



**DEPARTMENT OF THE ARMY**  
**DIRECTORATE OF TRAINING PLANS, TRAINING AND MOBILIZATION**  
**TRAINING DIVISION**  
**TRAINING SUPPORT CENTER**  
**2175 REILLY ROAD, STOP A**  
**FORT BRAGG, NORTH CAROLINA 28310-5000**

REPLY TO  
ATTENTION OF:

IMBG-PLT-T-T

1 December 2016

STANDARD OPERATING PROCEDURES (SOP) for the HMMWV EGRESS ASSISTANCE TRAINER (HEAT)

**1. PURPOSE.** To establish standard policies and procedures for scheduling in the **Range Facilities Management Support Services (RFMSS)** System and operation of the HEAT trainer.

**2. SCOPE.** This SOP is applicable to all personnel requesting, scheduling, and utilizing the HEAT trainer.

**3. REFERENCES.**

- RFMSS Scheduling Handbook, June 21, 2010
- FRMSS Fire Desk Handbook, June 3, 2010
- TM 9-HEAT-387-10 Operators Manual for the HEAT
- CENTCOM Message HMMWV Egress Assistance Trainer (HEAT)
- Pre-deployment training Requirement, dtd 141646Z Sep 07
- CFLCC Training Circular 21-305-4-1 HEAT TTP, dtd 27 Feb 06
- GTA 55-03-030
- TC 55-HEAT, Training Program for the High Mobility Multipurpose Wheeled Vehicle (HMMWV) Egress Assistance Trainer (HEAT)
- FORSCOM Training Guidance for Follow-on Forces Deploying ISO Operations on Southwest Asia, dtd 211500 Sep 07.

**4. UNIT SCHEDULING.**

- a. Battalion S3 or battalion training officers (Land, Air or Ammo NCO) are responsible for requesting training through RFMSS. If there are questions about scheduling, call (910) 396-2023.
- b. The H.E.A.T. may be scheduled six months out but, not later than two weeks from the requested training date(s).
- c. The scheduling priority is as follows:
  - Deploying Units
  - Mobilizing Units
  - Schools
  - Space Available
- d. The unit must provide at least three certified HEAT Instructor/Operators (I/O) (see section twelve and thirteen below).

- e. The HEAT facility accepts reservations for unit level training events only.
- f. POC for technical or tactical scenarios is the HEAT site lead at (910) 396-3291.

#### 5. CANCELTION OF SCHEDULED TRAINING.

- a. Units wishing to cancel scheduled and approved training must do so no less than forty-eight hours prior to scheduled training. Cancellations less than forty-eight hours prior to training will automatically be a **NO-SHOW**. **All Cancellations must be done by the RFMSS Operator.**
- b. HEAT training will be cancelled if the unit I/O fails to show up to conduct training for their unit, soldiers are not in the correct uniform, no signed risk assessment, no combat lifesaver, no aid bag or no government EVAC vehicle. This will result in a No-Show.
- c. A unit has two hours from their scheduled time to occupy their trainer. If the unit does not occupy, their trainer will become available for other units to use unless prior coordination has been arranged.

#### 6. HOURS OF OPERATION.

- 0730-0800: HEAT power-up and testing
- 0800-1200: Unit Training
- 1200-1300: Lunch (unit option)
- 1300-1530: Unit Training
- 1530-1600: Clean up and Close out

**7. EXTENDED HOURS, WEEKEND, AND HOLIDAY TRAINING.** A request is required for all training events requiring after hours, weekend or holiday training. A memorandum will be submitted 30-days in advance at a minimum. Eight-hours per day is normal for weekend support, if the unit requires more training hours, ensure this requirement is included in the Request for Training memorandum. Contact the HEAT team for procedures or questions reference support.

**8. WEATHER.** 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 cancel depending on the threat.

#### 9. RESPONSIBILITIES OF THE COMMANDERS.

- a. An O5 must sign a completed Deliberate Risk Assessment Worksheet (found online) IAW FM 5-19 or DA PAM 385-50 (Appendix D) and provide it to members of the HEAT training team prior to conducting HEAT training with their unit(s).

- b. Ensure that a completed *Training Participant Screening Sheet* (Appendix B) is provided to members of the HEAT Training Team on the day of the training for each Soldier participating in training.
- c. Ensure personnel participating in training are in the proper uniform.

**10. TRAINING.**

- a. Effective 1 Oct 07, HMMWV rollover training is a USCENTCOM operational requirement. The requirement includes classroom rollover training and hands-on training utilizing the HEAT. Additionally, the four crew/battle drills and annual refresher training are mandatory for HMMWV crewmembers. Rollover crew/battle drills will be scheduled at least once during each training year and include training outlined in TC 55-HEAT.
- b. Training location is at the Longstreet training facility.
- c. The number of soldiers supported:
  - If training on multiple days, this number should reflect the number of soldiers sent daily.
  - The average number of Soldiers that can be trained on a HEAT Trainer is **80 per day**.
  - The maximum number of soldiers that can be sent to the instructor/operator course is **20**, the minimum is 3.

**11. UNIFORM:** The uniform for all Soldiers is combat boots, Army combat uniform, protective eye wear, helmet, gloves and body armor. It is at the commander's discretion for protective masks and any other equipment typically worn while riding in an up-armored HMMWV in a combat zone. It is also suggested HEAT participants wear knee and elbow pads during training. Weapons for training will be provided by the HEAT Trainers.

**12. INSTRUCTOR/OPERATOR CERTIFICATION.**

HEAT Operators must be trained and certified by HEAT Training Team (Office). As such, Commanders must determine competent personnel to attend the HEAT/MRAP I/O Course. Ideally, someone who is already a driver trainer or has experience as an instructor or safety officer/NCO may be designated by the commander to attend HEAT/MRAP I/O Course. An I/O must be selected not only for their technical qualifications but also for their demonstrated performance, objectivity, and ability to observe and provide constructive comments. Qualification training for HEAT I/Os will be conducted using the following guidance:

- a. The scheduling for the I/O course is done through RFMSS. It is recommended that six NCO's are sent to the course, but the minimum requirement is three.
- b. Individuals conducting HEAT training must be trained and certified by the HEAT Training Team (Office).
- c. Initial qualification training will consist of, at a minimum, hands-on training of all tasks the operator is authorized to perform. Special

emphasis will be placed on Academic and Performance Phase Learning Objectives and appropriate PMCS. Annually, all HEAT I/Os must demonstrate a working knowledge and understanding of the appropriate subject areas in the HEAT Training Manuals and the ability to administer the Commander's HEAT training program.

- d. The initial/annual evaluation will determine the HEAT Operator's ability to train other personnel and perform essential tasks to the prescribed standards. HEAT Training Team (Office) may evaluate the HEAT Operators by observing the performance of the prescribed duties or by functioning as a crewmember undergoing HEAT training by the HEAT Operator, in order to evaluate the effectiveness of the HEAT Operators instruction.

**13. HEAT INSTRUCTOR/OPERATOR COURSE.** The HEAT I/O Course is primarily for training the Master Drivers of all units deploying or mobilizing through Fort Bragg, North Carolina. Due to the fact that each I/O candidate will physically conduct Crew/ Battle drills (see appendix C), the following conditions must be met for the I/O course:

- a. The using unit is responsible for providing a Combat Life Saver (CLS) with bag and a litter capable Government evacuation vehicle.
- b. Selected individuals will need to bring a CRM assessment signed by the first O5 commander in the chain of command(original only).
- c. Each I/O candidate will bring a completed Heat Participation screening sheet.
- d. The Uniform for the I/O course is combat boots, Army combat uniform, protective eye wear, helmet, gloves and body armor. It is at the commander's discretion for protective masks and any other equipment typically worn while riding in an up-armored vehicle in a combat zone. It is also suggested HEAT participants wear knee and elbow pads during training.

**14. SAFETY CONSIDERATIONS.** Of all the vehicle occupants, the likelihood of injury to the gunner is disproportionately higher than those of the others. Knowing the fundamental purpose of the HEAT, those occupying the gunner position must exercise particular diligence in securing occupant restraints, bracing for the rollover, and be particularly mindful of the increased potential for head and neck injuries - even in the device.

- a. **Medical pre-screening.** HEAT training undertaken while being treated by prescription medications, must be done so with the knowledge and approval of the treating physician.
- b. **Safety hazard awareness notice.** A potential for a mishap during HEAT training is acknowledged. In order to ensure the safety of staff and HEAT Training participant(s), the following considerations will be addressed. Be alert for those who appear to be experiencing difficulty. In the event of motion discomfort, the individual or the unit to which the individual

belongs will be responsible for cleaning the physical evidence (i.e., the release of any bodily fluid or compound) of such discomfort before training will continue.

- c. **Hazardous conditions and control measures.** Students must be informed of any known hazardous conditions and control measures that exist in the training environment. All watches, rings, and jewelry worn around the neck shall be removed; pagers or cell phones removed; and all pockets emptied of contents particularly pens, pencils and pocket knives. Earrings should be removed to prevent inadvertent tearing of the earlobe during inversion and egress from the device.

Crew members must be briefed of their responsibility to report any unsafe/unhealthful condition they may discover. The instructor will identify the location of emergency equipment, fire exits, and local procedures to be used in the event of a fire, injury, or other emergency. In the event of an in-HEAT emergency, exit the HEAT immediately and proceed to the pre-designated location. First aid treatment (Unit medical personnel- see **paragraph e.**) includes treatment for shock, Cardiopulmonary Resuscitation (CPR) when needed, and transport to the nearest medical treatment facility IAW the Pre-Mishap Plan (Handout).

- d. **Pre-training requirements.** Prior to engaging in HEAT training, personnel shall be proficient with the wear and operation of standard uniform and combat equipment worn in the theater, and be familiar with survival, signaling and rescue techniques appropriate to survival situations typical of disabled vehicles in the AOR.
- e. **Emergency medical personnel.** There will be a minimum of one CLS on-site during any operation of the HEAT. CLS services will be provided by the unit undergoing the training. Emergency medical personnel with appropriate equipment and a litter capable Government vehicle for transport will be readily available during all HEAT training. The CLS will be responsible for confirmation of the Heat Index Category throughout the training period (907-HEAT). In the event there is an injury that the CLS cannot handle, the unit will immediately call 911 to have the soldier evacuated to the nearest facility. Training will not begin unless a certified CLS with bag and a litter capable Government evacuation vehicle is on site.
- f. **Safety reminder.** All personnel will be reminded that personal injury, death, or equipment damage can result from carelessness, failure to comply with the approved procedures, violations of warnings, cautions, and safety regulations.
- g. **Risk Assessment Level.** This much remain at a Moderate level. The Deliberate Risk Assessment Worksheet (DRAW) is a decision-making process used by leaders to mitigate risks associated with all hazards that can injure or kill people, damage or destroy equipment, or otherwise impact mission effectiveness. CRM is provided by the HEAT Training Team (Office). The 90° egress is extremely dangerous and will only be

conducted with the approval of the commander. Egress will only be done through the Gunner's Hatch.

**15. FACILITIES AND CONDUCT ON SITE.** Facilities include the following: Port-a-Potties with wash stations, beverage and snack machines and two smoking areas. Please discard all plastic and aluminum cans in the recyclable bins. Use of smokeless tobacco is prohibited in the classroom and training area, use smoking areas; **"SPIT BOTTLES" ARE PROHIBITED.** Food and snacks are not permitted in the training area except for beverages for hydration.

**16. CLEAN-UP AND CLOSE OUT.** Using units are responsible for cleanup of the training facility at the conclusion of training. Units will complete an "ICE" card(s) and turn it into the Site Lead in order to evaluate and improve our training techniques resulting in greater training dividends for units. Clean-up activities include the following:

- a. Clean the classroom and the trainer.
- b. Empty all waste receptacles in the immediate area of assigned trainer.
- c. Conduct outside police-call.
- d. Conduct cleanup of break area, smoke area, and latrine prior to departure as directed by the facility personnel. **Note: Check with facility personnel for specific requirements.**

//ORIGINAL SIGNED//  
KEITH R. CARR  
Training Support Officer

### **Appendices**

- A. HEAT Training Participant Screening Sheet
- B. HEAT Safety Brief
- C. HEAT Crew/Battle Drill and Scenario Descriptions
- D. Deliberate Risk Assessment Worksheet
- E. Class E Mishap Reporting Form
- F. HEAT Location Strip Map
- G. MEDEVAC Strip Map

**Appendix A**

**HEAT Training Participant Screening Sheet**

**HEAT TRAINING PARTICIPANT SCREENING SHEET**

NAME (LAST, FIRST MI) \_\_\_\_\_ SSN: \_\_\_\_\_ RANK: \_\_\_\_\_

UNIT \_\_\_\_\_ AGE \_\_\_\_\_ DATE OF LAST PHYSICAL \_\_\_\_\_

TRAINING: INITIAL/REFRESHER MEDICAL STATUS (Profiles): \_\_\_\_\_

1. Have you been physically ill in the last two weeks? Y N
2. Have you taken any medications in the last 24 hours? Y N
3. Are you presently under any medical treatment or (aircrews) have you been medically grounded in the last 30 days? Y N
4. Have you had any shots or immunizations in the past 12 hours? Y N
5. Have you had any dental work in the past seven days? Y N
6. Have you donated blood in the last seven days? Y N
7. Have you had less than your normal amount of sleep in the last two nights? Y N
8. Have you had any alcohol in the last 12 hours? Y N
9. Have you changed your eating habits in the last 24 hours? Y N
10. Do you have any physical condition which might be aggravated by this training? Y N
11. Have you had any back or joint trouble in the last 30 days? Y N
12. Have you had any head, neck, back, or any major previous bone fracture? Y N
  - a. If so, have you been released for such activity by a Competent Medical Authority? Y N
13. For women: Are you pregnant? Y N
14. Do you have any physical condition not noted above? Y N
15. Have you ever had a traumatic experience in vehicles and/or do you have any fear associated with being in a tactical vehicle, such as a HMMWV? Y N
16. Is there any reason why you shouldn't participate in training today? Y N
17. Have you previously requested to drop from any MET/egress training? Y N

**Note:** If you marked **yes** to any one of these questions, please provide explanation in the section below identifying by number the question to which the reference is made.

**If my medical status should change during this course of training, I will immediately report my status to the Lead HEAT Instructor.**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Appendix B**

**SAFETY BRIEF**

## **Safety Brief**

- **Has anyone had any injuries or surgeries in the last 30 days**
  - **Remove all jewelry, dog tags, thumb drive's, knives, rings, pens and any loose and sharp objects from pockets / IBA.**
  - **Uniform Requirements:**
    - **ACH/Kevlar**
    - **IBA w/SAPI**
    - **Knee & Elbow Pads (optional)**
    - **Ballistic Goggles / Not Glasses**
    - **Gloves**
  - **Do not approach or board the platform until instructed to do so.**
  - **Pay attention to Safety personnel, take all commands from the operator.**
  - **In case of power failure during simulation, stop all drills and wait for assistance from safeties**
-



**Appendix C****HEAT CREW/BATTLE DRILLS AND SCENARIO DESCRIPTIONS****1. Crew/Battle Drill.**

- a. The **first drill is for familiarization**, pausing to highlight the 30- and 25-degree critical rollover angles and righting the device back.
- b. The **second drill shall be a "dry run"** - completely rolling over (inverted) - no actual release of the seatbelts or Gunner's Restraint System/Product Improved Gunner's Restraint System harness will be made.
- c. The **third will entail inverting the device, simulating a dry land roll-over**. Participants actually exit the device, while inverted out their own door.
- d. After righting the device, crew rotating seats and re-entering the device. The **fourth drill will entail inverting the device, simulating a water entry**.

**2. Scenarios.**

- a. **Scenario 1** - Orientation scenario. Demonstrate 25, 90, 180, and 360 degrees.
- b. **Scenario 2** - HMMWV rollover to 180 degrees, Basic. Egress from one door.
- c. **Scenario 3** - IED explosion causes HMMWV rollover to 180° with (1) injured but conscious Soldier. Egress from one door.
- d. **Scenario 4** - IED explosion causes HMMWV rollover to 180° with (2) injured but conscious Soldiers. Egress from one door.
- e. **Scenario 5** - IED explosion causes HMMWV Rollover to 180° with (1) injured and unconscious Soldier. Egress from driver's door.
- f. **Scenario 6** - IED explosion causes HMMWV Rollover to 180° with (2) injured and unconscious Soldiers. Egress from driver's door.
- g. **Scenario 7**- HMMWV Rollover to 90°, Basic. WARNING: 90° Egress is extremely dangerous and must only be conducted with the approval of the commander. Egress will only be done through the Gunner's Hatch.
- h. **Scenario 8**- IED explosion causes HMMWV rollover to 90° with (1) injured but conscious Soldier. WARNING: 90° Egress is extremely dangerous and must only be conducted with the approval of the commander. Egress will only be done through the Gunner's Hatch.

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- i. **Scenario 9** - IED explosion causes HMMWV rollover to 90° with (2) injured but conscious Soldier. WARNING: 90° Egress is extremely dangerous and must only be conducted with the approval of the commander. Egress will only be done through the Gunner's Hatch.
  
- j. **Scenario 10**- IED explosion causes HMMWV Rollover to 90° with (1) injured and unconscious Soldier. WARNING: 90° Egress is extremely dangerous and must only be conducted with the approval of the commander. Egress will only be done through the Gunner's Hatch.
  
- k. **Scenario 11** - IED explosion causes HMMWV Rollover to 90° with (2) injured and unconscious Soldiers. WARNING: 90° Egress is extremely dangerous and must only be conducted with the approval of the commander. Egress will only be done through the Gunner's Hatch.

**Appendix D**

DELIBERATE RISK ASSESSMENT WORKSHEET						
<b>1. MISSION/TASK DESCRIPTION</b>					<b>2. DATE (DD/MM/YYYY)</b>	
HEAT / MRAP Egress Training Device						
<b>3. PREPARED BY</b>						
<b>a. Name (Last, First Middle Initial)</b>			<b>b. Rank/Grade</b>		<b>c. Duty Title/Position</b>	
<b>d. Unit</b>		<b>e. Work Email</b>			<b>f. Telephone (DSN/Commercial (Include Area Code))</b>	
<b>g. UIC/CIN (as required)</b>		<b>h. Training Support/Lesson Plan or OPORD (as required)</b>			<b>i. Signature of Preparer</b>	
Five steps of Risk Management: (1) Identify the hazards (2) Assess the hazards (3) Develop controls & make decisions (4) Implement controls (5) Supervise and evaluate (Step numbers not equal to numbered items on form)						
	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<input type="checkbox"/> + <input type="checkbox"/> -	Mounting or dismounting of Egress Training device	Slip, trip and fall during all entry and exit procedures	H	1. All personnel will maintain 3 points of contact at all times.  2. All personnel will maintain situational awareness of their surroundings.	How: Everyone will receive instructions during safety brief. Train safeties to ID and correct unsafe acts  Who: Direct observation by Egress training instructors and unit trained safeties. All leadership will assist.	L

	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 5px; text-align: center; line-height: 20px;">+</div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 5px; text-align: center; line-height: 20px;">-</div>	Rotation of trainer	Head/Neck injuries resulting from unsecured personnel and equipment.	H	1. All training will be conducted under the direct observation of a trained safety. 2. All participants will wear PPE to include: Helmet, eye protections and full IA. 3. All occupants will remain belted in seats until safeties instruct them that it is safe to unfasten. 4. Interior of vehicle trainer is padded 5. No unsecured items are allowed in trainer 6. All individuals must complete a medical fitness questionnaire prior to participation. 7. All individuals will understand actions required during a vehicle rollover.	How: 1. Certify all safeties on facilities SOPs. 2. Leadership will conduct PCCs/PPCs prior to training. 3. Incorporate instructions into safety brief. 4. & 5. PMCS equipment before training. 6. OIC/NCOIC must approve form prior to trainer. 7. Rollover battle drills are taught during trainer class  Who: 1. Site PM certifies all safeties and will be on site. 2. Spot check from leadership at all levels. 3. Safeties will ensure all receive complete safety brief 4 & 5. PM/all safeties will PMCS equip before OPN. 6. OIC will review all evaluations before event. 7. Senior vehicle occupant enforces drill during rollover.	M
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 5px; text-align: center; line-height: 20px;">+</div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 5px; text-align: center; line-height: 20px;">-</div>	Rotation of trainer	Personal injuries resulting from pinch point and loose doors/ hatches	H	1. Communication hazards to occupants before and during training. 2. Maintain constant situational awareness of surroundings. 3. Keep body parts away from moving parts and hazardous components. 4. Ensure all doors and hatches are secured while trainer is in motion.	How: 1. Certify all safeties on equipment characteristics. 2. Train safeties to identify and correct unsafe acts. 3. Place safeties on the control panel and each side. 4. All doors/hatches will be secured while moving.  Who: 1. Site PM certifies all safeties and will be on site. 2. All leaders and safeties will remain vigilant. 3. Safeties will ensure all hazardous areas are secured. 4. Only safeties can tell occupants to lock/unlock door	M

	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<input type="checkbox"/> + <input type="checkbox"/> -		Personnel being struck by loose objects	M	1.Restrict items that are allowed in trainer. 2. Ensure all personnel and objects are properly secured prior to operation. 3. All personnel are belted in during operation	How: 1. Only foam training aids are authorized 2 & 3 Incorporate into brief, spot checks by safeties prior to operation. Who: 1&3 Direct observation by Egress instructors and trained safeties. 2. All leadership will assist.	L
<input type="checkbox"/> + <input type="checkbox"/> -		Heat and Cold weather injuries	M	1. Ensure all personnel are aware of how to detect and prevent heat and cold injuries. 2. Ensure all personnel have appropriate gear. 3. Limit exposure time whenever possible.	How: 1. Incorporate Heat/Cold injuries in safety brief. 2. PCCs/PCIs 3. Identify staging areas. Who: 1. Safeties will brief current weather conditions. 2. All leaders will spot-check 3. Safeties will keep time.	L
<input type="checkbox"/> + <input type="checkbox"/> -		Injuries to operator resulting from moving parts.	H	1. Establish a 6' exclusion zone during operation 2. Identify hazardous parts and areas. 3. Identify location of emergency stop buttons. 4. Teach operator how to safely operate equip.	How: 1&2. Hazardous areas marked with barriers. 3. Everyone is briefed on emergency stop buttons. 4. All safeties must be trained and certified on equip. to operate. Who: 1-3 PM ensures all areas identified and certifies all safeties. 4. Equipment is operated under the direct supervision of a PM representative.	M
<input type="checkbox"/> + <input type="checkbox"/> -		Ejection of gunner during rollover drill.	H	1. All personnel will remain in harness until told to release. 2. Occupants secure gunner during rollover and pull into vehicle once it exceeds 30 degrees. 3. All occupants will communicate hazards and fully understand roles and responsibilities during rollover drills.	How: 1. Only instructions will come from safeties. 2&3 Rollover battle drills are taught during Egress class 2&3 Occupants will practice pulling gunner into vehicle before operation. 1&2 Safety brief. Who: 1&3 Direct observation by Egress instructors and trained safeties. 2. All leadership will assist.	M

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	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 5px; text-align: center; line-height: 20px;">+</div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 5px; text-align: center; line-height: 20px;">-</div>		Injuries resulting from 90 degrees gunners hatch exit (falls)	H	1. Training on all 4 egress battle drills, to include order of exit. 2. Ensure personnel are aware of 3' drop. 3. Exiting personnel will push open with their legs and back to the hatch. 4. External assistance while exiting vehicle. 5. Situational awareness of all personnel involved in training at all times.	How: 1. All battle drills are taught during Egress training class. 2&3 Incorporate into Egress TNG and safety brief. 4. Safeties will help occupants out of trainer. 5. Train safeties to identify and correct unsafe acts.  Who: 1-5 Direct observation by Egress instructors and trained safeties with assistance from all leadership.	M
<b>10. OVERALL RESIDUAL RISK LEVEL (All controls implemented):</b>						
<input type="checkbox"/> EXTREMELY HIGH <input type="checkbox"/> HIGH <input checked="" type="checkbox"/> MEDIUM <input type="checkbox"/> LOW						
<b>11. OVERALL SUPERVISION PLAN AND RECOMMENDED COURSE OF ACTION</b> Please enter Dates of scheduled training:						
<b>12. APPROVAL OR DISAPPROVAL OF MISSION OR TASK</b> <input type="checkbox"/> Approve <input type="checkbox"/> Disapprove						
a. Name (Last, First, Middle Initial)	b. Rank/Grade	c. Duty Title/Position	d. Signature of Approval Authority			
e. Additional Guidance:						

Risk Assessment Matrix		Probability (expected frequency)				
		Frequent: Continuous, regular, or inevitable occurrences	Likely: Several or numerous occurrences	Occasional: Sporadic or intermittent occurrences	Seldom: Infrequent occurrences	Unlikely: Possible occurrences but improbable
Severity (expected consequence)		A	B	C	D	E
Catastrophic: Mission failure, unit readiness eliminated; death, unacceptable loss or damage	I	EH	EH	H	H	M
Critical: Significantly degraded unit readiness or mission capability; severe injury, illness, loss or damage	II	EH	H	H	M	L
Moderate: Somewhat degraded unit readiness or mission capability; minor injury, illness, loss, or damage	III	H	M	M	L	L
Negligible: Little or no impact to unit readiness or mission capability; minimal injury, loss, or damage	IV	M	L	L	L	L
<b>Legend:</b> EH - Extremely High Risk H - High Risk M - Medium Risk L - Low Risk						
<b>13. RISK ASSESSMENT REVIEW</b> (Required when assessment applies to ongoing operations or activities)						
a. Date	b. Last Name	c. Rank/Grade	d. Duty Title/Position	e. Signature of Reviewer		
<b>14. FEEDBACK AND LESSONS LEARNED</b>						
<b>15. ADDITIONAL COMMENTS OR REMARKS</b>						

<b>Instructions for Completing DD Form 2977, "Deliberate Risk Assessment Worksheet"</b>	
<p><b>1. Mission/Task Description:</b> Briefly describe the overall Mission or Task for which the deliberate risk assessment is being conducted.</p> <p><b>2. Date (DD/MM/YYYY):</b> Self Explanatory.</p> <p><b>3. Prepared By:</b> Information provided by the individual conducting the deliberate risk assessment for the operation or training.  <b>Legend:</b> <b>UIC</b> = Unit Identification Code; <b>CIN</b> = Course ID Number; <b>OPORD</b> = operation order; <b>DSN</b> = defense switched network; <b>COMM</b> = commercial</p> <p><b>4. Sub-task/Sub-Step of Mission/Task:</b> Briefly describe all subtasks or substeps that warrant risk management.</p> <p><b>5. Hazard:</b> Specify hazards related to the subtask in block 4.</p> <p><b>6. Initial Risk Level:</b> Determine probability and severity. Using the risk assessment matrix (page 3), determine level of risk for each hazard specified. probability, severity and associated Risk Level; enter level into column.</p> <p><b>7. Control:</b> Enter risk mitigation resources/ controls identified to abate or reduce risk relevant to the hazard identified in block 5.</p> <p><b>8. How to Implement / Who Will Implement:</b> Briefly describe the means of employment for each control (i.e., OPOrd, briefing, rehearsal) and the name of the individual unit or office that has primary responsibility for control implementation.</p> <p><b>9. Residual Risk Level:</b> After controls are implemented, determine resulting probability, severity, and residual risk level.</p> <p><b>10. Overall Risk After Controls are Implemented:</b> Assign an overall residual risk level. This is equal to or greater than the highest residual risk level (from block 9).</p>	<p><b>11. Supervision Plan and Recommended Course of Action:</b> Completed by preparer. Identify specific tasks and levels of responsibility for supervisory personnel and provide the decision authority with a recommend course of action for approval or disapproval based upon the overall risk assessment.</p> <p><b>12. Approval/Disapproval of Mission/Task:</b> Risk approval authority approves or disapproves the mission or task based on the overall risk assessment, including controls, residual risk level, and supervision plan.</p> <p><b>13. Risk Assessment Review:</b> Should be conducted on a regular basis. Reviewers should have sufficient oversight of the mission or activity and controls to provide valid input on changes or adjustments needed. If the residual risk rises above the level already approved, operations should cease until the appropriate approval authority is contacted and approves continued operations.</p> <p><b>14. Feedback and Lessons Learned:</b> Provide specific input on the effectiveness of risk controls and their contribution to mission success or failure. Include recommendations for new or revised controls, practicable solutions, or alternate actions. Submit and brief valid lessons learned as necessary to persons affected.</p> <p><b>15. Additional Comments or Remarks:</b> Preparer or approval authority provides any additional comments, remarks, or information to support the integration of risk management.</p> <p><b>Additional Guidance:</b> Blocks 4-9 may be reproduced as necessary for processing of all subtasks/ substeps of the mission/task. The addition and subtraction buttons are designed to enable users to accomplish this task.</p>



**Appendix E**

**CLASS E MISHAP REPORTING FORM**

For use in reporting non-aviation mishaps costing the Government less than \$2,000, or not otherwise qualifying as a Class D mishap. Not for use in reporting Class E Army Aviation mishaps, which are required to be reported on a DA Form 2379-AB-R [Abbreviated Aviation Accident Report (AAAR)] IAW DA Pam 385-40.

<b>SECURITY CLASSIFICATION OF FORM</b>	
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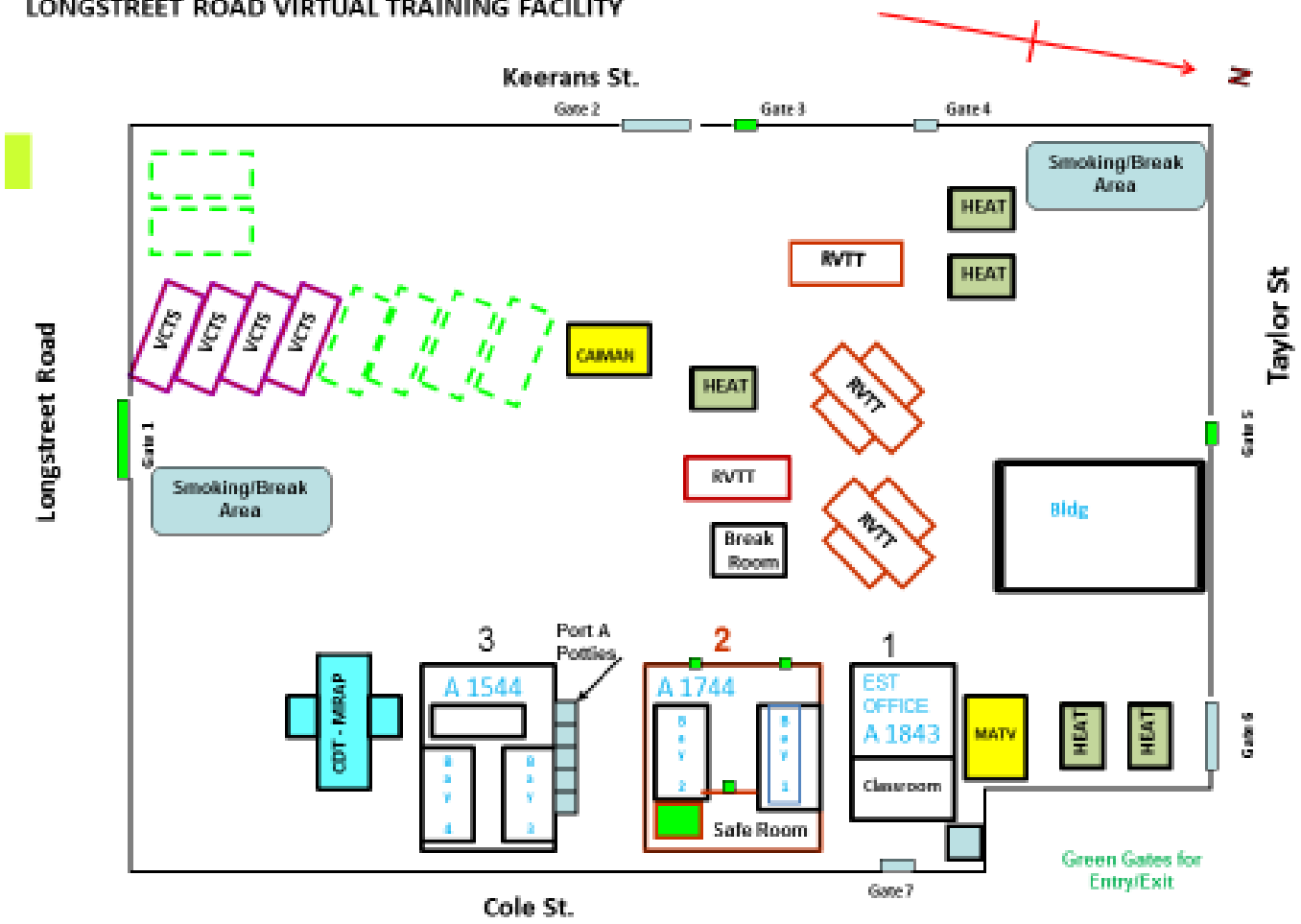
1. Date and Local Time of Mishap:	
2. Location of Mishap ( <i>address, building number and installation, grid, etc.</i> ):	
3. Number of, and type of injuries (e.g., "One cut finger"), if any. If more than one injured person, list them as "1.", "2", etc. <b>Specify whether the injury is a HEAT impact or non-impact injury.</b> If no injuries, write "None".	
4. Rank and name of individuals involved in the mishap. Correspond them to block 3 above (e.g., "1. SGT Adam Burkholder; 2b. SFC Richard Wolfe").	
5. Indicate any military or civilian equipment damaged, and describe the damage. If none, write "None".	
6. Describe what happened, and the events that led up to the mishap. Use additional sheets of paper if necessary.	
7. How do you think this mishap could have been prevented?	
8a. Rank and Name of person reporting mishap:	
8b. Phone number (DSN or commercial) where you may be reached.	

*DO NOT WRITE BELOW THIS LINE - FOR USE BY SAFETY OFFICE (R).*

9a. Rank and Name of Safety Officer receiving and investigating mishap:	
9b. Date received:	
9c. Date Investigation completed, filed:	
9d. Cross-referenced LODs or other mishap reports (e.g., SFs 91, AGARs):	

Appendix F

LONGSTREET ROAD VIRTUAL TRAINING FACILITY



**Appendix G**

**HEAT MEDAVAC STRIP MAP**

