

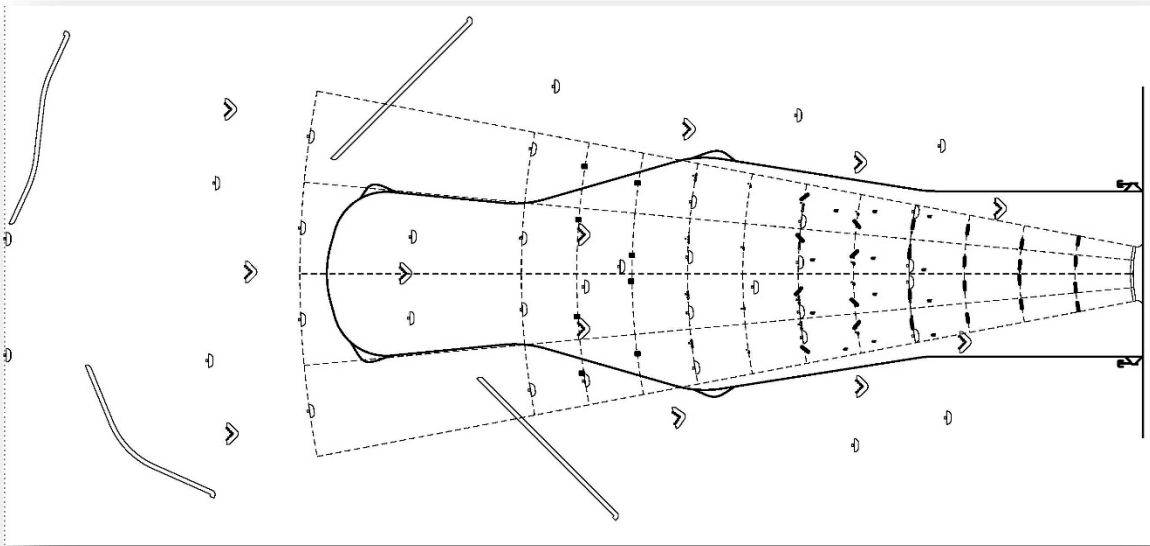


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## Scout/Recce Gunnery Complex (Scout)

# 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). The document includes references to sections of the RDG for information that is general to multiple range types. The document describes the design and construction information that is specific to the range and is not contained in, or differs from, the general section. Use both the specific information in this section and the general sections referenced together for a complete, useable range.

## 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 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 an 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

This section provides the standard layout and a listing of the primary features that are standard on a Scout/Recce; separated into Range and the Range Operations and Control Area (ROCA). The tables include the number and/or size of each item included in a standard facility with hyperlinks to the RDG section with the general design and construction requirements.

## Standard Layout

The following drawings depict the standard layout for the range. They are included at the end of this document.

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

## Range

NUMBER	FEATURE	RDG SECTION
4	Moving Armor Target	MAT
35	Stationary Armor Target	SAT
24	Moving Infantry Target – 15M	MIT
16	Stationary Infantry Target	SIT
4	Double Target Arm - Stationary Infantry Target	DTA SIT
16	Widened Stationary Infantry Target	WSIT
12	Infantry Cluster (7 SIT)	
20	Iron Maiden Target	
8	Iron Maiden Pad	

4	Target Boots	Target Boots
4	2-Man Fighting Position	
4	Sniper Firing Pad	
2	Vehicle Battle Positions - Defilade	
4	Vehicle Battle Positions - Hasty	
4	Vehicle Firing Pad	
Option	Cameras	Cameras
	Range Signage	Range Signage

## ROCA

NAME	SIZE	UoM	RDG SECTION
Control Tower – Non-Instrumented Ranges	1	EA	<a href="#">Range Control Towers</a>
Operations/Storage Building, Standard	800	SF	<a href="#">Ops/Stg Buildings</a>
Latrine: Vault (Latrine: Water)	330 (550)	SF	<a href="#">Latrines</a>
Bleacher Enclosure	1	EA	<a href="#">Bleacher Enclosure</a>
Covered Mess	800	SF	<a href="#">Covered Mess</a>
Small After Action Review Building	1064	SF	<a href="#">Classroom and AAR Facilities Part 1</a> <a href="#">Classroom and AAR Facilities Part 2</a>
Ammunition Loading Dock	1	EA	<a href="#">Ammunition Breakdown Building</a>
Bivouac Area	1	EA	
Unit Staging Area	1	EA	

## Design

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

The standard Scout range includes two course roads that extend approximately 1500 meters downrange. Individual target and target arrays extend to 2000 meters. The range is approximately 650 meters wide. The range includes an overlay of the four center lanes of a Multipurpose Machinegun (MPMG) range to support the scout units vehicle mounted and dismounted machinegun and sniper training.

### General Range Design Requirements

This section contains references to the general range design sections of the RDG. Use these in addition to the sections for a specific item or structure and the design requirements in this document specific to the Scout.

#### General

- [Fire Protection](#)
- [LEED](#)

- [EPACT](#)
- [Furniture](#)
- [ADA](#)
- [Utility Services](#)

### Civil Range Design

- [Siting Considerations](#)
- [Roads/Trails/Parking](#)
- [Target Protection Design Curves](#)
- [Line of sight](#)
- [Topographic Surveying](#)
- [Surface Danger Zones](#)

### Electrical Range Design

- [Data Termination Rack](#)
- [Downrange Power and Data Distribution – General](#)
- [Downrange Power and Data Distribution – Over 300M](#)
- [Target Feeder Voltage Drop Spreadsheet/Instructions](#)

### ROCA

Refer to the [ROCA-General](#) 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.

### Firing Line

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

### Down Range

The Scout/Recce targetry shown is an example of the general arrangement. Refer to the training requirements for detailed engagement information and site topography to develop specific range layout to meet training objectives. Refer to the MPMG section of the RDG for more information on the target layout for the MPMG portion of the RDG.

### 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 particular lane. Provide a view shed for installation trainers to determine if sufficient areas are visible for placing iron maiden targets at unknown distances. Prepared positions may be required if sufficient areas are not visible. 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 targetry 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 scoring data, which is then available to the unit for after action review (AAR).

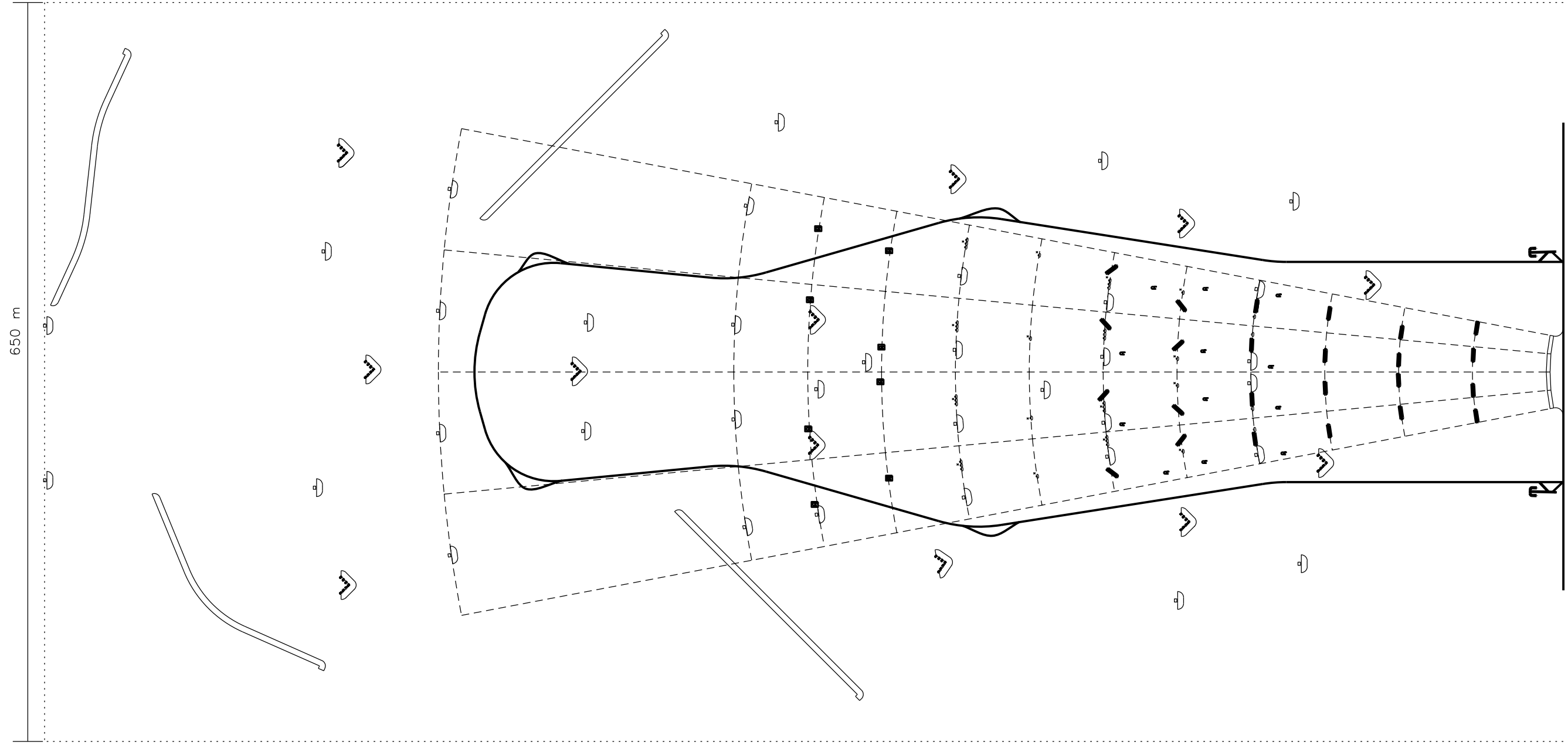
## Requirement Documents





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](http://www.us.army.mil)) and the General Dennis J. Reimer Training and Doctrine Digital Library ([www.train.army.mil](http://www.train.army.mil)).



## Additional Information




None

2100 m  
 2000 m  
 1900 m  
 1800 m  
 1700 m  
 1600 m  
 1500 m  
 1400 m  
 1300 m  
 1200 m  
 1100 m  
 1000 m  
 900 m  
 800 m  
 700 m  
 600 m  
 500 m  
 400 m  
 300 m  
 200 m  
 100 m  
 BASELINE







-  STATIONARY INFANTRY TARGET (SIT) EMPLACEMENT
-  SIT EMPLACEMENT WIDENED TO ACCOMMODATE TWO TARGET MECHANISMS
-  IRON MAIDEN PAD
-  IRON MAIDEN TARGET (IM)

-  MOVING INFANTRY TARGET (MIT) EMPLACEMENT
-  25M X 5M FIRING POSITIONS WITH FOXHOLES (TYP.) VEHICLE FIRING POSITIONS

-  MOVING ARMOR TARGET (MAT) EMPLACEMENT
-  INFANTRY TARGET EMPLACEMENT CLUSTER (7 SITs)
-  STATIONARY ARMOR TARGET (SAT) EMPLACEMENT

LEGEND

-  TRAIL
-  DEFENSIVE DEFILADE POSITION
-  PULL THROUGH/HASTY BATTLE POSITION



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