



17858



Scout/Recce Gunnery Complex (Scout)

RANGE DESIGN GUIDE



RANGE AND TRAINING LAND PROGRAM – MANDATORY CENTER OF EXPERTISE

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General

This document contains information specific to a Scout/Recce Gunnery Complex (Scout), FCC 17858. It describes the design and construction information that is specific to this range. The general sections of the RDG provide information on range features that are generic to multiple range types. Use both for complete range requirements.

Purpose

This range complex is designed train and test scout reconnaissance crews and sections on the skills necessary to detect, identify, engage, and defeat stationary and moving infantry and armor targets in a tactical array. In addition to the vehicle qualification course, there are four machinegun (MPMG) qualification lanes. These lanes are used to train and test Soldiers on the skills necessary to zero, detect, identify, engage, and defeat stationary and moving infantry targets, Stationary and moving armor targets in a tactical array with machineguns organic to a scout platoon or company/troop. All targets are fully automated, and the event-specific target scenario is computer driven and scored from the range observation tower. Captured audio/video are then compiled and available to the unit during the AAR.

Primary Features

The primary features of the ranges are divided into two categories: the Range and the Range Operations and Control Area (ROCA).

Range

The following drawing depicts the standard layout for the range. It is included at the end of this document.

- [SCT-C-01 Scout Recce](#)

Layout

Use the standard Scout layout referenced above as the basis for the range.

The standard Scout range supports two different types of training on the same footprint, Mounted Maneuver and MPMG. The Scout includes two course roads with defensive and rollover defilades for maneuver training. The trails extend approximately 1500 meters downrange. The total range footprint is approximately 2500 meters deep and 1000 meters wide. The range includes an overlay of the four center lanes of a Multipurpose Machinegun (MPMG) range to support vehicle mounted and dismounted machinegun training.

NUMBER	FEATURE	RDG SECTION
4	Moving Armor Target	MAT
35	Stationary Armor Target	SAT
24	Stationary Infantry Target	SIT
8	SIT Arrays (1-WSIT + 2-SIT)	SIT
4	SIT Clusters (6-SIT + 1-MIT)	SIT
8	SIT Clusters (7-SIT)	SIT

4	Target Boot sets	
4	2-Man/Vehicle Fighting Positions	
2	Defensive Vehicle Defilades	
4	Hasty/Rollover Defilades	
2	Cameras	Cameras

Firing Line

The baseline has a defensive defilade at the beginning of each course road. There is a combined vehicle/dismounted firing position at the firing line for each of the MPMG lanes.

Down Range

The Scout/Recce layout provided is an example of the general arrangement and should be used as the starting point for laying out the range. Tailor the specific range layout to meet training objectives based on detailed engagement requirements, Surface Danger Zone (SDZ) analysis, and site topography. To the maximum extent possible, keep downrange features, roads, trails, defilades, etc., out of the beaten zone of other targets; especially those areas behind MPMG targets. Refer to the MPMG section of the RDG for specific information about its lane dimensions and target layout.

Line of sight

Refer to the [Line of Sight](#) (LoS) section of the RDG for LoS requirements, procedures, and submittal requirements. For the Scout portion, provide LoS from battle positions and maneuver boxes to targets as required to support the training tables with alternates. For the MPMG lanes, provide LoS from each firing position to all targets within that lane. Use the Small Arms Qualification Range design criteria for the MPMG portion and the Maneuver Range design and availability criteria for the Scout targetry.

Targetry

The Scout uses fully automated targets with event-specific, computer-driven target scenarios and scoring. The Range Control System (RCS) computer in the Control Tower controls the targets through the target data network. The target data network can be either hard-wired or Radio Frequency (RF), refer to the Electrical Range Design Section of the RDG for further information. The computer captures the video and scoring data which can then be used by the unit for performance evaluation in the after action review (AAR) process. Refer to the Electrical and ROCA sections in the RDG for the location and configuration of workstations and server racks and the data connection requirements between buildings. Coordinate with the MCX and TPO Ranges to ensure that the latest information is included.

ROCA

Refer to the ROCA section of the RDG for general design information. The ROCA for the Scout is based on the standard non-instrumented Armor ROCA. The Control Tower – Non-Instrumented Ranges is standard for the Scout.

NAME	SIZE	UoM	RDG SECTION
Control Tower – Non-Instrumented Ranges	1	EA	Range Control Towers
Operations/Storage Building, Standard	800	SF	Ops/Stg Buildings
Latrine: Vault (Latrine: Water)	330 (550)	SF	Latrines
Bleacher Enclosure	1	EA	Bleacher Enclosure
Covered Mess	800	SF	Covered Mess
Small After Action Review Building	1064	SF	Classroom and AAR Facilities
Ammunition Loading Dock	1	EA	Ammunition Breakdown Building
Bivouac Area	1	EA	
Unit Staging Area	1	EA	

Requirement Documents

Refer to Training Circular TC 25-8, Training Ranges, for additional information and references to the FMs, ARTEPs, TCs, etc. that describe and require the training on this type of range. The latest TC 25-8 is available at Army Knowledge Online (www.us.army.mil) and the General Dennis J. Reimer Training and Doctrine Digital Library (www.train.army.mil).

Additional Information

None

