

SEVENTH ARMY JOINT MULTINATIONAL TRAINING COMMAND

TRAINING SUPPORT CENTER (TSC)-WIESBADEN

SIMULATORS SOP

Call For Fire Trainer (CFFT)
Engagement Skills Trainer (EST) 2000
HMMWV Egress Assistance Trainer (HEAT)



21 Mar 2012

"Training Today's Warriors"

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- **1. PURPOSE:** The purpose of this Standing Operating Procedure (SOP) is to provide guidance to those units/personnel scheduling training and training in the CFFT, EST, and HEAT.

2. REFERENCES:

- a. TD 06-6910-708-TSUH CALL FOR FIRE TRAINER (CFFT)
- USAREUR REG 350-220 HOME STATION TRAINING Operator Manual for USAREUR HEAT Trainer March 07
- c. TC 55-HEAT TRAINING PROGRAM FOR THE HIGH MOBILITY MULTIPURPOSE WHEELED VEHICLE (HMMWV) EGRESS ASSISTANCE TRAINER (HEAT)
- d. TM 9-HEAT-387-10 OPERATOR'S MANUAL FOR HMMWV EGRESS ASSISTANCE TRAINER (HEAT)
- e. TD-07-6910-702-10 Technical Manual Operator's manual EST 2000
- f. All TM/FM's for M4/16 Rifle, M9 Pistol, M240 MG, M249 SAW, AT-4, M2 HBMG, MK-19 GL, M203 GL
- **3. SCOPE:** This SOP is applicable to all units training within the TSC Wiesbaden's area of operation. Basically, any unit wishing to schedule the simulators we offer for your training needs.
- **4. LOCATION:** The Wiesbaden Simulators section is located in Building 1638, Wiesbaden Army Airfield, at Wiesbaden, Germany.

HOURS OF OPERATION:

Monday – Friday 07:30 – 12:00 & 13:00 – 16:30

Scheduling for usage of the any simulator during nights, weekends or holidays must be requested in writing with justification to TSC Wiesbaden 30 days prior to training.

CLOSED ON AMERICAN HOLIDAYS

All correspondence should be addressed to:

TRAINING SUPPORT CENTER ATTN: AETT-STS-TSB Unit 34600, Box 40 APO AE 09005-0060

TELEPHONE/FAX NUMBERS:

TSC Chief 337-5370 Training Support specialist/ EST/HEAT Operator 337-7612

- **5. ORGANIZATION:** The Training Support Center, Wiesbaden simulations consist of the following sections:
 - a. Call For Fire Trainer (CFFT)
 - b. Engagement Skills Trainer (EST)
 - c. HMMWV Egress Assistance Trainer (HEAT)
- **6. MISSION:** *Identify*, acquire, manage and sustain training enablers required to provide state-of-the-art *home station / deployed* training support and execute the visual information program as directed by USAREUR.

Priorities of support will be in accordance with Internal TSAE SOP as follows:

- (1) Pre-Deployment Training
- (2) Pre-Density Training
- (3) METL Requirements
- (4) All other training and support requirements

//// Original Signed ////
Ronald Clendenen
Chief, Training Support Center
Wiesbaden

Appendix A CFFT

- 1. Description & Capabilities: The Call For Fire Trainer (CFFT) provides a lightweight, rapidly deployable, observed fire training system that will fulfill the need for an observed fire training device that supports all fire support missions; capable of depicting all current and future munitions and expanded to train all soldiers regardless of MOS. CFFT provides the ability to train to standard for mortars, navel gunfire (NGF) and close air support (CAS) (type II and III). The CFFT consists of two stations: Instructor Station and Student Station. There are two types of student Stations; Standard and Enhanced. The Standard is comprised of a map and a set of binoculars, the Enhanced is comprised of Simulated Military Equipment (SME) and Virtual Military Equipment (VME) and a student control station. The Wiesbaden CFFT is a 1:12 configuration (one Instructor to 12 Students) with all twelve student stations having a digital interface. The CFFT device is capable of operating in three modes which are:
- a. Stand-alone mode: Training is accomplished through interaction between the Instructor/Operator (I/O) station and the student station. The I/O can monitor and override the execution of the fire mission, exchange voice and hand-held Terminal Unit (HTU)/forward Entry Device (FED) messages with the student, and select battlefield scenarios for display. The "call for fire" communication can be either Manual: student verbally calls for fire and the I/O enters the data in TACFIRE format using the keyboard. Or Automatic: the student enters calls for fire into the FED/HTU and the trainer automatically extracts and processes the data.
- b. Interactive-automated mode: A digital interface is added between the FO HTU/FED, CFFT, and the FDC lightweight computer unit (LCU) AFATADS (user supplied). The FO's requests for fire via HTU/FED are sent digitally.
- c. FSCATT closed loop mode is similar to in interactive-automated mode but in the FSCATT Closed Loop mode, the CFFT is electronically linked to the FO FED or FIST HTU, the FDC BCS and the FSCATT system

2. CFFT Facilities Guidelines.

- 1. General Guidelines
 - (1) Soldier safety is the priority and training is conducted in minimal lighting.
 - (2) Hearing protection should be used while CFFT training is being conducted.
 - (3) No food, drink, or spit cans authorized in the CFFT room.
 - (4) Cell phones are prohibited in the facility.
- **3. Unit Training:** The training unit is responsible for the conduct of training and providing an OIC/NCOIC that must be present at all times. A training outline must be provided to the TSC Training Technician prior to training.
- **4. I/O Certification Training:** The Training Technician will conduct a 5 day (40 hour) certification training course to unit I/O's on a case by case basis. Students for the I/O course must be an E-5 or above with at least 6 months retain ability in the unit. During the course unit I/O's will learn PMCS, Emergency, Basic Operations, safety, trouble

shooting and start-up and shutdown procedures. The certification is good for one year; after one year they must re-certify again. Units with certified I/O's can conduct training without the Training Technician being present.

5. Scheduling

- a. Scheduling of the CFFT is done through the Range Facility Management Support System (RFMSS).
- b. RFMSS scheduling provides the ability for units that use the training facilities on an installation or other installations, to determine the availability of those facilities, submit requests for those facilities, and determine the status of their submitted requests.
- c. After scheduling the CFFT in RFMSS and Firing Desk/TSC approval, Units are required to conduct direct final coordination with the I/O 48 hours prior to training.
 - d. Telephonic coordination is allowed for units driving more than 30 minutes.
- e. Final unit to TSC/CFFT Operator coordination includes number of Soldiers to train, training intent, weapons, weapons availability etc.
 - f. Units who fail to conduct coordination will lose their scheduled slot.
- g. Joint Multinational Training Center Director of Training is the approving authority for the authorization of Government Operator overtime.
- h. Operations sections of units requiring authorization and passwords to RFMSS must contact the Training Support Specialist DSN 337-7612.
- i. Units scheduling on RFMSS will be approved for training provided training is conducted during normal operating hours and requested two weeks prior to training date.
- **6. NO SHOWS:** Units failing to conduct final coordination will be considered a noshow and all units training at the EST will be canceled. Units failing to show up for training within one hour of their scheduled training will be considered a no-show unless telephonically contacting the Training Support Specialist. A no-show report will be sent to unit commanders and the TSC Chief. The below no show offenses will be reported as described below:
 - 1st No Show- Verbal warning to unit representative
 - 2nd No Show- MFR from Company/Battery Commander
 - 3rd No Show- MFR from Battalion Commander
 - 4th No Show- Report sent to RTSC Baumholder Chief

Appendix B EST

- 1. Description & Capabilities: The Engagement Skills Trainer 2000 (EST 2000) 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 2000 is designed for use as a unit and institutional trainer. The indoor, multipurpose, multilane EST 2000 design provides for individual small arms, crew served, and individual anti-tank training. The system provides tactical training for dismounted Infantry, Scout, Engineer and Military Police squads as well as both basic rifle marksmanship (BRM) and Advanced Rifle Marksmanship (ARM). The system is comprised of multiple independent subsystems that are networked and configured in three operational modes (practice types), which are:
- a. Marksmanship: Provides basic rifle marksmanship for individual small arms and crew served weapons in a 5 or 10 lane configuration. M-16/M4 BRM and ARM, M249, M240B, M2, MK-19, AT4 zero, qualification, night, and NBC training can be conducted. M-16/M4 NBC and night fire familiarization can be accredited in the EST.
- b. Collective Core: Collective Core Training uses both individual and squad weapons at the same time in Infantry, Scout, Combat Engineer, Military Police and Combat Support/Combat Service Support size squads. The system can be ran in a 5 or 10 lane set-up using up to 10 weapons at a time with the ability to shoot across screens.
- c. Shoot Don't Shoot: Provides judgmental shoot-don't-shoot training operated in a 5-lane system configuration only.
- **2. SIMULATED WEAPONS:** The following simulated weapons are available in the EST2000:

M16A2	10 each	
M16A2/M203	2 each	
M16A4	4 each	
M16A4/M203	2 each	
M4	5 each	
M4/M203	2 each	
M9	6 each	
M249	2 each	
M240B	2 each	
MK-19*	2 each	
M2*	2 each	

^{*} Mk-19 requires unit to provide Mount Machine gun mk-64 mod 4, tripod, and T&E equipment.

^{*} M2 requires unit to provide Tripod and T&E equipment.

3. EST Facilities Guidelines for TSAE EST Facilities.

- 2. General Guidelines
 - (1) Soldier safety is the priority and training is conducted in minimal lighting.
 - (2) Hearing protection should be used while EST training is being conducted.
- (3) EST Weapons will be treated as "real" weapons during training and treated as a sensitive item for security.
 - (4) No food or drink is authorized in the EST room.
- (5) Under NO circumstances will live or blank ammunition or any live weapons be allowed in the EST Facility.
- (6) Cell phones are prohibited in the EST facility. Exception is the operator at sites without DSN telephone.
- **4. UNIT TRAINING:** The training unit is responsible for the conduct of training and providing an OIC/NCOIC that must be present at all times. A training outline must be provided to the Training Support Specialist prior to training. Units with certified Instructor/Operators (I/O)'s can conduct training without the Training Support Specialist present. A training outline is attached this SOP.
- **5. INSTRUCTOR/OPERATOR (I/0) Certification Training:** The Training Support Specialist will conduct a two day (16 Hours) certification training course to unit I/O's. Students for the I/O course must be an E-5 or above with at least 6 months retain ability in the unit. During the course unit I/O's will learn startup procedures, hookup of simulated weapons, operation of the instructor/operator station (IOS), trouble shooting procedures and shutdown procedures. EST certification is good for one year; after one year the EST certified person must take a new EST certification course to become certified again.

The I/O course completion list will be kept on file with the Training Support Specialist.

6. Scheduling

- j. Scheduling of the EST is done through the Range Facility Management Support System (RFMSS).
- k. RFMSS scheduling provides the ability for units that use the training facilities on an installation or other installations, to determine the availability of those facilities, submit requests for those facilities, and determine the status of their submitted requests.
- I. When scheduling in RFMSS ensure on the RFMSS "New Request Form" that the Std. Event block is unchecked in order to see EVENTS i.e. EST-Collective Training, EST-M16/M4 Zero and Qualify etc.
- m. After scheduling the EST in RFMSS and Firing Desk/TSC approval, Units are required to conduct direct final coordination with the EST Operator 48 hours prior to training.
 - n. Telephonic coordination is allowed for units driving more than 30 minutes.
- o. Final unit to TSC/EST Operator coordination includes number of Soldiers to train, training intent, weapons, weapons availability etc.
 - p. Units who fail to conduct coordination will lose their scheduled slot.
- q. Joint Multinational Training Center Director of Training is the approving authority for the authorization of Government EST Operator overtime.

- r. EST Facility Weapons availability and maintenance status will affect planning times. Coordination with the EST Facility and Training Support Center prior to training is required in final EST training planning and scheduling.
- s. Operations sections of units requiring authorization and passwords to RFMSS must contact the Training Support Specialist DSN 337-7612.
- t. Units scheduling on RFMSS will be approved for training provided training is conducted during normal operating hours and requested two weeks prior to training date.
- **7. NO SHOWS:** Units failing to conduct final coordination will be considered a noshow and all units training at the EST will be canceled. Units failing to show up for training within one hour of their scheduled training will be considered a no-show unless telephonically contacting the Training Support Specialist. A no-show report will be sent to unit commanders and the TSC Chief. The below no show offenses will be reported as described below:
 - 1st No Show- Verbal warning to unit representative
 - 2nd No Show- MFR from Company/Battery Commander
 - 3rd No Show- MFR from Battalion Commander
 - 4th No Show- Report sent to RTSC Baumholder Chief

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Appendix C HEAT

1. Description & Capabilities:

a. The HEAT is designed and manufactured equipment to simulate the turn-over on an armored HMMWV. The basic components for this equipment are the cut-away frame of a Reefer Container and the HMMWV body. The trainer is propelled by a hydraulic/electrical system.

- b. The HEAT is capable of rotating and stopping in various positions making it the only Army training device that allows Soldiers to practice a variety of egress techniques at different angles. The purpose is to teach Soldiers the proper procedures to egress from an inverted HMMWV.
- c. Conducting this training under controlled conditions will allow vehicle occupants to gain experience in the proper egress procedures. This practice is necessary for the Soldiers to achieve self-control and overcome natural fear and panic following the catastrophic event which led to the vehicle becoming inverted.
- 2. **DUTIES AND RESPONSIBILITIES:** The following personnel perform the duties and responsibilities for the HEAT training program.
 - a. Commander: The Commander ensures adequate resources are allocated to support an effective HEAT training program. The unit operations officer has staff responsibility, coordinating, fielding, and supervising the HEAT training program, to include the following:
 - 1) Maintaining the currency and relevance of the unit's drivers training program and associated standing operating procedures (SOP).
 - 2) Ensuring an inspection and maintenance checks are conducted on the HEAT and facility when utilized by the unit.
 - 3) Ensuring users conduct pre-operation, during operation, and postoperation preventative maintenance and safety checks to ensure the HEAT is functioning properly.
 - 4) Coordinating procurement of additional training aids to support the HEAT training program with simulated realistic training. This can be requested through the TSC Wiesbaden TADS/VI section office.
 - 5) Overseeing the associated risk management process when utilizing any training area.
 - 6) Risk assessment must be available for inspection by safety personnel at all times.

b. Safety Officer/NCO will:

- 1) Assist with establishing and implementing the Command's HEAT training program, training inspection, and safety programs ensuring it is in line with the Master Drivers SOP.
- 2) Review and monitor the program and HEAT device for safe operations.
- Review accident experience trends and provides an analysis to appropriate agencies/organizations as it pertains to the HMMWV and

- HEAT in order to assist in maintaining the HEAT training program's currency and relevance.
- Submit any changes to the Local Training Support Center for changes to the trainer.
- 5) Assist in any investigation where a Soldier is injured while conducting HEAT training in order to mitigate the risk for future use.
- 6) Safety briefing is prepared and given to soldiers attending the HEAT training.

c. Unit Instructor/Operators (I/O's) and Master Drivers Will:

- 1) Develop training plans in order to prepare Soldiers to conduct effective HEAT training.
- 2) Complete a risk assessment in accordance with Field Manual (FM) 5-19, prior to conducting HEAT training with their unit.
- 3) Ensure personnel attending the HEAT training are medically fit to participate in this training. Commanders will screen Soldiers prior to HEAT training for any profiles or medical conditions that may preclude participation in the training. Conditions such as previous neck and back injuries or pregnancy will preclude Soldiers from training.
- 4) Notify those in their charge of the hazards associated with HEAT training.
- 5) Ensure personnel attending HEAT training are properly equipped, including protective eyewear.
- 6) Ensure personnel selected to attend the HEAT training to accomplish any directed or recommended prerequisite training.

d. Commanders, Supervisors and Trainers who attend HEAT training will:

- 1) Read and be familiar with TC 55-HEAT and TM 9-HEAT-387-10.
- 2) Review the HEAT Risk Management Worksheet and make any local expansions necessary for compatibility with the unit mission essential task list (METL).
- 3) Ensure the HEAT preventive maintenance checks and services (PMCS) and prescribed maintenance is performed.
- 4) Ensure communications are established in case of emergency.
- 5) Ensure any waste from motion sickness is policed.
- 6) Ensure training records are completed in accordance with local SOP.

e. TSC Wiesbaden Training Instructors:

- 1) The instructor will provide operations training to certify unit Officers and NCO's, enabling the unit to operate the trainer in a safe manner.
- 2) At no time will the TSC instructor be the unit trainer. The instructor will only be the operator of the simulator when there are no certified operators in the unit.
- It is the unit's responsibility to provide a safety NCO or Master Driver to conduct the training for the unit following their units and HEAT SOP and safety guidelines.

- 4) The TSC Instructor will conduct PMCS prior, during and after operation when operating the simulator.
- 5) The TSC Instructor will also conduct the weekly and annual PMCS on the system.

3. HEAT Training Requirements:

- Medic or Combat Life Saver with an Aid bag, covered tactical or non-tactical vehicle that can transport a litter, licensed driver with a map to the nearest medical facility.
- b. Motion sickness supplies (medical/hazardous waste), such as:
 - 1) Two one-gallon pails.
 - 2) Latex (or equivalent) gloves.
 - 3) Shop rags/towels.
 - 4) Motion sickness bags.
 - 5) A self-closing trash can and plastic trash bags.
- c. Two certified operators to run the HEAT (main operator and assistant operator).
- d. All operators will complete a PMCS on the HEAT prior to operations IAW TM 9-HEAT-387-10 Operator's Manual for HMMWV Egress Assistance Trainer (HEAT) and record deficiencies on DA 2404 and report any deficiencies to the TSC training staff in person at building 1043 or call 337-7612.
- e. Hazardous material absorbent material to recover any oil and/or grease that may leak from the HEAT device and/or to clean up the effects of motion sickness.
- f. No food or drink is authorized in the HEAT trainer room.
- g. Cell phones are prohibited in the HEAT facility.
- h. A completed risk assessment must be submitted to the TSC prior to operating the HEAT. A 90° egress is extremely dangerous and must only be conducted with the approval of the commander. An additional risk assessment must be done prior to the conduct of any 90° egress training being started. No egress will be conducted through the Gunner's Hatch.
- i. Units will ensure the HEAT facility is clean prior to clearing and turning keys into TSC training staff at building 1043.

4. Mandatory Training Uniform and Equipment:

- a. HEAT trainees will at a minimum report with the following uniform.
 - 1) Boots
 - 2) Army/Air Force/Marine/Navy Battle Dress Uniform
 - 3) Protective eye wear
 - 4) Helmet (PASGT or MITCH)
 - 5) body armor
- b. When training with protective masks, Load Bearing Equipment (LBV) or other equipment that would typically be worn while in an up-armored HMMWV in a combat zone; the unit will prepare a risk assessment to include that equipment.
- c. Whistle, air horn, or similar signal device.

- d. Recommended (Not mandatory) knee-pads and elbow-pads (flailing and egress injury abatement).
- e. Safety glasses or goggles (mandatory for eye injury abatement).
- **6. I/O Certification Training:** The Training Support Specialist will conduct a 4 hour certification training course to unit I/O's. Students for the I/O course must be an E-5 or above with at least 6 months retain ability in the unit. During the course unit I/O's will learn PMCS, Emergency, Basic Operations, safety, trouble shooting and shutdown procedures. The certification is good for one year; after one year they must re-certify again. The I/O course completion list will be kept on file with the TSC instructors.

7. Scheduling

- A. Scheduling of the HEAT is done through the Range Facility Management Support System (RFMSS).
- B. RFMSS scheduling provides the ability for units that use the training facilities on an installation or other installations.
- C. When scheduling in RFMSS ensure on the RFMSS "New Request Form" that the Std. Event block is unchecked in order to see EVENTS i.e. HEAT training.
- D. After scheduling the HEAT in RFMSS and Firing Desk/TSC approval, Units are required to conduct direct final coordination with the HEAT Operator 48 hours prior to training.
- E. Telephonic coordination is allowed for units driving more than 30 minutes.
- F. Final unit to HEAT Operator coordination includes number of Soldiers to train.
- G. Units who fail to conduct coordination will lose their scheduled slot.
- H. All Units approved for training is for normal operating hours. A request is needed two weeks prior to being authorized for any weekend training.
- **8. NO SHOWS:** Units failing to conduct final coordination will be considered a noshow and all units training at the HEAT will be canceled. Units failing to show up for training within one hour of their scheduled training will be considered a no-show unless you telephonically contact the TSC HEAT operator. A no-show report will be sent to unit commanders and the TSC Chief. The below no show offenses will be reported as described below:
 - 1st No Show- Verbal warning to unit representative
 - 2nd No Show- MFR from Company/Battery Commander
 - 3rd No Show- MFR from Battalion Commander
 - 4th No Show- Report sent to RTSC Baumholder Chief