

TECHNICAL MANUAL

DIRECT SUPPORT AND GENERAL SUPPORT

MAINTENANCE MANUAL

**SMALL ARMS AMMUNITION TO 30
MILLIMETER INCLUSIVE
(FEDERAL SUPPLY CLASS 1305)**

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

HEADQUARTERS, DEPARTMENT OF THE ARMY

APRIL 1994

TECHNICAL MANUAL)
)
 No. 9-1305-201-34)

HEADQUARTERS
 DEPARTMENT OF THE ARMY
 Washington, DC, 30 April 1994

**DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL
 (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST)
 FOR
 SMALL ARMS AMMUNITION TO 30 MILLIMETER INCLUSIVE
 (FSC 1305)**

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or know of a way to improve the procedures, please let us know. You may mail, e-mail, or FAX your response. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) direct to: Commander, U.S. Army TACOM, Armament Research, Development and Engineering Center, ATTN: AMSTA-AR-LSB, Picatinny Arsenal, NJ 07806-5000. E-mail address is LSB @PICA.ARMY.MIL. FAX number is Commercial (201) 724-4633, DSN 880-4633. A reply will be furnished to you.

	<u>Page</u>
CHAPTER 1. INTRODUCTION	
Section I. General	
1-1. Scope	1-1
1-2. Forms, Records, and Reports	1-1
Section II. Description and Data	
1-3. General	1-1
Section III. Safety, Care, and Handling	
1-4. General	1-1
CHAPTER 2. TOOLS AND EQUIPMENT	
2-1. General	2-1
2-2. Packing Materials, Accessories and Tools	2-1
2-3. Fabricated Tools and Equipment	2-1
CHAPTER 3. INSPECTION REQUIREMENTS	
Section I. General	
3-1. Inspection and Purpose	3-1
3-2. Ammunition Surveillance Program	3-1
3-3. Inspection Methods	3-1
3-4. General Inspection Procedure	3-1
3-5. Inspections	3-2
Section II. Classification of Material Defects	
3-6. Method of Classifying Defects	3-2
3-7. Acceptable Quality Level (AQL)	3-2.1
3-8. In-Process and Final Inspection	3-2.1
3-9. Disposition of Lots	3-2.1
CHAPTER 4. MAINTENANCE PROCEDURES	
Section I. Introduction	
4-1. General	4-1
4-2. Direct Support Maintenance	4-1
4-3. General Support Maintenance	4-1
4-4. Unpacking and Repacking	4-1
4-5. Inspection	4-1

*This publication supersedes TM 9-1305-201-34&P, dated 7 July 1981, including all changes.

CHAPTER 4	MAINTENANCE PROCEDURES - Continued	
Section II.	Cleaning	
	4-6. Ammunition of Caliber .50 and Less	4-2
	4-7. Ammunition above Caliber .50	4-2
	4-8. Components	4-3
Section III.	Repair	
	4-9. Packaging Materials	4-3
Section IV.	Touchup, Painting, and Marking	
	4-10. General	4-5
	4-11. Touchup	4-5
	4-12. Painting	4-6
	4-13. Color Coding of Boxes With Light Loads	4-8
	4-14. Marking	4-9
APPENDIX A	REFERENCES	A-1
APPENDIX B	PACKING MATERIALS, ACCESSORIES, AND TOOLS	B-1
APPENDIX C	EXPENDABLE AND DURABLE ITEMS LIST	C-1
APPENDIX D	MARKING FOR CARTRIDGES	D-1

LIST OF ILLUSTRATIONS

Figure No.	Title	Page
3-1	Twist inspection	3-5
3-2	Case defects	3-8
3-3	M791 APDS-T ammunition	3-10
3-4	M919 APFSDS-T ammunition	3-10
3-5	M792 HEI-T ammunition	3-10
3-6	M793 TP-T ammunition	3-11
3-7	M910 TPDS-T ammunition	3-11
4-1	Box, wirebound	4-4
4-2	Typical markings on metal packing box	4-10
4-3	Typical packing and marking for 5.56mm ammunition box	4-11
4-4	Typical packing and marking for 7.62mm cartridges NATO boxes and cartons	4-12
4-5	Typical markings on M21 can	4-13
4-6	Typical packing and markings for linked 20mm in M21 and box Mark 1	4-14
4-7	Typical packing and marking for 20mm cartridges in can M21 and box M23	4-15
4-8	Link 20mm cartridges packed in shipping and storage container M528	4-16
4-9	Typical markings on shipping and storage container M548	4-17
4-10	Typical markings for container, PA125	4-18
4-11	Palletizing	4-19
D-1	Typical marking for Cartridge 20mm HEI, M56A3	D-1
D-2	Typical markings for cartridge 20mm HEI-T-SD, M246	D-2
D-3	Typical markings for cartridge 25mm; APDS-T, M791	D-2
D-4	Typical markings for cartridge 25mm HEI-T, M792	D-3
D-5	Typical markings for cartridge 25.4mm Decoy, M839	D-3
D-6	Typical markings for cartridge 30mm TP, XM788	D-4
D-7	Typical markings for cartridge 20mm, MPT-SD, M940	D-4
D-8	Typical marking for Cartridge 25mm, TPDS-T, M910	D-5

LIST OF TABLES

Table No.	Title	Page
3-1	Classification of Material Defects	3-3
3-2	Inspection Criteria for 25MM Ammunition	3-9

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope

a. This is one of a series of manuals on maintenance of small arms ammunition. (Federal Supply Class 1305 which includes ammunition through 30 millimeter.) Information in this manual is limited to the responsibilities of direct and general support maintenance personnel.

b. Operating instructions and operator-level maintenance are covered in the appropriate weapon manuals. Unit level maintenance is covered in TM 9-1305-201-20&P which also contains the Maintenance Allocation Chart (MAC). Authorized procedures for each level of maintenance, including direct and general support, are specified in the MAC.

1-2. Forms, Records, and Reports

a. Forms generally applicable to units maintaining this materiel are listed in appendix A. A current listing of all forms is maintained in DA Pam 25-30. DA Pam 738-750 contains instructions on applicability and completion of forms.

b. Ammunition Data Cards will be annotated to reflect major maintenance operations in accordance with TM 9-1300-250.

c. A record should be kept of each inspection job undertaken on an Ammunition Condition Report (ACR).

Section II. DESCRIPTION AND DATA

1-3. General

Description and data on this ammunition are contained in

TM 43-0001-27. Refer to the applicable operator and unit maintenance manuals for detailed operating instructions.

Section III. SAFETY, CARE, AND HANDLING

1-4. General

a. For general information on safety, care, and handling of ammunition, refer to TM 91300-206, TM 9-1300-25, and TM 9-1305-20120&P.

b. Specific information on safety, care, and handling is contained in the applicable operator's and unit maintenance manuals.

c. Specific safety precautions, warnings, and cautions relating to the maintenance operation are

incorporated with the maintenance procedures for the ammunition item.

d. The cartridge 25MM APFSDS-T M919 utilizes Depleted Uranium (U) that emits very low level radiation. Care must be taken when handling this round to limit direct contact with the DU penetrator.

e. The U.S. Nuclear Regulatory Commission sets standards/conditions, and issues licenses for the safe use, storage and possession of radioactive material.

Current copies of title 10, parts 19, 20, and 21, as well as licensed operating procedures, are maintained by the HQ IOC, Health Physicist and may be examined at HQ IOC, Rock Island, IL 61299-6000. The NRC source material license for the radioactive material contained in the manual is maintained by HQ IOC, Rock Island, IL 61299-6000. Users of this material may request further information from Cdr, IOC, ATTN: AMSIO-DMW (RPO), Rock Island, IL 61299-6000.

f. Loss or unauthorized firings of M919 rounds must be reported through the chain of command as soon as discovered. All transmissions regarding incidents of this nature must be marked FOUO (For Official Use Only). IOC Headquarters must be notified within 24 hours of discovery. Report to Cdr., IOC, ATTN:

AMSIODMW (RPO), Rock Island, IL 61299-6000, DSN 793-0338/2969, Commercial (309) 782-0338/2969. After normal duty hours contact SDO (Staff Duty Officer), DSN 793-6001, Commercial (309) 782-6001.

g. Exposure to 25MM APFSDS-T M919 ammunition results in exposure to low level radiation. The amount of radiation the soldier receives is proportional to the amount of time spent in the vicinity of APFSDS-T M919 ammunition. Although the radiation exposure received is low and considered safe, avoid unnecessary contact with packaged APFSDS-T M919 ammunition, within mission constraints.

Change 1 1-2