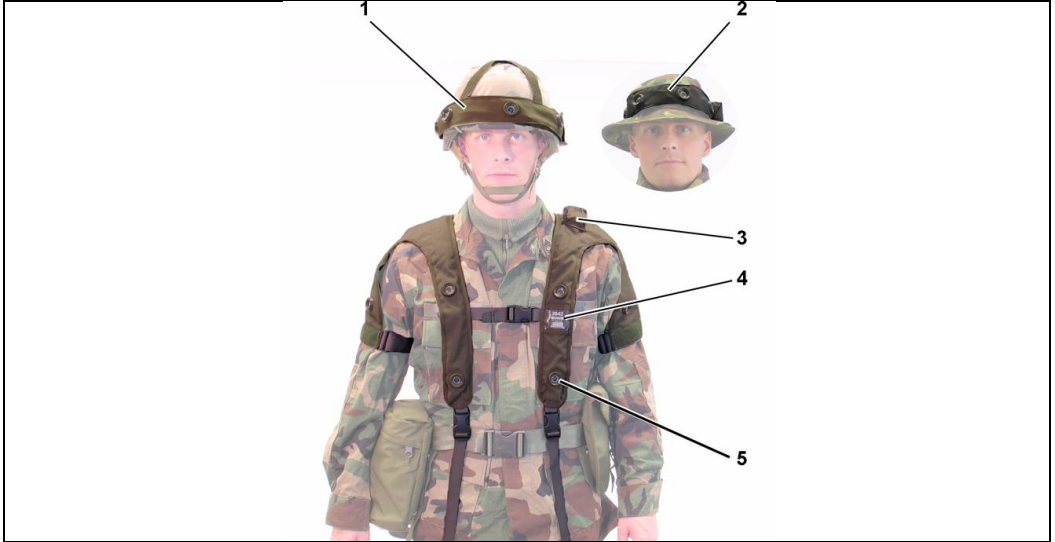




### 1 MDS Overview



1. Head harness	4. ID number
2. Head harness soft cap	5. Laser detectors
3. Loudspeaker, LED indication and push-button for emergency beacon functionality.	



1. (GPS antenna)

3. Personnel Computer Unit (PCU) incl. IR port and Battery Unit (BU)

2. Miniature Remote System Interface (MRSI) (Advanced)

## 2 General

The MDS is used to simulate the effect of engagements during exercise. All events are stored in the Personnel computer unit for later retrieval into an after action tool. All versions can evaluate laser engagement, and generate audio cues for the simulated events. A GPS equipped MDS can store tracking data during the exercise. If the MDS has a network radio it can be engaged by simulated indirect fire like artillery and minefields from EXCON. The MDS also transmits tracking and event data back to EXCON in near real time.

### 3 Battery

The body harness is powered by a rechargeable battery and the head harness uses a non rechargeable battery. If the MDS is motionless for about 30 minutes the electronics go in to a battery saving mode. The MDS will return to normal when moved again. When a body harness battery reaches low charge, an audio cue "Low Battery" is given. This cue is repeated every 5 minutes.

**Typical operating time:**

Body harness 1-cell battery	40h
Body harness 2-cell battery	80h
Head harness	480h

### 4 Fitting of the Body Harness

*1. Put on the Body Harness*

**Note!**

The MDS is intended to be attached to a combat Harness.



**2. Wrap the front buckles around the belt.**



3. Tighten the straps.



4. Wrap the rear part of the harness around the belt.



5. Tighten the strap around each arm.

6. Make sure no detectors or the GPS antenna are covered.

## 5 Fitting of Head Harness

### Helmet



#### **Note!**

It is easier to start with the rear hooks to attach the head Harness.

**Soft cap**



1. Hook

2. Velcro





3. Attach the four hooks through the loops.

## 6 Battery installation

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### **WARNING!**

Prevent Batteries from:

- Damage
  - Short circuit
  - Exposure to temperatures above 70°C (158°F)
  - Being dismantled
  - Immersion in liquids
-





1a. Install the 1-cell battery in the body harness.



1b. Install the 2-cell battery in the body harness.



2. Install the battery in the head harness, if applicable.



## 7 Events and Audio Cues

Events and audio cues are given from the built in loudspeaker and/or from an earpiece connected to the MDS.



Earpiece connection.

The MDS generates the following types of audio cues/messages via the built-in speaker:

- near miss sounds
- wound status
- killed
- artillery sound with distance and compass direction
- minefield effect

Hit evaluation:

When the MDS evaluates a hit an attention noise is generated. This is followed by a message as to wound type or a killed statement.

The MDS will disable the weapon SAT for about 30 seconds to simulate the shock of being hit. This prevents immediately return fire.

If the hit is evaluated as a kill or a severely/lethally wound the SAT will continue to be disabled. Only light wounds result in the ability to continue firing after 30 seconds.

The simulated wound type will dictate the remaining time to live from an untreated wound. In the event of "kill" the wearer presents a combat target and should not move around. If moving around an unrealistic situation during the After Action Review is caused.

## 8 MDS Troubleshooting

Symptom	Cause	Corrective action
No indication of a hit	Detectors covered or dirty	Make sure that the detectors are clean and facing forward.
	Helmet not connected to body harness	Make sure that the helmet cable is connected with the body harness.
	No power	Push the volume control in the PID. If no sound, replace the battery.
	Head harness not powered up not soft cap halo.	Move the head band (sleep mode?)
		Turn the battery in the head harness to right position (+ and - pole)
		Install or replace the battery in the head harness

Symptom	Cause	Corrective action
<b>No sound from the speakers</b>	<b>No battery in MDS</b>	<b>Install battery.</b>
	Low volume	Press the volume control button.
	Battery discharged in MDS	Replace the battery.

## 9 Regulatory Statements

### FCC Certification

The United States Federal Communication Commission (FCC) has established certain rules governing the use of electronic equipment.

### Part15, Class B

1. This device is FCC Certified **FCC ID: R4AWLN915A**
2. This device complies with Part 15 of FCC rules. Operation is subject to the following two conditions:
  - a) This device may not cause harmful interface, and
  - b) This device must accept any interface received, including interface that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

## 10 Information for User

### Caution

Any changes or modifications not expressly approved by the party responsible for compliance, namely SAAB Training USA LLC, could void the user's authority to operate the Equipment.