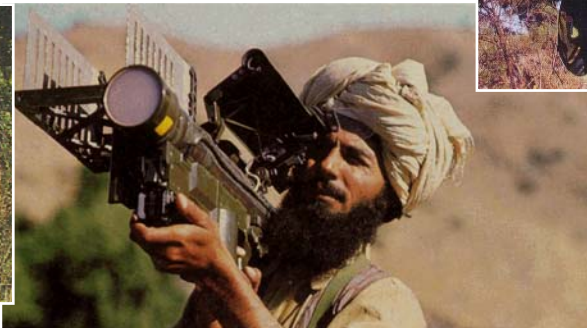
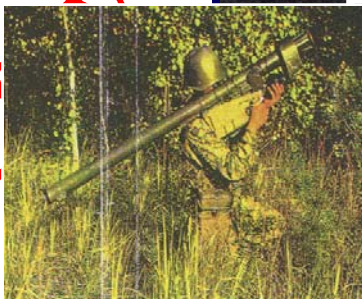
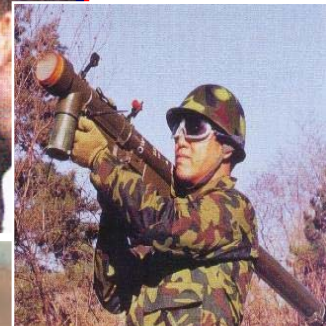
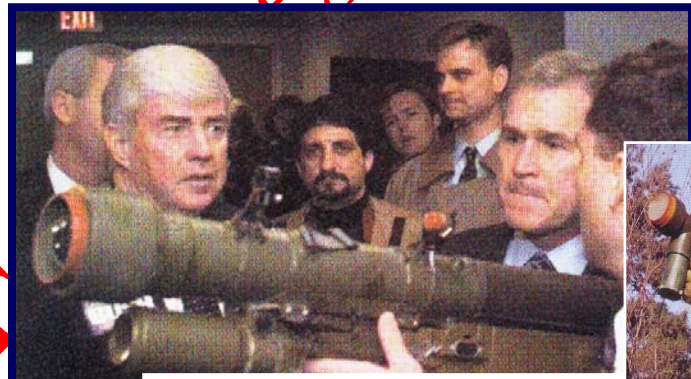




Homeland Security



Introduction to Man Portable Air Defense System (MANPADS)



Introduction

The U.S. Department of Homeland Security's concern that a law enforcement officer may come in contact with a MANPADS is real and genuine. It is the intent to provide the law enforcement officer the tools needed to identify a MANPADS if they come into contact with one and have the information needed to respond and handle an incident involving a MANPADS. Through extensive research and partnerships the Federal Law Enforcement Training Center has come up with this guide book which is designed to aid the law enforcement officer in the identification and response to a MANPADS incident.

Officer's / Agent's Response ~~NOT in Ready fire~~

The below are the minimum recommended steps if a law enforcement officer / agent finds MANPADS components or a complete system NOT in the ready fire position.

1. Correctly identify a MANPADS or basic components.

The first thing that the law enforcement officer must do is identify the MANPADS or its components correctly. This can be done by using knowledge of the system from personal experience or past training. If you do not possess the knowledge then the officer/agent can refer to a FLETC tri-fold handout on MANPADS or the Law Enforcement Officers/Agents MANPADS guide.

In order for the law enforcement officer/agent to successfully start the MANPADS incident procedures correct identification is imperative. Ramifications from the incorrect identification of a MANPADS or its components can only be imagined due to so many agencies and businesses affected.

2. Remove all subjects from the area and properly secure.

Depending on the law enforcement officers'/agents' situation, training and local protocol will vary the meaning of properly secure. If the officer/agent is faced with multiple subjects and backup is miles away then properly secure may mean to place them at a disadvantage until reinforcements

arrive. Properly secure may mean to handcuff and search if a single subject is encountered. This is only a guideline as in all cases agency's protocol will supercede.

3. Make proper, timely detailed notification to your dispatch / communications center.

In order to get the ball rolling in a MANPADS incident, it is important that the law enforcement officer / agent makes timely and complete notification to their dispatch / communications center. It is recommended that at a minimum the following be related:

1. Positive identification of a MANPADS has been made.
2. The exact location.
3. Number and disposition of subjects.
4. Request for the immediate response of a supervisor and additional units. If the law enforcement officer is an agent then local law enforcement may need to be notified.
5. Ensure that the supervisor and dispatch / communications center is aware that notification to the Federal Bureau of Investigation (FBI) is mandatory under PDD-39.
6. Also additional notifications may need to be made to Alcohol Tobacco and Firearms (ATF), Transportation Security Administration (TSA), and the Federal Aviation Administration (FAA).

4. Setup a perimeter / cordon as when dealing with any explosive device.

The MANPADS should be treated as an Improvised Explosive Device. Even though it has only about one pound of explosive it is made up with propellant that could also provide for additional explosive and you really don't know if it has been rigged with a booby-trap or homemade self destruct mechanism. The Federal Law Enforcement Training Center recommends the following minimum perimeter / cordon standards:

1. 300 feet if in or around buildings.
2. 1000 feet if in open area and there are no buildings to use as a shield.

These are only recommended standards, agency protocol will dictate the following perimeter cordon requirements.

5. Notify the nearest military Explosive Ordnance Disposal (EOD) unit.

If there is a local EOD unit available and on scene they will be able to assist in cordon / perimeter and some technical advice. However, a MANPADS is military ordnance and the best way to deal with military ordnance is through the military EOD. It makes no difference what branch of the service the military EOD is from. They all have and go through the same training. They are the technical experts having trained on and have in their possession the technical reference manuals to dispose of the MANPADS. It is recommended that the first notification be given to the military EOD units and if there is not one around at a minimum an FBI or ATF EOD unit should be notified next.

Officer's / Agent's Response In Ready Fire

1. Correctly identify a MANPADS and person is attempting to launch the MANPADS.

The below are the minimum recommended steps if a law enforcement officer / agent finds someone attempting to launch a MANPADS.

1. Challenge the person if time permits.
2. If time does not permit, the use of Deadly Force may be necessary to prevent the launch of the MANPADS.

(TIME IS OF THE ESSENCE IN THIS SITUATION)

2. Remove all subjects from the area and properly secure.

Depending on the law enforcement officers'/agents' situation, training and local protocol will vary the meaning of properly secure. If the officer/agent is faced with multiple subjects and backup is miles away then properly secure may mean to place them at a disadvantage until reinforcements arrive. Properly secure may mean to handcuff and search if a single subject

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Law Enforcement Officers / Agents MANPADS Hardware Identification Guide

In cooperation with the Defense Intelligence Agency / Missile and Space Intelligence Center, Huntsville, Alabama and the DHS Federal Law Enforcement Training Center, Glynco, GA. this MANPADS Hardware Identification Guide will help the law enforcement officer / agent to identify the different MANPADS in order to make better informed decisions. The sources of this information are unclassified; however, public release of this data must be coordinated with the Defense Intelligence Agency Public Affairs Office or the U. S. Department of Homeland Security, Federal Law Enforcement Training Center, Security Specialties Division.

The MANPADS Hardware Identification Guide is in the below order:

1. Shipping configuration of the specified missile system.
2. Shipping configuration of the specified missile system's grip stock.
3. Components of the complete specified missile system.

There are 6 MANPAD systems included in this guide along with component comparisons and shipping container markings guide.

Shipping Configuration – SA-7a

SA-7a Missile Container

Physical Description

The SA-7a is shipped in a wooden container, which houses two missiles in their launch tubes complete with thermal batteries and two spare thermal batteries. The container consists of case and cover coupled together by latches. A single firing mechanism, shipped in a separate container, accompanies the missile package.



Designators

System: 9K32

Missile: 9M32

Launch Tube: 9P54

Thermal Battery: 9B17

Container: 9Ya68

Characteristics (approximate)

Length: 1655mm (65.2 in)

Width: 382 mm (15.0 in)

Height: 325 mm (12.8 in)

Mass, Loaded: 58kg (127.9 lbs)

Color: Green

Shipping Configuration – SA-7a

SA-7a Gripstock Container

Physical Description

The launching mechanism for the SA-7a is most commonly referred to as a gripstock. The gripstock container, which includes a single gripstock, goggles, and a tool kit, consists of a case and cover. The container is locked and sealed with latches.



Designators

Launching Mechanism: 9P53

Characteristics (approximate)

Length: 432 mm (17.0 in)

Width: 280 mm (11.0 in)

Height: 112 mm (4.4 in)

Mass, Loaded: 6 kg (13.2 lbs)

Color: Green

Law Enforcement Sensitive

COMPONENTS – SA-7a



Launch Tube



Missile



Gripstock



Thermal Battery

Shipping Configuration – SA-7b

SA-7b Missile Container

Physical Description

The SA-7b is shipped in a wooden container, which houses two missiles in their launch tubes complete with thermal batteries and two spare thermal batteries. The container consists of case and cover coupled together by latches. A single firing mechanism, shipped in a separate container, accompanies the missile package.



Designators

System: 9K32M

Missile: 9M32M

Launch Tube: 9P54M

Thermal Battery: 9B17

Container: 9Ya68

Characteristics (approximate)

Length: 1655 mm (65.2 in)

Width: 382 mm (15.0 in)

Height: 325 mm (12.8 in)

Mass, Loaded: 58 kg (127.9 lbs)

Color: Green

Shipping Configuration – SA-7b

SA-7b Gripstock Container

Physical Description

The launching mechanism for the SA-7b is most commonly referred to as a gripstock. The gripstock container, which includes a single gripstock, goggles, and a tool kit, consists of a case and cover. The container is locked and sealed with latches.



Designators

Launching Mechanism: 9P58

Characteristics (approximate)

Length: 432 mm (17.0 in)

Width: 280 mm (11.0 in)

Height: 112 mm (4.4 in)

Mass, Loaded: 6 kg (13.2 lbs)

Color: Green

Law Enforcement Sensitive

COMPONENTS – SA-7b



Launch Tube



Missile



Gripstock



Thermal Battery

Shipping Configuration – SA-14

SA-14 Missile Container

Physical Description

The SA-14 is shipped in a wooden container, which houses two missiles in their launch tubes complete with Battery Coolant Units (BCU) and two spare BCUs. The container consists of case and cover coupled together by latches and locked by a cotter pin. A single firing mechanism, shipped in a separate container, accompanies the missile package.



Designators

System: 9K34

Missile: 9M36-1

Launch Tube: 9P59

BCU: 9P51

Container: 9Ya677

Characteristics (approximate)

Length: 1615 mm (63.6 in)

Width: 382 mm (15.0 in)

Height: 345 mm (13.6 in)

Mass, Loaded: 63 kg (138.9 lbs)

Color: Green

Shipping Configuration – SA-14

SA-14 Gripstock Container

Physical Description

The launching mechanism for the SA-14 is most commonly referred to as a gripstock. The gripstock container, which includes a single gripstock, goggles, and a tool kit, consists of a case and cover. The container is locked and sealed with latches.



Designators

Launching Mechanism: 9P58M

Characteristics (approximate)

Length: 427 mm (16.8 in)

Width: 242 mm (9.5 in)

Height: 157 mm (6.2 in)

Mass, Loaded: 5.5 kg (12.1 lbs)

Color: Green or Black

Law Enforcement Sensitive

COMPONENTS – SA-14



Launch Tube



Missile



Gripstock



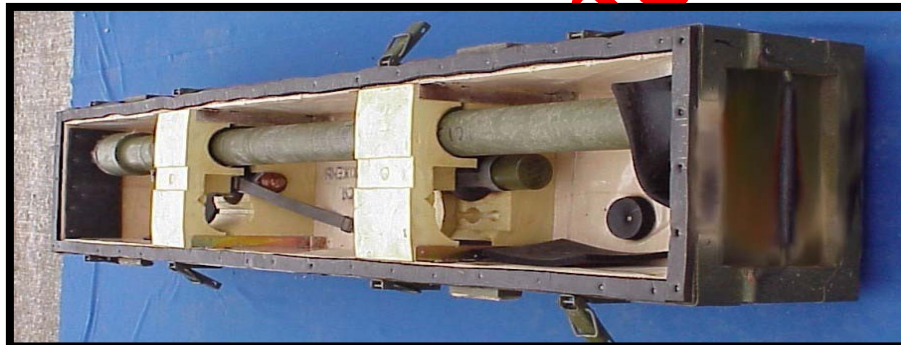
Battery Coolant Unit (BCU)

Shipping Configuration – SA-16

SA-16 Missile Container

Physical Description

The SA-16 is shipped in a wooden container, which houses two missiles in their launch tubes complete with Battery Coolant Units (BCU) and two spare BCUs. The container consists of case and cover coupled together by latches and locked by a cotter pin. A single firing mechanism, shipped in a separate container, accompanies the missile package.



Designators

System: 9K310

Missile: 9M313

Launch Tube: 9P322-1

BCU: 9B238

Container: 9Ya694

Characteristics (approximate)

Length: 1825 mm (71.9 in)

Width: 380 mm (14.9 in)

Height: 340 mm (13.4 in)

Mass, Loaded: 68kg (149.9 lbs)

Color: Green

Shipping Configuration – SA-16

SA-16 Gripstock Container

Physical Description

The launching mechanism for the SA-16 is most commonly referred to as a gripstock. The gripstock container, which includes a single gripstock, goggles, and a tool kit, consists of a case and cover. The container is locked and sealed with latches.



Designators

Launching Mechanism: 9P519

Characteristics (approximate)

Length: 423 mm (16.7 in)

Width: 275 mm (10.8 in)

Height: 158 mm (6.2 in)

Mass, Loaded: 4.9 kg (10.8 lbs)

Color: Green

Law Enforcement Sensitive

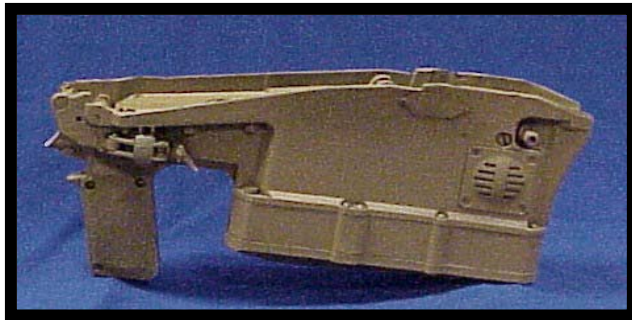
COMPONENTS – SA-16



Launch Tube



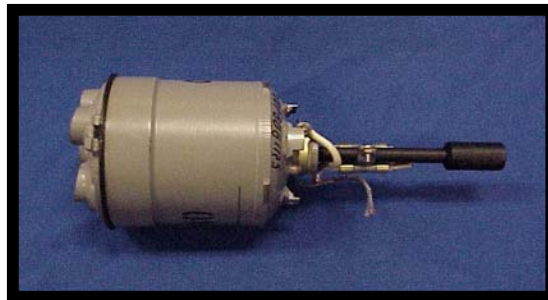
Missile



Gripstock



Battery Coolant Unit (BCU)



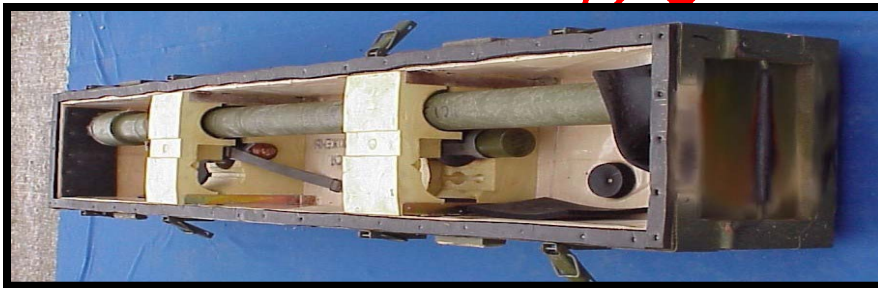
Eject Motor

Shipping Configuration – SA-18

SA-18 Missile Container

Physical Description

The SA-18 is shipped in a wooden container, which houses two missiles in their launch tubes complete with Battery Coolant Units (BCUs) and two spare BCUs. The container consists of case and cover coupled together by latches and locked by a cotter pin. A single firing mechanism, shipped in a separate container, accompanies the missile package.



Designators

System: 9K38

Missile: 9M39

Launch Tube: 9P39-1

BCU: 9B238

Container: 9Ya694

Characteristics (approximate)

Length: 1825 mm (71.9 in)

Width: 380 mm (15.0 in)

Height: 340 mm (13.5 in)

Mass, Loaded: 68 kg (149.9 lbs)

Color: Green (Standard)

Yellow (Trainer)

Silver (Inert Rounds for training)

Shipping Configuration – SA-18

SA-18 Gripstock Container

Physical Description

The launching mechanism for the SA-18 is most commonly referred to as a gripstock. The gripstock container, which includes a single gripstock, goggles, and a tool kit, consists of a case and cover. The container is locked and sealed with latches.



Designators

Launching Mechanism: 9P516

Characteristics (approximate)

Length: 423 mm (16.7 in)

Width: 275 mm (10.8 in)

Height: 158 mm (6.2 in)

Mass, Loaded: 6.0 kg (13.2 lbs)

Color: Green

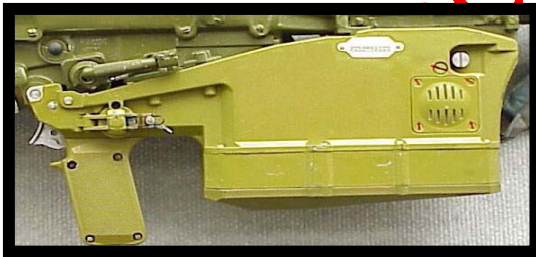
COMPONENTS – SA-18



Launch Tube



Missile



Gripstock



Battery Coolant Unit (BCU)



Eject Motor

Law Enforcement Sensitive

Shipping Configuration – STINGER

STINGER Weapon Round

The STINGER Weapon Round is shipped in a reusable aluminum container with one missile in a disposable launch tube assembly, a separable/reusable gripstock assembly, three (3) Battery Coolant Units (BCUs), and one set of earplugs. The container top is hinged and opens in a clamshell fashion.



Designators

System: FIM-92a

Missile Container Characteristics

Length: 1675.1 mm (66.0 in)

Width: 329.9 mm (13.0 in)

Height: 342.6 mm (13.5 in)

Mass, Empty: 15.6 kg (34.5 lbs)

Mass, Loaded: 39.4 kg (86.8 lbs)

Color: Green

STINGER Missile Round

The STINGER Missile Round is shipped in a sealed barrier bag and housed in a wire-bound wooden container with one missile in a disposable launch tube assembly, three (3) Battery Coolant Units (BCUs), and one set of earplugs.

Designators

System: FIM-92a

Missile Container Characteristics

Length: 1708.1 mm (67.3 in)

Width: 350.3 mm (13.8 in)

Height: 284.3 mm (11.2 in)

Mass, Empty: 12.8 kg (28.2 lbs)

Mass, Loaded: 33.4 kg (73.6 lbs)

Color: Green

Law Enforcement Sensitive

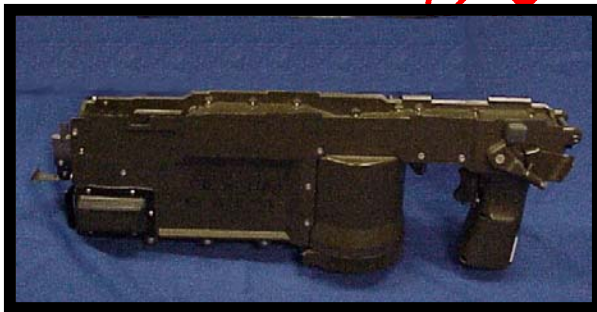
COMPONENTS – STINGER



Launch Tube



Missile



Gripstock



Battery Coolant Unit (BCU)



Eject Motor

Law
Private

COMPONENT COMPARISONS

Launch Tubes



SA-7a



SA-7b



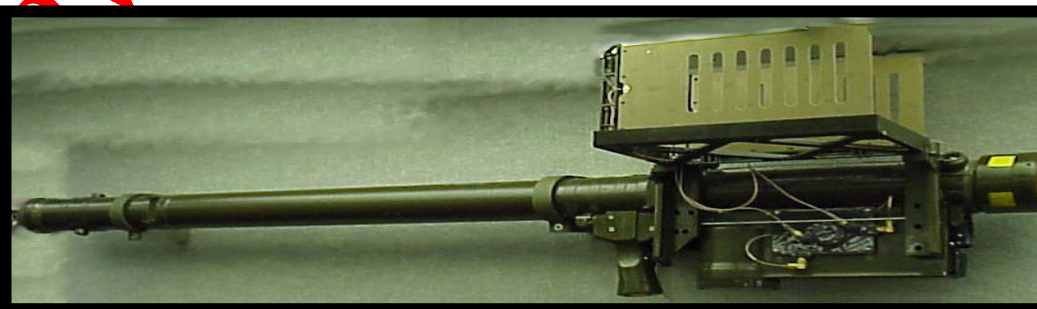
SA-14



SA-16



SA-18



Stinger
Basic

COMPONENT COMPARISONS

Missiles



SA-7a



SA-7b



SA-14



SA-16



SA-18



**Stinger
Basic**

COMPONENT COMPARISONS

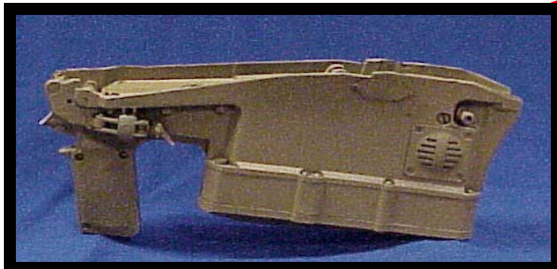
Gripstocks



SA-7a



SA-7b & SA-14



SA-16 & SA-18



**Stinger
Basic**

Note: There are very subtle differences between the SA-7b and SA-14 gripstocks and between the SA-16 and SA-18 gripstocks. These differences cannot be visually detected from these photographs.

COMPONENT COMPARISONS

Batteries



SA-7a



SA-7b



SA-14



SA-16 & 18



Stinger Basic

Law Enforcement

COMPONENT COMPARISONS

Eject Motors



SA-16 & 18

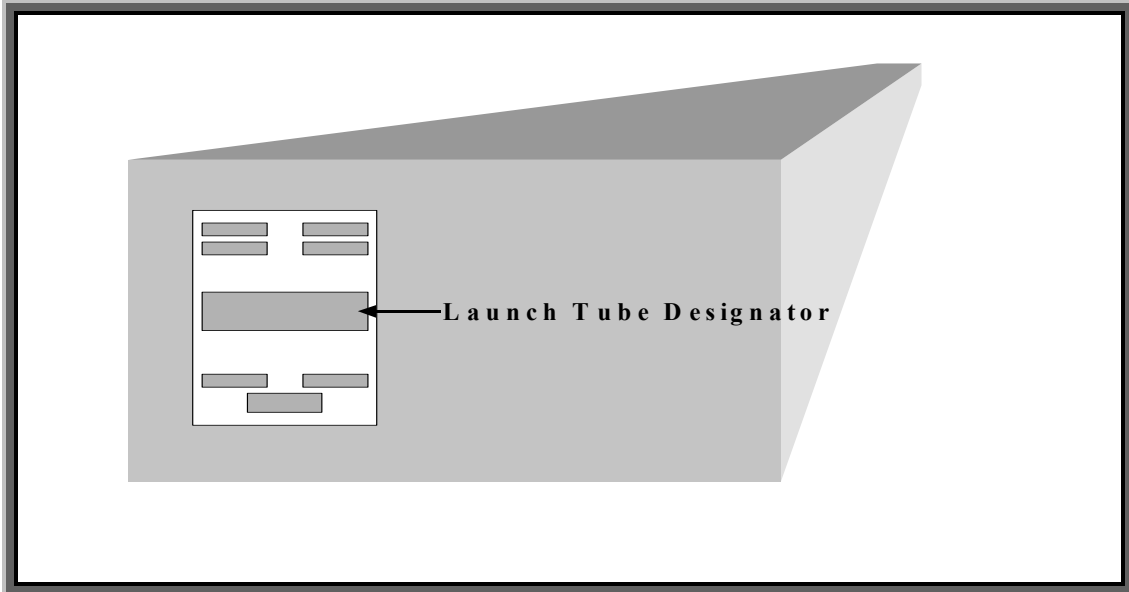


Stinger Basic

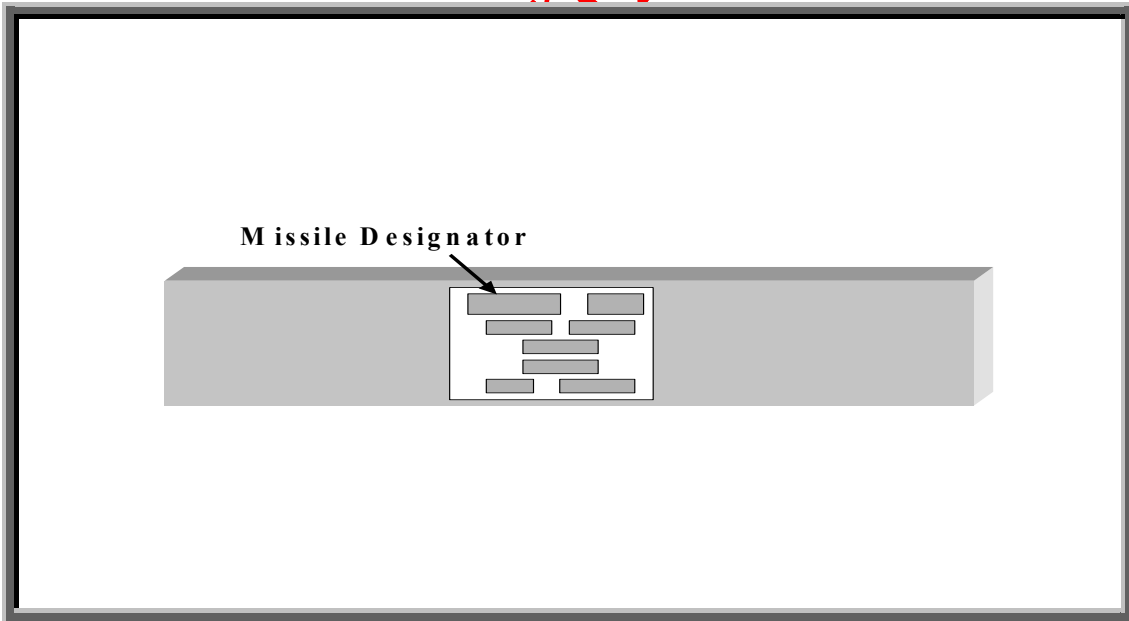
Law Enforcement Component Sensitive

Shipping Configuration – Russian MANPADS

Missile Containers



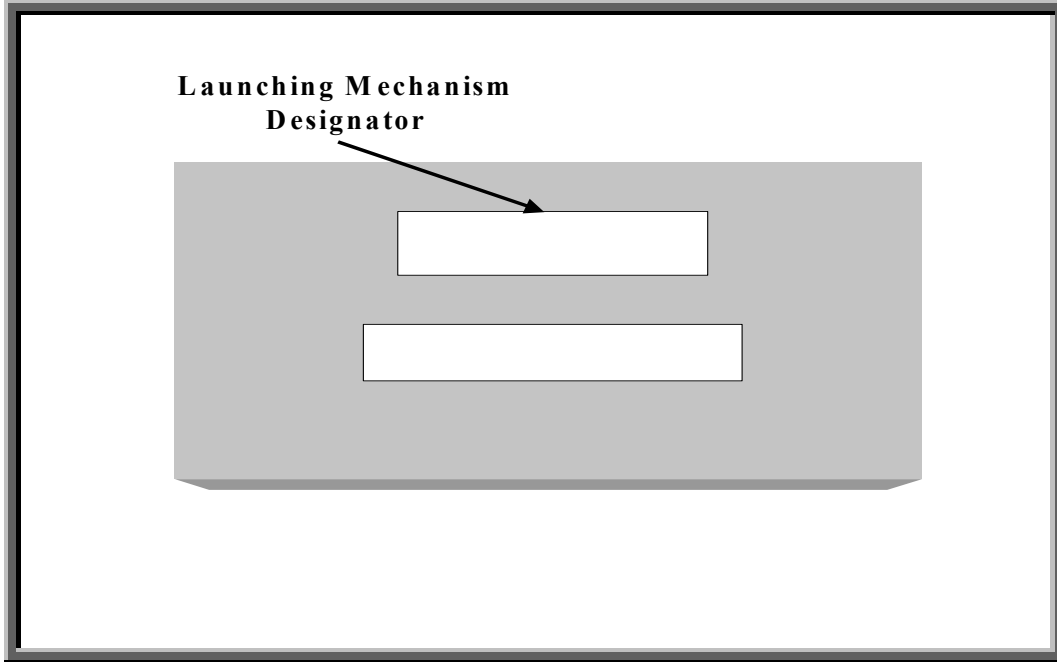
End Markings



Side Markings

Shipping Configuration – Russian MANPADS

Gripstock Containers



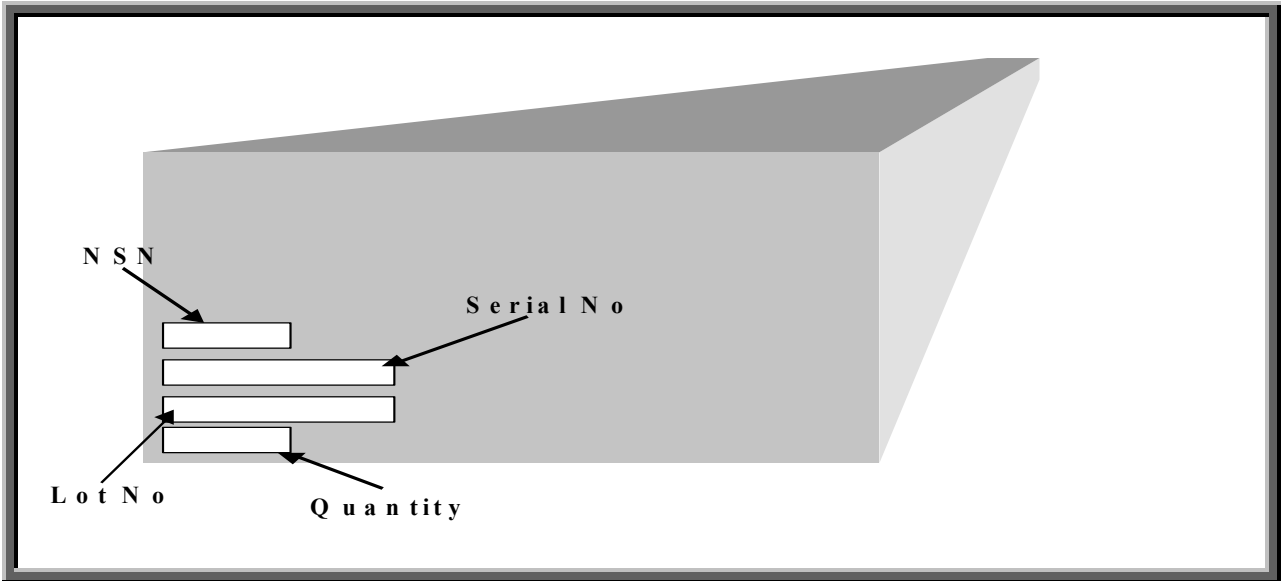
Top Markings

Law Enforcement

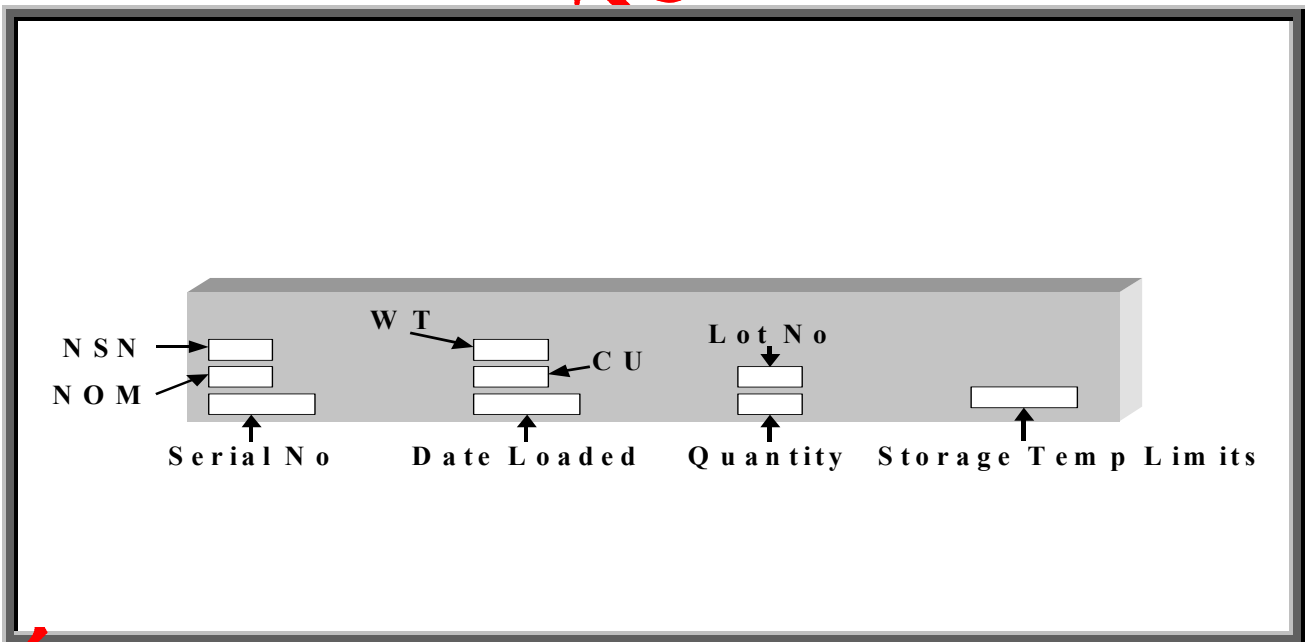
ive

Shipping Configuration – STINGER

Missile Containers



End Markings



Side Markings