

**BY ORDER OF THE COMMANDER
35TH FIGHTER WING**

**35TH FIGHTER WING INSTRUCTION
31-117**

22 OCTOBER 2019

Certified Current, 27 August 2025

Security



**WING USE OF
BLANK/MARKING CARTRIDGE**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available on the e-Publishing website at www.e-Publishing.af.mil for downloading or ordering

RELEASABILITY: There are no release restrictions on this publication

OPR: 35 SFS/S5/XP

Certified by: 35 SFS/CC
(Lt Col Devin L. Sproston)

Pages: 23

This instruction implements Air Force Instruction 31-117, *Arming and Use of Force by Air Force Personnel*, Technical Order (TO) 11W2-9-4-11 *Technical Manual Operator's Manual for Close Combat Mission Capability Kit (CCMCK)*. This instruction provides guidance and procedures for authorizing AF personnel to use AF Non-Nuclear Ammunition Safety Board (NNMSB) approved small arms dye-marking cartridges and CCMCK to conduct force-on-force and shoot, move and communicate training. The CCMCK allows force-on-force close combat training by temporarily converting small arms (M16A2 Rifle, M-4/M-4A1 Carbine, M249 Automatic Rifle, M9 Pistol and M11 Pistol) to fire low-velocity dye-marking ammunition. CCMCK ammunition includes 5.56mm single round marking ammunition for the M16 series weapons, 5.56mm linked marking ammunition for the M249, and 9mm marking ammunition for AF approved handguns. Dye-marking ammunition is loaded into the magazine/feedway of the converted weapon in the same manner as service ammunition. Once loaded, the weapon cycles and functions the same as with service ammunition and marks the target with minimal hazard to personnel wearing appropriate safety equipment. The CCMCK allows normal weapon employment cues such as aiming, firing, force-on-force training, and interactive live-fire scenario execution. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, Management of Records, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at <https://www.my.af.mil/gcss-af61a/afirms/>. Additionally, if the publication generates a report(s), alert readers in a statement and cite all applicable Reports Control Numbers in accordance with AFI 33-324. Refer recommended changes and questions about this publication

to the Office of Primary Responsibility (OPR) using the AF Form 847, Recommendation for Change of Publication; route AF Form 847s from the field through the appropriate functional's chain of command.”

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1. General. This Fighter Wing Instruction (FWI) implements policies and procedures for the Dye- Marking Cartridges (DMCs) and blank ammunition program of the wing. This instruction applies to all members of the wing and any personnel that receive training using DMC or blank ammunition. The FWI is designed to implement safety and program policies to provide wing members the opportunity to conduct realistic training utilizing DMCs and blank ammunition in the above designated weapon systems.

1.1. Emergency notification procedures will be established prior to exercises. The exercise POC will notify the Base Defense Operations Center (BDOC) of the location of the exercise.

1.2. Exercise POC will coordinate with Command Post, Explosive Ordnance Disposal, FW Safety, Medical and Fire Department prior to exercises to establish notification procedures for exercises using blank rounds.

2. Dye Marking Cartridges.

2.1. Background: The Ultimate Training Ammunition (UTMs) Man Marking Round (MMR) is considered to be non-lethal, live training ammunition. The round possesses a reduced noise signature which permits safe firing in any environment without the need for hearing protection. The rounds bright marking compound allows for easy identification of hits. Projectiles will not penetrate most walls or windows Which allow them to be used in a variety of locations. MMRs provide the accuracy of duty ammunition at close range. The ammunitions point of impact equals point of aim during close range usage. At 7.6 meters, the 5.56mm MMR's accuracy is 5 centimeter groups. The muzzle velocity of the 5.56mm MMRs is 375 feet per second. At 7.6 meters, the 9mm MMR's accuracy is 5 centimeter groups. The muzzle velocity of the 9mm MMRs is 335 feet per second. The rounds come in five colors for both the 5.56mm and 9mm MMRs: red, white, blue, green, and yellow (See [Attachment 4](#)).

2.2. Nomenclature: The rear primer is fired when the firing pin strikes and crushes the base of the round this is called rimfire. Duty rounds are fired when the firing pin strikes the center of the rounds. This is to ensure that MMR cartridges are incompatible with normal M16A2 or M-4 bolts (See [Attachment 4](#)). The method of firing for both M9 and M-4 MMRs is the same. The conversion kit for the 9mm MMR utilizes the pistol's own firing pin but does not permit the chambering of live 9mm ammunition due to insufficient headspace (See [Attachment 5](#)).

2.3. Description: The UTM cartridge consists of a modified cartridge case, a plastic sabot, and a thin- walled plastic projectile filled with detergent-based marking compound. DMCs leave a water-soluble brightly colored and highly visible marking compound on impact. The visible impacts allow assessment of simulated effect. DMC provide the accuracy of duty ammunition at close range. 9mm UTM rounds have a muzzle velocity of 360-490 feet per second. The 9mm UTM round impact area on a target from 25 meters is 15 cm below ball ammunition. The 5.56mm UTM round has a muzzle velocity of 650 feet per second. 5.56mm UTM cartridges are capable of 15 cm groups at 10 meters, or 40 cm groups at 30 meters. UTM cartridges have a maximum shelf life of 18 months and must be kept in a cool and dry storage location.

2.4. Storage, Inspection and Handling: All UTM ammunition must be stored in an approved explosive storage location and handled IAW AFMAN 91-201, *Explosive Safety Standards*. DMCs will not be maintained, stored, accounted for, or disposed of through the ammunition storage area until central procurement begins.

2.4.1. Malfunctioned Items: Malfunctioned UTM rounds will be identified and placed in an ammunition container or other safe container and will be marked “MALFUNCTIONED UTM ROUNDS.” Those rounds will then be returned or disposed of according to manufacturer guidance.

2.4.2. Accountability: Strict accountability will be maintained of all DMCs. The DMCs will be stored in the 35 SFS armories. The RSO will maintain control of all DMCs during transport and training scenarios.

2.4.3. Authorized Personnel: Equipment and ammunition will only be issued out to personnel identified on the weapons qualification roster signed by the Security Forces CC or identified on a firing roster by approved personnel.

2.4.4. All equipment and ammunition will be signed out via AF Form 1297. Once all equipment and ammunition has been turned in, the armorer will have the Range Safety Officer (RSO) that checked all ammunition out for the day complete the AF Form 710 and annotate exactly how many rounds were expended for training by caliber and lot number.

2.4.5. Range Safety Officer (RSO): At least one instructor acting as the RSO for DMC training will be armed with one M9 and 30 rounds of live 9mm ammunition before all other equipment is issued out. This Armed RSO may not participate in the training while armed.

3. Conversion Kits.

3.1. Rifle Kit: Conversion kits for the M16A2 and M-4 consist of a complete replacement bolt carrier group or a replacement upper receiver and special magazines (See [Attachment 4](#)). UTM MMR cartridges have a rim-fire rear primer. The UTM bolt carrier conversion kit features a three millimeter offset of the firing pin hole on the bolt head. This offset of the firing pin hole ensures that live 5.56mm ammunition cannot be chambered and fired while using the UTM conversion kit bolt carrier. Normal M16A2/M-4 magazines with blue paint or blue tape will be used when using UTM training rounds.

3.2. M9 Kit: The conversion kit for the M9 consists of a simple “drop-in” one-piece barrel assembly. The kit also includes a spare kit spring. The 9mm UTM MMR is a bottle-necked cartridge consisting of a 9mm casing necked down to a 5.56mm projectile, ensuring insufficient headspace to permit the chambering of a live 9mm round (See [Attachment 3](#)). The 9mm UTM rounds are consistent with 9mm ball headspace. Normal M9 magazines with blue paint or blue tape will be used when using UTM training rounds.

3.3. M249 Kit: There is a conversion for the M249 that is used in conjunction with the linked 5.56mm MMR. The kit consists of a new feed tray and bolt assembly (See [Attachment 3](#)).

4. Training Involving Blank Ammunition.

4.1. Nomenclature: The M200 blank cartridge has no projectile. The case mouth is closed with a seven-petal rosette crimp and shows a violet tip. The M200 blank cartridge can be fired by an M-4 Carbine, M-16 Rifle, or an M-249 Automatic Rifle.

4.2. Safety Measures: When utilizing the M200 blank cartridge, a Blank Firing Adaptor (BFA) will be used. The BFA is required to allow the weapon to function properly, serves as a safety feature in the event a live round, and diverts gases discharged by the round. If personnel are engaging each other, there must be a safe distance of 25 feet between adversaries. Operating inside of this distance can be fatal if the BFA becomes dislodged from the weapon.

4.3. Location for Use: All training should take place at the location identified in (See [Attachment 6](#) and [Attachment 7](#)). Any training at an additional site not identified in this instruction will require a risk assessment (See [Attachment 8](#)). No blank fire training will be conducted within 300 feet of a sited explosive facility.

4.4. Inspector General (IG) Exercises: During IG generated exercises, field armorers will not be armed. Field armorers will be provided a hand-held radio and have direct contact with real world security forces to sound the alarm in the event of an emergency

4.5. A designated disinterested official will be present and certify that only blank ammunition is loaded into the weapons.

4.6. If during training a blank round fails to fire or “misfires” meaning the primer was struck but the blank round did not fire the round will be cleared out and stored in a properly marked “dud” can that is stored separately from live munitions.

4.7. All expended munitions will be brought to Combat Arms, where they will be sorted to ensure there are no live rounds. Combat Arms personnel are the only members authorized by the 35 SFS/CC to certify munitions as expended. Combat Arms will then schedule turn-in of expended munitions once certified with local DRMO on Misawa AB.

5. Individual Protective Equipment (IPE).

5.1. Individual Protective Equipment: The minimum standards for protective equipment for all participants and observers according to the CCMCK Training CONOPS.

5.1.1. Full face protection: Eye protection must meet or exceed the ANZI Z87.1-2003 standards and will stop a .30cal (7.62mm) wide projectile traveling at 500 feet per second. Full face means eyes, nose, mouth, and ears must be covered (e.g. neoprene facemask, paintball mask, or equivalent which meets DMC manufacturer’s standards).

5.1.2. Throat protection: Any collar approved for CCMCK use can be used as long as it will stop a .30cal (7.62mm) wide projectile traveling at 500 feet per second.

5.1.3. Groin protection: All personnel, male and female, must use groin protection. In this case, it means a hard athletic-style cup, the ballistic groin protection issued with Individual Body Armor (IBA) or an approved style for use with the CCMCK.

5.1.4. No exposed skin: All personnel are not allowed to have any exposed skin. At a minimum, all personnel must wear long sleeved shirts, long pants, and gloves to cover any exposed skin. Airmen Battle Uniforms (ABUs) are recommended because excessive layers of clothing may detract from realistic training.

5.2. Shoot Move and Communicate (SMC): to participate in this training only Security Forces duty gear is required. Duty gear includes the following: home station kit (transition drill capable), gloves, and safety glasses.

6. Training.

6.1. Force on Force (FoF): The DMC can be utilized for training members in a FoF environment. It can provide realistic feedback, validate training and tactics to determine shot placement, and/or friendly-fire incidences through the use of different color rounds.

6.1.1. DMCs will be used to complement Use of Force training to incorporate shoot/don't shoot scenarios to reinforce members' ability to apply force consistent with *Arming and Use of Force by Air Force Personnel* AFI 31-117 or current regulation.

7. Personnel.

7.1. Chief Range Officer (CRO): The CRO must be E-6 or above and receive their training from Combat Arms and annotated on a 1098 as well as issued a 483 competency card. The CRO has the overall responsibility for all range operations and safety. The CRO will conduct the final inspection prior to the beginning of training as well as brief all personnel on the safety instructions. They are responsible for ensuring all RSO's they have selected have completed the Letter of Understanding (See [Attachment 9](#)).

7.1.1. An arming roster will be provided to the SF Armory from authorized members stating the personnel who will perform CRO/RSO duties as well as munitions custodian and personnel who will arm with live ammo if applicable.

7.2. Range Safety Officer (RSO): The RSO will be E-5 or above and receive their initial training from combat arms personnel and annotated on a 1098 as well as issued a 483 competency card and completing the letter of Understanding (See [Attachment 9](#)). The RSO is responsible for ensuring the safety of all personnel using the DCM equipment. The RSO will conduct a safety in-brief with all trainers and support personnel. The following is a list of RSO responsibilities:

7.2.1. Wear of safety equipment;

7.2.2. Trainers and support personnel duties and responsibilities;

7.2.3. Safe and unsafe areas during training;

7.2.4. Local operations risk assessment approved by 35 FW/SE;

7.2.5. The RSO will inspect the training area for any objects, obstacles or lethal ammunition that pose a threat or hazard;

7.2.6. Install or supervise the installation of weapon conversion kits;

7.2.7. Give the safety and medical mishap briefing (See [Attachment 9](#));

7.2.8. Accountable for the safe storage, verification and issuance of training ammunition;

- 7.2.9. Designating the training area as either “HOT” or “COLD”;
- 7.2.10. Monitoring all training to ensure a safe environment is maintained;
- 7.2.11. Assign training area guards, if needed, to control entry or access to the training area. Refer to [para. 7.2](#) for duties and responsibilities.
- 7.2.12. Additional RSOs may be used for multiple scenarios. If additional RSOs are required, they must meet all RSO requirements. In the event that it is necessary to run multiple scenarios concurrently.
- 7.2.13. The RSO establishes an arming point within the semi-safe zone and issues training ammunition, magazines, safety equipment and converts weapons to fire DMCs. As part of the arming point, the RSO will establish a temporary weapons clearing zone utilizing a clearing barrel and clearing barrel official. Prior to converting weapons for participants, the RSO will ensure that each weapon is cleared using standard clearing procedures. At the conclusion of training, the RSO will receive unused DMCs, expended brass, magazines, safety equipment and converted weapons back from the trainees. The RSO will ensure 100% accountability of equipment, DMCs, conversion kits, and weapons. The RSO will ensure that each weapon used in training is cleared and the weapon barrel is free from obstructions through a visual inspection of the barrel followed by using a standard M-4 cleaning rod through the barrel to ensure that the weapons are converted back to fully functional status.
- 7.2.14. The RSO remains at the arming point located within the semi-safe zone and maintains the integrity and safety of the training area by safeguarding the supply of training ammunition and other resources and by restricting access to the training area to only those individuals who have gone through the safety verification process. Training guards will assist the RSO as necessary to ensure safe zone integrity is maintained.
- 7.2.15. When live ammunition is present for guard or security requirements, the live arm individual will wear a brightly colored vest. All magazines containing live ammunition will be marked with red paint or red tape and will not be permitted into the training area. The live arm member will have an issued radio and maintain contact with BDOC.
- 7.2.16. The RSO will utilize the RSO checklist in order to ensure all steps are followed (See [Attachment 10](#)).

8. Safety.

- 8.1. General: A safety briefing will be conducted for all personnel (trainees, role players and observers) participating in DMC training scenarios. The safety briefing will be conducted by the RSO. (See [Attachment 9](#))
- 8.1.1. Minimum Safe Distances: The minimum safe firing distance recommended by UTM is 1.52 meters or 5 feet. Intentional shots above the neck during FoF training/exercises are not authorized. Shooters will not intentionally fire at the head or face of other personnel.
- 8.1.2. Only issued marking/blank ammunition and properly modified weapons are authorized for use in the training area.

8.1.3. The DMC/blank ammunition Operation Instruction must be present at the training location prior to initiation of training.

8.1.4. All weapons and magazines must be marked with blue tape or painted blue. The M16A2 and M-4 bolt carrier already has an indicator that is blue in color, however the magazines must have the blue tape around the entire bottom or painted blue. The bottom of the M9 magazine will have blue tape affixed or painted blue to the bottom of the magazine. Blue tape or paint must be placed so as not to interfere with the weapon's operation. If applied incorrectly the ability for the magazine to fit properly into the weapon could occur. Only the authorized SAFARILAND holster will be utilized IAW the approved Small Arms/Light Weapons Accessory listing.

8.1.5. DMC rounds will only be loaded into weapons specifically converted to fire the DMC and will be done only at the training location.

8.2. Location: The training location will be divided into three separate and distinct areas for safety. The "unsafe" zone will be where all live, lethal weapons (non-converted firearms, knives etc.) are kept. The "semi-safe" zone is where briefings and equipment (except training weapons and ammo) are held. It must be free from impact of DMC rounds. The "safe zone" is the area where training and loading of weapons will take place. Entry into the safe zone must be strictly controlled to ensure no introduction of lethal weapons, unauthorized, or unprotected personnel. The training area will be marked with "Military Training, No Entry" if outdoors. For indoor training, all entry points will be locked or blocked with the exception of the entry control point. When feasible, personnel who are not immediately involved with the training scenario will be utilized to monitor the avenues of approach the training area and direct personnel to the entry control point to come in contact with the RSO.

8.3. When training/exercise areas are located indoors units must conduct a risk assessment ([Attachment 8](#)). Dye-marking cartridge may cause damage to walls, ceilings, and floors of approved indoor training areas.

8.4. All instructions provided by AF Technical Order (TO) 11W2-9-4-11, *Technical Manual Operator's Manual For Close Combat Mission Capability Kit (CCMCK) Chapter 2 Range safety* will also be followed. Contact the Security Forces training office for a reference only copy if needed.

8.5. RSO will ensure that the training area has fire extinguishers for fire suppression readily available IAW AFMAN 91-201, *Explosives Safety Standards Chapter 7 Section 24*.

9. Medical Mishap Plan.

9.1. Individual First Aid Kit (IFAK): In preparation for a potential medical mishap, the RSO, or CRO as appropriate, will ensure that a fully stocked first aid kit capable of handling minor to severe trauma, (i.e. gunshot wounds) is present at the training location and accessible to all personnel.

9.2. In the event any personnel becomes injured, sick, or incapacitated during the training all ammunition and equipment will be collected and accounted from that individual by the RSO or CRO.

9.3. Communication: The RSO or CRO will ensure that they are in possession of a radio and a charged mobile phone with which they can contact emergency services personnel in the event of a medical emergency. If an ambulance is required, the RSO, or CRO will request the Base Defense Operations Center provide a police escort to and from the training area.

9.4. Self-Aid Buddy Care (SABC): All personnel should be current on SABC, however the RSO and CRO must ensure that at least one certified instructor at the training location is current on SABC, preferably Combat Lifesaver certified.

9.5. Transportation: The RSO or CRO as appropriate, will ensure that a government owned vehicle (GOV) or personally owned vehicle (POV) is available at the training location to provide transportation of minor injuries to Misawa Air Base Urgent Care Clinic.

9.6. The RSO is ultimately responsible for the safety and security of the exercise area. The RSO will brief all personnel the safety brief (See [Attachment 9](#)) to ensure all personnel understand the stop exercise procedures for both safety and medical situations. The RSO is responsible to ensure all safety reporting procedures are completed. The RSO and Senior TC will make contact with the Unit Safety Manager immediately to initiate required procedures.

KRISTOPHER W. STRUVE, Colonel, USAF
Commander

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFI 31-117, *Arming and Use of Force by Air Force Personnel*, 2 Feb 2016

AFMAN 91-201, *Explosive Safety Standards*, 21 Mar 2017

HQ AFSFC/SFXW. *Close Combat Mission Capability Kit Training CONOPS*

AF Technical Order (TO) 11W2-9-4-11. *Technical Manual Operator's Manual For Close Combat Mission Capability Kit (CCMCK)*

Prescribed Forms

No forms prescribed.

Adopted Forms

AF Form 847, Recommendation for Changed of Publication, 22 Sep 2009.

Abbreviations and Acronyms

BDOC—Base Defense Operations Center

CRO—Chief Range Officer

DMC—Dye-Marking Cartridge

FoF—Force on Force

GOV—Government Owned Vehicle

IBA—Individual Body Armor

IPE—Individual Protective Equipment

MMR—Man Marking Round

POV—Privately Owned Vehicle

RSO—Range Safety Officer SABC-Self Aid Buddy Care

SFS—Security Forces Squadron

SMC—Shoot Move and Communicate

UTM—Ultimate Training Ammunition

Attachment 2

FX MARKING CARTRIDGES AND CONVERSION KITS

Figure A2.1. 5.56mm FX and 9mm FX Cartridges.



Figure A2.2. Simunition 5.56mm FX M-4 Conversion Kit.



Figure A2.3. Simunition 5.56mm FX M-4 Conversion Kit.



Figure A2.4. Simunition 9mm FX M9 Conversion Kit.



Attachment 3**UTM MAN MARKER ROUNDS (MMR) AND CONVERSION KITS****Figure A3.1. 5.56mm MMR.****Figure A3.2. M-4/M16A2 5.56mm MMR Conversion Kit.****Figure A3.3. 5.56mm Linked MMR for M249.****Figure A3.4. M249 Conversion Kit.****Figure A3.5. M9 9mm MMR Conversion Kit.**

Attachment 4

UTM 5.56MM CONVERSION KIT

Figure A4.1. UTM 5.56MM Conversion Kit.



Attachment 5

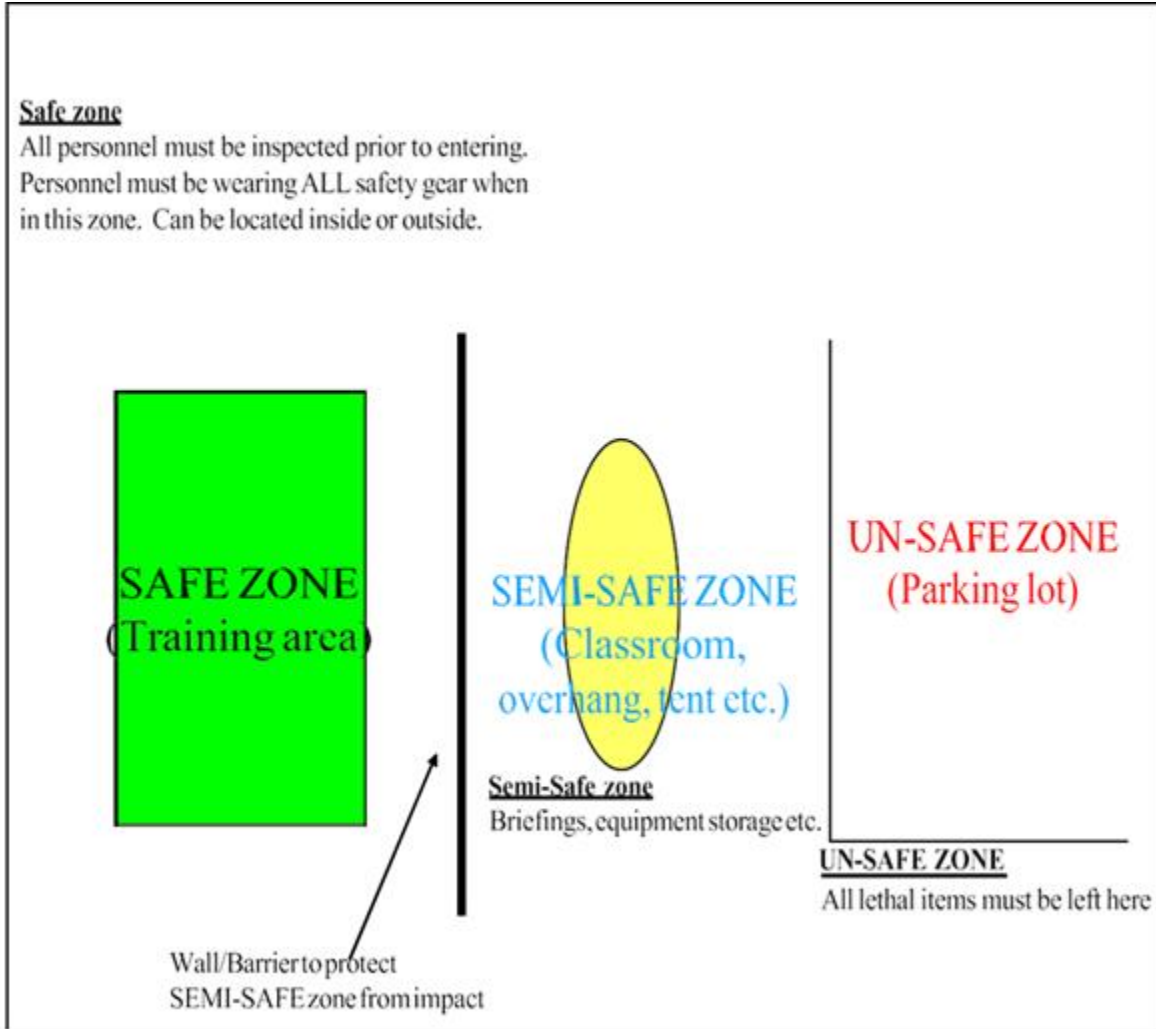
UTM 9MM CONVERSION KIT

Figure A5.1. UTM 9MM Conversion Kit.



Attachment 6
SAMPLE TRAINING AREA

Figure A6.1. SAMPLE TRAINING AREA.

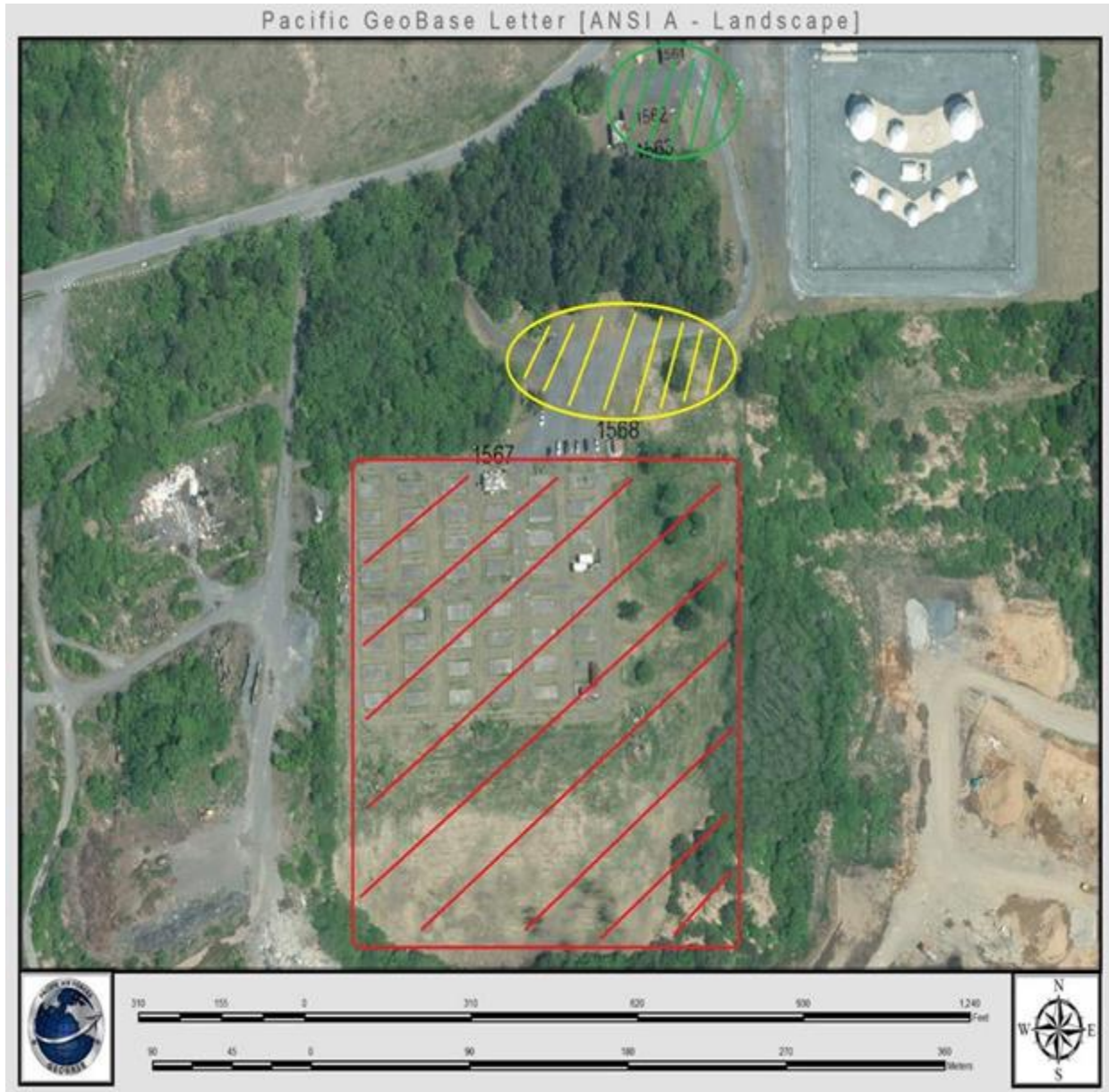


Attachment 7

CAMP DEFENDER TRAINING LOCATION

A7.1. DMC/Blank munition usage area (interior and immediate exterior of) adjacent to area 1567 OVERVIEW

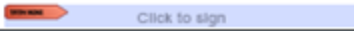

Figure A7.1. Misawa AB Training Range.






Attachment 8

AF FORM 4437, DELIBERATE RISK ASSESSMENT WORKSHEET

Figure A8.1. AF Form 4437, Deliberate Risk Assessment Worksheet.

DELIBERATE RISK ASSESSMENT WORKSHEET (Page 1)					
1. Mission / Task Description:			2. Date (DD/MM/YYYY)		
3. Prepared By					
A. Last Name /First Name / Middle Initial		B. Rank / Grade		C. Duty Title / Position	
D. Unit		E. Work Email		F. Phone DSN /COMM	
G. UIC / CIN (as required)		H. Training Support / Lesson Plan or OPORD (as required)		I. Signature of Preparer	
					
5-STEPS OF RM: (1) IDENTIFY HAZARDS (2) ASSESS HAZARDS (3) DEVELOP CONTROLS & MAKE DECISIONS (4) IMPLEMENT CONTROLS (5) SUPERVISE & EVALUATE					
4. Sub-task / Sub-Step of Mission / Task	5. Hazard	6. Initial Risk Level	7. Control	8. How to implement / Who will implement	
				How:	9. Residual Risk Level
				Who:	
				How:	
				Who:	
				How:	
				Who:	
				How:	
				Who:	
Additional entries for items 5-9 are provided on Page 2					
10. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED:					
<input type="checkbox"/> Extremely High <input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low					
11. OVERALL SUPERVISION PLAN and RECOMMENDED COURSE OF ACTION (COA)					
12. APPROVAL / DISAPPROVAL of MISSION / TASK					
<input type="checkbox"/> APPROVE <input type="checkbox"/> DISAPPROVE		ADDITIONAL GUIDANCE:			
A. Last Name /First Name / Middle Initial		B. Rank / Grade		C. Duty Title / Position	
				D. Signature of Decision Authority 	

DELIBERATE RISK ASSESSMENT WORKSHEET (Page <u> </u> of <u> </u>)								
RISK ASSESSMENT MATRIX			PROBABILITY					
			Frequency of Occurrence Over Time					
			A Frequent <small>(Continuously experienced)</small>	B Likely <small>(Will occur frequently)</small>	C Occasional <small>(Will occur several times)</small>	D Seldom <small>(Unlikely; can be expected to occur)</small>	E Unlikely <small>(Improbable; but possible to occur)</small>	
S E V E R I T Y	E F F E C T O F H A Z A R D	Catastrophic <small>(Death, Loss of Asset, Mission Capability or Unit Readiness)</small>	I	EH	EH	H	H	M
		Critical <small>(Severe Injury or Damage, Significantly Degraded Mission Capability or Unit Readiness)</small>	II	EH	H	H	M	L
		Moderate <small>(Minor Injury or Damage, Degraded Mission Capability or Unit Readiness)</small>	III	H	M	M	L	L
		Negligible <small>Minimal Injury or Damage, Little or No Impact to Mission Capability or Unit Readiness)</small>	IV	M	L	L	L	L
			Risk Assessment Levels					
			EH=Extremely High H=High M=Medium L=Low					
13. Risk Assessment Review-To be conducted when risk assessment applies to on-going operations / activities								
A. Date	B. Last Name	C. Rank / Grade	D. Duty Title / Position	E. Signature of Reviewer				
								
								
								
14. Feedback and Lessons Learned								
15. Additional Comments or Remarks								

Instructions for Completing Form	
<p>1. <u>Mission/Task Description:</u> Briefly describe overall Mission, or Task that the Risk Assessment is being conducted for.</p>	<p>9. <u>Residual Risk Level:</u> After controls are implemented, determine resulting probability, severity, and revised Risk Level.</p>
<p>2. <u>Date (DD/MM/YYYY):</u> Self Explanatory.</p>	<p>10. <u>Overall Risk After Controls are Implemented:</u> Assign an overall Risk Assessment Level. This is the highest Residual Risk Level (Block 9).</p>
<p>3. <u>Prepared By:</u> This section is self explanatory and will be filled out by the individual conducting the training/operation and deliberate risk assessment; (UIC = Unit Identification Code, CIN = Course ID Number)</p>	<p>11. <u>Supervision Plan and Recommended Course of Action (COA):</u> Completed by preparer. Identify specific tasks/ levels of responsibility for supervisory personnel and provide the decision authority with a recommend COA for approval or disapproval based upon the overall risk assessment and impact to mission and personnel.</p> <p>"Risk vs. Reward" consideration based on real-time issues.</p>
<p>4. <u>Sub-task/Sub-Step of Mission/Task:</u> Briefly describe any Sub-Tasks associated with Primary Task that warrant risk mitigation consideration.</p>	<p>12. <u>Approval/Disapproval of Mission/Task:</u> Items A-D are self explanatory. Final approval authority provides approval or disapproval for Mission/Task based upon overall risk assessment and supervisory plan. Additional guidance included as necessary.</p>
<p>5. <u>Hazard:</u> Enter specific hazards related to the Sub-Task.</p>	<p>13. <u>Risk Assessment Review:</u> Should be conducted on a regular basis. Reviewers should have sufficient oversight of the mission/activity and controls to make valid remarks and inputs regarding needed changes or adjustments (as necessary). Once Residual Risk rises above that already approved, operations should cease until the appropriate approval authority is contacted and approves continued operations.</p>
<p>6. <u>Initial Risk Level:</u> Using the Risk Assessment Matrix, determine probability, severity and associated Risk Level; enter level into column.</p>	<p>14. <u>Feedback and Lessons Learned:</u> Provide specific inputs on the effectiveness of risk controls and their contribution to mission success or failure. Feedback-recommendations for new/revised controls, actionable solutions or alternate actions is essential for effective RM. Ensure valid lessons learned are submitted and briefed as necessary to affected personnel.</p>
<p>7. <u>Control:</u> Enter risk mitigation resources/controls identified to abate or reduce risk relevant to the hazard identified in Block 5.</p>	<p>15. <u>Additional Comments or Remarks:</u> Provide any additional comments, remarks or information as required to support the risk assessment. If this section is to be used as a continuation of Block 14, strike through the block number and title.</p>
<p>8. <u>How to Implement/Who Will Control:</u> Provide brief description of sub-task means of employment (IE...OPORD, Briefing, Rehearsal) and the name of the individual, unit or office that has primary responsibility for control implementation.</p>	<p>Additional Guidance: Block 4-9 continuance page may be reproduced as necessary for processing of all sub-tasks / sub-steps of mission / asks. If a complete page is not utilized, "NOTHING FOLLOWS" should be written into the first unused row in order to identify the last sub-task / sub-step.</p>

Attachment 9**SAMPLE SAFETY BRIEFING****Figure A9.1. Sample Safety Briefing.**

(RSO) All weapons to be used in this training evolution will have the proper UTM Weapons Conversion Kits installed. All weapons will be marked with brightly colored blue tape where it is easily visible and doesn't interfere with the operation of the weapon.

All magazines to be utilized in this evolution will be inspected by me, the RSO, and marked with brightly colored blue tape. All magazines not inspected and marked will be removed from the immediate training area. Ammunition will not be loaded into magazines until training is ready to commence. I will observe the loading of all magazines with the UTM Man Marker Rounds. No rounds of any kind will be carried in pockets at any time. I will inspect all weapons and magazines after this brief.

All personnel will wear proper protective gear. Approved face mask, throat protector, goggles, helmet, gloves, and groin protection is mandatory. Personnel are required to wear long sleeves with no exposed skin. This includes all participants and observers. Does everyone have the required equipment?

I, the RSO, am the only person who can grant permission for the training cycle to begin. When I am satisfied with the training area, proper clothing, protective equipment, and safety of the intended scenario, I will start the training cycle by announcing that the training area is "HOT". When the training cadre tells you to load, point your weapons in a safe direction, charge it, re-holster or sling the weapon and prepare for the scenario. At no time will a loaded weapon leave the training area. All standard weapon safety rules apply while in the training area and involved in training.

At no time shall any attending personnel remove any safety equipment until I have called the training area "COLD". I will need a full accounting of personnel and all weapons will be cleared and a buddy-check performed before I call the training area "COLD".

If you hear "CEASE FIRE", you will immediately stop training, point your weapon in a safe direction, and wait for further instructions. If anybody sees anything they think is unsafe, shout "CEASE FIRE". All training will stop until the condition is made safe. If you hear "CEASE FIRE", you must echo the command.

In the event of a medical emergency, follow procedures for safety "CEASE FIRE", immediately followed by "SAFETY, SAFETY, SAFETY" and location of the mishap. The RSO will give direction to personnel to notify BDOC for serious medical responses. The RSO and/or Senior TC is responsible for completing all necessary safety reporting procedures and reports.

Are there any questions?

Attachment 10

RSO/CRO LETTER OF UNDERSTANDING

Figure A10.1. RSO/CRO Letter of Understanding.

MEMORANDUM FOR RECORD

FROM: RANK NAME, 35 SFS/S3T

SUBJECT: Memorandum of Understanding

1. On _____, I certify that I have read in its entirety 35FWI 31-117, *Wing Use of Blank/ Marking Cartridges*. I have received my qualification training from the RSO and I fully understand my roles and responsibilities as Training Cadre.

NAME, RANK, USAF
Title

1st Ind

FROM: Range Safety Officer (RSO)

1. I certify that the above statement is correct and _____ has read and fully understand their responsibilities as Training Cadre.

NAME, RANK, USAF
Range Safety Officer

Attachment 11

RSO TRAINING/EXERCISE CHECKLIST

Figure A11.1. RSO Training/Exercise Checklist.

TASKS	COMPLETED
1. Inspection of training/exercise area for unsafe conditions.	
2. Documentation of participants (Sign in Roster)	
3. RSO gives Safety Briefing, Rules of Engagement and RSO checklist.	
4. CCMCK Weapons conversion kit installation procedures	
5. Safety inspection of Personnel, Weapons and Equipment (Live Round Check/authorized Equipment check).	
6. Conduct safety inspection of TSO, role-players, support personnel and vehicles (Live Round Check/authorized Equipment check).	
7. If applicable. Brief role-players and support personnel on position for training/exercise scenario.	
8. Contact ECC to give training/exercise location and start time.	
9. Bring personnel to entrance of safety area for inspection.	
10. Conduct safety inspection of personnel PPE and Safety Equipment.	
11. Conduct second safety check. Role-players and support personnel put masks on until range is called cold. Role-players weapons are not loaded yet. When satisfied that everyone is briefed and wearing all necessary protective equipment and the training area is secure, RSO will call the range "RANGE HOT".	
12. Call BDOC to relay the start time for the training and the training location.	
13. Have personnel face in a safe direction and load weapons inside the semi-safe zone. Begin training/exercise scenario.	
14. RSO positioned to monitor the scenario for safety violations and not an active participant in the scenario; any safety violation shouts "CEASE FIRE".	
15. TSO also monitors the scenario for safety issues and ensures training objectives are met. TSO ends the scenario by shouting "CEASE FIRE, CEASE FIRE, and EVERYONE COME TO THE SOUND OF MY VOICE." All masks stay on. Check for any injuries.	
16. Instruct all personnel with weapons to face in a safe direction and clear their weapons inside the safe zone/training area. Account for all personnel, weapons and equipment. All items must be accounted for and checked by the RSO and TSO. The RSO will call the range "COLD". All personnel may then remove PPE/Mask.	
17. TSO Conduct hot wash, debrief/after action review.	
18. Once all training is complete account for all weapons, magazines, ammunition and equipment, clear training/exercise area of CCMCK ammunition residue before personnel leave the Safety zone.	
19. CCMCK Weapons conversion kit removal	
20. Contact BDOC to inform exercise completed, injury status and accountability of all equipment status.	