

# EQUIPMENT UPDATE

## Fire and Forget

### The Javelin Anti-Armour Missile System

**B**y December 2003, the Defence Forces will take possession of the first batch of the new Javelin Anti-Armour weapon system. Javelin will replace the MILAN SACLOS, which has been in service since the 1980's. The acquisition of Javelin is a very important and progressive addition to the Defence Forces anti-armour capabilities.



*The Javelin (above) will replace the MILAN SACLOS.*



*"Standing, kneeling, sitting, or prone, Javelin is as flexible as the gunner."*

The Javelin Fire and Forget Anti-Armour missile has been in full production since 1994. It came into service with the 75th Ranger and 101st Airborne Divisions of the U.S. Army in 1997. It has also been fielded with the U.S. Marine Corps.

The system has a built in Thermal sight, allowing 24hr surveillance and engagement capability. A single eyepiece displays images of the battlefield, allowing gunners to find targets at extended ranges and in adverse weather. Operational procedures are easy and quick.

After attaching the missile to the CLU, the gunner places a cursor box over the selected target and sends a lock-on-before-launch command to the missile. Once locked-on, the missile is ready to fire. With its soft launch design, Javelin can be safely fired from inside buildings or covered fighting positions.

Standing, kneeling, sitting, or prone, Javelin is as flexible as the gunner. Both search and engage functions are fully simulated, removing the need for expensive training missile firings.

It has a tandem warhead missile with a large 126mm calibre, allowing it to defeat all known armour on the battlefield, as have been seen from the war in Iraq.

Javelin can also be used to engage helicopters and buildings or bunkers. The weapon system is being purchased with a

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state of the art simulator, which creates 3D images of various targets, in various terrain and visibility.

Unlike conventional wire/fibre-guided or laser beam-rider missiles, Javelin automatically guides itself to the target after launch. Soldiers can reposition immediately after firing or reload to engage another threat. Using an arched, top-attack flight profile, Javelin climbs above its target for improved battle-field visibility and then strikes where the armour is weakest.

A gunner selected direct-attack mode is used when attacking tanks under cover or targets such as bunkers, buildings, or helicopters. Javelin defeats all armour types with two precision shaped-charges combine to slice through armour.

With this system, Anti-Armour Platoons of the Defence Forces will be equipped with state of the art technology to be deployed at home, and on overseas serv-

ice, with the first Battalion being deployed to Kosovo in the near future.

## Training Devices

### Enhanced Producibility Basic Skills

**Trainer:** The EPBST is an indoor/outdoor training device. It consists of the following components: a student station and an instructor station. The student stations consist of the following components: a simulated Command Launch Unit, a Missile Simulated Round and a W1 Cable.

The Instructor station consists of the following components: Rugged Computer and screen, control panel.

Training exercises for the EPBST are created using real terrain from actual visible and infrared imagery, and three dimensional target models that simulate target movement. Exercises can be viewed on the instructor station monitor during gunner training.

The gunner views these exercises through

the SCLU and reacts to the situations presented in each exercise.

**Missile Simulated Round:** The MSR is a simulated javelin round that contains no instruments or circuitry. It simulates the weight and balance of a round. The MSR is used to train gunners how to maintain, handle, and carry the round. It also is used with the BST to allow the gunner to feel the weight and centre of gravity when connected to the simulated CLU.

## Javelin Technical Specifications

### Command Launch Unit:

#### Physical Specifications:

- Length: 14.75 inches
- Width: 16.50 inches
- Height: 13.00 inches
- Weight: 11.28 pounds

### Command Launch Unit sights:

#### DAYSIGHT:

##### Day field of view (FOV):

- Magnification x 4
- Field of view 6.4 deg x 4.8 deg

### Night Vision Sight:

#### Wide Field of View (WFOV):

- Magnification x 4.2
- Field of View 6.11 deg x 4.58 deg

#### Narrow Field of View (NFOV):

- Magnification x 9.2
- Field of View 3 deg x 2 deg

### Missile Data:

- Length: 47.60 inches
- Diameter: 11.75 inches
- Weight: 15.46 kg
- Seeker: FOV Magnification x 9

#### EFFECTIVE RANGE:

##### Top Attack Mode:

- Min. 150m
- Max. 2500m

##### Direct attack:

- Min. 65m
- Max. 2500m



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