

//UNCLASSIFIED//  
171504Z Mar 16  
FROM CDR JMC ROCK ISL IL//AMSJM-QAS//  
740 (A)

SUBJECT: AMMUNITION INFORMATION NOTICE (AIN) 044-16, EMPHASIS ON PROPER ROCKET AND LAUNCHER, 83 MILLIMETER: HEDP, BUNKER DEFEAT MUNITION (BDM), M141 ARMING, FIRING, AND MISFIRE PROCEDURES TO PREVENT MISFIRE AND POSSIBLE HANGFIRE MALFUNCTIONS

1. AIN 043-16 WAS TRANSMITTED 161647Z Mar 16

2. THIS AIN SUPERSEDES AIN 026-15.

3. DODIC: HA08

4. REFERENCES:

A. TECHNICAL OPERATOR'S MANUAL, TM 9-1340-228-10, ROCKET AND LAUNCHER, 83 MILLIMETER: HEDP, BUNKER DEFEAT MUNITION (BDM), M141

B. AR 75-1 - MALFUNCTIONS INVOLVING AMMUNITION AND EXPLOSIVES

5. REQUEST A COPY OF THIS AIN BE PROVIDED TO ALL USERS, AMMUNITION SUPPLY POINT (ASP) PERSONNEL, QUALITY ASSURANCE SPECIALISTS AMMUNITION SURVEILLANCE (QASAS), RANGE SAFETY OFFICERS (RSO), AND EXPLOSIVE ORDNANCE DISPOSAL SPECIALISTS (EOD). THIS AIN SHALL BE PROVIDED TO ALL UNITS AND EACH USER AT TIME OF ISSUE.

6. BACKGROUND: AN M141 BDM WAS DEPLOYED DURING ENEMY ENGAGEMENT BUT EXPERIENCED A MISFIRE. THE USER CONDUCTED APPROPRIATE MISFIRE PROCEDURES. AFTER THREE ATTEMPTS TO FIRE, THE USER BROUGHT THE BDM OFF HIS SHOULDER, KEEPING THE WEAPON POINTED IN THE DIRECTION OF THE ENEMY. WHEN HE PLACED THE WEAPON ON HIS KNEE, THE WEAPON FIRED UNEXPECTEDLY.

7. INVESTIGATION DETERMINED THAT THE MISFIRE AND SUBSEQUENT UNEXPECTED FIRING INCIDENT WAS MOST LIKELY CAUSED BY A DISCONTINUITY IN THE BDM FIRING CIRCUIT. THE DISCONTINUITY MAY HAVE BEEN CAUSED BY EITHER A FAULTY COMPONENT IN THE FIRING CIRCUIT OR IMPROPER FIRING PROCEDURE. IN AN EFFORT TO PRECLUDE POSSIBLE MISFIRE AND UNEXPECTED FIRING (HANGFIRE) MALFUNCTIONS, THE FOLLOWING BDM ARMING, FIRING, AND MISFIRE PROCEDURE EMPHASIS IS PROVIDED.

8. THE BDM CONSISTS OF AN 83MM HIGH EXPLOSIVE DUAL PURPOSE ROCKET SEALED IN A TELESCOPING, SHOULDER-FIRED, EXPENDABLE LAUNCHER. THE BDM EMPLOYS A NUMBER OF BUILT-IN ELECTRICAL AND MECHANICAL SAFETY INTERLOCKS THAT PREVENT THE SYSTEM FROM INADVERTENTLY FIRING. THESE SAFETY INTERLOCKS MUST BE PROPERLY DISENGAGED, IN SEQUENCE, IN ORDER TO ARM AND FIRE THE SYSTEM.

9. TO ARM THE BDM, THE TELESCOPING LAUNCHER MUST BE FULLY EXTENDED, ROTATED COUNTERCLOCKWISE, AND LOCKED. THIS ACTION ALIGNS AND COMPLETES THE WEAPON'S ELECTRICAL

CIRCUIT FROM THE FIRING MECHANISM THERMAL BATTERY TO THE ROCKET MOTOR IGNITER. IF THE LAUNCHER IS NOT LOCKED, THE ELECTRICAL CIRCUIT IS INCOMPLETE AND THE WEAPON WILL NOT FIRE. FAILURE TO FULLY EXTEND AND LOCK THE LAUNCHER MAY LEAD TO A MISFIRE.

10. THE LAUNCHER FIRING MECHANISM COVER MUST THEN BE FULLY OPENED, WITH THE COVER LYING FLAT AGAINST THE LAUNCHER TUBE. THIS ACTION FULLY COMPRESSES THE FIRING MECHANISM FIRING PIN SPRINGS. FAILURE TO FULLY OPEN THE FIRING MECHANISM COVER MAY LEAD TO A MISFIRE.

11. THE FIRING MECHANISM "SAFETY" BUTTON PHYSICALLY BLOCKS THE FIRING PIN FROM STRIKING THE THERMAL BATTERY PERCUSSION PRIMER. FAILURE TO FULLY DEPRESS AND HOLD THE SAFETY BUTTON DURING TRIGGERING MAY LEAD TO A MISFIRE.

12. WITH THE FIRING MECHANISM "SAFETY" BUTTON FULLY DEPRESSED, PRESSING THE "TRIGGER" ALLOWS THE FIRING PIN TO STRIKE AND INITIATE THE THERMAL BATTERY PERCUSSION PRIMER. THE RESULTING HEAT ACTIVATES THE THERMAL BATTERY AND INITIATES THE BDM ROCKET PROPULSION SYSTEM.

13. A DEFECT IN OR FAILURE TO DISENGAGE ANY OF THE ABOVE SAFETY INTERLOCKS MAY LEAD TO A MISFIRE. THIS COULD BE DUE TO A FAULTY FIRING MECHANISM, FAULTY COMPONENT IN THE FIRING CIRCUIT, OR IMPROPER FIRING PROCEDURE. ENSURE PROPER BDM ARMING AND FIRING PROCEDURES ARE FOLLOWED TO PREVENT POSSIBLE SYSTEM MISFIRE. REFER TO BDM TECHNICAL OPERATOR'S MANUAL, TM 9-1340-228-10 (REF 4A) FOR PROPER ARMING AND FIRING INSTRUCTIONS.

14. IN THE EVENT OF A MISFIRE, THE WEAPON MUST BE CONSIDERED A POSSIBLE HANGFIRE, UNTIL SUCH TIME AS THE THERMAL BATTERY IS ALLOWED TO BLEED OUT. THE REQUIRED BDM THERMAL BATTERY BLEED OUT TIME IS 90 SECONDS, AS THE SITUATION PERMITS. REFER TO BDM TECHNICAL OPERATOR'S MANUAL, TM 9-1340-228-10 FOR PROPER MISFIRE PROCEDURES.

15. AFTER FOLLOWING PROPER MISFIRE PROCEDURES AND WAITING THE ALLOTTED 90 SECOND MISFIRE WAITING PERIOD, CAREFULLY LAY THE WEAPON ON THE GROUND POINTING AT THE TARGET. DO NOT ATTEMPT TO COLLAPSE THE LAUNCHER. BREAK OFF THE SIGHTS FOR UXO IDENTIFICATION AND NOTIFY RANGE CADRE. RANGE CADRE MUST REPORT MALFUNCTIONS INVOLVING AMMUNITION AND EXPLOSIVES IAW AR 75-1 (REF 4B).

16. IN THE EVENT THE 90 SECOND MISFIRE WAITING PERIOD IS NOT POSSIBLE (E.G. COMBAT ENVIRONMENT), ENSURE MUZZLE AND REAR OF THE LAUNCHER (BACK BLAST AREA) IS CLEAR AND CAREFULLY LAY THE WEAPON ON THE GROUND POINTING AT THE TARGET. DO NOT ATTEMPT TO COLLAPSE THE LAUNCHER. BREAK OFF THE SIGHTS FOR UXO IDENTIFICATION AND DISPOSE OF THE MISFIRED LAUNCHER IAW UNIT SOP.

17. REFERENCE 4A WILL BE UPDATED WITH NEXT REVISION TO INCORPORATE THE ABOVE CLARIFICATION.

18. THE TECHNICAL POC FOR THIS AIN IS MR. MICHAEL VILLACILLO, RDAR-EIL-LM, COMMERCIAL (973) 724-2033(DSN 880-2033), EMAIL: MICHAEL.VILLACILLO@US.ARMY.MIL, AND POC FOR DISTRIBUTION IS MR. JAMES M. BREWER, AMSJM-QAS, COMM: 309-782-7552 (DSN 793-7552), EMAIL: JAMES.M.BREWER10.CIV@MAIL.MIL

19. THIS AIN EXPIRES 31 MARCH 2017 UNLESS OTHERWISE RESCINDED OR SUPERSEDED.

//SIGNED//

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