

ANTIARMOR TRACKING AND LIVE FIRE (AATLF) RANGE NARRATIVE DESCRIPTION

Purpose: The information in this document is based on TC 25-8 Training Ranges dated 5 April 2004 FCC 17845. This complex is used to train and test soldiers on the skills necessary to employ antiarmor missile systems, identify, track, engage and defeat stationary and moving armor targets presented individually or as part of a tactical array. The complex is designed to satisfy the training and qualification requirements of medium and heavy anti-armor weapon systems.

The AATLF range is used during both day and night exercises to teach the techniques of engaging targets with medium and heavy anti-armor weapon systems with the following ground and vehicle mounted weapon systems:

- TOW (tube-launched, optically tracked, wire-guided) Weapon System
- M47 DRAGON Medium Antitank Weapon System
- JAVELIN Medium Antiarmor Weapon System
- LOSAT (Line of Site Antitank) Weapon System
- Recoilless rifles

Gunnery tasks requiring the use of dud producing ammunition cannot be fired on the range. Provisions for these tasks must be made in impact areas adjacent to range.

This range is also used for field tracking exercises and for qualification exercises. The TOW Field Tactical Trainer (TFTT), Dragon FTT, and the Javelin FTT are used to train gunners and crews without the need to fire live missiles. The TFTT and the FTTs use LASERS to simulate the missile. Vehicles mounted with LASER hit sensors use the tracking roads located downrange while missile crews track and engage the vehicles and emplaced targetry with the TFTT and/or FTTs.

Note: The Field Tactical Trainers use the ATWESS cartridge to simulate the flash and noise of a missile firing. Refer to DA Pam 385-63 Range Safety for SDZ considerations prior to using the ATWESS cartridge.

Trainers and range users are responsible for ensuring laser safety before using a laser device (See DA PAM 385-63.).

Primary features include:

- 2 Moving Armor Targets (MATs)
- 4 Stationary Armor Targets (SATs)
- 1 Course Road
- 2 Tracking Roads
- 3 Turnaround Pads

Layout: Refer to the Layout Details in the Appendix of this document for a typical AntiArmor Tracking and Live Fire range layout. The base line is approximately 500 meters wide and has two firing berms. The target area width increases to 1,000 meters at 4,000 meters downrange. The last target should be 3,750 meters downrange, the maximum effective range of a TOW, while the tracking course road extends to 4000 meters. This area does not include the ROCA facilities. Refer to the Layout Details in the Appendix of this document for a typical AATLF layout.

Course Roads: The AATLF has 1 course road approximately 4000 meters in length. The total length and layout of the roadway network should enable the gunners to observe the moving vehicle/tracking target from all directions. Refer to the Civil Details in the Appendix of this document for detailed course road information.

Firing Positions: Each course road has 4 defilade firing positions. The placement of the defilades is based on current gunnery standards, line of site to the targets and terrain. Refer to the Civil Details in the Appendix of this document for detailed defilade firing position information.

Targetry: All targets are fully automated, utilizing event-specific, computer-driven target scenarios and scoring. Targets receive and transmit digital data from the range operations center. The captured data is compiled and is available to the unit for use during the after action review (AAR).

The targetry on the AATLF is placed in a tactical array that supports the current gunnery training standards. Targets are emplaced based on line of sight from firing positions and from maneuver sections of the course roads.

The Stationary Armor Targets (SATs) locations will need to be based on the weapons organic to the units that's will train on this range. The current layout depicts SATs at ranges useful for the TOW missile. These targets are out of range for the DRAGON, which has a maximum range of 1,700m.

Two Moving Armor Targets (MATs) are located on the AATLF range. The centers of the MAT tracks should be located about 950 meters and 1,300 meters from the firing line. The Moving Armor Targets (MATs) have a movement capability of 350 meters. Refer to the Civil Details in the Appendix of this document for detailed information of the targetry on the AATLF.

Associated Range Operations and Control Area (ROCA) facilities:

Standard Armor ROCA Facilities

Except:

- Range Operations Center (ROC)–Large (17124) is replaced by ROC-Small (17123)
- No Ammunition Breakdown Building (17129)
- No AAR-Small Building (17118)

Requirement Document:

- FM 3-20.8 Scout Gunnery
- FM 3-22.32 Line of Site Antitank (LOSAT) Weapon System
- FM 3-22.34 TOW Weapon System
- FM 3-22.37 Javelin Medium Antiarmor Weapon System
- FM 3-23.24 M47 Dragon Medium Antitank Weapon System

Additional Information: Location of the boresight area must be coordinated with the trainer. Gunnery tasks requiring the usage of dud producing ammunition cannot be fired on the range. Provisions for these tasks must be made in impact areas adjacent to range.