

# FIRING/NONFIRING DATA

*For use of this form see USAIC Regulation 210-4; the proponent agency is DOT*

TO: <b>CHIEF, DIRECTORITE OF PLANS, TRAINING, AND MOBILIZATION FORT BENNING, GA 31905</b>	DATE: <b>23 NOVEMBER 2009</b>
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THRU: <b>USAMU S-3 OPERATIONS</b>	FROM: <b>USAMU COMBAT ACTION/SERVICE SECTIONS</b>
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### SECTION I

Problem Number:	Range: <b>BURROUGHS RANGE</b>	Title: <b>3 - GUN CHALLENGE</b>
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Type Training: a. Live Fire <b>XXX</b> b. Non-live Fire	CP/Controller Coordinates:
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### SECTION II, DEMOLITIONS/GRENADES/MINES/PYROTECHNICS

Coordinates	Type	Model/DODAC	Size of Charges
<b>MANUVER BOX</b>	<b>PRACTICE GRENADES</b>	<b>G811/G878</b>	

### SECTION III, WEAPONS/AMMUNITION REQUESTED

Coordinates of Weapons Position	Type Weapon/Model Number	Type Ammunition	Left Limit	Right Limit
<b>ATTACHMENT #1</b>	<b>ATTACHMENT #1</b>	<b>ATTACHMENT#1</b>	<b>ATTACHMENT#1</b>	<b>ATTACHMENT #1</b>

### SECTION IV, LIVE FIRE EXERCISES Attach the following:

### SECTION V, NON-LIVE FIRE TRAINING

a. Scenario of training to be conducted: <b>ATTACHMENT #2</b>	a. Training area(s) to be occupied:
a. Sketch of area: <b>ATTACHMENT #3</b>	b. Scenario of training to be conducted:
c. Risk Assessment: <b>ATTACHMENT #4</b>	c. Sketch of area(s) to be occupied:
d. Attach FB Form 210-4-2-R if Mortar or artillery is being fired:	d. REMARKS:

Name/rank/signature of requesting officer: Janet Sokolowski SFC, USA S-3 Range NCOIC 	Name/rank/signature of Major Unit S3/Commander DANIEL C. HODNE LTC, SF USAMU COMMANDER 
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### SECTION VI, FOR RANGE DIVISION USE

TO: <b>COMMANDER USAMU</b>	FROM: Range Division, Directorate of Plans, Training, & Mobilization	DATE: <b>23 Nov 2009</b>
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a. Roadblocks to be closed: <b>A8, A11, A12A, A12B, A18, A30, A30A, A32, A33, A34, A38, A39</b>	b. Road(s) to be closed/road barrier locations:
c. This approval expires: <b>22 Nov 2010</b>	d. REMARKS:

Chief, Range Division Directorate of Operations and Training	Signature: 
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DEPARTMENT OF THE ARMY  
HEADQUARTERS UNITED STATES ARMY MANEUVER CENTER OF EXCELLENCE  
35 RIDGWAY LOOP  
FORT BENNING, GEORGIA 31905-4500

REPLY TO  
ATTENTION OF

ATAL-BM-C

MEMORANDUM FOR DIRECTOR OF OPERATIONS AND TRAINING,  
ATTN: ATSH-OTR, USAMCOE, FORT BENNING, GA 31905-5593

SUBJECT: ~~Galloway, Burroughs, and Buchanan~~ <sup>RB</sup> Ranges Safety and Steel Waiver

1. REFERENCES:

- a. AR 385-63, Range Safety, 19 May 03.
- b. DA PAM 385-63, Range Safety, 4 Aug 09.
- c. Memorandum, HQ TRADOC, ATCS-S, 10 Oct 00, Subject: Authority to Waive Safety Criteria contained in AR 385-63.

2. Under the provisions given in References 1 a-c above, used in conjunction with the Fort Benning Form 210-4-3-R, Composite Risk Management Worksheet, USAMU Use of Steel Target SOP, and Range Scenario/SOP, the areas to be waived are as follows: The SDZ from firing MK19 and Mortars from Coolidge Range that proceeds onto the left side corner of Burroughs Range (to exclude the Javelin Weapon System). The use of steel targets from 7.62 weapon system on ~~Galloway, Burroughs, and Buchanan~~ <sup>RB</sup> Ranges, and the ricochet area (990m) known as Area "W" that encompasses the following areas:

(1) ~~On Galloway Range - Coolidge Range, Burroughs Range, Goodluck Rd, and Yankee Rd.~~ <sup>RB</sup>

(2) On Burroughs Range - Coolidge Range, Galloway Range, Goodluck Rd, and Yankee Rd.

(3) ~~On Buchanan Range - Jamestown Rd, Hourglass Rd, Goodluck Rd, Crossie Rd, Fort Benning Sewage Treatment Plant, and the northwest corner of the 718th Engineer Company Motorpool.~~ <sup>RB</sup>

3. USAMU Commanders are charged with the responsibility to ensure compliance with applicable guidelines described within this waiver.

ATAL-BM-C

SUBJECT: Buchanan and Burroughs Ranges Safety and Steel Waiver

4. I hereby grant this waiver for use on Galloway, Burroughs, and Buchanan Ranges by the USAMU. This waiver becomes valid for 1 year. In the event of an accident arising from use of these waived conditions, the waiver becomes invalid until reinstated by this headquarters.

5. POC for this action is SFC Janet Sokolowski, S-3 Range NCO, USAMU, 706-545-7174/DSN 835-7174 or [janet.sokolowski@usaac.army.mil](mailto:janet.sokolowski@usaac.army.mil).

A handwritten signature in black ink, appearing to read "Michael Ferriter". The signature is fluid and cursive, with the first name "Michael" written in a larger, more prominent script than the last name "Ferriter".

MICHAEL FERRITER  
Major General, USA  
Commanding General



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
HEADQUARTERS, US ARMY MARKSMANSHIP UNIT  
7031 BILLS STREET  
FORT BENNING, GEORGIA 31905-3103

ATAL-BM-C

20 November 2009

MEMORANDUM THRU: Chief, Range Operations, Directorate of Plans, Training & Mobilization

FOR: USAMU, Combat/Action Shooting and Service Pistol Sections

SUBJECT: Burroughs Range Live Fire Scenario, Range Utilization SOP

1. Burroughs Range is a Known and Unknown Distance Range primarily used for Advanced Marksmanship Training, Qualification, Zeroing, Familiarization, and Competition. Pistols, Rifles, Shotguns, Lasers, Scopes, Training Hand Grenades, Automatic and Foreign Weapons will be used on Burroughs Range.

**SAFETY:** All live firing will be controlled at Burroughs Range while conducting competition, advanced marksmanship training, qualifications, VIP demos and drills. All phases are well planned, rehearsed, briefed, dry fired, and completed in accordance with the approved safety/steel waiver, range scenarios/SOPs, composite risk management worksheet, USAMU Use of Steel Targets SOP, and Fort Benning Form 210-4-3-R. Before any live firing, all non USAMU personnel will sign a Liability Release Form provided by the RSO/ OIC of the range. During Competition, the form is required as part of the registration process of the match. During firing, all Civilian and Military Competitors/VIP Guests/Armed Forces Personnel will have limited ammunition, limited number of engagements, and a limited plan of how to engage targets. All Civilian and Military Competitors/VIP Guests/Armed Forces Personnel will follow all commands of the designated Range Safety Officer. During all phases, all Civilian and Military Competitors/VIP Guests/Armed Forces Personnel receive Range Safety Briefings on procedures, equipment, and hazards. Eye and Ear protection is mandatory while on the range facility for competitors, staff, and spectators as well as proper protective equipment to prevent injury. Laser and laser hazards are addressed prior to use, to include a brief instruction on the laser equipment. Laser Warning Signs will be posted throughout the shooting area and range. Because various weapon systems (.22 thru .308 calibers) and commercial ammunition (ammunition will not exceed 6000m) will be fired on Burroughs Range, Civilian and Military Competitors/VIP Guests/Armed Forces Personnel bringing POWs will have weapons and ammunition inspected by an USAMU Gunsmith to ensure safety and correspondence to the prescribed equipment for the competition or training. No tracer, incendiary, armor piercing or steel jacketed

ammunition is allowed. Not adhering to the rules and regulations provided by USAMU personnel will result in the ejection from the range facility, training/competition, and Fort Benning. During firing, Civilian and Military Competitors/VIP Guests/Armed Forces Personnel will have Weapons Racks provided when in the Holding Area, not shooting, dry firing, or rehearsing. During the stage rehearsal/dry fire, Safeties and Judges will determine if the Civilian and Military Competitors/VIP Guests/Armed Forces Personnel are proficient and understand the course of fire. In the case that the Civilian and Military Competitors/VIP Guests/Armed Forces Personnel do not understand, he/she will be removed from the line and remedial training will be conducted. In some cases, competitors will be disqualified from the competition entirely. All stages/scenarios are controlled, so that the shooter cannot engage targets at a close distance. All shooting will be within maximum visibility in which the shooter is squared off with the target. Minimum distances to the targets are as follows: 10m for Pistol to engage steel/paper targets, 15m for shotgun to engage steel/paper targets, 100m for 5.56 – 7.62 to engage steel/paper targets). All minimum distances are described within the USAMU Use of Steel Targets SOP. Detailed specific instructions will be provided to the Civilian and Military Competitors/VIP Guests/Armed Forces Personnel on each scenario where a picture sketch and text directions describe the course of fire. USAMU Personnel will set up, calibrate, inspect, and test fire all steel targets IAW USAMU Use of Steel SOP. The OIC ensures the target positioning in which the steel will be pointed downward at an angle to the shooter to reduce ricochet and will not violate the Left and Right limits. All paper and steel targets will be set up and removed by USAMU personnel. Target maintenance and inspection is done after each shooter has completed the course of fire. See graphics for Holding Area, Spectator Area, Range Layout, and Weapons/Ammunition limitations.

The Judge and Safety will watch for ricochets, malfunctions, misfires, safety violations, or any situation that is deemed harmful to the shooter, spectators, or staff. In case of emergency where a cease-fire is called both hand and arm as well as verbal Cease-Fire will be given. All USAMU Soldiers are Combat Lifesaver qualified as well as provide aid and use Combat Lifesaver aid bags on the range. A dedicated Range Vehicle for only CLS will be on the range facility ready for use. Vehicles carrying supplies, targets, and pasters for the range will also be on the range facility readily available.

PHASE I COMPETITION and TRAINING consists of the MANUEVER BOX Phase used on Burroughs Range. During PHASE I / COMPETITION and TRAINING MANUEVER BOX, only one Shooter will move with one safety and one judge at a time on Burroughs Range. The Safety, Judge, and Scorer will always be at a safe distance behind the competitor while engaging targets. All others preparing to shoot the same stage will be prepositioned in the Holding Area with the next shooter in line, On Deck, and the 3<sup>rd</sup> Shooter in the line, in The Hole. The Holding Area will be at a safe distance away from the firing line. Spectators who will be watching the stages will watch from behind the Holding Area. All areas (Holding Area/Spectator Area) will be visibly marked. There will be a Range Safety Officer controlling the Holding Area and no Shooter can leave the area without the RSO approval. The Civilian and Military Competitors/VIP

Guests/Armed Forces Personnel will place their weapons on weapons racks. The Holding Area RSO maintains security of the weapons, ammunition, and personnel in the Holding Area. When all Civilian and Military Competitors/VIP Guests/Armed Forces Personnel have completed the stage, the Holding Area RSO will release the entire squad to the next Holding Area in which the next Holding Area RSO will be awaiting weapons, ammunition, and personnel. Throughout PHASE I / COMPETITION and TRAINING, Civilian and Military Competitors/VIP Guests/Armed Forces Personnel will load holstered weapon and prepositioned weapons resting on a table or barrel after he has rehearsed, dry fired, and is given the authorization to live fire the scenario. During every PHASE I / COMPETITION and TRAINING, RSO/OICs will have controls in place that when the shooter is changing weapons, Civilian and Military Competitors/VIP Guests/Armed Forces Personnel will place the weapon on a barrel or table and pick up another weapon from this point. The weapon that is being replaced will be left in a safe grounded condition (slide/bolt to the rear, magazine out, weapon on safe).

During Advanced Marksmanship Training on Burroughs Range, the majority of firing is done in the semi-automatic mode. In some cases burst/automatic fire may be used in a training environment with only one Shooter firing at a time with a line safety present to ensure safe employment of the weapon system and range limits are observed. The techniques used in marksmanship training are primarily derived from FM 3-23-35, FM 3-06-11, and FM 3-22-9.

**MOVEMENT:** During firing, the Civilian and Military Competitors/VIP Guests/Armed Forces Personnel will shoot from standing, kneeling, crouching, and prone positions as well as being told when to load, when to observe their target, in which their time begins when a designated start signal is given. During the movement portions of training it will be one safety to one Shooter moving in-depth or in-width of the range always centering on the target they are engaging to stay within range fan limits. Movement in one of three directions: Straight forward toward down range, diagonal forward toward down range, or horizontal toward down range. At all times weapon will be pointed down range and in a safe direction and firing will be down range almost straight into the target. Existing structures will not be damaged during firing. During the movement portions between firing lines, there will be a minimum of 2 range safeties controlling movement and ensuring that Civilian and Military Competitors/VIP Guests/Armed Forces Personnel are moving in-depth or in-width of the range always centering on the target they are engaging to stay within range fan limits.

**CONTROLLING FACTORS:** Civilian and Military Competitors/VIP Guests/Armed Forces Personnel fire under controlled conditions at all times. During firing, a line official or range officer gives all firing commands from the center of the firing line. The Civilian and Military Competitors/VIP Guests/Armed Forces Personnel will shoot from standing, kneeling, crouching, and prone positions as well as being told when to load and when to observe their target and their time begins when a designated start signal is given. Each Civilian and Military Competitors/VIP Guests/Armed Forces Personnel fire their appropriate course of fire, then a designated signal is sounded to mark when their time has expired. Line safety's and judges clear the firing line and make note of any saved

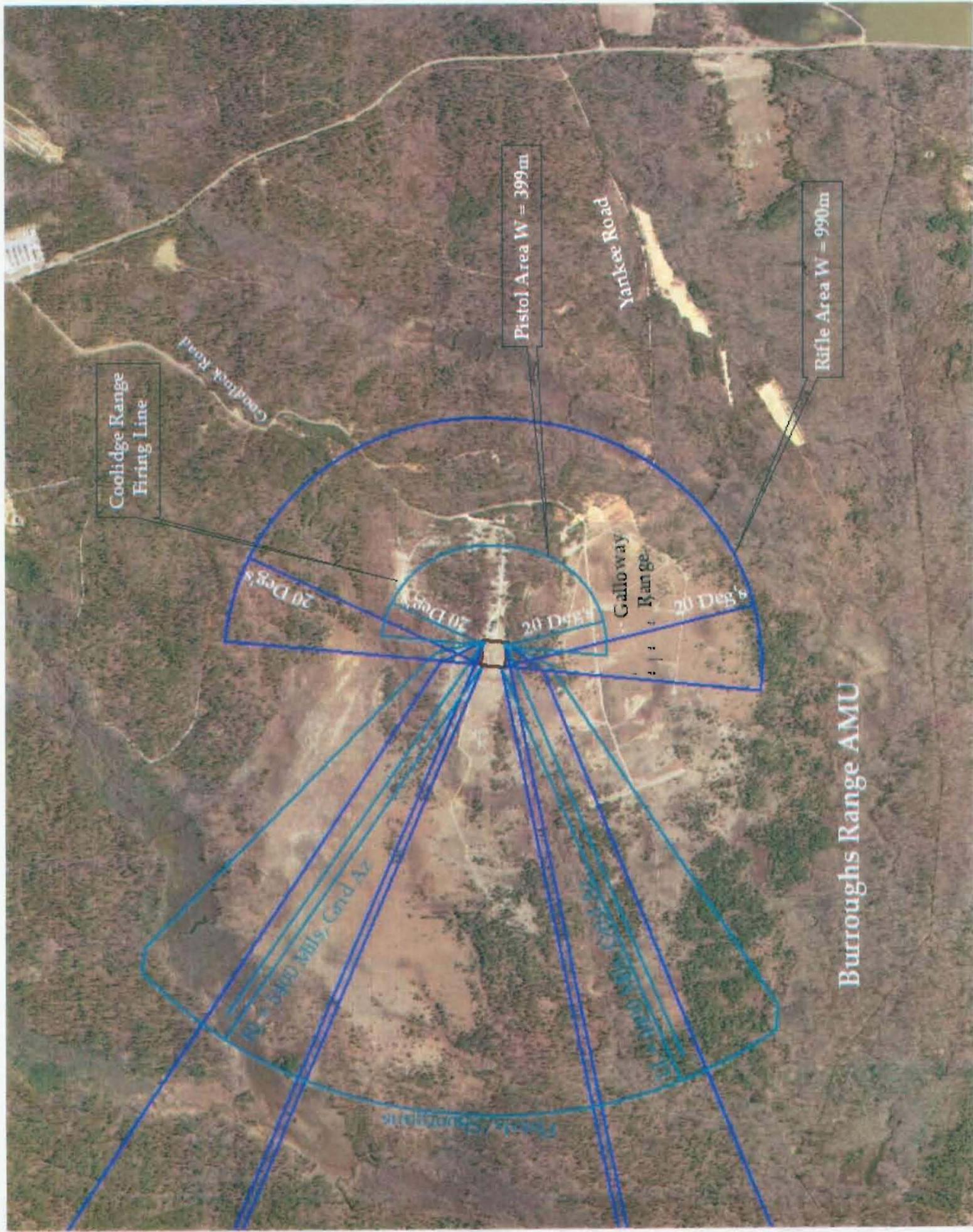
rounds. The line is completely cleared prior to Civilian and Military Competitors/VIP Guests/Armed Forces Personnel moving downrange to change targets or to score targets in competition. Before firing, the NCOIC or his representative is responsible to designate the line safety that will clear weapons after each phase of firing is complete. The grenades and fuses will be handled and defused by a representative of the OIC/NCOIC only. All grenades and fuses will be handled with care along with eye and ear protection. During the firing phase it is the range safety's responsibility to ensure the range is safe until completion of that phase of fire and all weapons are cleared.

2. During PHASE I / COMPETITION and TRAINING, USAMU use Iron Maidens and Stage Design Props for situational courses of fire at Burroughs Range. Iron Maidens will be fired upon in accordance with the dimensions described in the Burroughs Range Safety/Steel Waiver, FB 210-4-3-R, range scenario/SOP, USAMU Use of Steel Target SOP, and Composite Risk Management Worksheet. Some Steel Targets (Pepper Poppers) are designed to fall once fired upon. All props used on the range are obstacle-laden shooting courses (called stages or scenarios) requiring anywhere from six to thirty shots on several targets. Civilian and Military Competitors/VIP Guests/Armed Forces Personnel move, negotiate obstacles, run, reload, and compete through each of several courses. These scenarios require Civilian and Military Competitors/VIP Guests/Armed Forces Personnel to deal with constantly changing props such as doors, ports, bridges, windows, barrels, furniture, military and civilian vehicles or vessels of all types. All vehicles used as barricades will have hazardous material fluids purged. All vehicles will be covered with sand bags to reduce ricochet. At no time will a Civilian and Military Competitors/VIP Guests/Armed Forces Personnel move any part of the stage designs. All props and vehicles are not permanently fixed inside on the ranges. All props will be removed for qualification or when needed. When using Props, Stages, Scenarios, Iron Maidens, and Pepper Poppers, each Civilian and Military Competitors/VIP Guests/Armed Forces Personnel negotiates through the stages one at a time and is observed by a Range Safety Officer with one judge.

4. POC is SFC Janet Sokolowski, S-3 Range NCOIC, USAMU, (706) 545-7174/1410 or [janet.sokolowski@usaac.army.mil](mailto:janet.sokolowski@usaac.army.mil).



DANIEL C. HODNE  
LTC, SF  
Commanding



Cooledge Range  
Firing Line

Pistol Area W = 399m

Rifle Area W = 990m

Galloway  
Range

Burroughs Range AMU

Crestbrook Road

Yankee Road

N. 1000 Milsy, Cond. Av.

Pine Springs



Area to Waive

Coolidge MK19 SDZ

9506

100m

Burroughs Range AMU

**MANEUVER BOX**

**KEY**

-  HOLDING AREA
-  SPECTATOR AREA

Coolidge Mortar SDZ



# Steel Targets to be Used



Fort Benning, Future Home of the MCOE



## FLASH TARGET

- Intended to eliminate long range target resetting
- Standard 10" circle with a 5" head hangs below a horizontal stainless shaft.
- Large white piece of polycarbonate plastic in front, and hiding behind is a smaller piece of plastic painted fluorescent orange.
- When the target is hit the swinging motion of the target moves the white plastic down and the orange plastic up.



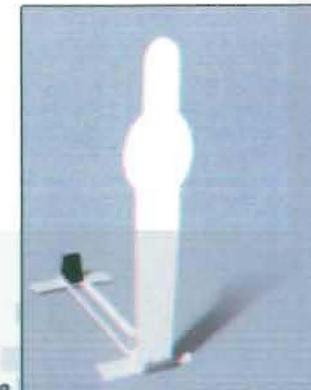
## RIFLE SELF SETTER WITH FLASH CARD

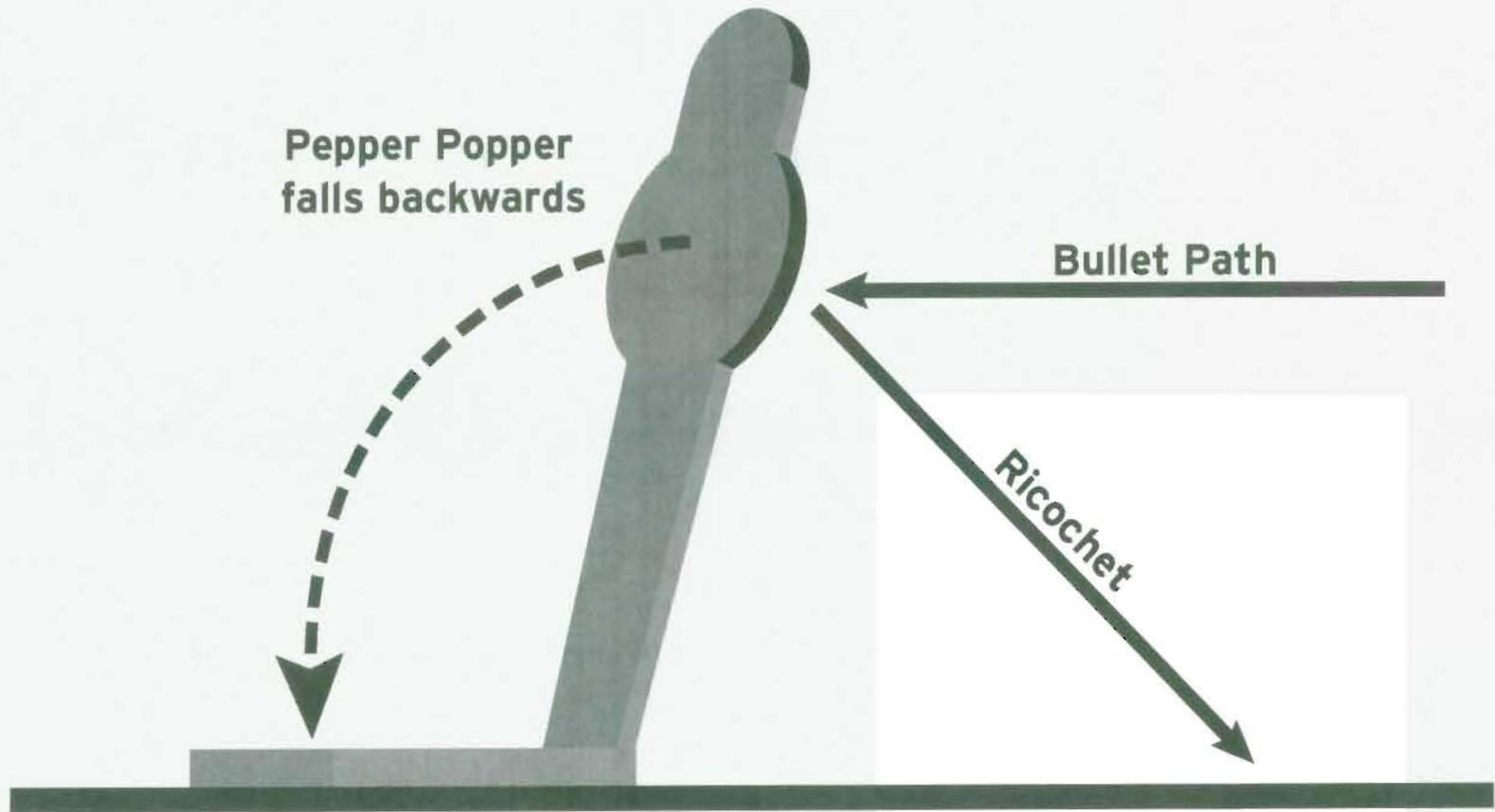
Made from AR 500 3/8 Steel.

- 8" in diameter.
- When Target is hit the swinging motion moves the orange plastic up.
- The Range Officer, Judge, Competitor, and Scorer have maximum visibility target recognition.

## PEPPER POPPERS

- Fully adjustable, reactive, knockdown steel target.
- Used for pistols and shotguns.
- Once hit the target falls reducing splatter from steel.

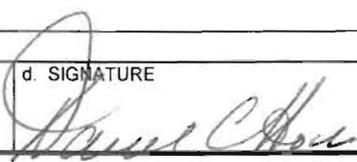




**Pepper Poppers are angled forward to reduce risk of ricochet back towards the shooter.**

### COMPOSITE RISK MANAGEMENT WORKSHEET

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

1. MSN/TASK Marksmanship Training, Burroughs Range		2a. DTG BEGIN 1 Dec 2009		2b. DTG END 1 Dec 2010		3. DATE PREPARED (YYYYMMDD) 20090111	
4. PREPARED BY							
a. LAST NAME Hampton			b. RANK SFC		c. POSITION USAMU NCOIC Combat/Action Shooting Section		
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?
Conduct small arms training, matches, and qualifications.	Personnel injury due to accidental discharge of a weapon.	M	Weapons only loaded and unloaded on the firing line; Shooters trained in weapons and Range Safety. Weapons maintained to high standards. Gunsmiths inspect all weapons.	L	IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	
	Personnel injury due to accidental discharge of a weapon.	M	Range Officer and Range Safety Officer must complete Range Safety Class. Combat Lifesaver and bag on range. Eye and Hearing protection available and worn.	L	IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	
	Personnel injury due to accidental discharge of a weapon.	M	Armed Forces Personnel, Civilians, VIP, and Junior shooters will have Military supervision. Liability form must be signed prior to shooting. Junior Shooter's consent signed by an adult.	L	IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	
	Unauthorized Personnel are downrange during firing	H	Range opened and closed with Range Control, Range flag, and barricades in place during firing. Firing terminated during periods of limited visibility: 150 to 350 meters.	M	IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	
	Unauthorized Personnel are downrange during firing	M	Cease Fire implemented if authorized personnel observed down range. 100% monitoring of the Range Control Radio.	L	IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	
Daily Risk Management Worksheet	General Range Hazards	M	OIC, RSO, and Safeties will brief on hazards listed on the daily risk assessment.	L	IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	
Additional space for entries in Items 5 through 11 is provided on Page 2.							
13. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (Check one)							
<input type="checkbox"/> LOW <input checked="" type="checkbox"/> MODERATE <input type="checkbox"/> HIGH <input type="checkbox"/> EXTREMELY HIGH							
14. RISK DECISION AUTHORITY							
a. LAST NAME HODNE		b. RANK LTC		c. DUTY POSITION USAMU COMMANDER		d. SIGNATURE 	

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 EFFECTIVE?						
Conduct small arms training, matches, and qualifications.	Range/ General Situational Awareness	M	THE RANGE OFFICER IN CHARGE (OIC/NCOIC) WILL DO THE FOLLOWING: 1. Read and review the Risk Assessment. 2. Senior Unit Representative will conduct a	L	IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver							
			daily risk assessment in consultation with range cadre representatives and annotate in writing on the CRMWS. He/She has taken into account Personnel, Environment, and Equipment.					IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver				
			3. Ensure cadre, combat lifesaver, and a dedicated evacuation vehicle are available. 4. Identify Soldiers with impeding medical problems that may impact training.							IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver		
			5. Review evacuation and reporting procedures for serious incidents. 6. Ensure Soldiers have been allowed at a minimum 6 hours of rest in the previous 24 hrs.									IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver
			7. Observe down range for any fires. 8. Call cease fire if a fire has the potential to cause harm to Soldiers and or damage range equipment.										
Conduct small arms training, matches, and qualifications.	Specific Hazards: Hearing and Sight Loss	H	All personnel on the range are required to wear eye and ear protection at all times on the range. Unit Personnel is enrolled in the FB Occupational Health Screening Program.	M	IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver							
			All permanent party on Ft Benning are enrolled in Occupational health screening program to monitor changes in vision and hearing.					IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver				
Heat/ Cold Awareness Foul weather Lightning	Personnel Injury due to extreme heat/ cold foul weather lightning	M	Weather and Temperature will be monitored at all times. Training is halted during foul weather conditions when lightning is possible.	L	IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver							
			In the event that lightning is present, all personnel will move inside section building. All equipment will be grounded. 100% monitoring of radio.					IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver				
General Range Awareness	Minor Body Injury Cuts Or Falls	M	Brief Personnel on tripping hazards: Rocks, Branches, Fallen Trees, and Creek Beds.	L	IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver							

### COMPOSITE RISK MANAGEMENT WORKSHEET

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

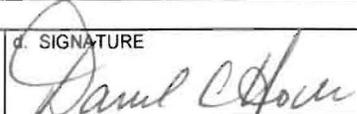
1. MSN/TASK Marksmanship Training, Burroughs Range (continued pg 3-4)	2a. DTG BEGIN 1 Dec 2009	2b. DTG END 1 Dec 2010	3. DATE PREPARED (YYYYMMDD) 20091113
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4. PREPARED BY		
a. LAST NAME Hampton	b. RANK SFC	c. POSITION USAMU NCOIC Combat/ Action Shooting Section

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?
Heat / Cold Awareness Foul Weather Lightning	Personnel Injury: Due to extreme Heat and Cold / Foul Weather	L	All Soldiers are trained in Preventive Medicine. Training is halted during foul weather condition. Be aware of the current Heat Category. Replace fluids at the following rate:	L	IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	
			HEAT CAT 1            1/2 QT/HR HEAT CAT 2            1/2 QT/HR HEAT CAT 3            3/4 QT/HR HEAT CAT 4            3/4 QT/HR		IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	
			HEAT CAT 5            1 QT/HR Water available from portable water cooler. Daily fluid intake will not exceed 12 QTS. Previous heat/cold injuries will be identified.		IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	
			During cold weather all personnel will have adequate cold weather clothing available.		IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	
	Insect Bites	M	Personnel will be identified, as to being allergic to insect bites. These personnel will have their own kit on their person.	L	IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	
			For those individuals not identified as being allergic and they suffer an insect bite reaction, 911 will be called for emergency assistance.		IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	

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

13. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (Check one)
<input type="checkbox"/> LOW <input checked="" type="checkbox"/> MODERATE <input type="checkbox"/> HIGH <input type="checkbox"/> EXTREMELY HIGH

14. RISK DECISION AUTHORITY			
a. LAST NAME HODNE	b. RANK LTC	c. DUTY POSITION USAMU COMMANDER	d. SIGNATURE 

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?
Weapons Cleaning	Cleaning Solvents may ignite causing a fire.	M	All weapons cleaning preformed in well ventilated area, no smoking in range facilities. No Smoking signs are posted within the area.	L	IAW: RANGE SOP USAMU SOP AR 200-1	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	
			Used cleaning solvents/materials properly stored/disposed of IAW HAZMAT regulations, fire fighting equipment on hand and serviceable		IAW: RANGE SOP USAMU SOP AR 200-1	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	
Conduct small arms training, matches, and qualifications	Bullet/Fragment/Steel target injuries from ricochet area.	M	Artificial barriers installed, dirt berms installed, fixed firing points, steel targets angled downward to control splatter. All shooters are highly trained.	L	IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	
			Shooter's are briefed minimum safe distance from steel targets.		IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	
General Range Awareness	Downrange Movement to set up, repair, and take down targets.	M	Upon occupation of the Range, an opening code will be requested from Range Control. Once the opening code is received the flag will be put up.	L	IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	
			At that time a request will be made to go downrange to set up the targets for that day's course of fire.		IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	
			Once back from downrange, the range barricades will be put in place, and Range Control will be notified that all personal are back.		IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	
			Before any firing takes place, the question "Is everyone back from downrange" will be asked loudly, three times over the P.A. system. At that time the days training will commence.		IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	
			Once the days training is complete, a request will be made to go downrange to retrieve targets. After all personal are back, a request for a closing code will be made.		IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	
			Once the closing code has been received, the range flag will be taken down and all personnel will depart the Range.		IAW: Range SOP USAMU SOP USAIC Reg 210-4 AR 385-63 DA Pam 385-63	Range NCOIC RSO, OIC Line Safety Combat Lifesaver	



## RECORD OF ENVIRONMENTAL CONSIDERATION (REC)



**EMD Number:** 928001

**Project#:** Unknown

**Project Title:** USAMU RANGES AND TRAINING AREAS

**Description of proposed action:**

ALL USAMU RANGES HAVE BEEN GRANTED CONCURRENCES IN PRIOR REQUESTS. PERSONNEL WILL TRAIN AND COMPLETE BY FIRING LIVE FIRE AMMUNITION AT RANGES OF 7 TO 1000 YARDS INTO KNOWN AND UNKNOWN DISTANCES INTO THE IMPACT AREA.

**Project Location:**

EASLEY, HIBBS, PHILLIPS, PARKS, HOOK, POOL, BRINSON, MAERTENS, ENGLISH, ROOSEVELT, BURROUGHS, BUCHANAN, A1-A5

**Amount, Description, Location of Disturbance/Digging:**

N/A

**Number/Types of Vehicles:**

100

**Number of Personnel:**

200

**Type of Ammunition:**

.22-.50 CAL. Live

**Number/Types of Trees:**

N/A

**Size of Project Area:**

**Duration of Action:** Start: 10/14/2009 Stop: 9/30/2010

**Proponent:** Nicole Allaire 706-545-7174

**Organization/Unit:** USAMU

**DECISION:** Concur with conditions

**This Action is adequately covered in the Existing EA titled: 'Ongoing Mission and siting Activities, USAIC, FT. Benning, GA.'**

**(NA): Training involving LIVE FIRE and tracked vehicles has NO CATEX -- "Ongoing Mission and Siting Activities, USAIC, Ft. Benning, GA."**

**APPROVED THROUGH 30, SEPTEMBER, 2010**

**CWA - Training**

**Conditions:**

Jesse Taylor (706 545 0276), 10/16/2009

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 improper 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 544-8291, and they will notify E-911 for Fire Department/HAZMAT Team assistance and/or notification of the EMD office. 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.

EMD Number: 928001

JO# Unknown

Project Title: USAMU RANGES AND TRAINING AREAS

Hazardous Materials/Waste

Conditions:

Dudley Carson (706 545 7570), 10/9/2009

Appropriate precautions must be taken to prevent hazardous material spills. Have adequate quantities of spill response supplies on hand. If a spill occurs use notification procedures as outlined in the Fort Benning Hazardous Waste Management Plan. Contain and clean up spill according to guidance provided by the Environmental Protection Management Branch. Any waste generated must undergo a waste stream analysis to determine appropriate management requirements to include weapons cleaning patches, rags, and swaps. If any hazardous waste is generated it must be managed in accordance with Federal, State, Army and Fort Benning regulations. The Environmental Program Management Branch (EPMB) provides an 8 hour course covering Hazardous Waste Management, Hazardous Waste Minimization, Safety, and Pollution Prevention. Call the EPMB at 545-7570 for class schedule and to register for class.

All excess, unused munitions (to include Defective, misfired, or otherwise unserviceable munitions.) must be returned to the Ammunition Supply Point after the field exercise is completed. A dud shall not be removed from the range; it will be marked, called into range control and will be properly disposed of by EOD personnel IAW/USAIC Reg. 210-4 -5-8, May 05, 1. Ensure personnel know the correct procedure for handling misfires at the range. Closed containers (ammunition can marked "MISFIRES") will be used for the collection of misfires at the firing range(s). The MISFIRE container will stay closed except to add or remove misfires. Misfires SHALL NOT BE COLLECTED in any open container or cardboard box. Contact EPMB for detailed information on the proper disposal of waste products resulting from the training.

Rubbish, empty containers and other waste (including used smoke canisters) should be removed from the training area after the exercise. Contact EPMB for detailed information on the proper disposal of waste products resulting from the exercise. Contact POC below for any questions or additional guidance.

Natural Resources - RCW

Conditions:

Michael Barron (706 544 7080), 10/7/2009

Concur with conditions. See attached conditions. Note locations of red-cockaded woodpeckers on attached maps. Training restrictions apply. Unit commanders must make sure that all troops know the locations of restricted areas and understand these training restrictions. This is imperative since night training may occur. Boundaries are often hard to see at night, but this is no excuse for violations to occur. Two hour time restriction is for 2 hours once every 24 hour period. Note where digging may not occur. All trenches, fighting positions, etc must be filled in prior to leaving an area. There must be no cutting down or intentional destruction of any pine trees throughout the requested area(s). Units may fire on existing ranges but must make every effort to contain their firing to the established range footprints. Targets may not be moved from their current positions nor may new targets be established without approval via a separate 144R and a site visit with this office.

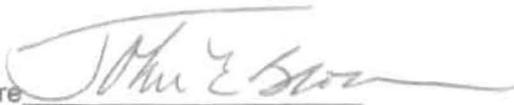
Noise

Conditions:

Ellis Leeder ((706) 545 1857), 10/7/2009

This is normal training that must be conducted annually. If there are any complaints received, the Environmental Management Division will investigate by determining if the noise was detected by noise detection monitors, and then recommending noise mitigation actions to the appropriate personnel. Please follow the Garrison guidelines to noise management and hours of firing operations. If any assistance is needed please feel free to contact Ellis Leeder at 706.545.7576 or email ellis.leeder@us.army.mil

Signature



John E Brown

NEPA Program Manager

Date

16 OCT 09

Signature



Christopher E. Hamilton, PhD

Acting EPMB Chief

Date

20 Oct 09

## RECORD OF ENVIRONMENTAL CONSIDERATION (FB FORM 144R) CONTINUED....

RECORD NUMBER: 928001

1. Backfill all fighting positions before leaving the training area.
2. There are several Red-cockaded woodpecker clusters located in the area of these ranges. Note locations on attached maps. An exception is granted to conduct live fire on these ranges but restrictions apply to the clusters and area adjacent to the Ranges (see attached). There is 1 Red-cockaded woodpecker cluster located on the west side of Maertins Range. Units must not fire into the tree line along this side of the range and firing must be concentrated at established targets. Two white bands mark cavity (nest) trees. The cluster boundaries extend approximately 200 feet from the cavity trees and are marked by signs indicating the area is an RCW cluster. Training restrictions apply to this area. All target positions must be backstopped to minimize bullet damage to surrounding trees. These backstops must be maintained to be effective. No positions may be created, moved or expanded without concurrence with Conservation Branch. Two white bands mark cavity (nest) trees. The cluster boundaries extend approximately 200 feet from the cavity trees and are marked by signs indicating the area is an RCW cluster.
  - a. **Activities in cluster boundaries are limited to 2 hours with the following activities allowed:** Hasty defense-light infantry-hand digging, foot traffic, wheeled-vehicle traffic (must stay 50 feet from marked trees), vehicle maintenance, 7.62-mm and lower blank firing, artillery/hand grenade simulators, Hoffman type devices, smoke/haze operations-generators or pots (smoke can drift into, but source must be outside boundary), star cluster/parachute flare, cutting of hardwoods for camouflage (do not cut pines).
  - b. **The following activities are not allowed in the cluster boundary:** No other digging, establishment of command post, assembly area operations, established CS/CSS sites, live fire, noise generators, incendiary devices (including trip flares), CS/Riot gas, HC smoke, tank ditches, deliberate individual fighting positions, crew served fighting positions, vehicle fighting positions, force reduction positions, vehicle survivability postings.
  - c. Within ½ mile of a cluster, there is no mechanical digging within 20 feet of a mature pine tree (8 inches diameter at breast height or greater).
3. Report all wildfires to Range Control ASAP.

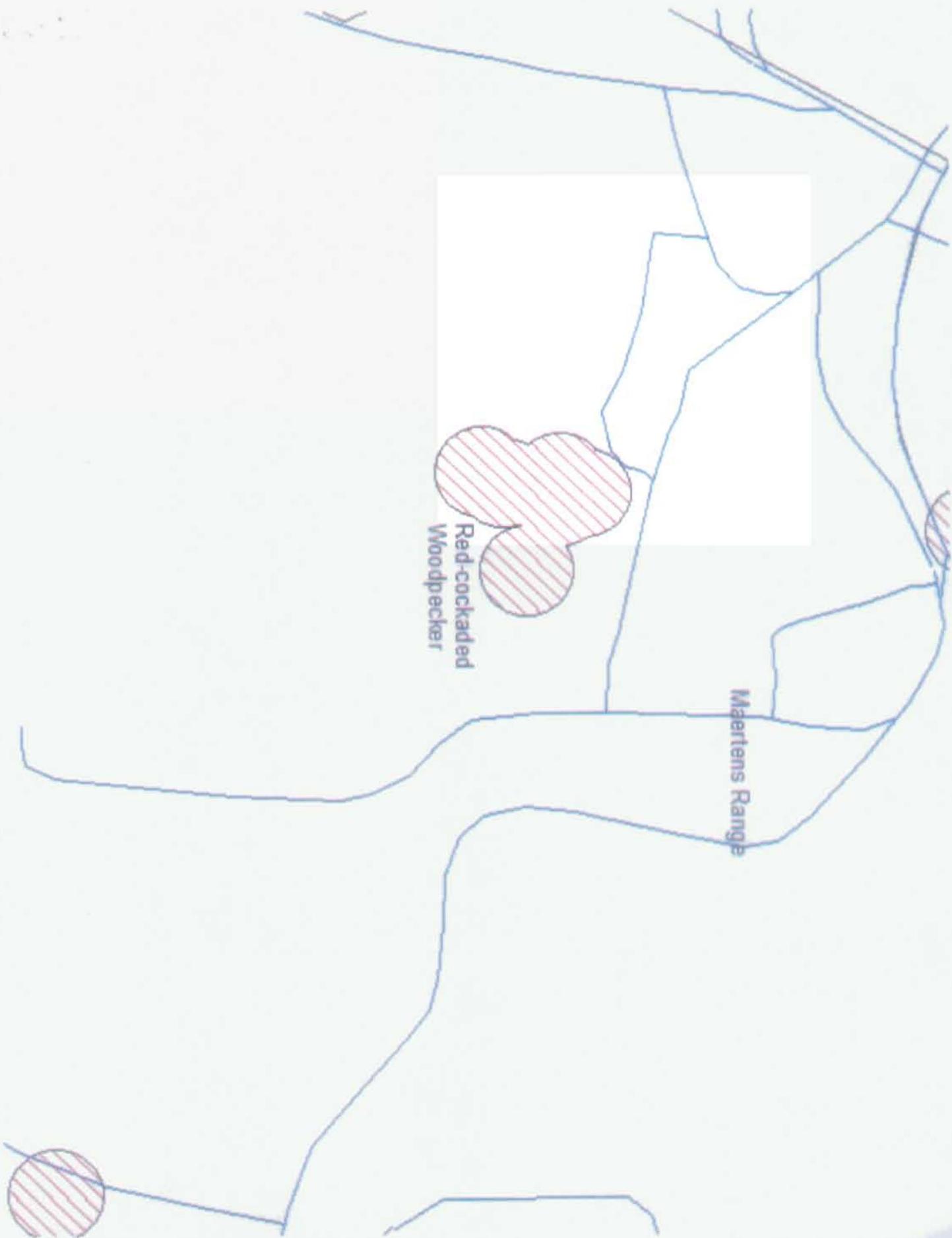
MICHAEL G. BARRON  
Wildlife Biologist, NRMB  
544-7080/7319

TRAINING ACTIVITY WITHIN 200' BUFFER ZONE	
Maneuver and Bivouac:	
Hasty defense, Light Infantry, Hand digging only, 2 hrs max	yes
Foot Transit	yes
Wheel/Track Vehicle Transit	yes (1)
Cutting Hardwood Camouflage	yes
Vehicle Maintenance, 2 hrs max	yes
Hasty defense, Mechanized Infantry/Armor	no
Deliberate Defense, Light Infantry	no
Deliberate Defense, Mechanized Infantry/Armor	no
Established Command Post, Light Infantry	no
Assembly Area Operations, Light Infantry, Mech Infantry/Armor	no
Established CS/CSS Sites	no
Weapons Firing:	
7.62mm and Below Blank Firing	yes
.50 Cal Blank Firing	yes
Artillery Firing Position	no
MLRS Firing Position	no
All Others	no
Noise:	
Artillery/Hand Grenade Simulators	yes
Hoffman Type Devices	yes
Generators	no
Pyrotechnics/Smoke:	
Smoke, Haze Operations, Generators or Pots	yes (2)
Smoke Grenades	yes
Star Cluster/Parachute Flares	yes
Incendiary Device to include Trip Flares	no
CS/Riot Gas	no
HC smoke of Any Type	no
Digging:	
Hasty Individual Fighting Positions, Hand Digging Only	yes
Tank Ditches	no
Deliberate Individual Fighting Positions	no
Crew-served Weapons Fighting Positions	no
Vehicle Fighting Positions	no
other survivability/Force Reduction positions	no
Vehicle Survivability Postings	no

Note: Yes means that the activity may be conducted within 200 feet of a marked cavity tree

- (1) Vehicles (wheel and track) will not get closer than 50 feet of a marked cavity tree unless on an existing road or trail
- (2) Smoke generators and smoke pots will not be set up within 200 feet of a marked cavity tree, but the smoke may drift inside the 200 foot buffer







DEPARTMENT OF THE ARMY  
HEADQUARTERS, U.S. ARMY MARKSMANSHIP UNIT  
7031 BILLS STREET  
FORT BENNING, GEORGIA 31905-5810

REPLY TO  
ATTENTION OF

ATAL-BM-C

20 November 2009

MEMORANDUM FOR Chief Range Control, Directorate of Plans, Training and Mobilization

SUBJECT: Standard Operating Procedures for Use of Steel Targets during USAMU Live-fire Training/Competitions

1. The U.S. Army Marksmanship Unit has been using steel targets since 1992 and has not had a serious incident on any ranges due to steel target ricochet accidents. As stated in Army Field Manuals, Army Safety Regulations, Department of the Army Pamphlets, Memorandums, and Documents that support proper safety techniques, Army marksmanship will always be hazardous. The awareness of the inherent risks allows the USAMU to develop and implement controls. The use of steel targets is just one more factor to be included in the risk management program. USAMU has taken precautions to ensure proper uses of all steel targets are enforced.

The OIC/RSO ensures the target positioning in which the steel will be pointed downward to reduce ricochet and will not violate the Left and Right limits. The OIC/RSO will also ensure targets will be positioned at the base of the berm to avoid Competitors / Military Personnel from shooting over the top of the berm compartment. Competitors / Military Personnel will engage targets from a safe distance in IAW the limitations described in this USAMU SOP for use of Steel Targets and the Fort Benning Form 210-4-3-R scenario that is used in conjunction with the Range Waiver.

2. Below are some examples of training and competition where the use of steel targets is incorporated into our mission. The following is a partial list:

- a) Steel targets are an integral part of USAMU shooting sports course design. If we do not have steel targets to train on we will not be able to compete and win.
- b) Utilizing steel targets for our training allows shooters to dedicate all available training time to shooting instead of moving down range and repairing paper targets.
- c) Steel targets are more economical than paper targets and electronic targets, as they need only paint and minimal care to remain serviceable for many years.
- d) Steel targets are a very important part of Train the Trainer Courses. Steel targets allow students to get visual and audio logical feedback, as well as see shot groups and coach down range performance without leaving the shooting position.

ATAL-BM-C

SUBJECT: Standard Operating Procedures for Use of Steel Targets during USAMU Live-fire Training/Competitions

3. The following are some of the controls placed on the use of steel targets:

a) Pistol

- a. Never closer than 7 meters with reactive or downward angled steel.
- b. Never closer than 12 meters on Static steel.
- c. Never on rifle steel.
- d. Steel will be oriented at a downward angle to reduce ricochet from reaching the shooter.

b) Rifle / Automatic Weapons

- a. Never closer than 12 meters with reactive or downward angled steel.
- b. Never closer than 25 meters for static steel.
- c. Never use steel core or penetrator rounds other than M855 ball.
- d. Never use M855 ball closer than 100 meters.
- e. Steel will be oriented at a downward angle to reduce ricochet from reaching the shooter.
- f. Frangible ammo may be shot as close as 1 meter.
- g. No calibers greater than 7.62x51mm inside of 100 meters without frangible ammo.

c) Shotgun

- a. Never closer than 7 meters on any steel.
- b. Frangible shot may be used as close as 1 meter.
- c. No slugs, steel shot or breaching rounds.

ATAL-BM-C

SUBJECT: Standard Operating Procedures for Use of Steel Targets during USAMU Live-fire Training/Competitions

4. All Steel:

- a. Never mix rifle and pistol steel. Once steel is used for rifle it is ALWAYS rifle. Firing pistol ammo on rifle steel will result in excessive fragmenting of bullets on impact.
- b. All steel must be calibrated prior to use.

5. General safety requirements remain the same. The use of steel targets is included in the range Composite Risk Management Worksheet, Range SOP, and Range Safety Briefings. If there is steel in any array, Wrap around Eye Protection and Ear Protection is required for: USAMU personnel, Armed Forces personnel, and Shooters/Competitors of the USAMU hosted events. During Training Events: Kevlar and IBA are added along with Eye and Ear Protection.

6. There will always be some amount of fragments from shooting steel, once rounds impact a piece of steel the path of fragments can not be guaranteed. By using these guidelines set, most fragments will not reach the shooters, and any fragments that do will not be capable of serious injury.

7. All use of steel targets are requested from USAMU and approved by the Commanding General of Fort Benning under each USAMU range Safety Waiver.

8. Point of Contact for this memorandum is SFC Janet Sokolowski, USAMU Range NCO, 706-545-7174 or [janet.sokolowski@usaac.army.mil](mailto:janet.sokolowski@usaac.army.mil).

///SIGNED///  
DANIEL C. HODNE  
LTC, SF  
Commanding

## GENERAL RELEASE

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**NOTICE:** By executing this document, you waive certain legal rights on behalf of yourself and your family. You should read this document carefully before you sign it.

In consideration for my being permitted to participate in marksmanship training and competition sponsored by \_\_\_\_\_, at Fort Benning, Georgia, I hereby remise, release, acquit, satisfy, hold harmless, and forever discharge the United States, its officers and employees from any and all manner of actions, causes of action, suits, debts, covenants, contracts, controversies, agreements, promises, liability, claims and demands whatsoever arising out of, claimed on account of, or in any manner predicated upon my participation in the aforementioned activity. I make this release on my own behalf and on behalf of my personal representative, successor, heirs, and assigns. I have been fully briefed on the dangers inherent in all planned activities. I hereby certify that I am in good health and suffer from no medical condition that will be aggravated or detrimentally affected by my participation in this activity.

IN WITNESS WHEREOF, I set my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_.

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Printed name)