

MEMORANDUM FOR Training Support Center Employees, Battalion S3, Land Ammo Personnel and Certified EST Operators

SUBJECT: Engagement Skills Trainer (EST) Standard Operating Procedures

1. **PURPOSE.** To establish standard policies and procedures for scheduling EST facilities using the Range Facilities Management Support System (RFMSS) and operation of the EST 2000 and the associated facilities.
2. **SCOPE.** This SOP is applicable to all personnel requesting, scheduling, coordinating and utilizing the EST Facilities.
3. **REFERENCES.** RFMSS Scheduling Handbook, June 21, 2010
RFMSS Fire Desk Handbook, June 3, 2010
4. **UNIT SCHEDULING.**
 - a. Unit training officers or NCOs (Land, Air or Ammo) are responsible for entering requests for training in RFMSS. If there are questions about scheduling, contact the Lead Training Instructor, (270) 461- 0622 or the Supervisory Training Specialist, (270) 461-0620.

Scheduling Steps

- Identify desired training date(s)
 - Verify date(s) availability using RFMSS
 - Submit reservation request in RFMSS
 - Conduct face to face coordination with facility manager NLT 10 days prior to training (NCOIC, number of personnel, weapon types, mode of training, etc.)
 - Provide certified operator (operator will NOT be NCOIC)
 - conduct training
- b. The EST Facilities may be scheduled three months out in accordance with the IRAC process.
 - c. Final face-to-face coordination with the facility manager **must** be complete at least 10 days prior to the scheduled training date. If a unit fails to coordinate the requested training, the EST Facility Manager will contact the requestor prior to cancellation and inform them that the unit has not completed coordination. If the unit fails to respond within one day the facility manager will cancel the request in RFMSS.

d. At the time of coordination the unit will provide the operator's name to verify compliance with certification roster. If unit is unable to provide operator names they can call or email the names NLT next duty day. Additional options are to provide unit a roster with certified operator from their respective battalion or reschedule the training. The facility manager can elect to perform operator duties for the unit, strictly on a case by case basis.

e. Units must attempt to conduct the final coordination with the facility manager at the facility that the training is scheduled. Exceptions will be made if that manager is not available.

f. All requests should be standard and NO requests should be continuous. A continuous request could result in causing your unit to be a No Show in RFMSS when the previous day of training is closed out.

g. In order to plan training events the BN S-3 should plan using the following method:

- The maximum number of soldiers that can train per bay for marksmanship training is approximately 70 per bay.
- The maximum number of soldiers that can train per bay for collective is approximately 60 per bay.
- The maximum number of soldiers that can train per bay for the shoot-don't – shoot training is approximately 50 per bay.

h. Training locations for the Engagement Skills Facilities are:

- Building 3701 Indiana and Polk Road, 798-1833
- Building 6084 Screaming Eagle Blvd, 798-5486
- Building 6202 Wickham and 47th Ave, 956-2879
- Building 6757 A Shau Valley and Screaming Eagle Blvd, 798-0111
- Building 6856 Market Garden Road, 798-2454
- Building 7036 Toccoa Road and Trouble Shooter, 412-5875

5. Cancellation of scheduled training.

a. Units wanting to cancel scheduled and approved training using RFMSS must cancel no less than forty eight hours prior to the scheduled training event. Cancellations less than forty eight hours prior to the training will automatically result as a NO-SHOW in RFMSS. All cancellations must be entered in RFMSS.

b. A unit has two hours from their scheduled time to occupy their EST facility or they will be entered as a No-Show, unless coordinated with facility manager prior to the training. Additionally, facility managers will ensure that units that schedule a training

event and do not use the trainer for over an hour will shut down the EST computers until the unit has personnel to train.

6. Hours of Operation.

0800-0830: EST power-up and testing by the facility managers
0830-1200: Unit Training (Monday – Friday) (Does not include federal holidays)
1200-1230: Lunch (Unit Optional)
1230-1530: Unit Training (Monday –Friday) (Does not include federal holidays)
1530-1600: Clean up and Close out

7. Extended Hours, Weekends, and Holiday Training.

a. In Accordance With (IAW) CAM Reg 350-1 a surge request is required for all training events requiring after hours, weekend or holiday training. This process is conducted at the unit level. A surge request memorandum will be submitted through the chain of command 30-days in advance at a minimum. Eight hours per day is normal for weekend support, if the unit requires more training hours, ensure the requirement is included in the Request for Training memorandum. Weekend/holiday training events must have prior approval from the chain of command.

b. Required documents for surge training and weekend/holiday training are posted on the Fort Campbell intranet at the following link and require approval through the chain of command:

<https://intranet.campbell.army.mil/division/g3/training/layouts/15/start.aspx#/SitePages/Home.aspx?RootFolder=%2Fdivision%2Fg3%2Ftraining%2FShared%20Documents%2FSenior%20Commander%20Requests%20%28Off%20Post%2C%20CITA%2C%20Wkend%20and%20DONSA%20Tng%2C%20Leave%29&FolderCTID=0x012000ADDBFAC45F123D468145F47613AD4D8A&View=%7B7A4700C1%2D65F4%2D44CF%2D8D48%2D785FAC685037%7D>

c. TSC personnel will use the above web site to verify that the unit has an approved request for weekend/holiday training prior to reserving an EST request in RFMSS.

8. Weather.

a. In the event that a thunderstorm or lightning is within 5-nautical miles, the trainers will be shut down. Training may be delayed, suspended, or cancelled depending on the threat.

b. In the event of post closure, training will be cancelled.

c. In the event of civilian personnel delayed for weather, units should be prepared to train at the report time of post personnel.

9. EST 2000.

a. The EST provides the means to conduct weapons training indoors in a controlled environment, without expending live ammunition, and without subjecting tactical weapons to wear and tear. The EST supports weapons training for all small arms to include; M-9 Pistol, M16A2 Rifle, M4 Carbine, M-249 Squad Automatic Weapon, M-240B Machine Gun, M-1200 Shotgun, M-320 Grenade Launcher, M136 (AT-4) Anti-armor Weapon, MK-19 Grenade Launcher and M2 50 Cal MG. Soldiers are encouraged to wear the same uniform as would be worn on a live fire range.

b. There are three modes of training provided with the EST system.

-Marksmanship. Includes all standardized training tables for all supported weapons systems.

-Collective. Provides a wide range of scenarios to support a host of collective tasks. This training type is an effective tool for the enhancement of communication skills, command and control, and fire control and distribution.

-Shoot-don't-Shoot. Provides situational target discrimination exercises to place the soldier in circumstances that require judgmental decisions in the application of deadly force.

10. Operators Certification.

a. Units are required to ensure there are an adequate number of personnel certified to operate the EST prior to the unit's scheduled training date. Operator's must be in the rank of SGT (E5) or above, have retainability, and not be on PCS/ETS orders at the time they are certified. Operators should not have any appointments scheduled for the duration of the scheduled class. Operators should report to the scheduled facility NLT 0930 on the morning of the scheduled training.

b. All classes conducted will be 3 days in length with the exception of National Guard or Reserve units which will be given a one day course (for a limited number of operators). Operator course are scheduled by the TSC for open enrollment using RFMSS. Units may also coordinate for their own unit-specific course using RFMSS.

c. When units requests a special training class for their units they must provide a minimum of 10 personnel for the class with a maximum of 16 personnel. If less than 10 personnel show up for the training event, leadership (unit or TSC) will contact the unit and allow them until noon that day to furnish the minimum number of Soldiers to conduct training. If minimum number of soldiers cannot be met, training will be cancelled and unit will be recorded as a no-show in RFMSS. The TSO or TSS will make the decision to conduct the course with less than 10 Soldiers.

d. Monthly TSC training events open to all units will be announced to the DPTMS Training Division for dissemination to BCT S-3s/Land and Ammo Managers. Units should forward name, rank, and unit of Soldiers to the POC for the scheduled training events. In the event that not enough personnel have signed up for the course within 10 days of the event, TSC leadership will contact units within their EST footprint. The maximum number of personnel for these training events will be 16 so it is imperative for units to quickly respond as personnel will be accepted on a first come basis.

e. When students successfully pass the course they will be issued an EST Operators Card. This card should be carried with them and presented to the facility manager prior to training.

f. The operators are certified to operate the EST for a one year duration. Prior to the expiration of the card operators are required to be recertified to retain operators status. Any card that is expired longer than 90 days will not be honored and units will need to have those personnel rescheduled for a full three day class.

g. Units may request current listings of certified operators of their units and should monitor the list to ensure operators remain compliant.

h. Operator's are encouraged to remain knowledgeable on EST system usage by occasionally visiting an EST. This allows the operator to retain proficiency on how to work the system.

i. Operator certifications from other installations are not accepted as substitution for the Ft. Campbell TSC operator course.

11. Basic Rules of EST Facilities

a. Food, drinks, and cell phones may only be used in the troop holding area of the EST. Tobacco products including spit cups are not allowed in the buildings. Troops should be directed to the smoking area at the facilities. Troops will not throw cigarettes onto the ground.

b. Only certified personnel are authorized to operate the EST Operators stations. Operators are the only personnel authorized in front of the firing lines to attach or disconnect weapons from floor boxes.

c. Handle all weapons as though they were real. EST weapons are equipped with a category I infrared laser. Use appropriate caution and avoid staring into the muzzle end of the weapon.

d. Tampering with EST computers is strictly prohibited.

- e. All equipment damage or systems malfunctions will be reported to the facility manager promptly.
- f. Soldiers should maintain their military bearing at the EST. Music, movies from cell phones should not be so loud as to disrupt the facilities managers, who are conducting business at these facilities.
- g. All equipment damage or systems malfunctions will be reported to the facility manager promptly.
- h. Requested mode of training at coordination is the only mode of training authorized unless requested change or addition is noted at least one day in advance of training.

12. Start Up Operations.

- a. Compressors: Will be handled by the facility managers. Operators should not attempt to adjust any settings.
- b. Projectors: Will be handled by the facility personnel. Do not touch or make any adjustments to the projectors.
- c. Power Up: Ensure all weapons data connectors have been disconnected from the floor boxes prior to applying power to the EST subsystems. Start up begins from the right IOS to the left IOS. After switching the power up button this will provide power to all peripheral components of the system, not including the compressors.
- d. Login and calibration: Operation of the EST is from the left subsystem IOS (Instructor Operating Station). Type "EST" for the password, ensure Training is highlighted, then select "ok". Select training mode (i.e., Marksmanship, Collective or Shoot-Don't Shoot). Select OK. The next screen is the system allocation screen; with the mouse select the desired substations. (Either Substation 1 and Substation 2, or Substation 1). Select OK. This will initialize the system's projectors and calibration process.
- e. Connecting Weapons to the Floor boxes: Do not connect weapons to the floor boxes until the system has powered up to the assign fires screen. EST weapons have two line connections that must be connected to the systems floor boxes. One line supplies compress air for recoil replication' the other serves as a power-data interface with computer. Each floor box supports two weapons simulators. There are two air souce connector ports and a power data cable connector port for each weapon. Install the airline first to the appropriate connector port. (Note: silver line connector's with the black "O" rings goes into the silver connector port 100 psi port. The connectors without

the black “O” rings, solid silver or brass gets connected to the 125 psi brass port.) Connect the power-data cable (red dot to red dot). Do not force the power-data connector into the floor box. If any resistance is experienced, stop and ensure the cable connector is properly aligned.

13. **Training.** Once initialization and calibration have been successfully completed, there will be a series of tabbed pages on the screen.

a. **Assign Firers Page:** The operator will assign the selected fire to the corresponding firer. Operators will not add any other information to this page. Operators will select the firers by clicking the mouse on the firers, once firer is highlighted move the mouse to the weapon on the right side and checking the box under firers on the right side. (Do not check the box).

b. **Select Practice:** This is where the training table is selected. In Marksmanship, select the weapons type from the dropdown menu. Select the training table by double clicking the practice or highlighting the practice and selecting the load practice tab. For Collective Training use the dropdown menu to select the training category i.e., Infantry, artillery, combat support, etc. Use the view Practice Description to see details of the selected scenarios. For Shoot-Don't-Shoot scenarios follow the same procedure as collective training.

c. **Setup:** Setup should only be utilized in the collective training mode. This page provides options to the operator to manipulate scenario variables such as weather, atmospheric conditions, and ammunition allocations and weapon malfunction options. Select changes and apply.

d. **Run Practice:** Use the load practice button to initialize weapons for firing. Hit the Play button. Ensure firers do not lock and load weapons until the on screen queue is received. Prior to selecting OK, operators should ensure all firers have the proper number of rounds and are properly loaded by checking the individual firer details on the screen. Select the OK button and the table will begin. The replay option will allow the operator to provide firers with an on screen shot by shot replay in the Marksmanship training tables, and a complete scenario replay with shots displayed for collective and shoot-don't –shoot scenarios. Operators have the option of going to an individual lane detail on the monitor to see more detailed information on an individual firers performance or to view and print score cards.

14. **Changing Training Categories:** To change from one major training type to another, move the mouse cursor to the top left corner of the monitor screen. Select the small IOS Tab. Select the option, Return to Main Menu. This will return the system to the password screen. Re-enter the Password and select the desired training category. The system will then recalibrate and you must again assign the firers to the adjacent weapons.

15. Shut Down Procedures.

a. Weapons: When the system has been returned to the main menu screen, disconnect all weapons from the floor boxes. Check with the facility managers to determine the disposition of the weapons.

b. Systems Shutdown: To shutdown the system, move the mouse cursor to the top left corner of the monitor screen and select IOS and select Return to Main Menu. Once back at the password screen, select shutdown (no password is required). At the next screen, select option #2, Shutdown all free subsystems. This will boot down both the left and right EST subsystem. On screen a projector cool-down timer will begin to count down. Wait until the countdown is complete on both the left and right subsystem monitors. A floating box will appear and say check signal connection. Then switch the main power switch on the back of the left IOS to off and then the main power switch on the right IOS to off.

16. **Cleanup and Close Out.** Units utilizing the training facilities are responsible for cleanup of the facility at the conclusion of training. Operators or unit supervisors will be asked to complete an "ICE" card and return it to the facility manager in order to evaluate and improve our training techniques resulting in greater training dividends for units (if possible, allow them access to your computer and have them complete it on line prior to the end of training).

https://ice.disa.mil/index.cfm?fa=card&sp=91984&s=339&dep=*DoD&sc=32

Cleanup consists of the following:

- a. Vacuum out the trainer, to include firing platforms and observers area.
- b. Rehabilitate all sandbags. Place sandbags three high, facing the same direction, evenly spaced on platforms.
- c. Sweep, mop and vacuum (if necessary) the exterior area outside of Bay area.
- d. Empty all waste receptacles in the immediate area of the Facility.
- e. Clean bathrooms.
- f. Conduct cleanup of break area and smoke area as directed by the facility manager. Note: Check with the facility manager for specific requirements.
- g. Operators will ensure all safety goggles are returned from personnel that used them.

17. Additional Notes.

- a. Do not attempt to fix anything. If problems are encountered contact the facility manager for assistance.
- b. Operator's should brief the soldiers on the M4A4 magazines. After loading, no upward pressure can be applied to the bottom of the magazine. This will cause the weapon to lose rounds and interrupt firing.
- c. Operator's should instruct the soldiers using any of the machine guns in the EST to leave the weapons on fire at all times. Charging these weapons with the weapons on safe cause the bolt to lock in the rear position and requires evacuation to tech support to unlock.
- d. Operators should instruct the soldiers not to manipulate the links or move the ammunition rounds for belt fed weapons.
- e. Maintenance will be performed by the facility managers IAW TD 07-6910-702-10.
- f. Facility Managers will open facilities/close facilities in RFMSS at the end of each training event.
- g. Facility managers will enter the appropriate requirements in TS-MATs.
- h. Facility managers will maintain copies of unit coordination sheets for a period of one year for each training event. The coordination sheets serves as backup for RFMSS/TS-MATS, and quick ref for verifying/pulling data for analysis.
- i. Facility managers will check RFMSS daily for new reservations. Confirmed reservations will be entered into the scheduling matrix posted on the Z drive. Facility managers are responsible for ensuring that RFMSS schedules mirror the scheduling matrix on the Z drive.

18. Safety Note:

- a. All EST weapons are equipped with a category one infrared laser. Observe laser safety procedures. Keep all weapons aimed down range at all times.
- b. Facility managers will brief the Emergency Action Plan to all personnel to ensure that appropriate actions are taken in case of an emergency.
- c. No live weapons are allowed in the facility when firing bays are in the operational mode. If units are conducting PMI with real weapons, it will be conducted in the classroom area and firing bays will be secured so that no live weapons can enter

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the firing bays. Leaders and facility managers will ensure that **ALL** weapons are cleared prior to entering the facility.

19. Approving authority for this SOP is the undersigned at 798-7640.

////////original signed////////
STEVEN L. ZUERCHER
Training Support Officer

Enclosures:

TAB A: Customer Quick Reference Checklist

TAB B: Instructor Program of Instruction (POI)

TAB A: Customer Quick Reference Checklist

- Facility reserved in RFMSS at unit
- Face to face coordination with facility manager NLT 10 days before scheduled training
- Unit has certified (current) operator
- If training scenario/weapons type changes after face to face coordination has been done, contact the facility manager immediately!!!
- Report to training on time and with at least the minimal number of personnel to be trained (face to face coordination should reflect this number)
- Do not touch or make any adjustments to the projectors or compressor
- Follow the instructions of the facility manager
- Submit ICE comment card on line (OIC or NCOIC)
- Conduct clean-up

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TAB B: Instructor POI