

## Instrumented Ranges CORE AND NON-CORE Tasks to be Performed during Each Phase

Instrumented Range tasks are organized into nine phases. The table below depicts each task by phase required to complete the task.

**CORE = C; N/C = NONCORE.**

Setup	
Obtain Scenario	C and N/C
Determine Scenario Requirements	C
Load Scenario	C
Run Simulation of Scenario	C
Develop Setup Sheet	C
Co-ordinate work efforts/assign tasks/troubleshoot/QC	C
Pickup Targets	C
Load vehicles for setup (Trailers)	C
Fabricate Targets	C
Target Fabrication Tools	C
Install Target Face	C
Thermalize Target	C
Install Hit Sensors	C
Local Test on Target mechanism/PMCS	C
Verify hit sensor	C
Validate thermalization (IR Thermometer/Thermal Camera)	C
Visual inspection of target pit	C
Inspect moving target rail for damage/debris/PMCS	C
Check moving target	C
Check battery status and replace as required	C
Down load/clean up trucks/tools	C
Repair Roads	N/C
Repair berms and target pits	N/C
Run scenario step by step visual confirm exposure	C
Identify Failures and repair (Targets/Fiber)	C

*Table 1 Set Up phase task/time required*

Occupy	
OIC Briefing of Range	NC
Issue fire fighting equipment	C
Inspect and inventory Unit use equipment/facilities for hand receipt to unit	NC
Site recon w/unit for special events (digging, breaches, dismounts, etc...)	C

*Table 2 Occupy phase task/time required*

### Unit Setup

Co-ordinate work efforts/assign tasks/troubleshoot/QC	C
Load vehicles for range crews	C
Load BES in target pits/test	C
Load/install TADDS in Target Pits as required	C
Instrumentation inventory and hand receipt to unit	C
Instrumentation install	C
Instrumentation check and repair as required	C
Unit verify commo Admin and Tactical	C
Verify waivers, fire check, range book, all admin requirements for hot status	N/C
Unit proof scenario	C
Inventory/Receive/Store BES munitions from firing unit	NC

*Table 3 Unit Set Up phase task/time required***Hot Status**

Co-ordinate work efforts/assign tasks/troubleshoot/QC	C
Clear personnel from down range	C
ROC operator verify admin requirements for hot status	C
Request Hot Status, cease fire, status changes with Range Control	NC
Reset targets for scenario execution	C
Verify proper scenario is loaded	C
Prep scenario for execution	C
Execute scenario	C
Maintain DA 1594 record of significant actions	C
Maintain malfunction log	C
Print score sheets for unit	C
Monitor security of range (fire, cattle, visitors, etc...)	NC
Instrumentation removal	C
Instrumentation install	C
Instrumentation check and repair as required	C

*Table 4 Hot Status phase task/time required***Mandatory Shutdown**

Load vehicles for range crews	C
Generate Malfunction Report	C
Request Permission for down range clearance	C
Check target faces	C
Repair/replace target faces if needed	C
Check thermalization	C
Inspect for damaged or destroyed components in pit	C
Re-verify thermalization	C
Raise/lower target mechanism	C
Replenish BES as required	NC
Replace destroyed TADDS as required	C
Call for tower operator to raise lower target and validate target	C
Verify thermalization through tower camera	C
Repair Roads	NC
Repair berms and target pits	NC

Verify commo tactical and admin	C
Verify video	C
Visual inspection of range for cattle, etc... move them	C
Inspect moving target rail for damage/debris	C
Perform PMCS Checks on moving target carriers	C
Check battery status and replace as required	C
Execute "All Up"	C
Reset targets for scenario execution	C
Clear all personnel from down range	C
Ensure all requirements for hot status	C
Clear from down range status with range control	C
Down load/clean up trucks/tools	C

**Table 5 Mandatory Shutdown phase task/time required**

<b>Unit Clearing</b>	
ROC confirm with unit gunnery is complete	C
ROC shut down (range side)	C
ROC clean up - police call - clear unit from tower	C
Inventory/Clear Unit-Use equipment/facilities from unit	C
Inventory/inspect fire fighting equipment	C
Remove Instrumentation	Assist
Clean Instrumentation	C w/Unit
Inventory/Return Instrumentation to Range Personnel	C
Prepare loss or damage statements	C
Store Instrumentation	C
Assist Unit police range brief	C
Assist Unit in police/clearing range	C
Verify clearing of temp impact areas (Observe/Record/Notify)	C
Verify clearing of breach sites for wire and demo	C
Inspecting dig areas for backfill requirements	C
Inspect unit clearing areas	C
Recover BES	C
Turn unused BES to unit	C
Remove TADDS from Tgts	C
Turn TADDS over to unit	C

**Table 6 Unit Clearing**

<b>Range Recovery</b>	
Load vehicles for range crews	C
Inspect pits and equipment for damage and report to Range Mgr	C
Clean target pits	C
Repair Roads	N/C
Identify/Report Damaged Berms/Pits/Roads	C
Repair berms and target pits	N/C

Evacuate major damaged or malfunction lifters to DS/GS repair site	C
Install major equipment items from DS/GS into pits as available/required	C
Perform Local Test on Target mechanism	C
Inspect moving target rail for damage/debris	C
Perform After Operations Checks/Services on MATs	C
Check battery status and replace as required	C
Down load/clean up trucks/tools	C

**Table 7 Range Recovery phase task/time required**

### Administrative - Unoccupied Status

Provide ACOR/TOR for range operations/planning per shift	
RSOIC Class provided to all employees	
Safety certification of personnel	
Approve alternate targets	
Approve alternate scenario	
Determine Proposed Scenario Requirements	C
Order Target Faces	C
Terrain walks with unit and G3 to support scenario development	C
Inventory equipment	C
Create and maintain work schedule	C
Create and maintain leave schedule	C
Create and maintain pay schedule	C
Inventory target materials	C
Order target materials	C
Construct targets	C
Maintain supply document register on damaged and repaired equip & status	C
Initiate Maintenance Documentation for damaged equipment	C
Generate engineer work orders	C
Schedule engineer work repairs/QC completed work	C
Receive Class IV related repair materials and stockpile	N/C
Range Network connectivity checks and repairs	C
Range Network database administration - backups, upgrades, permissions, purge	C
Commo Life Cycle Support, PMCS	C
Radio frequency <u>coordination</u> for future gunneries	C
Video maintenance repairs and PMCS	C
Update maps/terrain databases (SDT et al)	C
Verify and test target electronic network components diagnostics	C
Obtain unit databases for digital gunnery	C
Inspect fiber and power runs	C
Repair fiber and power runs as required (from ground to lifters, TGTs, Bldgs)	C
Generate weekly range supply reports	C
Generate weekly COR status reports	C
Generate weekly maintenance reports	C

Generate projected manpower reports	C
Generate monthly financial voucher labor and reimbursables	C
Attend weekly range scheduling meeting w/Installation Range Manager	C
Conduct fire inspections (Individual areas of responsibility + Fire Marshals inspections)	C
Conduct safety inspections (Individual areas of responsibility + Safety Officers inspections)	C
Conduct hazmat inspections (Individual areas of responsibility + HazMat Officers inspections)	C
Install and verify software upgrades	C
Assist in visitor briefings on range	C
Maintain buildings and grounds Non-Fac Maint.	C

***Table 8 Administrative - Unoccupied phase task/time required***

### Administrative - Occupied Status

Support engagement data collection	C
Assist in AAR Development	C
Assist in developing AAR Take Home Package	C
Monitor/Maintain Tactical Communications (voice and data)	C
Capture and record data for AAR	C
Operate AAR System	C
Operate ROC systems in support of range ops	C

Table 6