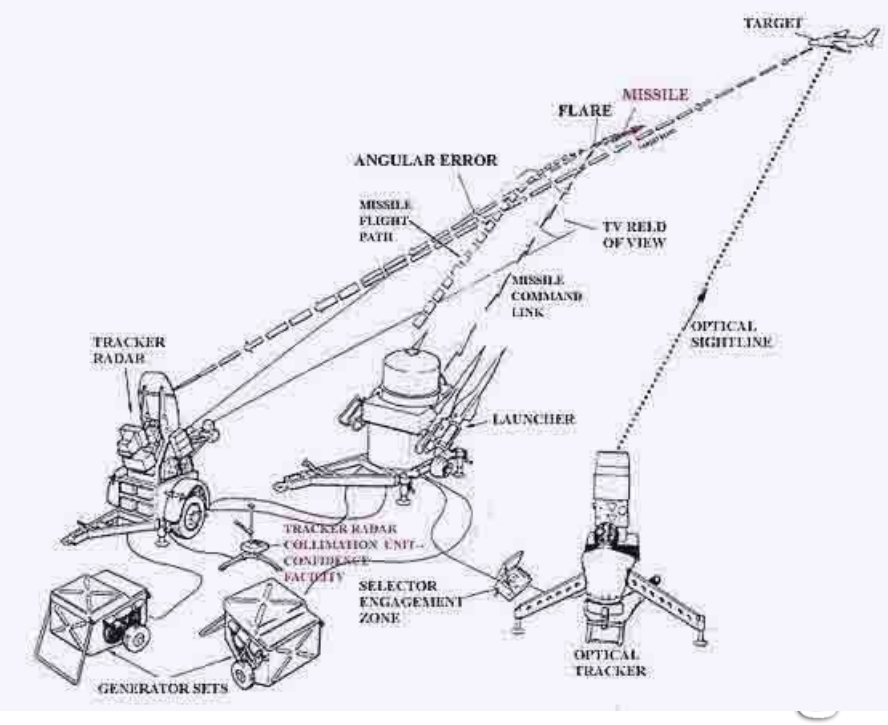
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Factsheet - Rapier System Description

26 Nov 1997



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The Rapier weapon system currently operates in the Blindfire configuration. The weapon system can still operate in the Optical mode.

Optical system comprises the following main equipment:

a. Launcher containing the surveillance radar, IFF radar, command transmitter, launcher computer and four ready-to-fire missiles.

b. Optical Tracker and Selector Engagement Zone unit

c. Generator

Blindfire configuration, the difference lies in the addition of the Blindfire Tracking Radar and another generator. It is called the Radar Tracker.

The Rapier launcher has four ready-to-fire missiles with a J-band command transmitter antenna. This antenna is to provide command guidance signals from the launcher computer to the missile-in-flight. The Rapier employs a command-to-line-of-sight guidance system. The F-band surveillance radar and D-band IFF radar are housed within the radome on the launcher. The surveillance radar has a range of out to 11.6km whilst the Rapier missile has a maximum engagement envelope of 6.8km in range and 3km in altitude.

The Optical Tracker is where the operator can either choose to automatically track the target using the Radar Tracker or manually track the target by the tracker joystick. The operator is also able to launch the missile from the Optical Tracker position. The Selector Engagement Zone (or SEZ) unit provides tactical information to the Tactical Controller for decision-making during the entire engagement process.

The Blindfire Radar Tracker operates on the K-band. The equipment allows the weapon system to operate in adverse weather conditions and also provides night capability. The weapon system is flexible and can allow a Radar Tracker to be added onto an existing Optical fire unit should the need arise.

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