

/UNCLASSIFIED//

041241Z Apr 12

FROM CDR JMC ROCK ISL IL//AMSJM-QAS//

740 (A)

SUBJECT: AMMUNITION INFORMATION NOTICE (AIN) 057-12, MINIMUM SAFE ENGAGEMENT DISTANCE FOR CLOSE COMBAT MISSION CAPABILITY KITS (CCMCK) - CTG 5.56MM M1042, 5.56MM M1071, AND 9MM M1041

1. AIN 056-12 WAS TRANSMITTED ON 301926Z Mar 12

2. THIS IS THE INITIAL ISSUE OF THIS AIN

3. DODICS: AB09/AB10/AB11/AB12/AB13/AB14/AB15/AB16/AB17

4. REFERENCES:

A. MEMORANDUM, FOR: US ARMY PROJECT MANAGER, MANEUVER AMMUNITION SYSTEM, SFAE-AMO-MAS-SMC, 20 JAN 2012, SUBJECT: AMENDMENT NO. 1 TO THE SAFETY CONFIRMATION FOR THE CLOSE COMBAT MISSION CAPABILITY KITS (CCMCK) IN SUPPORT OF FIELDING

B. MEMORANDUM, US ARDEC, ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER, RDAR-EIL-LA, 6 MAR 2012, SUBJECT: REQUEST FOR AMMUNITION INFORMATION NOTICE (AIN) - CLOSE COMBAT MISSION CAPABILITY KITS (CCMCK) - ENGAGEMENT DISTANCE

C. MIL-STD-882D, STANDARD PRACTICE FOR SYSTEM SAFETY, 10 FEB 00

D. TM 9-6920-3700-10, TECHNICAL MANUAL OPERATOR'S MANUAL FOR CLOSE COMBAT MISSION CAPABILITY KIT (CCMCK), 13 MAR 09

5. THIS AIN WILL BE DISSEMINATED TO ALL PERSONNEL INVOLVED IN INSPECTING, STORING, HANDLING, ISSUING, OR USING SUBJECT AMMUNITION. THIS AIN WILL BE ENFORCED BY THE UNIT OFFICER IN CHARGE (OIC) / NON-COMMISSIONED OIC (NCOIC), RANGE SAFETY OFFICER, OR LOCAL TRAINING OFFICER WITH DIRECT COMMAND AND CONTROL OVER RANGES USING CCMCK ASSETS.

6. BLUF: THE FOLLOWING MINIMUM SAFE ENGAGEMENT DISTANCES WILL BE ENFORCED WHEN CONDUCTING TRAINING USING CCMCK AMMUNITION:

A. CTG 5.56MM (M1042 AND M1071) CCMCK - ALL LOTS - 1.5 METERS (5 FT) FROM END OF THE WEAPON MUZZLE.

B. CTG 9MM (M1041) CCMCK ALL LOTS - 1.5 METERS (5 FT) FROM WEAPON MUZZLE.

7. SYSTEM DESCRIPTIONS: CCMCK IS DESIGNED TO ALLOW FORCE-ON-FORCE CLOSE COMBAT TRAINING BY TEMPORARILY CONVERTING SERVICE WEAPONS (M16 SERIES RIFLES, M4 SERIES CARBINES, M249 SQUAD AUTOMATIC WEAPONS (SAW), AND M9 AND M11 PISTOLS) TO FIRE LOW-VELOCITY MARKING AMMUNITION. THE SYSTEM ALLOWS NORMAL WEAPON EMPLOYMENT CUES SUCH AS AIMING, FIRING, FORCE-ON-FORCE TRAINING, AND INTERACTIVE LIVE-FIRE SCENARIOS.

8. SAFETY STUDY:

A. ARDEC CONDUCTED SAFETY CONFIRMATION TESTS TO SUPPORT FULL MATERIAL RELEASE AND THE FIELDING OF THESE SUBJECT CCMCK ASSETS AND DETERMINE THE MINIMUM ENGAGEMENT DISTANCES. THE TEST METHODOLOGY FOCUSED ON ASSESSING PROJECTILE BEHAVIOR GIVEN A WORSE CASE IMPACT VELOCITY AGAINST THE ARMY COMBAT UNIFORM (ACU) FABRIC OVER GELATIN. ALL LOTS OF THE M1041 AND M1071 MANUFACTURED TO DATE, ARE WELL BELOW MAXIMUM VELOCITY OF 450 FT/SEC ON 5.56MM CARTRIDGES. THE CTG 9MM (M1041) WAS TESTED DURING THE 2007 ATC DT AND DID NOT TEAR OR PENETRATE THE ACU FABRICS.

B. IN ADDITION, THE TESTS SHOWED THAT THERE WERE INSTANCES WHERE THE PLASTIC TIPS OF THE PROJECTILES FOR CCMCK FALL OFF OR BECOME LOOSE DURING HANDLING AND LOADING. CARTRIDGES FIRED WITH LOOSE OR MISSING PLASTIC TIPS HAVE HIGHER VELOCITIES AND THE PROJECTILE CAN BE EXPECTED TO PENETRATE THE ACU FABRIC AND SKIN. THE PROTECTIVE FACE MASKS DID STOP THE HIGHER VELOCITY PROJECTILES.

C. THE COMBINED RESULTS OF THESE TESTS CONCLUDED THE OVERALL RISK WAS MEDIUM WHEN USING CCMCK CARTRIDGES WITH THE APPROVED COMMERCIAL OFF-THE-SHELF (COTS) PROTECTIVE MASKS, PROVIDED USERS FOLLOW THE WARNINGS, PROCEDURES, AND MITIGATIONS IDENTIFIED HEREIN AND IN THE TECHNICAL MANUAL (REF D).

D. THIS OVERALL MEDIUM RISK ALLOWED A REDUCTION IN THE SAFE MINIMUM ENGAGEMENT DISTANCE TO 1.5 METERS (5 FT). THIS SAFETY CONFIRMATION INCLUDES ALL LOTS OF CTG 5.56MM (M1042 AND M1071) CCMCK AMMUNITION. THERE ARE NO RESTRICTIONS TO LOTS FOR THE CTG 9MM (M1041).

9. THE ATTACHED TABLES (AIN057-12A) LIST THE CCMCK CARTRIDGES APPROVED FOR FULL MATERIAL RELEASE:

10. ADDITIONAL SAFETY INFORMATION:

A. SOLDIERS WILL WEAR APPROVED PPE FOR PROTECTION OF THE EYES, HEAD, NECK, AND GROIN. THE SIMUNITION FXR OR EYE TACTICAL PROTECTIVE FACE MASKS MUST BE WORN IN CONJUNCTION WITH THE ARMY COMBAT HELMET (ACH). FAILURE TO WEAR APPROVED PPE CAN RESULT IN PERMANENT PARTIAL DISABILITY DUE TO THE PROJECTILES IMPACTING THE UNPROTECTED HEAD, EYES, FACE, NECK,

R GROIN.

B. HEAD SHOTS ARE PROHIBITED. SOLDIERS MUST AIM FOR THE TARGET'S BODY CENTER OF MASS.

C. SOLDIERS WILL NOT TRAIN WITH ANY CCMCK WEAPON OR CARTRIDGES WITHOUT ALL SKIN COVERED BY A MINIMUM OF ONE LAYER OF CLOTHING (INCLUDING COMBAT GLOVES). SOLDIERS TRAINING WITHOUT COMPLETE PPE WILL INCUR BRUISING, WELTS AND POSSIBLE BROKEN SKIN.

D. SOLDIERS WILL WEAR SINGLE HEARING PROTECTION WHEN TRAINING WITH ANY CCMCK WEAPON OR CARTRIDGE.

E. INSPECT THE CTG 5.56MM (M1042 AND M1071) TO ENSURE THE PLASTIC TIPS ARE SECURE AND CANNOT BE REMOVED BY HAND.

11. TECHNICAL POINT OF CONTACTS: MR. ROBERT WEISSMAN, DSN 880-3056, EMAIL: ROBERT.WEISSMAN@US.ARMY.MIL AND MR. DAVID CHAROWSKY, DSN: 880-6087, EMAIL: DAVID.CHAROWSKY@US.ARMY.MIL, RDAR-MEM-I. POINT OF CONTACT FOR DISTRIBUTION OF THIS AIN IS DARRIN LAMPMAN, DSN 793-7188, AMSJM-QAS, EMAIL: DARRIN.LAMPMAN@US.ARMY.MIL.

12. THIS AIN EXPIRES 31 MARCH 2014 UNLESS OTHERWISE RESCINDED OR SUPERSEDED.

//SIGNED//

JOHN W. GRAY

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