

**BY ORDER OF THE COMMANDER
RAF LAKENHEATH (USAFE)**

LAKENHEATH INSTRUCTION

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Security



**CLOSE COMBAT MISSION
CAPABILITY KIT (CCMCK) AND
BLANK AMMUNITION TRAINING**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements Air Force Policy Directive (AFPD) 31-1, *Integrated Defense*. It establishes procedures and requirements for the use of blank ammunition and dye-marking cartridges during controlled force-on-force or base defense training at Royal Air Force (RAF) Lakenheath and RAF Feltwell for all 48th Fighter Wing (FW) personnel. It also implements established guidelines in Headquarters Air Force Security Forces Center (AFSFC) Close Combat Mission Capability Kit (CCMCK) Training Concept of Operations (CONOPS). This instruction applies to all 48 FW personnel who use, supervise, or manage training using blank ammunition and dye-marking cartridges. It may not be supplemented or further implemented/extended. Refer recommended changes and questions about this publication to the office of primary responsibility (OPR) using the Air Force (AF) Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate functional chain of command. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW the Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

SUMMARY OF CHANGES

This publication has been completely rewritten and should be reviewed in its entirety. It has been converted from a Security Forces Operating Instruction to a Lakenheath Instruction to ensure all 48th Fighter Wing personnel comply while participating in training involving blank ammunition and dye-marking cartridges.

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1. Roles and Responsibilities. All personnel who use, supervise, or manage training using blank ammunition and dye-marking cartridges are responsible for complying with this instruction and must be trained and task certified by the Combat Arms NCOIC in Chief Range Officer (CRO) and/or Range Safety Officer (RSO) duties as appropriate for the role they will perform as required by AFI 36-2654, *Combat Arms Program*. The Chief Range Officer (CRO) is responsible for managing personnel, equipment, and ranges during each training event. The Range Safety Officer (RSO) is responsible for ensuring all training is conducted safely and in accordance with established guidelines. Additionally, the RSO must have a copy of the TO 11W2-9-4-11, *Technical Manual Operator's Manual For Close Combat Mission Capability Kit (CCMCK)*, AFSFC CCMCK Training CONOPS and this instruction on-hand during each training event. Training Cadre (TC) are responsible for running the scenarios and verifying all training objectives are met. TCs must work together with the RSO to ensure training remains realistic and safe, and to implement the evolution brief in [Attachment 2](#) and scenario execution checklist in [Attachment 3](#).

1.1. Chief Range Officer. The CRO will be trained and appointed in writing by the unit commander, IAW AFI 36-2654, *Combat Arms Program*, [Paragraph 2.3.2.6.](#), and is

responsible for managing personnel, equipment, and ranges during each training event. While the CRO may not be the primary instructor, he/she will be the direct link to the range complex and have ultimate control during training scenarios. Additionally, they will be responsible for ensuring that entry requirements into training areas include inspection of all pockets, pouches, and gear for real-world knives, weapons, ammunition, or other hazardous/dangerous items. The CRO will not be engaged in any other duties while performing CRO responsibilities IAW AFI 36-2654, **Paragraph 2.3.2.3**. The CRO will:

1.1.1. Be an E-6 or above.

1.1.2. Be trained and task-certified by the Combat Arms Non-Commissioned Officer In-charge (NCOIC) on applicable range management duties annually and must have an AF Form 483, *Certificate of Competency*, signed by the Combat Arms NCOIC, on their person while operating the range. This training must be documented in the individual's training record on an AF Form 797, *Job Qualification Standard (JQS) Continuation/Command JQS* and AF Form 1098, *Special Task Certification and Recurring Training*.

1.1.3. Ensure adequate Range Safety Officers are on site during training.

1.1.4. Establish an Entry Control Point (ECP) for a single point of entry to the training area and training zones. Also, establish personnel and equipment staging areas and evacuation rally points.

1.1.5. Monitor all range openings and closings, equipment issues, and training events to maintain a safe training environment.

1.1.6. Assign range guards, as required, to control access to the training area.

1.2. Range Safety Officer (RSO). The RSO will be trained and appointed in writing by the unit commander, IAW AFI 36-2654, *Combat Arms Program*, **Paragraph 2.3.2.5**, and is responsible for ensuring all training is conducted safely and in accordance with established guidelines. Additionally, the RSO must have a copy of the TO 11W2-9-4-11, *Technical Manual Operator's Manual For Close Combat Mission Capability Kit (CCMCK)*, AFSFC CCMCK Training CONOPS and this instruction on-hand during each training event. The RSO will not be engaged in any other duties while performing RSO responsibilities IAW AFI 36-2654, **Paragraph 2.3.2.3** The RSO will:

1.2.1. Be an E-5 or above.

1.2.2. Be trained and task-certified by the Combat Arms NCOIC on applicable range management duties annually and must have and AF Form 483, *Certificate of Competency*, signed by the Combat Arms NCOIC, on their person while operating the range. This training must be documented in the individual's training record on an AF Form 797, *Job Qualification Standard Continuation/Command JQS* and AF Form 1098, *Special Task Certification and Recurring Training*.

1.2.3. Inspect the training area for any objects, obstacles, or lethal munitions that pose a threat or hazard.

1.2.4. Conduct a pre-training safety brief with all trainers, students, and support personnel, as listed in **Attachment 4**.

1.2.5. Install or supervise the installation of weapon conversion kits in accordance with the AFSFC Close Combat Mission Capability Kit Training Concept of Operations.

1.2.6. Oversee the storage, verification, and issuing of training ammunition.

1.2.7. Designate the range as either 'Hot' or 'Cold'. These terms refer to whether training is being conducted on the range or the range is not in use and is safe for personnel to enter.

1.3. Training Cadre (TC). TCs are responsible for running the scenarios and verifying all training objectives are met. TCs must work together with the RSO to ensure training remains realistic and safe. The TC will:

1.3.1. Ensure personnel are in compliance with the Gun Control Act of 1968 requirements as outlined in AFI 31-117, *Arming and Use of Force by Air Force Personnel* and have a current DD Form 2760, *Qualification to Possess Firearms or Ammunitions*. Personnel providing training should be qualified by Combat Arms on the weapon before training others; however, they must be familiar with all safety requirements, have a working knowledge of the weapon and be able to distinguish between live, dye-marking, less than lethal and blank ammunition. Unit training personnel document this training on AF Form 797, *Job Qualification Standard Continuation/Continuation/Command JQS*. Unit training personnel accomplish this training annually and document it on AF Form 1098, *Special Task Certification and Recurring Training*, if a requirement continues to exist IAW AFMAN 31-129, *USAF Small Arms and Light Weapons Handling Procedures*.

1.3.2. Assign weapon types and ammunition colors to participants.

1.3.3. Conduct a debrief and lessons learned with all participants.

1.3.4. Request additional TCs if running multiple scenarios.

2. Procedures.

2.1. Dye-marking cartridges. These are a reduced energy, reduced impact, training ammunition that can be safely fired from each individual's assigned service weapon. A conversion kit is installed in each weapon to allow use of dye-marking cartridges, and precludes the chambering of live ammunition. On impact, the markers produce a detergent-based, water-soluble inert color marking, similar to a paint-ball. Dye-marking cartridges and weapon conversion kits enhance learning throughout the full spectrum of force-on-force training. The incorporation of dye-marking cartridges enhances mission readiness by expanding training capabilities and eliminating most limiting factors (LIMFACs) associated with blank ammunition and laser technology. The pain penalty reinforces the use of proper cover, and emphasizes to Airmen that even if they are wounded they can continue to fight the enemy, move to safety, and/or communicate with team members. As an example, using dye-marking cartridges enables:

2.1.1. Force-on-force training scenarios.

2.1.2. Patrolman survival/safety training.

2.1.3. Firearm retention drills.

2.1.4. Routine and felony traffic stop training.

- 2.1.5. Judgmental shooting (i.e. shoot/don't shoot).
- 2.1.6. Protection of Protection Level (PL) Resources.
- 2.1.7. Building/Room clearing.
- 2.1.8. Hostage rescue.
- 2.1.9. Aircraft/vehicle/bus/boat assaults.
- 2.1.10. Military Operations on Urban Terrain (MOUT).
- 2.1.11. Close Quarters Battle (CQB).
- 2.1.12. Individual and Team Movement Tactics.
- 2.1.13. Operating in low light environments.

2.2. Conversion Kits and Dye Markers. The CCMCK system allows students to use their assigned duty weapons. In order to prepare them for dye- marking training, specific steps must be followed for installation. Chief Range Officers (CRO), Range Safety Officers (RSO), and Training Cadres (TC), are the only personnel authorized to change the configuration of weapons from live to CCMCK.

2.2.1. Use only conversion kits authorized in [Attachment 5](#). Do not install or use kits not displayed on that list. When an actual weapon part is replaced with a conversion kit, place the actual weapon part into the conversion kit box. This maintains accountability, and also ensures weapon components return to their original weapon. Do not mix parts with other students.

2.2.2. Use only dye markers authorized in [Attachment 6](#). Do not load or fire cartridges not displayed on that list. Dye markers are real explosives, with a real projectile. Munition custodians and CROs must ensure security, safety, and transportation standards for Hazard Class/Division are maintained. Follow the procedures for procurement, transportation, and safety in accordance with AFMAN 91-201, *Explosive Safety Standards*.

2.3. Training Areas. IAW AFMAN 31-129, *USAF Small Arms and Light Weapons Handling Procedures*, establish local procedures for conducting exercises or training with blank/dye-marking ammunition. Training areas will be comprised of a minimum of three distinctive zones.

2.3.1. Unsafe Zone: The area where all scenarios take place. Personnel in this area are required to wear all mandatory personal protective equipment (PPE) at all times, until the range is certified 'Cold'.

2.3.2. Semi-safe Zone: The area where all lethal weapons and ammunition are kept. This is the transition area between the pre-scenario brief and the actual training.

2.3.3. Safe Zone: The area where all briefings, equipment storage, and scenario preparation takes place. This area must be separated from the Unsafe Zone by a physical barrier or be beyond the round impact area.

2.3.4. All zones should have controlled entry/access points (doors, range guards, signs, etc.).

2.3.5. The following are the only approved CCMCK training sites on RAF Feltwell:

Figure 2.1. Zone 1 Building 17.

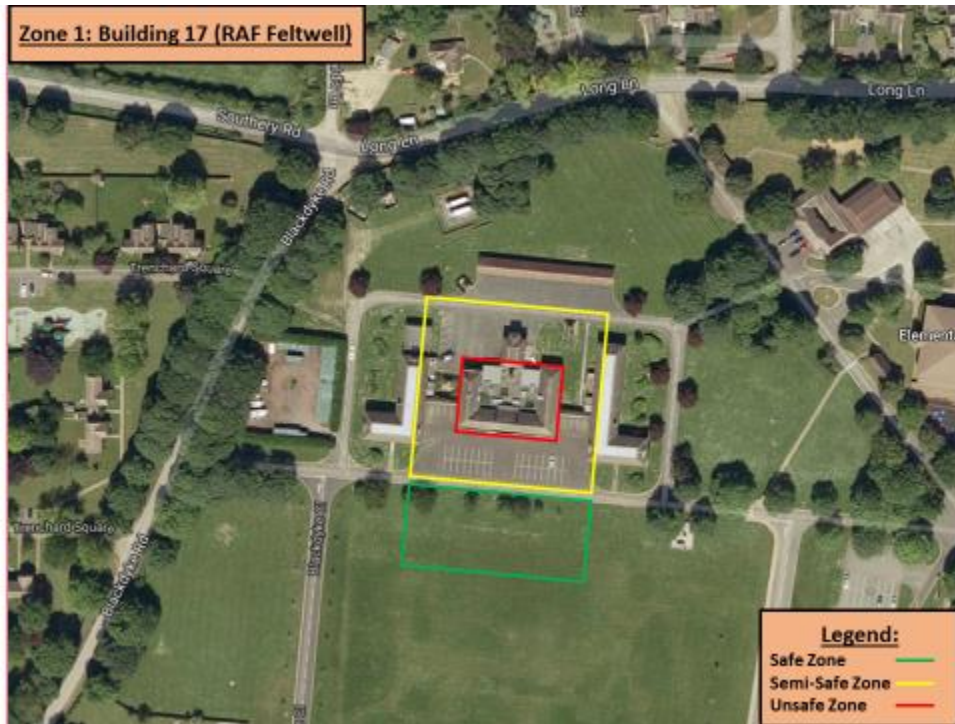


Figure 2.2. Zone 2 Building 91.

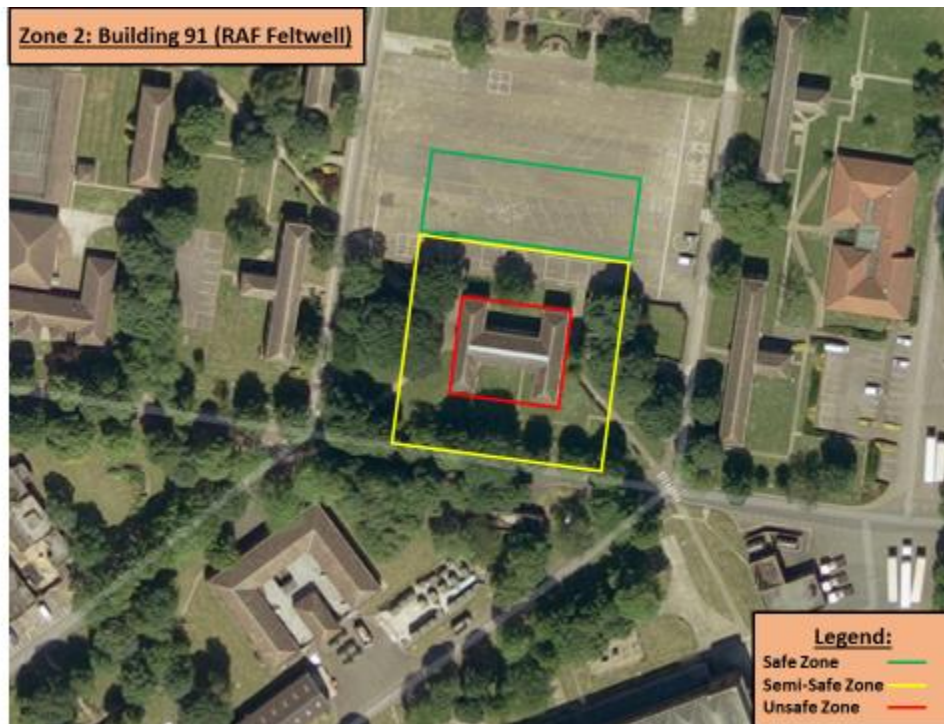
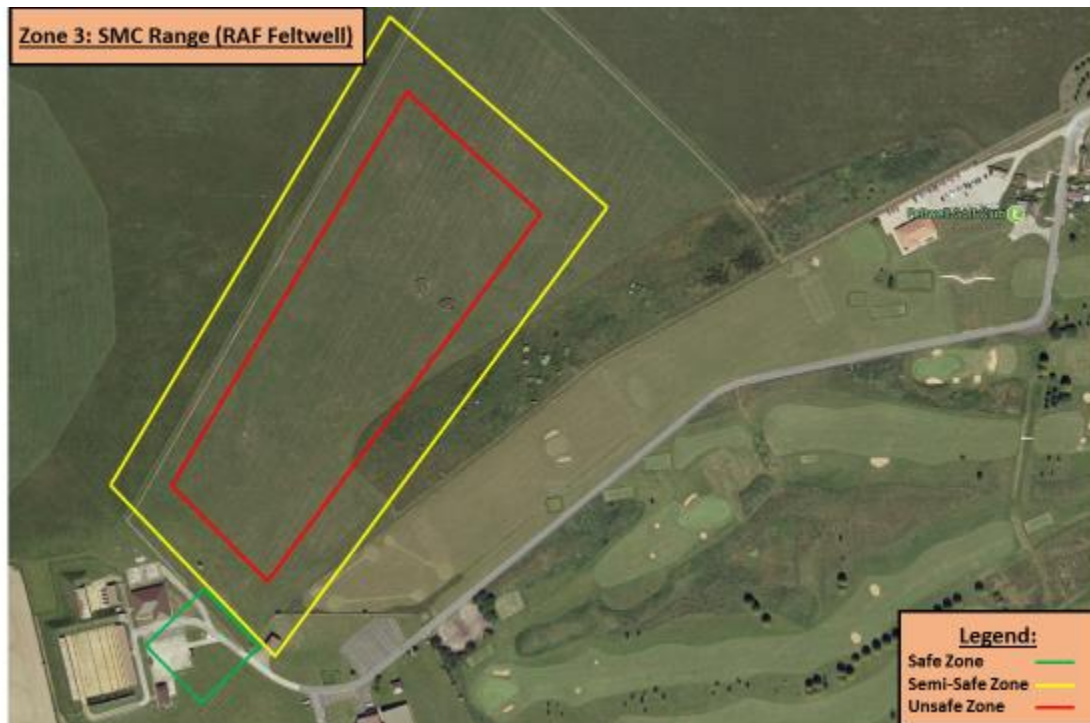


Figure 2.3. Zone 3 Shoot, Move and Communicate Range



2.4. Safety. While on RAF Feltwell, adhere to all requirements in TO 11W2-9-4-11, AFSFC CCMCK Training CONOPS, and this instruction, ensuring the most restrictive guidance applies.

2.4.1. Personnel using dye-marking cartridges do not have to be qualified on the weapon used during training. However, they must be trained on the safety features of the weapon and have a working knowledge of the mechanical features. This training will be documented on an AF Form 1098 or AF Form 797. Exception: Security Forces personnel performing Shoot, Move, and Communicate (SMC) must be qualified on the M4 prior to training.

2.4.2. Only approved marking ammunition and properly modified weapons are authorized for use in the training area.

2.4.3. Use extreme care when handling dye-marking cartridges. Marking ammunition is more susceptible to damage than service ammunition. Do not exert pressure on the projectile. Damaged projectiles may cause jammed weapons due to projectiles becoming lodged in the barrels. Do not reuse cartridges that have been jammed in a weapon. Any unused CCMCK 5.56MM marking ammunition must be repacked with the tip up to prevent marking compound from coming out.

2.4.4. If resources are available, paint or tape a two-inch blue stripe on magazines holding blank ammunition and dye-marking cartridges.

2.4.5. With the exception of the armed weapon courier, no live ammunition is allowed in the written training scenario, or in the training site. Each individual involved in the event will verbally declare they do not have live ammunition. If a live round is found or suspected in the training area, the phrase: "LIVE ROUND, LIVE ROUND, LIVE

ROUND” will be shouted, echoed, and transmitted on the radio net. Additionally, execute the following steps:

- 2.4.5.1. All operations and scenarios will cease immediately.
 - 2.4.5.2. The CRO will direct a 100 percent physical verification of all ammunition in the training area, and consolidate it in the ammunition holding area.
 - 2.4.5.3. Operations will not resume until the CRO and RSO physically verify all remaining rounds of ammunition are training rounds.
 - 2.4.5.4. Upon completion of verifying all ammunition in the training area, the CRO will notify the chain of command who, in turn, will decide whether training will continue.
 - 2.4.6. Personnel using CCMCK marking ammunition are required to follow good personal hygiene practices (i.e., hand washing, cleaning of contaminated clothing and equipment), following exposure/contamination with marking compounds. Seek medical care in the event of acute eye contamination, skin irritation, or ingestion of marking compound.
 - 2.4.7. Minimum engagement distance when using CCMCK marking ammunition in converted weapons is 1.52 meters (5 feet.). The risk of severe personal injury can be greatly increased if shots are taken at less than 1.52 meters (5 feet) unless technical data dictates a greater distance IAW AFMAN 31-129, *USAF Small Arms and Light Weapons Handling Procedures*.. No headshots will be taken by any participant.
 - 2.4.8. Minimum engagement distance when using blank ammunition is 6.096 meters (20 feet) unless technical data dictates a greater distance IAW AFMAN 31-129, *USAF Small Arms and Light Weapons Handling Procedures*.
- 2.5. Safety Procedures. Prior to any training involving dye-marking cartridges, the CRO will ensure there is a current Operational Risk Management (ORM) worksheet (**Attachment 7**) signed by the 48th Security Forces Squadron commander. Due to the close proximity of trainees to each other and the nature of pointing weapons at other individuals during training, extra care must be given to safety considerations. These procedures will ensure a safe training environment.
- 2.5.1. The RSO will perform the safety brief in **Attachment 4**, explain the safety considerations in **Paragraph 2.2**, and ensure all personnel have safety equipment available that is outlined in **Attachment 3**.
 - 2.5.2. Prior to training execution, the RSO will inspect the range, all ammunition crates, magazines, weapons, and individual combat equipment (ICE) to verify no live rounds are brought into the training site.
 - 2.5.3. Weapons will be cleared by the RSO in accordance with AFMAN 31-129. They will visually inspect the barrel of each weapon to ensure there are no debris stuck in the bore. This will be accomplished by placing a cleaning rod through the barrels, or disassembling the weapons to look down the back of the barrels. At no time will any personnel look through the muzzle of an assembled weapon.

2.5.4. RSOs and TCs will install conversion kits and store actual weapon parts IAW **Paragraph 1.3.1.** of this instruction. Once conversion kits are installed, the RSO and TCs will place the weapons into the Semi-safe Zone.

2.5.5. The weapon courier, with live ammunition for real-world security, must wear a vest for identification purposes. They will not participate in training, or leave the Safe Zone.

2.5.6. Instructors issuing dye-marking cartridges in the Semi-safe Zone will inspect each box they hand out to ensure only marking rounds are introduced into the training area. A fire extinguisher will be positioned at the issue area.

2.5.7. When assigned a scenario and briefed on instructions, students will enter the Semi-safe Zone and load their magazines. A pre-designated disinterested official will be on site, and will certify that only dye-marking cartridges are loaded into magazines.

2.5.8. Prior to entering the Unsafe Zone to participate in the actual scenario, the RSO will visually inspect each person for all required PPE.

2.5.9. With all equipment, PPE in place, weapons, and rounds, all personnel will enter the Unsafe Zone simultaneously. The RSO will announce that the zone is 'Hot' and training will begin. If any mandatory safety equipment becomes dislodged during training, the individual will immediately cover the area with his/her hands, take a knee and call "cease fire." DO NOT remove any equipment until instructed to do so. Once the equipment is replaced, the training can continue.

2.5.10. If anyone sees new personnel approach the training area, they will direct those personnel to the CRO or RSO to ensure the new personnel receive a safety brief.

2.5.11. Upon completion of each scenario, students will transition from the Unsafe Zone to the Semi-safe Zone. Personnel are authorized to remove PPE only when the zone is certified 'Cold' by the RSO. The RSO will then verify that each weapon is clear by running a clearing rod through the muzzle of the barrel to ensure the barrel is clear of all debris. If a ruptured cartridge or projectile is stuck in the chamber or bore, a cleaning rod will be used to remove the casing as deemed necessary. All personnel will be instructed to return all unexpended rounds and cleared weapons to the staging area.

2.5.12. At the end of the operation, all personnel will place the live bolt back into the weapon system, turn-in firearms, and marking cartridge bolts along with any remaining munitions to the CRO and the RSO. For rifles, the CRO or RSO will place them into a 'Rack Safe' configuration: bolt forward, on semi, trigger depressed, and dust cover closed.

2.5.13. Ammunition and residue will be collected at the issue area. At the issue area, the RSO will inspect each magazine, all ICE, and receive a verbal certification from each individual stating that his/her uniform is free of live and expended ammunition.

2.5.14. A sweep of the entire training area will be conducted by all personnel to ensure unexpended/expended cartridges and/or residue are not left behind. Collect unexpended cartridges and/or residue to be packaged in approved containers for shipment back to the Munitions Storage Area.

2.5.15. During weapons cleaning, all students must ensure their barrels are free of debris. Dye-marking projectiles get lodged in barrels often. While a barrel may appear clear and empty, extra attention must be given to the grooves inside where there may be plastic and paint residue.

2.5.16. Failure to inspect and clean the chamber and bore before firing service ammunition can result in personnel injury or catastrophic damage to the weapon if a CCMCK marking projectile remains lodged in the bore.

2.5.17. Before installing CCMCK Weapon Conversion Kit, weapon must be cleaned and lubricated with CLP IAW the appropriate weapon TM.

2.5.18. During CCMCK use, weapon must be cleaned in accordance with *TO 11W2-9-4-11* cleaning instructions after the firing of every Ammunition Basic Load for the particular weapon.

2.5.19. After CCMCK use, rod the weapon bore for possible stuck projectiles. Inspect, clean, and lubricate weapon paying special attention to chamber and bore to ensure all CCMCK marking compound is removed.

2.5.20. Before turn-in of CCMCK Weapon Conversion Kit, thoroughly clean all components with CLP. Use a suitable cloth to clean any dirt, debris, carbon deposits, or marking compound.

2.6. Emergency Actions. In the event of an emergency or inclement weather, immediately stop all operations, relocate all personnel to a safe location if necessary. Once at a safe location, obtain personnel accountability. Specific actions to take based on the situation are as follows:

2.6.1. Lightning.

2.6.1.1. A *Lightning Watch* will be in effect 30 minutes prior to thunderstorms being within 5 nautical miles (nm). Initiate controlled termination procedures for all outdoor explosives operations when a *Lightning Watch* occurs.

2.6.1.2. A *Lightning Warning* will be in effect whenever lightning occurs within a 5 nm radius of base. If training outdoors, immediately cease all training, the CRO will direct all personnel to the nearest sheltered facility.

2.6.1.3. After the lightning has passed, the CRO will assess risks and determine whether to continue training.

2.6.2. Injured Personnel.

2.6.2.1. For a minor injury, provide first aid as soon as possible. Halt training by yelling "Spartan Down" three times, continue until the CRO/RSO acknowledges the injured member and halts all training. If necessary, have another individual at the training location transport the injured person to a medical treatment facility. Do not let the injured person, or their escort, leave the training site with their weapons.

2.6.2.2. For a major injury, contact emergency services at 01638 527911 or the Emergency Control Center at 01638 522333. Immediately halt training by yelling "Spartan Down" three times. When making contact with emergency services, relay the nature of the emergency, number of personnel effected, severity, and exact

- location. Provide first aid as soon as possible, and keep the individual stable and alert until emergency personnel arrive. Send an individual to the training site entrance to meet and direct emergency personnel. Do not let the injured person, or their escort, leave the training site with their weapons.
- 2.6.2.3. Consolidate all equipment, pyrotechnics and take accountability.
- 2.6.2.4. After assessing the risks involved, continue training only if practical.
- 2.6.3. Fires. When fires involving pyrotechnics, dye-marking cartridges, vehicles, or training materials the following procedures will be adhered to:
- 2.6.3.1. Make no attempt to fight fires when pyrotechnics or dye-marking cartridges are engulfed in flames. If the fire does not involve dye-marking cartridges, the person nearest the on-hand fire extinguisher will attempt to extinguish the flames.
- 2.6.3.2. No matter the type of fire, evacuate all personnel at the training site to the pre-designated rally point, 300 feet from the dye-marking cartridges issue area.
- 2.6.3.3. Contact emergency services 01638 527911, or the Emergency Control Center at 01638 522333. When making contact, relay the nature of the emergency, hazard class and division of the dye-marking cartridges, pyrotechnics, severity, number of personnel effected, and exact location. Send an individual to the training site entrance to meet and direct emergency personnel.
- 2.6.4. Misfires. A misfire is the failure of the propellant charge to ignite wholly or in part.
- 2.6.4.1. Misfires are removed by unit personnel as prescribed by applicable Field Manual (FM)s and Training Manual (TM)s for the weapons and ammunition being fired.
- 2.6.4.2. In the event of a misfire, standard immediate action procedures should be accomplished.
- 2.6.4.3. Should immediate action fail to clear the misfired round, keep the weapon pointed in a safe direction for 5 minutes to prevent the possibility of a hang fire or cook-off.
- 2.6.4.4. Clear the jammed cartridge/round and inspect the barrel for obstructions prior to returning to service.
- 2.6.4.5. In the event a weapon cannot be safely cleared, contact Combat Arms at 226-7244 for assistance.
- 2.6.4.6. After removal from the weapon, place the projectile into the original packaging container, mark the container as containing a misfired projectile and keep separate from serviceable ammunition.
- 2.6.5. Reporting. If personnel are injured or government property is damaged during training, a proper safety mishap report must be accomplished. The CRO must initiate the report on an AF Form 978, *Supervisor Mishap Report*. However, in addition to the standard reporting through an individual's chain of command, a notification must be made to the 48 FW Weapon Safety Office if the incident involves explosives.

2.6.6. Points of Contact.

2.6.6.1. RAF Feltwell Base Fire Department: 01638 527025.

2.6.6.2. RAF Lakenheath Emergency Control Center: 01638 522333.

2.6.6.3. RAF Lakenheath Command Post: 01638 524800.

2.6.6.4. 48 FW/SE Weapon Safety Office: 01638 525647.

2.7. Training Preparation.

3. Ammunition Requirements. The only USAF-approved training markers are SimunitionFX™ and Ultimate Training Munitions. These cartridges and blank ammunition are classified as 1.4S explosive items and have been approved by the Nonnuclear Munitions Safety Board. Items will be stored in a licensed explosive storage location and handled in accordance with (IAW) *Air Force Manual (AFMAN) 91-201 Explosive Safety Standards*.

3.1. Explosive operations. In accordance with AFMAN 91-201, 7B, **Paragraph 7.2**, “All explosives operations must be conducted in accordance with written instructions.”

3.2. Ammunition Handling Procedures.

3.2.1. Ammunition Pick-Up Procedures.

3.2.1.1. Ammunition will be requested through 48 MUNS Storage (DSN: 226-1635). When possible, five duty “days” notice will be given. **Note:** The Defender University (DU) Ammunition Supply Point Custodian and SF Training Section Chief will be informed of all transactions involving ammunition assets.

3.2.1.2. Quantities of ammunition must be limited to minimum quantities necessary to support specific, mission essential, and explosives operations or missions.

3.2.1.3. Net explosive weight limits will be adhered to at all times.

3.2.1.4. Once a pick-up date has been scheduled, an appropriately rated and marked GOV will be used to transport munitions to Building 40, storage room locker on RAF Feltwell. All personnel transporting ammunition on United Kingdom public roads will be certified/trained through Ministry of Defence (MOD) AR qualification training course. Personnel can be scheduled for this training/course by contacting 48 FW Weapon Safety.

3.2.1.5. Personnel will arrive 15 minutes prior to scheduled pick-up time at the munitions storage area.

3.2.1.6. Ammunition will not be removed from standard packaging.

3.2.1.7. All ammunition removed from the munitions storage area will be stored in Building 40, storage room locker.

3.2.1.8. All personnel are required to wear steel toed boots and gloves when moving ammunition.

3.2.1.9. All munitions movements will be conducted IAW Association of Chief Police Officers (ACPO) and United States Visiting Forces (USVF) Protocol for the procedures regarding the off base bearing and transport of firearms and munitions

involving USVF personnel. This protocol can be attained through 48 LRS Cargo Movement section.

3.2.2. Ammunition Storage - Building 40.

3.2.2.1. Explosive Limits and Ammunition quantities will not exceed the maximum limits listed on the AF Form 2047, *Explosives Facility License*, as prescribed by *AFMAN 91- 201, Explosives Safety Standards* and MOD Form 1659 (RAF), *Authorized Quantity Explosive License*, as prescribed by Joint Services Publication 482, *MOD Explosives Regulations*. All ammunition lot numbers will be segregated at all times, to include both serviceable and unserviceable AE.

3.2.2.2. Ammunition will not be removed from standard packaging until needed. All ammunition in standard packaging will be stored in the storage room locker. Different ammunition types and lot numbers will be stored separated with "LITE" boxes on top of the stack. Only one "LITE" box per lot number is permitted at any time.

3.2.2.3. Ammunition will be issued starting with the lowest quantity lot number.

3.2.2.4. 48 SFS/S3T storage custodians will turn in unserviceable explosive components or items to the base munitions storage area as quickly as possible to preclude build-up of unserviceable items.

3.2.3. Ammunition Accountability.

3.2.3.1. Ammunition will be inventoried when removing or adding ammunition to the storage locker. Ensure the physical amount corresponds with the amount listed on inventory sheet. Any discrepancies will be immediately reported to the Ammunition Account Custodian and the SF Training Section Chief.

3.2.3.2. Only quantities required for the specific training will be removed from the storage locker. This will be tracked on a locally generated inventory form and verified on expenditure reports forwarded to 48 MUNS.

3.2.3.3. Ammunition not expended will be returned to the storage locker and added to the inventory. Ensure that the amount of ammunition accounted for on the inventory sheet coincides with the amount in the armory.

3.2.3.4. Dud ammunition (rounds that fail to fire) will be turned in to the munitions custodian. All duds will be placed in the "Class 3" dud box and annotated on the AF Form 710, *Combat Arms Training Records*.

3.2.3.5. Using the Munitions Expenditure Request form, all expenditures will be submitted to 48 MUNS within two duty days of expenditure.

3.2.3.6. All duds will be turned in to Munitions Inspection in a timely manner.

3.2.4. Munitions Residue (Brass).

3.2.4.1. Brass turn-ins should be accomplished as needed but as a minimum will be done monthly to prevent unnecessary accumulation. Brass and ammo cans will be turned in to the recycling center.

3.2.4.2. Munitions residue will be inspected for live rounds at the end of each training day, prior to storage in the brass containment area.

3.2.5. Storage Facilities. Personnel present inside the storage room (Building 40) will not exceed the maximum limits posted on the Explosives Storage Facility License located in the storage room.

3.2.6. Exact Location of Operations.

3.2.6.1. All ammunition will be issued from Building 40, once in the shoot house (Building 91 and Building 17) and on the Shoot Move and Communicate course all ammunition will be controlled by the Range Safety Officer.

3.2.6.2. Malfunctions and stoppages will be corrected IAW the applicable Technical Order for the respective weapon in use.

3.2.6.3. A dud box will be available on the range and all dud ammunition will be deposited in the box.

3.2.7. Transportation of Ammunition.

3.2.7.1. Ensure vehicles are in safe mechanical condition by conducting an inspection prior to use. The AF Form 1800, *Operators Inspection Guide and Trouble Report*, as prescribed by *AFI 24-302, Vehicle Management* will be signed by the vehicle operator.

3.2.7.2. A set of chocks will be located in the vehicle for use during munitions loading and unloading.

3.2.7.3. When available, a spotter will be used when backing.

3.2.7.4. When loading or unloading ammunition, the vehicle will be chocked, engine turned off, and parking brake set.

3.2.7.5. Two (2) 10 BC fire extinguishers will be located in the vehicle.

3.2.7.6. All munitions will be transported in the proper container.

3.2.7.7. While loading or unloading munitions, do not drop or throw ammunition on or off the vehicle.

3.2.7.8. Ammunition will be transported in the cargo container of the vehicle only. The cargo container must be physically separate from the passenger compartment.

3.2.7.9. Prior to moving the vehicle, all munitions will be secured to the vehicle with tie down straps and the appropriate fire symbol displayed properly.

3.2.7.10. Smoking is prohibited while handling or transporting munitions or within 50 feet of an explosives laden vehicle.

3.2.7.11. Explosives laden vehicles will not be left unattended.

3.2.7.12. Explosives laden vehicles will not be refueled.

3.2.7.13. Personnel involved in munitions handling and transporting will wear sturdy leather gloves.

3.2.8. Blank and Ammunition Safety.

3.2.8.1. Prior to commencement of training, all blanks and/or dye marking cartridges will be inspected by a designated disinterested official to certify only blanks and/or dye markers are loaded in magazines/weapons to be used in training.

3.2.8.2. Weapon operators will ensure the appropriate blank firing adapters are used/installed on each weapon system when using blank ammunition.

3.2.8.3. Fire extinguishers will be inspected and readily available during all training scenarios involving blanks and/or dye markers.

WILLIAM L. MARSHALL, Colonel, USAF
Commander, 48th Fighter Wing

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

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

AFMAN 31-129, *USAF Small Arms and Light Weapons Handling Procedures*, 29 June 2016

AFMAN 33-363, *Management of Records*, 1 March 2008

AFI 36-2654, *Combat Arms Program AFGM2019-01*, 27 February 2019

AFMAN 36-2655, *USAF Small Arms and Light Weapons Qualification Programs*, 12 August 2016

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

HQ AFSFC Center Close Combat Mission Capability Kit (CCMCK) Training Concept on Operations (CONOPS), 1 June 2016

TO 11W2-9-4-11, *Technical Manual Operator's Manual for Close Combat Mission Capability Kit (CCMCK)*, 28 January 2015

Adopted Forms

AF Form 483, *Certificate of Competency*

AF Form 797, *Job Qualification Standard Continuation/Command JQS*

AF Form 847, *Recommendation for Change of Publication*

AF Form 978, *Supervisor Mishap Report*

AF Form 1098, *Special Task Certification and Recurring Training*

DD Form 2760, *Qualification to Possess Firearms or Ammunitions*

Prescribed Forms

None

Abbreviations and Acronyms

AF—Air Force

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFRIMS—Air Force Records Information Management System

AFSFC—Air Force Security Forces Center

CCMCK—Center Close Combat Mission Capability Kit

CONOPS—Concept on Operations

CQB—Close Quarters Battle

CRO—Chief Range Officer
ECP—Entry Control Point
FM—Field Manual
FW—Fighter Wing
IAW—In Accordance With
ICE—Individual Combat Equipment
JQS—Job Qualification Standard
LIMFAC—Limiting Factor
MOD—Ministry of Defence
MOUNT—Military Operations on Urban Terrain
MSA—Munitions Storage Area
NCOIC—Non-Commissioned Officer In-charge
NM—Nautical Miles
OIC—Officer in Charge
OPR—Office of Primary Responsibility
ORM—Operational Risk Management
PL—Protection Level
PPE—Personal Protective Equipment
RAF—Royal Air Force
RDS—Records Disposition Schedule
RSO—Range Safety Officer
SMC—Shoot, Move, and Communicate
TC—Training Cadre
TM—Training Manual

Attachment 2**EVOLUTION BRIEF (EXAMPLE)**

A2.1. (Training Cadre) We are about to conduct training using dye-markers and weapon conversion kits. Prior to entering the Semi-safe Zone, you were told by the RSO not to bring anything lethal onto the area with you. You all should have required protective equipment and gear. If you leave the Semi-safe Zone at any time you must be re-inspected by the RSO.

A2.2. I will assign the students to teams and issue the scenario brief. Then, I will assign role players and support personnel, and issue them instructions. The role players, support personnel, and I will accompany the RSO to the entrance of the Safe Zone for a pre-training safety inspection by the RSO. I will brief you on your assigned duties after you have been inspected.

A2.3. All personnel must be inspected prior to entering the Safe Zone. When I complete the safety check, the RSO will make the range 'Hot.' Students will be issued their weapons and instructed to stand by. I will have students face in a safe direction, load, and make ready their weapons. I will then begin the scenario.

A2.4. Remember to keep alert and treat the scenario as real-world. Keep safety in mind at all times. Upon completing the scenario, you will hear the command to "CEASE FIRE." When instructed, personnel with weapons will face in a safe direction, clear, and sling their weapons. The RSO and I will inspect all cleared weapons. Once the RSO is satisfied all personnel, weapons, and equipment are accounted for and safe, he/she will call the range 'Cold' and give permission to remove masks. You may NOT remove your mask until the range is declared 'Cold.' All weapons will be returned to the RSO prior to leaving the Safe Zone. The debrief will be conducted at my discretion.

A2.5. Are there any questions?

Attachment 3**SCENARIO EXECUTION INSTRUCTIONS (EXAMPLE)**

- A3.1.** Give safety brief. **(RSO)**
- A3.2.** Conduct evolution brief. **(TC)**
- A3.3.** Safety inspection of **RSO**. **(TC)**
- A3.4.** Conduct safety inspection of **(TC)**, role-players, support personnel and vehicles (if applicable). **(RSO)**
- A3.5.** Brief role-players and support personnel on position for scenario. **(TC)**
- A3.6.** Prepare all weapons and issue un-loaded weapons to role-players if needed. **(RSO)**
- A3.7.** Bring students to entrance of Safe Zone for inspection. **(TC)**
- A3.8.** Conduct safety inspection of students and vehicles. **(RSO)**
- A3.9.** Conduct first safety check. Role-players and support personnel put masks on. 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 "**HOT.**" **(TC)**
- A3.10.** Have students face in a safe direction and load weapons. Begin scenario. **(TC)**
- A3.11.** **RSO** positions himself to monitor the scenario for safety violations. **RSO** is not an active participant in the scenario. However, if anyone sees any safety violation, shout "**CEASE FIRE.**" **(RSO)**
- A3.12.** **TC** monitors the scenario for safety issues and ensures training objectives are met. End the scenario by shouting "**CEASE FIRE, CEASE FIRE, and EVERYONE COME TO THE SOUND OF MY VOICE.**" All masks stay on. Check for injuries. **(TC)**
- A3.13.** Instruct all personnel with weapons to face in a safe direction and clear their weapons. Account for all personnel, weapons, and equipment. All items must be accounted for and checked by the **RSO** and **TC**. The **RSO** will call the range "**COLD.**" All personnel may then remove masks. **(RSO)**
- A3.14.** Conduct debrief/after action review. **(TC)**
- A3.15.** Once all training is complete, account for all weapons, magazines, and equipment before personnel leave the Safe Zone. **(RSO and TC)**

Attachment 4**SAFETY BRIEF (EXAMPLE)**

A4.1. (RSO) All weapons used in this training evolution will have the proper conversion kits installed. All weapons will be marked with brightly colored blue tape (if available) where it is easily visible and doesn't interfere with the functioning of the weapon.

A4.2. All magazines used in this evolution will be inspected by me (RSO) and marked with brightly colored blue tape (if available). 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. No rounds of any kind will be carried in pockets at any time. I will inspect all weapons and magazines after this brief.

A4.3. All personnel will wear proper protective gear. Approved full-face helmet, throat, and groin protection is MANDATORY. This includes all participants and observers. Non-duty clothing must cover the arms, legs, and hands. Does everyone have the required safety equipment?

A4.4. I (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 the range is 'Hot.' When the training cadre gives the order in the Unsafe Zone, point your weapons in a safe direction, charge it, re-holster/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 on the range and involved in training.

A4.5. At no time shall any personnel remove any safety equipment until I have called the range 'Cold.' I will need full accountability of personnel, all weapons will be cleared, and a buddy-check performed before the range is certified 'Cold.'

A4.6. 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.

A4.7. Do not fire weapons within five feet of another individual.

A4.8. Do you have any questions?

Attachment 5

DYE-MARKING CONVERSION KITS

A5.1. The following conversion kits are currently approved for use. FX and UTM brands are not interchangeable.

Figure A5.1. M9 Conversion Kit (6920-01-564-9656)



Figure A5.2. M11 Conversion Kit (6920-01-564-9568)



Figure A5.3. M16A2/M-4 Conversion Kit (6920-01-564-9657)



Figure A5.4. M249 Conversion Kit (6920-01-564-9655)



Attachment 6

PERSONNEL SAFETY AND WEAPON EQUIPMENT

A6.1. The following safety equipment is approved and MANDATORY for wear when using dye-marking cartridges. All personnel in the training area must wear all mandatory safety equipment.

Figure A6.1. UTM Face Mask - NSN: 8415-01-632-4474



Figure A6.2. UTM Helmet - NSN: 8415-01-632-4484



- A6.1.1. Standard Issue Gloves; leather, nomex, or winter
- A6.1.2. Single Layer Hearing Protection; foam inserts or under-the-helmet headset
- A6.1.3. Groin Protection
- A6.1.4. Standard Combat Helmet; any government issued helmet
- A6.1.5. Full, single layer of clothing. Excessive clothing may detract from training realism.

A6.2. The following equipment is optional for wear when using dye-marking cartridges as needed to enhance scenario realism, and offer further protection and comfort to students.

- A6.2.1. Individual Combat Equipment (ICE)
- A6.2.2. Elbow and Knee Pads

Table A6.1. Approved CCMCK Items

Items Approved for Use and Purchase
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NSN	NOMENCLATURE	NOTES
6920-01-564-9657	Training Device, Fire Dye Marking Ammo: M16/M4	UTM
6920-01-564-9656	Training Device, Fire Dye Marking Ammo: M9	FX
6920-01-564-9658	Training Device, Fire Dye Marking Ammo: M11	FX
6920-01-564-9655	Training Device, Fire Dye Marking Ammo: M249	UTM
8415-99-359-9160	Mask, Cold Weather (Standard CCMCK Face Mask), 69-0304 (KE396)	
8464-01-328-8268	Goggles, Sun, Wind and Dust	
4240-01-612-0702	Helmet Mounted Training Facial Protection Systems: Eye Tactical CM121, black, CM121-43 (1G6Y3)	
4240-01-612-0696	Helmet Mounted Training Facial Protection Systems: Eye Tactical CM121, tan, CM121-44 (1G6Y3)	
4240-01-612-0690	Helmet Mounted Training Facial Protection Systems: Eye Tactical CM121, green, CM121-45 (1G6Y3)	
8415-20-005-2260	Helmet, Safety: Simunitions FX9003, black, 8971960 (0YAE9)	
8415-20-007-2548	Helmet, Safety: Simunitions FX9003, tan, 8971962 (0YAE9)	
8415-99-359-9160	Mask, Cold Weather (Standard CCMCK Face Mask), 69-0304 (KE396)	
8415-01-632-4480	Helmet, Safety: UTM RBT Helmet, green, 69-PHXHELMET-Green (4SC89)	
8415-01-632-4482	Helmet, Safety: UTM RBT Helmet, blue, 69-PHXHELMET-Blue (4SC89)	
8415-01-632-4484	Helmet, Safety: UTM RBT Helmet, black, 69-PHXHELMET-Black (4SC89)	
8415-01-632-4474	Helmet, Safety: UTM Face Mask w/Integrated Goggles, Black, 69-0590 (4SC89)	
8415-01-632-4477	Helmet, Safety: UTM RBT Helmet, tan, 69-PHXHELMET-Tan (4SC89)	
8415-01-632-4479	Helmet, Safety: UTM RBT Helmet, red, 69-PHXHELMET-Red (4SC89)	
Approved Munitions (Centrally Procured - Cannot Local Purchase)		
NSN (DODIC)	NOMENCLATURE	NOTES
1305-01-536-7722 (AB14)	9mm Red Marking Cartridge	
1305-01-536-7721 (AB13)	9mm Blue Marking Cartridge	
1305-01-537-1521 (AB16)	5.56 Blue Linked Marking Cartridge: M249 Only	
1305-01-537-1522 (AB17)	5.56 Red Linked Marking Cartridge: M249 Only	
1305-01-536-5822 (AB09)	5.56 Blue Marking Cartridge: M4/M16 Only	
1305-01-536-5827 (AB10)	5.56 Red Marking Cartridge: M4/M16 Only	

Notes:

1. Cartridges from different manufacturers are not interchangeable and may not be used in other manufacturers' adapters.
2. The AF is not procuring the yellow marking cartridges in either 5.56mm or 9mm; therefore, these rounds are not available to AF users.

Attachment 7

CCMCK (ORM) OPERATIONAL RISK MANAGEMENT

Figure A7.1. CCMCK (ORM) Operational Risk Management

