TECHNICAL SPECIFICATIONS

HE, Prac, WP and Smoke Burst

- Maximum range of Bomb: 6200 m
- Total length of Bomb: 420 mm
- Mass of Bomb (Flight Mass): 2.26 kg

Illumination and Coloured Trailing Smoke

- Max. Application Distance: 4800 m
- Total length of Bomb: 572 mm
- Mass of Bomb (Flight Mass): 2.123 kg

TRAINING SIMULATOR

The Simulator is the standard Indirect Fire Trainer (IFT) system from FATS, with modifications to interface with the 60 mm simulated weapon. Computer Generated Imaging (CGI) software support the 60 mm simulated weapon, additional round types, new ballistics, and associated effects.

Components

Main System

- Small Arms Trainer (SAT) that is based on the FATS standard military product to meet the customer's indoor trainer requirement
- FATS Military Indirect Fire Trainer (1-Screen, Floor Mount/Rack Config)
- 60 mm weapon system, adapted for training purposes - 4 units

Software

- FATS Military Software Package - English (Customized for the 60mm mortar system) unit
- CGI SAT Software (Collective Training)
- Common Software (System Set-up/Configuration) - Updated to support specific 60mm (to be selected by the SANDF) mortar calibration issues
- FATS IFT Software package (English)

Courseware

- Generic CGI Scenario Package (English)
- FATS CGI Terrain Database Library
- FATS CGI Target Model Library

Documentation

Manuals - System O&M Manual (English)

LOGISTICS AND TRAINING

The logistics system address all maintenance, support and information requirements to sustain the Operational Readiness of the 60 mm Long Range Mortar Product System.

A complete and comprehensive training package is part of the 60 mm Long Range Mortar Product System

NOTE: Subject to improvement or change without prior notice. The document is issued for information only and shall not be deemed to form part of any contract.
**60 mm LONG RANGE MORTAR PRODUCT SYSTEM**

**INTRODUCTION**

The 60 mm Long Range Mortar Product System provides the Motorised and Parachute Infantry with an integrated, accurate and supportable Indirect Fire Support capability.

This system entails the 60 mm weapon (including H-019 sight), ammunition, fire control (observation and fire directing), training simulator subsystems and products with their associated logistics support. The system is a complete integrated Indirect Fire Support Product System which has two system configurations, the Armoured Personnel Carrier Mortar Variant and the Ground Role IFS-PS.

The 60 mm Long Range Mortar Products System consist of the following:

- 60 mm Weapon:
  - Calibre 60 mm
  - Effective range >6000 m
  - Beaten Zone (@6000m) 270 x 70 m
  - Elevation 45 - 85º
  - Firing Rate 15 rpm
  - Barrel length 1.450 mm
  - Mass Complete 28.3 kg
  - Barrel 10.0 kg
  - Bipod 12.2 kg
  - Base Plate 6.7 kg
  - Sight 1.5 kg

- **Barrel assembly**
- **Base plate (light weight)**
- **Bi-pod**
- **H-019 sight**
- **Carrying harnesses**
- **Equipment and accessories**

**TECHNICAL SPECIFICATIONS**

- Calibre 60 mm
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- Beaten Zone (@6000m) 270 x 70 m
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- Base Plate 6.7 kg
- Sight 1.5 kg

**Fire directing system**

**INTRODUCTION**

A handheld Personal Digital Assistant (PDA) solution as Mortar Fire Control (MFC) was developed for the 60mm Mortar System, used in conjunction with a Laser Range Finder (LRF). The LRF has an onboard compass to fulfil target acquisition and fire adjustment tasks. The accuracy is based on the magnetic compass and the PDA takes into account the magnetic declination.

The Observer Control Computer is based on the PDA as the MFC, fitted with onboard GPS and a serial communication port adapter for external interfaces.

**COMPONENTS**

- **LH-41C Laser Range Finder with imbedded digital compass**
- **Tripod (light weight)**
- **Interface with the Observation System computer**

**TECHNICAL SPECIFICATIONS**

- Measuring Range 80 to 20 500 m
- Measuring Rate 10 and 20 measurements per min
- Multiple Targets First, second and last targets
- Laser Type Erbium glass
- Safety class Class 1 eye safe
- NOHD 0 m (nominal ocular hazard distance)
- Magnification 6 x
- Field of View 6º
- Eyepiece adjustment 4 to +2
- Laser Safety Filter Against 1064 nm
- Batteries 8 x AA NiCd, Alkaline, Lithium or NiMH
- Number of Ranges per charge Approx. 400 (NiCd)
- External power 8 to 30 VDC
- Operating temperature range -30ºC to +55ºC
- Mass (incl. Batteries) <1.65 kg
- Size 170 x 165 x 80 mm
- Interface RS232 (RS485 optional)
- Tripod weight 2.75 kg
- Working height Maximum 1 500 mm
- Minimum 260 mm

**Types**

- 60 mm Long Range High Explosive
- 60 mm Long Range Practice
- 60 mm Long Range White Smoke Bursting
- 60 mm Long Range White Phosphorous
- 60 mm Long Range Coloured Trailing Smoke (Red, Yellow, Green, Orange and Blue)
- 60 mm Long Range Illumination