FIRING/NONFIRING DATA

Log # 5-19-11

For use of this form see USAIC Regulation 350-19; the proponent agency is DPTMS

TO: Chief, Range Division, Directorate of Plans, Training, Mobilization and Security Fort Benning, GA 31905	**Date:** **Range:** MINE TA **Title:** Small Unmanned Ground Vehicle Trainer Course **Problem No:**
THRU:	**FROM:** Commander E CO 2ND BATTALION, 29TH INFANTRY FORT BENNING GA, 31905

SECTION I, TYPE OF TRAINING

☐ a. Live Fire ☒ b. Non-live Fire CP/Controller Coordinates:

SECTION II, DEMOLITIONS/GRENADES/MINES/PYROTECHNICS

Coordinates	Type	Model/DODAC	Size of Charges
N/A	N/A	N/A	N/A

SECTION III, WEAPONS/AMMUNITION REQUESTED

Coordinates of Weapons Position	Type Weapon/Model Number	Type Ammunition	Left Limit	Right Limit
N/A	N/A	N/A	N/A	N/A

SECTION IV, LIVE FIRE EXERCISES Attach the following:

- ☐ **Scenario of training to be conducted:**
- ☐ **Sketch of area:**
- ☐ **Risk Assessment:**
- ☐ **Attach FB Form 350-19-2-E-R if Mortar or artillery is being fired:**

SECTION V, NON-LIVE FIRE TRAINING

Training area(s) to be occupied:

MINE TA

- ☒ **Scenario of training to be conducted:**
- ☒ **Sketch of area(s) to be occupied:**
- ☒ **Risk Assessment:**

Name/rank of requesting officer:	Name/rank of Major Unit S3/Commander:
CHRISTOPHER M. MORSE, SSG, USA BN LAND NCO	A. BRITTON CRAFTON, MAJ, S3

SECTION VI, FOR RANGE DIVISION USE **DATE:** 23 MAY 11

TO:	**FROM: Range Division,** **Directorate of Plans, Training,** **Mobilization and Security** **Fort Benning, GA 31905**

a. Roadblocks to be closed:

b. Road(s) to be closed/road barrier locations:

c. Remarks:

d. This approval expires: 22 MAY 13

Chief, Range Division
Directorate of Plans, Training, Mobilization and Security

Brady S. Tate

DEPARTMENT OF THE ARMY
HEADQUARTERS, 2D BATTALION, 29TH INFANTRY REGIMENT
BUILDING 74, 6610 WILKIN ROAD
FORT BENNING, GEORGIA 31905-4420

REPLY TO
ATTENTION OF

ATSH-INB-E

18 May 2011

MEMORANDUM FOR CADRE, E/2-29 Infantry

SUBJECT: Small Unmanned Ground Vehicle Trainer Course Standard Operating Procedure

1. REFERENCES:

a. AR 385-63 Range Safety
b. MCOE Range and Terrain Regulation 350-19
c. DA Form 2408-4 Equipment Log record Fire
d. FM 5-19 Composite Risk Management
e. DA Form 7566 Composite Risk Management Worksheet
f. FB Form 51-R Range Safety Operations Checklists
g. FB Form 350-19-3-R Firing/Non-firing Data
h. Range Request Summary
i. MCOE Regulation 350-19
j. TM 9-2350-397-13&P SUG-V Technical Manuel

2. PURPOSE: This SOP provides Mine TA personnel with guidance to safely and effectively conduct the Small Unmanned Ground Vehicle Trainer Course at Mine TA. This SOP does not supersede or take the place of applicable regulations or guidance from higher headquarters.

3. RANGE DUTIES AND ORGANIZATION:

a. Duty Positions:

(1) Range OIC	1
(2) NCOIC	1
(3) Range Safety Officer	1
(4) CLS	1

b. Description of Duties:

(1) Range OIC (must be SFC or higher appointed on unit orders), adheres to MCOE Regulation 350-19:

(a) Responsible for overall supervision and safety on Mine TA.

(b) Ensures all personnel know and comply with the CRMW, SOP, TSP, and applicable range and safety regulations.

(c) Ensures that all SSGs assigned to Mine TA are currently range safety certified to perform Range Safety Officer (RSO) duties.

(d) Conducts range cadre certification, and ensures proficiency training is conducted when available.

(e) Supervises certification of new Robotic Vehicle.

(f) Ensures all pre-range coordination has been made in accordance with this SOP.

(g) Adjusts start times constantly based on season/sunset time.

(h) Ensures Range Orientation briefing is conducted with all Students prior to range. The briefing will cover range sequence, safety, and a walkthrough.

(i) Coordinates the efforts of the NCOIC, RSO.

(j) Inspects CLS personnel to ensure proper equipment and communications are present.

(k) Ensures 100% accountability of Range, Training Unit, and any other personnel on the range at all times.

(l) Handles any user unit discrepancies on behalf of E Co, 2-29 Infantry.

(m) Takes charge of all emergencies and evacuations (Medics have final say).

(n) Gives VIP/Visitor briefing (Appendix B) and ensures accountability of VIPs during conduct of range.

(2) Range NCOIC (must be SSG or higher appointed on unit orders), adheres to MCOE Regulation 350-19:

(a) Has Valid FB range safety card in his possession.

(b) Responsible for overall supervision and safety on the course.

(c) Ensures all personnel know and comply with the CRMW, SOP, TSP, and applicable range and safety regulations.

(d) Ensures all pre-range coordination has been made in accordance with this SOP.

(e) Assists the OIC in range cadre certification, and ensures proficiency training is conducted when available. Maintains and updates Range book.

(f) Ensures all BN and Co Policy and Safety letters are posted in Range shack.

(g) Conducts Cadre Safety brief.

(h) Establishes and maintains communications with Range Control.

(i) Ensures 100% accountability of Range, Training Unit, and any other personnel on the range at all times.

(j) Ensures Range Orientation briefing is conducted with all using unit cadre prior to range. The briefing will cover range sequence, safety, and a walkthrough (Appendix I).

(k) Gives VIP/Visitor briefing (Appendix B) and ensures accountability of VIPs during conduct of range.

(3) Range Safety Officer (must be SSG or higher, appointed on unit orders), adheres to MCOE Regulation 350-19:

(a) Has valid FB range safety card in his possession.

(b) Adheres to MCOE Regulation 350-19

(c) Monitors safe operation of the range and immediately corrects any safety violations.

(d) Briefs the Soldiers on safety and conduct of the range.

(e) Ensures all radios are functioning properly.

(4) Ensures that Ice Sheets and dump tanks are emplaced in Assembly Area where Soldiers will be located. Ice sheets and dump tanks will be used from 01 APR - 01 OCT of each year.

(5) CLS:

(a) CLS will ensure that the CLS bag has all required components prior to training.

(b) Responsible for placing all required medical equipment at the Briefing area.

(c) Identify injuries and coordinate any MEDEVAC.

(6) Early Man (arrival time determined by RSO):

(a) Opens Range shack, tower, and latrines.

(b) Checks range shack, and latrine for signs of damage, tampering, or vandalism.

4. GENERAL RANGE OPERATIONS:

a. Pre-Range Coordination and Requirements:

(1) OIC and NCOIC check to ensure pre-range coordination has occurred prior to each class start date.

(2) OIC and NCOIC ensure that the range start times are adjusted based on the changing seasons and sunset times.

(3) OIC and NCOIC ensure that the Range Orientation briefing is conducted. The briefing will cover range sequence, safety, and a walkthrough.

(4) At the completion of training, the SUG-V will be transported to the storage cage and stored overnight.

5. COMMUNICATIONS:

a. Mine TA personnel must maintain communication with range control at all times when the range is active. This is done via Motorola radio. Alternate communication is the FM radio.

b. Communication between the OIC, NCOIC, RSO will be maintained at all times using FM communications.

c. Mobile phones are not an adequate form of communications and will not be used in place of a radio.

6. SCHEME OF MANUVER

a) Lane 1:

Leave RP (GA0133588602) operator will move SUG-V along street to target 1 (building GA 0140288627). Operator will ascend stairs to second level of target building (using proper poses) and search floor for intel/enemy forces. Continuing to target 2 (drainage pipe GA0145388605), operator will maneuver robot through the pipe (using proper poses) and continue to target 3 (bridge GA0142488595) operator will inspect the underside of the bridge then move the SUG-V to target 4 (car GA0140188595) and inspect the undercarriage and inside of the vehicle and finish test at RP.

I. Briefing/Rally point:
   a. Student will receive an OPORD along with testing parameters and the SUG-V. The Student will inspect and assembly the SUG-V for operation.

II. Building GA 0140288627:
   a. Student will ascend the stairs on the exterior of target building using the ascend pose, and then maneuver the SUG-V into the building on the second level. Once the building has been searched student will maneuver the SUG-V down the stairs using the descend pose.

III. Drainage pipe GA0145388605:
   a. Student will maneuver the SUG-V through the pipe using the stow pose.

IV. Bridge GA0142488595:
   a. Student will maneuver SUG-V under bridge using any pose necessary.

V. Car GA0140188595:
   a. Student will maneuver the SUG-V to inspect the interior and exterior of the vehicle using the peek under/over poses.

b) Lane 2:
Leave RP (GA0133588602) operator will move SUG-V across open area to target 4 (car GA0140188595) and inspect the undercarriage and inside of the vehicle.

Continue to target 3 (bridge GA0142488595) operator will inspect the underside of the bridge then move the SUG-V to target 2 (drainage pipe GA0145388605) operator will maneuver robot through the pipe (using proper poses) and continue to target 1 (building GA 0140288627)

Operator will ascend stairs to second level of target building (using proper poses) and search floor for intel/enemy forces operator will then descend stairs and finish at RP.

I. Briefing/Rally point:
   a. Student will receive an OPORD along with testing parameters and the SUG-V. The Student will inspect and assemble the SUG-V for operation.

II. Car GA0140188595:
   a. Student will maneuver the SUG-V to inspect the interior and exterior of the vehicle using the peek under/over poses.

III. Bridge GA0142488595:
   a. Student will maneuver SUG-V under bridge using any pose necessary.

IV. Drainage pipe GA0145388605:
   a. Student will maneuver the SUG-V through the pipe using the stow pose.

V. Building GA 0140288627:
   a. Student will ascend the stairs on the exterior of target building using the ascend pose, and then maneuver the SUG-V into the building on the second level. Once the building has been searched student will maneuver the SUG-V down the stairs using the descend pose.

7. SAFETY:

a. A safety briefing will be given to all Soldiers prior to the start of each training day.

b. Range cadre will give Students a Range Orientation briefing covering range sequence, safety, and a walkthrough.

8. UPDATES: Any deviations or change to this SOP will be cleared through the E CO Company Commander.

9. The point of contact for this Memorandum is SFC Klein at 545-1677 or CPT DOWNS at 545-9845.

Joseph W Downs

JOSEPH W. DOWNS
CPT, IN
Commanding

A. RSO Brief
B. Mine TA VIP/ Visitor Briefing
C. Civilian Personnel on Mines T/A
D. Cadre Orientation Briefing
E. Range Cadre Check Sheet
F. Scheme of Maneuver/Range Layout
G. Company Instructor Roadmap
H. Time Line
I. TM Number and Photo

Appendix A:Mine TA RSO Briefing

- I am _____, the Safety Officer for today. For this reason, I am now going to tell you the important things you must remember today regarding safety on Mines TA
- Heat injuries (when appropriate): During the warm months, one of the greatest dangers you face at Fort Benning is heat injuries. You all have received a class on the symptoms and prevention of heat injuries. Always keep an eye out for signs of heat injury to you or your fellow Soldiers. If you see symptoms of heat injury, immediately notify range personnel or your company cadre.
- Cold Injuries (when appropriate): Same as heat injuries.
- On Fort Benning, you will find a variety of snakes. Some of them are poisonous, and can be found under bunkers and in trenches. If you see a snake, move away from it and notify range personnel or company cadre. Also, move away from any animal you encounter here today.
- If severe lightning should appear, you will be told to move to the designated dispersal area, which is the area that you are currently located. While you are moving to the dispersal area, you will be told where to ground all metal equipment. Avoid flagpoles, wire, and anything that conducts an electrical charge.
- If you should become sick, report this to range personnel or company cadre immediately.
- If you notice any unsafe activities, notify a range personnel or company cadre immediately.
- If you encounter a snake on the range, do not panic, stay still and call for one of the range cadre.

Appendix B:Mine TA VIP/Visitors Briefing

Welcome to Mine TA and the Small Unmanned Ground Vehicle Trainer Course. This course is designed to introduce and train Soldiers to operate and certify personnel on the use and employment of the Small Unmanned Ground Vehicle.100% Accountability of Soldiers and equipment are maintained at all times.

1. I am _____ welcome to Mine TA Land Robotics, The course is approximately 243 meters in length. It has 1 building, 1 drainage pipe, 1 bridge and 1 car. The first obstacle is at 49 meters and the last one is at 180 meters. The students must negotiate each obstacle using the techniques learned over the past weeks instruction.

2. The layout of the course

   a) Once the briefing is finished, the range cadre will walk the VIP/visitor through the range. The walkthrough will follow the sequence of training. The briefer will explain all pertinent actions that occur at each location.

3. Scenario

a) Each student is given a scenario, in which they are instructed to negotiate the course and find intelligence and Improvised Explosive Devices.

4. Safety Briefing

a) While on this range you will be aware that there is wildlife in the area, if you see any animals inform the cadre.
b) During summer months ensure that you remain hydrated.

Appendix C: Civilian Personnel on Mine TA

1. The following civilian personnel are authorized on the Small Unmanned Ground Vehicle Trainer Course without additional coordination through Range Control and E/2-29 cadre.

A. Range Control / Range Maintenance Personnel
B. Post Safety Personnel
C. TRADOC Representatives
D. Emergency Assistance Personnel

2. The following personnel can be authorized with proper approval from Range Control. When approval is granted, personnel will be briefed by the OIC and escorted by range cadre. At no time will they move forward of the gun towers.

A. Photographers
B. Reporters
C. Unit Representatives
D. VIPs

3. At no time will any dependent, friend, or vendor be authorized on the range without proper authorization.

4. Appendix E of this SOP is IAW Policy Memorandum 385-63-3, Installation Range Use by Non-Military Personnel dated 08 Apr 2011 below.

DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY MANEUVER CENTER OF EXCELLENCE
35 RIDGWAY LOOP
FORT BENNING, GEORGIA 31905-4500

REPLY TO
ATTENTION OF

Policy Memorandum 385-63-3

0 8 APR 2011

IMSE-BEN-PLT-R

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Installation Range Use by Non-Military Personnel

1. REFERENCES:

a. AR 385-63, Range Safety, 19 May 2003.

b. AR 405-80, Management of Title and Granting of Use of Real Property, 10 October 1997.

c. DA PAM 385-63, Range Safety, 4 August 2009.

d. MCoE Regulation 350-19, Installation and Terrain Regulation, 23 July 2010.

2. PURPOSE: To prescribe the procedures for authorizing non-military personnel on ranges, training facilities, and training areas of Fort Benning, Georgia.

3. POLICY: The Garrison Commander must approve all requests for non-military visitors on/in Fort Benning ranges, training facilities, and training compartments. Non-military visitors include family members and minor children of active duty personnel and Civilians working on Fort Benning; members of the press; Defense Contract Vendors; contractors not assigned to support installation missions; non-military organizations, such as schools, county, municipal, state or federal agencies; and organized civic organizations. This requirement does not apply to visitors attending official events staffed and approved by the G-3/DPTMS in published MCoE OPORDs/FRAGOs. In addition, graduations and demonstrations associated with TRADOC approved Program of Instruction (POI) events conducted on ranges/training facilities are exempt from this policy. The following procedures will be followed to ensure the safety of the visitor and limit the liability of the installation.

a. Requesting sponsor/unit will prepare documentation for the requested action with a FB Form 25-52-1-R-E cover. The main document is a memorandum signed by the Brigade/Battalion Commander that describes who, what (observing or participating), where, when, and for what purpose. Memorandum must clearly state when weapons and ammunition will be used by the visitor(s), and if the event includes participation by minor children. Enclosures will include: (1) a schedule/sequence of events; (2) a Composite Risk Management Worksheet; and (3) a safety plan with safety briefing for cadre and visitor(s).

b. The documentation will be routed through the Installation Staff Judge Advocate office to ensure proper "Hold-harmless" agreements, parental permissions for minors, and other legal instruments or considerations have been met.

c. The documentation will be routed through the Installation Safety Office for safety and the Risk Management Readiness Review.

IMSE-BEN-PLT-R
SUBJECT: Installation Range Use by Non-Military Personnel

d. The completed documentation will be submitted to Installation Range Control for review to ensure the documentation is complete and not in conflict with current range and training regulations or current training events.

e. The documentation will be routed through the MCoE G-3's G-33 (Current Operations) for scheduling and resource de-confliction review.

f. When the visitor(s) represent Defense Contract Vendors; contractors not assigned to support Installation missions; non-military organizations such as schools; county, municipal, state or federal agencies; and organized clubs including civic organizations, the documentation will be routed through DPW, Real Property (Master Planning Division) for Corps of Engineers licensing and actions including a written agreement between the non-military organization and the installation detailing all rights and responsibilities of each party, liabilities, procedures and regulatory procedural requirements. This agreement will be incorporated into the report of availability as required by AR 405-80.

g. The documentation will be routed through the G-3/DPTMS for final recommendation.

h. The documentation will be routed to the Garrison Commander for final review and approval.

4. SUPERSESSION: This policy memorandum supersedes MCoE Policy Memorandum 385-63-2, 10 December 2010, subject: Installation Range Use by Non-Military Personnel.

5. Proponent: Mr. Frederick E. Weekley, Jr., Installation Range Management Officer, (706) 545-4619,or e-mail fred.weekley@us.army.mil.

FOR THE COMMANDER:

TERRY L. SELLERS
Colonel, Infantry
Chief of Staff

DISTRIBUTION:
ADMIN L, CSM/SGM, and MSC DCO/XO Lists

Appendix D: Cadre Orientation Briefing

Prior to the start of training, the OIC, NCOIC, or RSO will give all students a Range Orientation Briefing. The briefing will start in the cadre shack using the image map as a reference point. The briefing will cover at a minimum:

1. General description of the range and the purpose of training
    a) Welcome to Mine TA Land Robotics, this is your range orientation brief. Currently you are in the Cadre shack, students are not permitted in this area during testing, directly across the parking lot you will see the portable toilets next to that you will see the briefing area/Rally Point which will be pointed out when we do the walkthrough. While on this range you will follow all commands given by the cadre. Today's training event is the culmination of the past weeks classes to ensure that you are proficient in the use of the SUG-V

2. Layout of the course
    a) See appendix E

3. Uniform
    a) The uniform on this range will be ACUs and soft cap

4. Safety measures
    a) Be aware of the wildlife
    b) Ensure you are drinking water
    c) You are in a MOUT site, if you are required to go the second floor or roof of a building maintain situational awareness.
    d) _____is the CLS if you become ill or are injured tell him/her immediately

5. Accountability measures
    a) Cadre will get accountability at the beginning of and at the end of training

Appendix E: CADRE CHECK SHEET

CADRE CHECK LIST	
CLS BAG	
FIRE EXTINGISHERS	
PORTABLE TOILOTS/AREA CLEAN	
RANGE SHACK OPEN/KEYS	
RANGE CONTROL OPENING/COLD CODE	
RANGE CONTROL CLOSING CODE	
MRES	
SUG-V SYSTEMS (2-1 RATIO)	
BATTERIES(RADIO & SUG-V)	
BATTERY CHARGER	
RANGE BOOK	
MOTOROLA RADIOS	
WATER	
SCORE SHEEETS	
ICE SHEETS/DUMP TANK	
MISSION ORENTATED EQUIPMENT	
LITTER	
TRASH BAGS	
OFFICE SUPPLIES	

Appendix F: RANGE LAYOUT SCHEME OF MANUVER

Scheme of Maneuver

Lane 1:

Leave RP (GA0133588602) operator will move SUG-V along street to target 1 (building GA 0140288627)

. Operator will ascend stairs to second level of target building (using proper poses) and search floor for intel/enemy forces. Continuing to target 2 (drainage pipe GA0145388605),operator will manuever robot through the pipe (using proper poses) and continue to target 3 (bridge GA0142488595) operator will inspect the underside of the bridge then move the SUG-V to target 4 (car GA0140188595) and inspect the undercarriage and inside of the vehicle. finish at RP. (attachment 3)

Briefing/Rally point:

Student will receive an OPORD along with testing parameters and the SUG-V. The Student will inspect and assembly the SUG-V for operation.

Building GA 0140288627:

Student will ascend the stairs on the exterior of target building using the ascend pose, then maneuver the SUG-V into the building on the second level. Once the building has been searched student will maneuver the SUG-V down the stairs using the descend pose.

Drainage pipe GA0145388605:

Student will maneuver the SUG-V through the pipe using the stow pose.

Bridge GA0142488595:

Student will maneuver SUG-V under bridge using any pose necessary.

Car GA0140188595:

Student will maneuver the SUG-V to inspect the interior and exterior of the vehicle using the peek under/over poses.

**Lane 2 will be used for retesting of students who do not pass on lane 1

Scheme of Maneuver

Lane 2:

Leave RP (GA0133588602) operator will move SUG-V across open area to target 4 (car GA0140188595) and inspect the undercarriage and inside of the vehicle. Continue to target 3 (bridge GA0142488595) operator will inspect the underside of the bridge then move the SUG-V to target 2 (drainage pipe GA0145388605) operator will maneuver robot through the pipe (using proper poses) and continue to target 1 (building GA 0140288627) Operator will ascend stairs to second level of target building (using proper poses) and search floor for intel/enemy forces operator will then descend stairs and finish at RP. (attachment 3)

Briefing/Rally point:

Student will receive an OPORD along with testing parameters and the SUG-V. The Student will inspect and assemble the SUG-V for operation.

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Student will maneuver the SUG-V to inspect the interior and exterior of the vehicle using the peek under/over poses.

Bridge GA0142488595:

Student will maneuver SUG-V under bridge using any pose necessary.

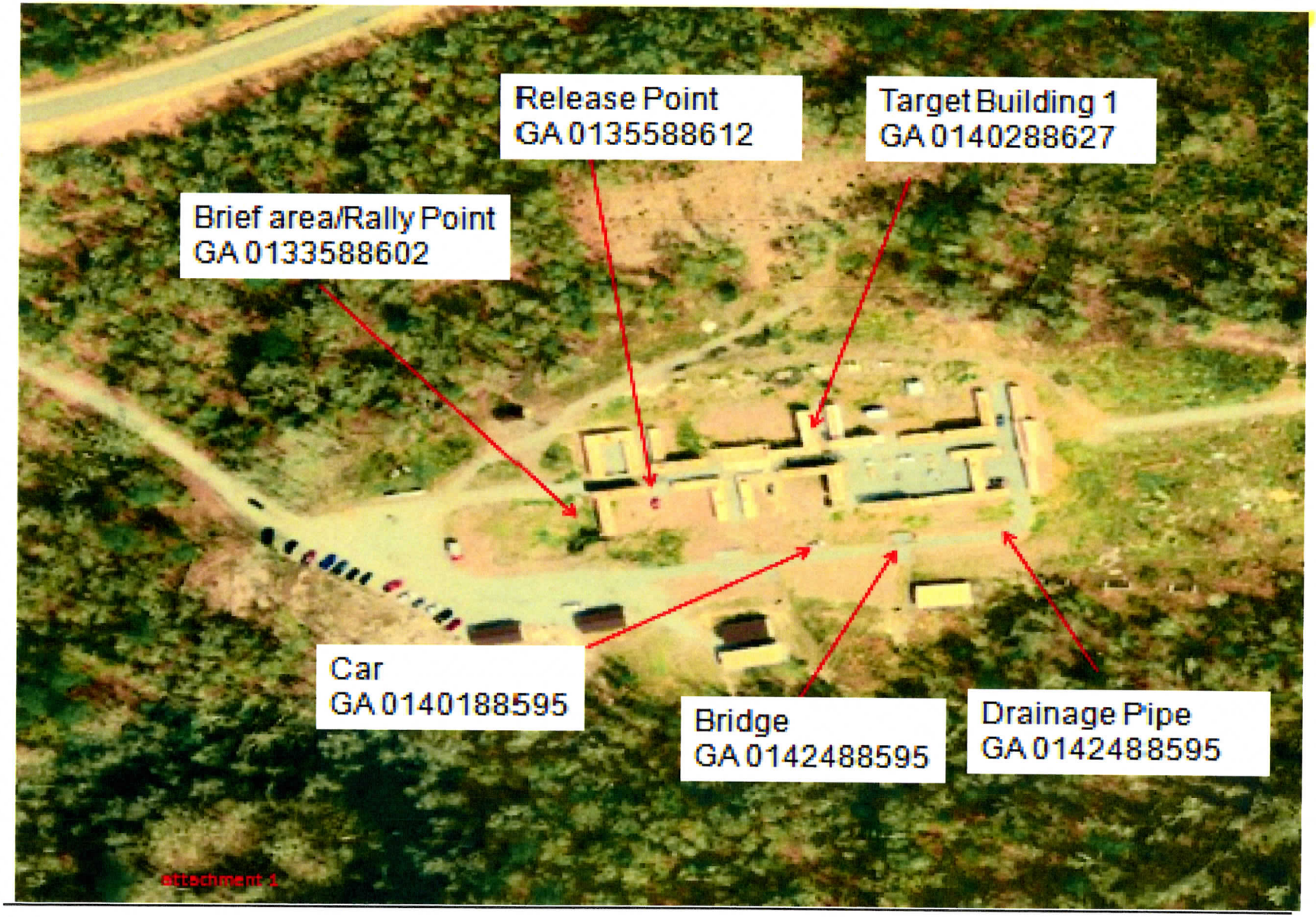
Drainage pipe GA0145388605:

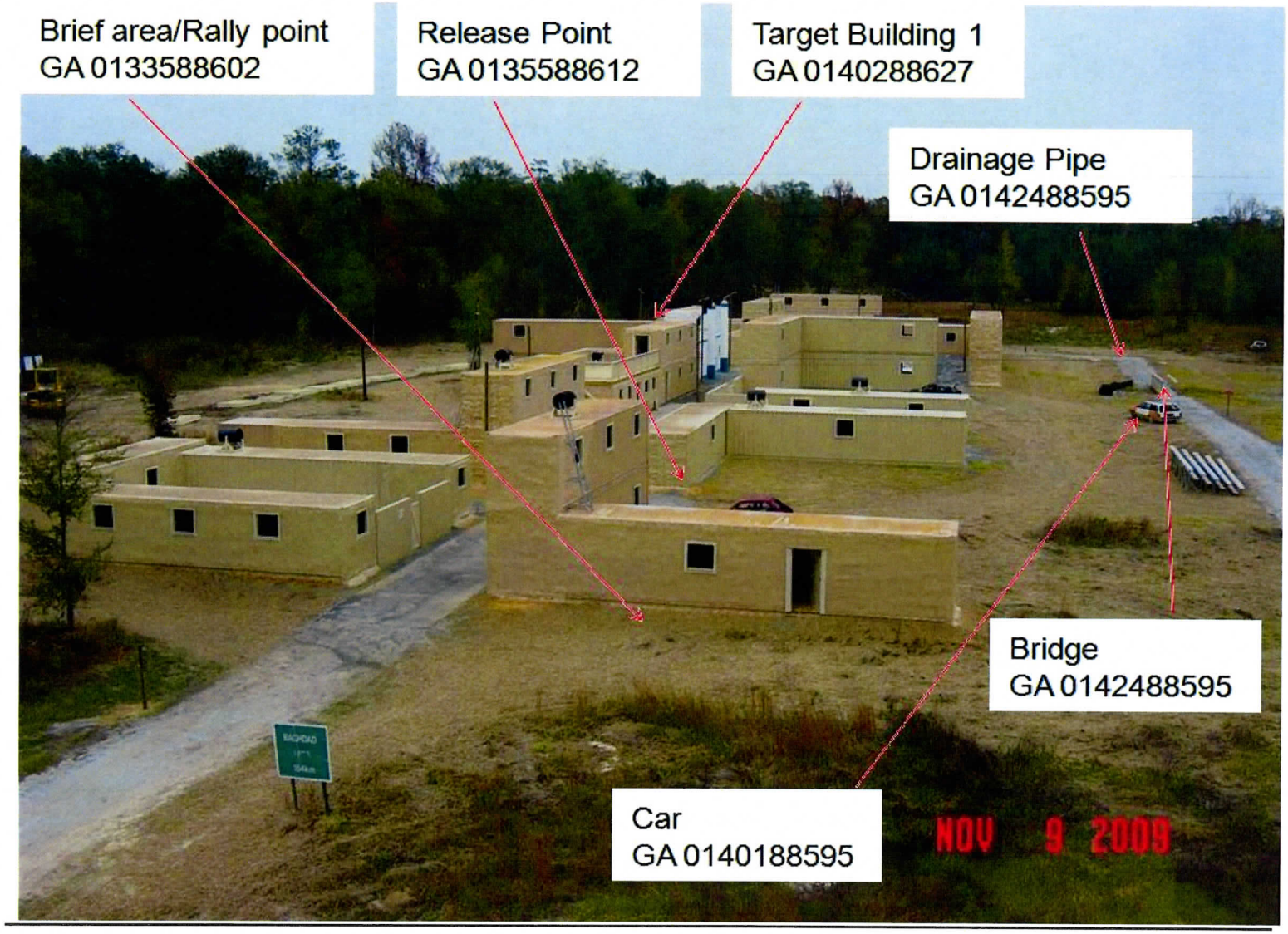
Student will maneuver the SUG-V through the pipe using the stow pose.

Building GA 0140288627:

Student will ascend the stairs on the exterior of target building using the ascend pose, then maneuver the SUG-V into the building on the second level. Once the building has been searched student will maneuver the SUG-V down the stairs using the descend pose.

**Lane 1 will be used for retesting of students who do not pass on lane 2


Release Point
GA 0135588612
Target Building 1
GA 0140288627
Brief area/Rally Point
GA 0133588602
Car
GA 0140188595
Bridge
GA 0142488595
Drainage Pipe
GA 0142488595
attachment 1


Brief area/Rally point
GA 0133588602
Release Point
GA 0135588612
Target Building 1
GA 0140288627
Drainage Pipe
GA 0142488595
Bridge
GA 0142488595
Car
GA 0140188595
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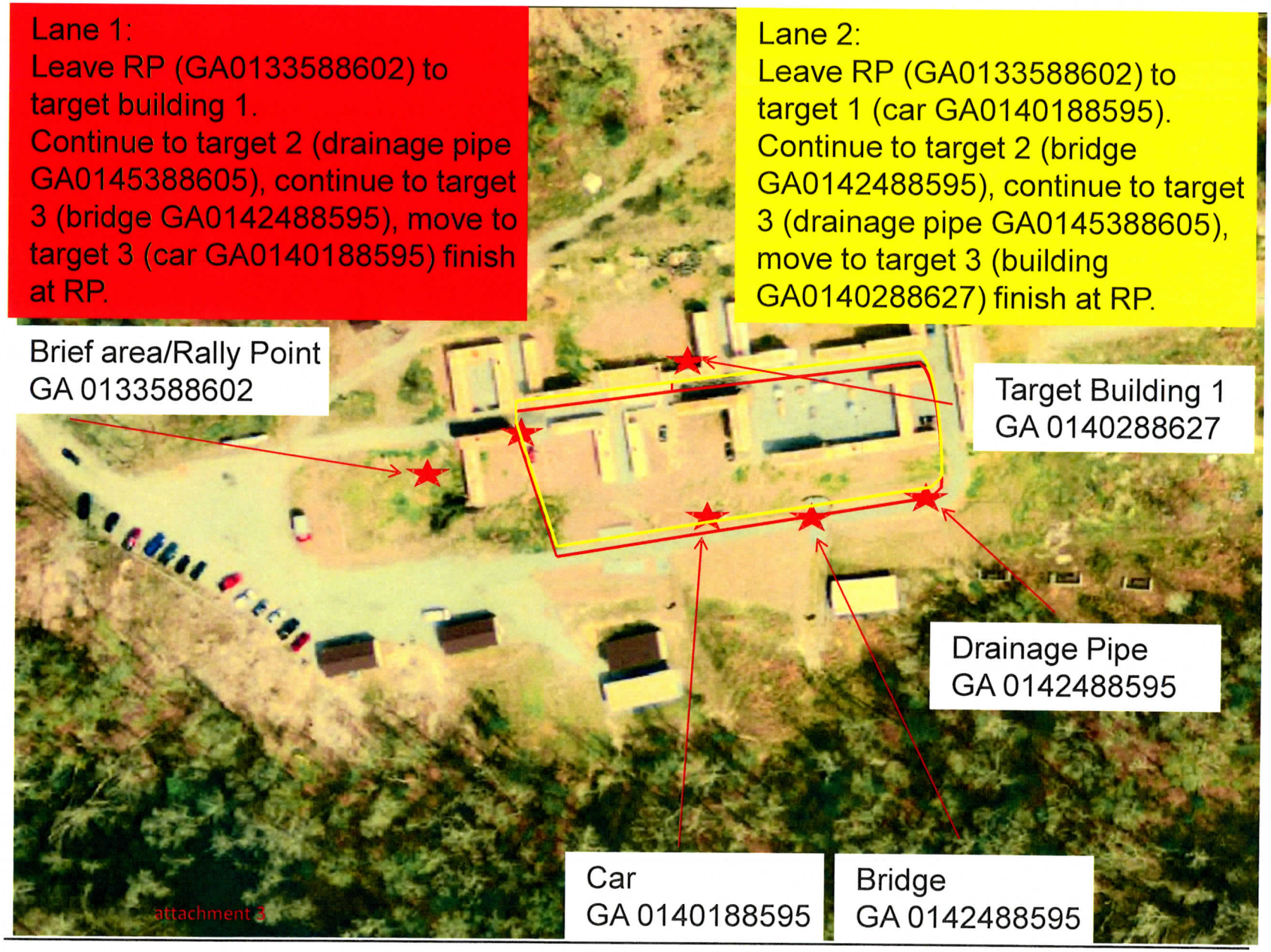
Lane 1:
Leave RP (GA0133588602) to target building 1.
Continue to target 2 (drainage pipe GA0145388605), continue to target 3 (bridge GA0142488595), move to target 3 (car GA0140188595) finish at RP.
Lane 2:
Leave RP (GA0133588602) to target 1 (car GA0140188595).
Continue to target 2 (bridge GA0142488595), continue to target 3 (drainage pipe GA0145388605), move to target 3 (building GA0140288627) finish at RP.
Brief area/Rally Point
GA 0133588602
Target Building 1
GA 0140288627
Drainage Pipe
GA 0142488595
Car
GA 0140188595
Bridge
GA 0142488595
attachment 3

Appendix G: E CO Instructor Roadmap

Instructor Time	Weeks 1-2	Months 1-2	Months 3-8	Months 9-24
Phases	Reception and Staging	Assistant Instructor	Primary Instructor	Senior Instructor
Instructor Training	• Company In processing - LES Check - NCOER Check - ERB Check • BN Newcomer Brief • Combat Life Saver Certification • Range Safety Officer • Defensive Driving • Safety Course Online Certification • Army Basic Instructor Course • Military Drivers License Course • First Sergeant / Master Trainer pinpoint Range assignment • Range Specific Courses (Ammo Handlers, HAZMAT, etc.) • Course Shadow begins	• Complete ABIC • Complete Range-Specific Courses • Teach / Perform Duties under supervision • PT Test/HT +WT • BN Newcomer Brief	• Pass range SOP/Risk management test • Pass range NCOIC board • Receive Official Instructor signed Memorandum for Record and Instructor Certification Checklist • Teach / Perform Duties without supervision	• Continue to teach classes and perform range duties • Advise chain of command on SOP/CRWMS updates • Act as part of Training Support Package and Field Manual update team • Potentially test for Range NCOIC
NCOES	**DA-selected Only**			**WLC / ALC / SLC elected or DA-selected**
Brigade Mandated Training	**None**		• Combatives I and II • Applied Suicide Intervention Skills Training • Master Resiliency Training	
Special Skills/ Schools/ Training	**None**			• Expert Infantry Badge • Ranger • Pathfinder • Sniper • Airborne • Air Assault
Self Development	**None**		• GT Score Improvement • Civilian Education	• Continue Civilian Education and GT Score Improvement • Audie Murphy Board / NCO of the Month Boards • Attend job-related or MOS-specific conferences

Appendix H: Time Line

TIME LINE	
LOAD EQUIPMENT	0700-0730
DEPART FOR MINES T/A	0730
ARRIVE AT MINES T/A	0745
UNLOAD EQUIPMENT	0745-0800
RANGE ORENTAION/SAFETY BRIEF	0800-0830
TESTING	0830-1200
LUNCH	1200-1300
TESTING	1300-UTC

Appendix I: TM Number and Photo

TM 9-2350-397-13&P

RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

EMD Number: 1112904 **Project#:** 1010 **Project Title:** Small Unmanned Ground Vehicle Trainer Course

Description of proposed action:

LANE 1
Leave RP (GA0133588602) operator will move SUG-V along street to target 1 (building GA 0140288627). Operator will ascend stairs to second level of target building (using proper poses) and search floor for intel/enemy forces. Continuing to target 2 (drainage pipe GA0145388605), operator will maneuver robot through the pipe (using proper poses) and continue to target 3 (bridge GA0142488595) operator will inspect the underside of the bridge then move the SUG-V to target 4 (car GA0140188595) and inspect the undercarriage and inside of the vehicle and finish test at RP.
LANE 2
Leave RP (GA0133588602) operator will move SUG-V across open area to target 4 (car GA0140188595) and inspect the undercarriage and inside of the vehicle. Continue to target 3 (bridge GA0142488595) operator will inspect the underside of the bridge then move the SUG-V to target 2 (drainage pipe GA0145388605) operator will maneuver robot through the pipe (using proper poses) and continue to target 1 (building GA 0140288627) Operator will ascend stairs to second level of target building (using proper poses) and search floor for intel/enemy forces operator will then descend stairs and finish at RP.

Project Location:
MINE TA

Amount, Description, Location of Disturbance/Digging:
NO DIGGING

Number/Types of Vehicles:	Number of Personnel:	Type of Ammunition:	Number/Types of Trees:
10	8	NONE	NONE

Size of Project Area: MINE TA MOUT SITE AREA

Duration of Action: Start: 5/13/2011 Stop: 9/30/2011

Proponent: christopher.m.morse 545-8594

Organization/Unit: E CO 2-29 IN

****

DECISION: Concur with conditions

This Action qualifies for a Categorical Exclusion **I-3** of Appendix B, (32 CFR 651)

(I-3): Intermittent on-post training activities (or off-post training covered by an ARNG land use agreement) that involve no live fire or vehicles off established roads or trails. Uses include, but are not limited to, land navigation, physical training, Federal Aviation Administration (FAA) approved aerial overflights, and small unit level training.

****

REC APPROVED THROUGH 30 SEPTEMBER, 2011

Natural Resources - RCW	**None**	**Michael Barron (706 544 7080), 5/9/2011**
Cultural Resources - Archeological	**None**	**Edward Howard (706 545 1898), 5/9/2011**

EMD Number: 1112904 **IJO#** 1010 **Project Title:** Small Unmanned Ground Vehicle Trainer Course

****

CWA - Training **Conditions:** **Jesse Taylor (706 545 0276), 5/11/2011**

Environmental Review: Caution within training areas and motor pools should be taken to protect all nearby waterways (including perennial, intermittent streams and wetlands); as well as ground surfaces and any other sensitive areas in the vicinity of the training areas. Potential spills/releases from this activity that may occur before and/or during the FTX include: 1. Discharge and/or improperly disposal of oil or hazardous substances into or upon land, water, or into ground water areas from storage, handling and/or transportation of hazardous materials/waste; 2. Vehicle/equipment/generators leaks; 3. Fuel loading/unloading/refueling operations; 4. Field mess facilities/equipment/operations, and/or 5. Ammunitions /explosives (as applicable, before and/or during the FTX).

General SPCC Requirements: Ensure all hazardous materials are properly storage to prevent spill/discharges, to meet safety requirements for storage, and that containers are not exposed to the weather. Have adequate spill response supplies available during exercise for any spills that may likely occur. Use drip pans under vehicles and provide secondary containment for any fueling activities and hazardous material/waste storage. Locate all refueling operations and storage of hazardous materials/waste away from waterways and sensitive areas. See attached section on prevention procedures and CHECKlist (Figure 6.9.1) to be used during training exercise to comply with SPCC plan requirements. Ensure all wastewater from field mess equipment/operations particularly those involving oil/grease are collected and dispose properly. Do not discharge any wastewater into storm drains or dispose of oil/grease waste directly into land.

General ISCP Requirements: In the event of a spill/discharge -- notify Range Control by radio or call 544-6291, and they will notify E-911 for Fire Department/HAZMAT Team assistance and/or notification of the EMD office (Spill Beeper 706-317-6584). As appropriate, and if personnel are trained – REACT to minimize spill damages. Submit a spill report to the EPMB Spill Program Manager (use Spill Response Report attached). All spills reaching navigable water must be reported immediately. The unit is responsible for the final cleanup of any spill during this exercise. Coordination with this office is required for clearance of the site.

SPECIAL NOTE: See 2010 ASP SOP Training and Deployment.doc for further training requirements.

Signature John E Brown

John E Brown
NEPA Program Manager
Date 12 MAY 2011

Signature Ted Power

for/ Christopher E. Hamilton, PhD
EPMB Chief
Date 12 May 2011

SPILL RESPONSE RECORD

PHASE I - IMMEDIATE ACTIONS FOR EVALUTING AND REPORTING SPILLS:

IMMEDIATELY REPORT ALL SPILLS TO YOUR SUPERVISOR AND CALL 911

***BE PREPARED TO PROVIDE THE FOLLOWING INFORMATION TO 911 OPERATOR:*

During Duty Hours also Call Mr. Felix Seda, EPMB Spill Manager at 545-9879

1. DATE/TIME OF SPILL: _____ /

2. LOCATION: _____

3. MATERIAL SPILLED (include NSN and ingredients, if able): _____

4. HAZARD: FLAMMABLE _____ TOXIC _____ CORROSIVE _____
   OXIDIZER _____ REACTIVE _____ UNKNOWN _____
   OTHER (specify) _____

5. CAUSE OF SPILL: _____

6. DESCRIPTION OF SPILL QUANTITY, SIZE AND TYPE OF AREA AFFECTED:
   a. Quantity Released and Size of Spill Area: _____
   b. Soil: _____
   c. Pavement: _____
   d. Vegetation: _____
   e. Storm or Sewer Drain: _____
   f. Name of Body of Water (River, Creek, Pond, Lake, Drainage Ditch): _____

7. HAS RELEASE BEEN STOPPED? _____

8. HAS RELEASE BEEN CONTAINED? _____

9. DID RELEASE CROSS INSTALLATION BOUNDARIES? (IF YES, DESCRIBE LOCATION) _____

10. TYPE AND EXTENT OF INJURIES, IF ANY: _____

****Provide a copy of this form to DPW EPMB Spill Program Manager or FAX to 545-4209**

PHASE II - POST-SPILL RESPONSE AND CLEAN UP ACTIONS:

11. DESCRIBE CLEAN-UP METHOD AND CONTAINMENT PROCEDURES: _____

12. NAME OF CONTRACTOR INVOLVED IN CLEAN-UP: _____

13. ESTIMATED AMOUNT OF SPILL RESIDUE AND CONTAMINATED MATERIAL REMOVED: _____

FIELD TRAINING EXERCISES AND DEPLOYMENT
GENERAL SPCC CHECKLIST
Figure 6.9.1

Units should continually keep HM/HW areas clean and orderly by applying the principals of Monitoring and Housekeeping. Vehicle Maintenance and Fueling Points, HW Collection Points and HM Storage & Supply Areas may not be set up at your filed training area and/or deployment destination.

BEFORE you deploy, plan to pack drip pans, rags, plastic, dry sweep, absorbent, and pallets to prevent drips, spills, and leaks from seeping into the ground and contaminating soil and water resources.

Plan to build your areas to prevent HM accidents before they occur. An easy way to remember what to check, is to remember your **CHECK** list:

Containment:

___ Ensure that secondary containment is used and in good condition.

___ Empty water within secondary containment on a regular basis. If water is contaminated, dispose of it IAW the Unit Hazardous Waste Management Plan.

HM/HW locations:

___ Make sure the locations of your HM/HW are well chosen. Stay away from waterways, drainage, sensitive areas, living areas, bunkers, ammunition storage, fence lines and/or dining facilities. Place them near the areas where hazardous materials are used.

___ Put up warning signs and keep them clean and orderly.

Environmental Documentation:

___ Maintain MSDSs for each hazardous material and update Unit/Activity SOPs and Spill Response Plans regularly.

Containers:

___ Check condition of containers and keep containers of incompatible materials in proper order.

Kits:

___ Place Spill Kits, First Aid Kits, and Emergency Response Kits in the vicinity of the HM/HW areas.

___ Spill Kits should also be available on vehicles transporting hazardous material/waste.

COMPOSITE RISK MANAGEMENT WORKSHEET

For use of this form, see FM 5-19; the proponent agency is TRADOC.

1. MSN/TASK	2a. DTG BEGIN	2b. DTG END	3. DATE PREPARED (YYYYMMDD)
SUG-V TRAINING/POI	20110519	20120518	20110518

4. PREPARED BY		
a. LAST NAME	b. RANK	c. POSITION
KLEIN	SFC	MASTER TRAINER

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
SUG-V TRAINING/POI	1(A) RANGE/GENERAL INJURIES CAUSED BY LOSS OF SITUATIONAL	H	The R OIC / Safety Officer will do the following:	M	1. IAW MCOE RANGE AND TERRAIN REGULATION 350-19	NCOIC, RSO, BUDDY TEAMS, INDIVIDUALS	
	AWARENESS		1.Read and Review the Composite Risk Management Worksheet		2. 2-29TH IN REGT POLICIES ON RANGE OPERATION		
			2. Ensure Combat Lifesaver and evac vehicle are available. Inventory CBT Lifesavers First Aid Bag, request and replenish supplies routinely. The OIC/RSO consults senior Student		3. RANGE SAFETY BRIEF TO LEADERS MCOE REG 350-19		
			Cadre and student COC identifies problem Soldiers- suicidal or homicidal intent or gesturesand serious emotional adjustments for higher risk Soldiers.		4. IAW USAIC PM 350-6-2 5.TM-9-2350-397-13&P		
			3. Identify Soldiers with potential medical problemswhich may impact on training to include minor illnesses, allergies, previous heat/or cold weather injuries, or enviromental		6.FM 5-19 COMPOSITE RISK MANAGMENT		
			sensitivities.				

Additional space for entries in Items 5 through 11 is provided on Page 2.

13. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED *(Check one)*

☐ LOW ☒ MODERATE ☐ HIGH ☐ EXTREMELY HIGH

14. RISK DECISION AUTHORITY

a. LAST NAME	b. RANK	c. DUTY POSITION	d. SIGNATURE
JODY C. MILLER	LTC	BN COMMANDER	

ITEMS 5 THROUGH 12 CONTINUED:

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFEC-TIVE?
SUG-V TRAINING/POI		H	4. Review evac procedures and reporting procedures for serious incidents. Plan to evac Soldiers with allergic reactions, anyone within 25m of lightning strike, cold/heat weather	M	1. IAW MCOE RANGE AND TERRAIN REGULATION 350-19	NCOIC, RSO, BUDDY TEAMS, INDIVIDUALS	
			injuries, snakebites, or anyone showing symptoms beyond the Range Officer's experience and the Combat lifesaver's ability to treat. The NCOIC/RSO will direct Air		2. IAW AR 385-63 POLICIES AND PROCEDURES FOR FIRING AMMUNITION		
			Medevac in the event of danger of loss oflife, limb or eyesight.		FOR TRAINING, TARGET PRACTICE, AND COMBAT		
			5.Enforce range uniform.		3. 2-29TH IN REGT POLICIES ON RANGE OPERATION		
					4. RANGE SAFETY BRIEF TO LEADERS 5. FM 5-19 COMPOSITE RISK MANAGMENT		
MECHANICAL TRAINING	1(B) HOT WEATHER INJURIES	H	1. The training unit will monitor wet bulb for heat category. Previous heat injuries will be montored through the buddy system, training company cadre, and Instructors. Update daily	M	1. IAW MCOE RANGE AND TERRAIN REGULATION 350-19		
			risk asessment if unit road marches to training.		2. IAW AR 385-63 POLICIES AND PROCEDURES FOR FIRING AMMUNITION		
			2. Heat categories will be enforced as follows: HEAT CAT WBGT INDEX F EASY WORK MOD WORK HARD WORK 1 78-81.9 NL1/2 NL 3/4 40/20 3/4		FOR TRAINING, TARGET PRACTICE, AND COMBAT		
			2 82-84.9 NL 1/2 50/10 3/4 30/30 1 3 85-87.9 NL 3/4 40/20 3/4 30/30 1 4 88-89.9 NL 3/4 30/30 3/4 20/40 1 5 >90 50/10 1 20/40 1 10/50 1		3. 2-29TH IN REGT POLICIES ON RANGE OPERATION		

ITEMS 5 THROUGH 12 CONTINUED:

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFEC-TIVE?
SUG-V TRAINING/POI		H	EASY WORK 1. weapon maintenance 2. walking hard surface at 2.5 mph, 30 lb load 3. manual of arms	M	4. RANGE SAFETY BRIEF TO LEADERS	NCOIC, RSO	
			4. marksmanship training 5. drill and ceremony MODERATE WORK 1. walking on loose sand at 2.5 mph, no load		5. PM 350-6-2 USAIC 40-14 HEAT INJURY PREVENTION		
			2. walking hard surface at 3.5 mph, < 40lb load 3. calisthenics 4. patrolling 5. individual movement techniques,				
			i.e. low crawl high crawl 6. defensive position construction 7. field assaults HARD WORK				
			1. walking hard surface at 3.5mph, > 40lb load 2. walking loose sand at 2.5 mph with load 3. daily water intake should not exceed 12 quarts.				
			4. Evacuate casualties in accordance with serious incident guidelines/post requirements 5. identify previous heat injuries 6. Monitor eating of meals and record water				
			consumption with card or cord system 7. Brief allSoldiers on signs of heat injuries 8. Ice sheet rehersals				
MECHANICAL TRAINING	1(C) COLD WEATHER INJURIES	M	1. All Soldiers with previous cold injuries will be identified and closely monitored through the buddy system, company cadreand instructors.	L	1. USAIC 40-14 PREVENTION & 1ST AID TREATMENT OF COLD INJURY		
			2. Immersion foot: cause: prolonged immersion in cold water, usually in excess of 12hours at temperatures below 50 degrees fahrenheit.		2. SOPs		
			3. Trench foot: cause: exposure to wetness and cold between freezing, lasting hours to several days				

ITEMS 5 THROUGH 12 CONTINUED:

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFEC-TIVE?
SUG-V TRAINING/POI		M	4. Frost bite: cause: exposure to cold at temperatures of freezing or below, for minutes to several hours	L	1. IAW MCOE RANGE AND TERRAIN REGULATION 350-19	NCOIC, RSO, BUDDY TEAMS, INDIVIDUALS	
			5. Hypothermia: cause: heat loss exceeding body's heat productionresulting in body temperature of 95 degrees fahrenheit or lower.		2. IAW AR 385-63 POLICIES AND PROCEDURES FOR FIRING AMMUNITION		
			6. First aid measures: remove wet clothing, rest affected part and rewarm it promptly to room temperature, except in the case of frostbite when thawing should only be attempted by		FOR TRAINING, TARGET PRACTICE, AND COMBAT		
			medical personnel. treat injuries and evacuate to medic or troop medical clinic.		3. 2-29TH IN REGT POLICIES ON RANGE OPERATION		
			7. Ensure all Soldiers have proper cold weather clothing. 8. monitor wind chill factor		4. PM 350-6-2		
			category degree of dress status of training CAT I stationary fully dressed +32 TO +1 F physically active patially dressed				
			partially dressed CAT II Stationary fully dressed 0 to -5 F physically active partially dressed				
			CAT III stationary fully dressed -6 to -10 F physically active fully dressed CAT IV below -10 discontinue outside				

ITEMS 5 THROUGH 12 CONTINUED:

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFEC-TIVE?
SUG-V TRAINING/POI	2. ANIMAL/INSECT BITES	M	1. Instructors indentify students with allergies prior to training.	L	1. IAW MCOE RANGE AND TERRAIN REGULATION 350-19	NCOIC, RSO, BUDDY TEAMS, INDIVIDUALS	
			2. Range OIC will ensure first aid kits are available with two bee sting kits, and the location is included in safety briefing by range oic.		2. IAW AR 385-63 POLICIES AND PROCEDURES FOR FIRING AMMUNITION		
			3. Range OIC will give a safety briefing, which identifies possible animal/wildlife dangers.		FOR TRAINING, TARGET PRACTICE, AND COMBAT		
	3. SEVERE WEATHER INJURIES(LIGHTNING/TORNADO)	M	1. Range OIC will give detailed safety briefing on severe weather procedures 2. all range personnel will drill weather evacuation and medical procedures quarterly	L	3. 2-29TH IN REGT POLICIES ON RANGE OPERATION		
			3.Range OIC will ensure that combat lifesaver with kit and commo is present 4. Range OIC will identify severe weather safe- area in safety briefing		4. RANGE SAFETY BRIEF TO LEADERS		
	1. BATTERIES EXPLODE FOR MISHANDLING OR FAULT	M	1.Range OIC will give a safety briefing,which identifies hazards of using lithium batteries	L	5. FM 5-19 CRM		
			2. Instructors and students inspect batteries for damage			NCOIC, RSO, BUDDY TEAMS, INDIVIDUALS	
	1. CLASS 1 EYE SAFE LASER	L	1. Range cadre will give a safety brief on the dangers of a class 1 laser	L	1. USAIC Regulation 210-4	NCOIC, RSO	
			2. Instructors will ensure that no students are in front of the laser while it is in use		2. Safety brief on dangers of a class 1 laser		