* TM 750-244-1-5

TECHNICAL MANUAL

PROCEDURES

FOR THE DESTRUCTION OF AIRCRAFT

AND

ASSOCIATED EQUIPMENT

TO PREVENT ENEMY USE

*** This publication supersedes TM 750-244-1-5, dated 12 November 1971.**

HEADQUARTERS, DEPARTMENT OF THE ARMY

15 DECEMBER 2008

WARNING

Personnel performing instructions involving operations, procedures, and practices which are included or implied in this technical manual shall observe the following instructions. Disregard of these warnings can cause serious or fatal injury to personnel.

WARNING

FIRE

Exercise extreme care when using petroleum products to destroy equipment by fire. These materials are highly flammable.

WARNING

DEMOLITION (explosives)

Destruction of equipment using explosives shall be performed in an area free of personnel to prevent injury which may be caused by flying fragments.

LIST OF EFFECTIVE PAGES

Dates of issue for original and changed pages are:

Original . . . . . 15 December 2008

TOTAL NUMBER OF PAGES IN THIS PUBLICATION IS 16, CONSISTING OF THE FOLLOWING:

Page No.	*Change No.
Cover	0
a	0
b Blank	0
A	0
B Blank	0
i	0
ii	0
1-1	0
1-2	0
1-3	0
1-4 Blank	0
2-1	0
2-2	0
2-3	0
2-4 Blank	0

***Zero in this column indicates an original page.**

TECHNICAL MANUAL

No. 750-244-1-5

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 15 December 2008

PROCEDURES

FOR THE DESTRUCTION OF AIRCRAFT

AND

ASSOCIATED EQUIPMENT

TO PREVENT ENEMY USE

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can improve this manual. If you find mistakes or if you know of a way to improve these procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) located at the back of this manual, directly to: Commander, U.S. Army Aviation and Missile Command, ATTN: AMSAM-MMC-MA-NP, Redstone Arsenal, AL 35898-5000. A reply will be furnished to you. You may also provide DA Form 2028 information to AMCOM via e-mail, fax or the World Wide Web. Our fax number is: DSN 788-6546 or Commercial (256) 842-6546. Our e-mail address is 2028@redstone.army.mil. Instructions for sending an electronic 2028 may be found at the back of this manual immediately preceding the hard copy 2028. For the World Wide Web use: https://amcom2028.redstone.army.mil.

TABLE OF CONTENTS

* This publication supersedes TM 750-244-1-5, dated 12 November 1971.

TABLE OF CONTENTS (Cont)

CHAPTER 1
INTRODUCTION

SECTION I GENERAL

1-1. SCOPE.

This manual prescribes equipment priorities, methods, and techniques which are to be used in the destruction of aircraft and associated equipment to prevent enemy use when capture or abandonment of the equipment is imminent.

1-2. PURPOSE.

The purpose of this publication is to provide personnel with guidance which will permit a quick, effective, and safe means of rendering inoperative or destroying subject equipment which is in imminent danger of capture by an enemy.

SECTION II PRELIMINARY CONSIDERATIONS

1-3. GENERAL.

Destruction of aircraft and associated equipment which is in imminent danger of capture by an enemy is a command decision that must be made by the commander specified in AR 735-5, Chapter 14. Upon receipt of orders from the proper authority, or in accordance with common, standard, operating procedures; equipment destruction may be initiated and should be as thorough as time, personnel, and means permit.

1-4. PLANNING.

All units possessing subject equipment should have a procedural plan for the implementation of destruction, to insure that the maximum and most effective damage is done to subject equipment, and to deny the use of this equipment to the enemy. The plan should outline the extent of demolition to be performed, priorities of destruction as applicable to the assigned equipment, and if applicable, the amount of explosives required. Additionally, the plan must be flexible enough in the designation of time, equipment, and personnel to contend with any tactical withdrawal situation. To prevent equipment cannibalization by an enemy, unit personnel shall be familiar with the priority sequence in which essential aircraft equipment, including repair parts in stock, are to be destroyed. The unit personnel shall also be familiar with the sequence to be followed for total destruction of subject equipment.

SECTION III PRIORITIES FOR DESTRUCTION

1-5. GENERAL.

a. Priority must always be given to the destruction of classified equipment and associated documents.

b. When lack of time and/or stores prevent complete destruction of equipment, priority is to be given to the destruction of essential parts, and the same parts are to be destroyed on all like items.

c. A guide to priorities for destruction of repair parts for aircraft and associated equipment is contained in Table 1-1.

1-6. REPAIR PARTS.

The same priority for destruction of repair parts of a major item necessary to render that item inoperable must be given to the destruction of similar repair parts located in storage areas.

Table 1-1. Priorities /or Destruction of Aircraft and Associated Equipment

Equipment	Priority	Sub-priority	Parts
Aircraft and associated	1		Identification (IFF) equipment, other classified electronic equipment, publications and documents pertaining thereto, and other materiel as defined by the national government concerned.
	2		Installed armament (use subpriorities for guns and/or small arms, as appropriate).
Guns		1	Breech, breech mechanism, and spares.
		2	Recoil mechanism
		3	Tube
Small arms		1	Breech mechanism
		2	Barrel
		3	Sighting equipment, including infrared
		4	Mounts
Aircraft and associated equipment		3	Engine assembly (priorities for destruction of magnetos equipment, carburetors, compressors, fuel controls, turbines, and other engine subassemblies to be determined by national governments, depending on type of aircraft involved and time available for destruction).
	4		Airframe, control surfaces, and undercarriage (priorities for destruction of propellers, hubs, rotor blades, gear boxes, drive shafts, transmissions, and other subassemblies to be determined by national governments, depending on type of aircraft involved and time available for destruction).
	5		Instruments, radios, and electronic equipment (use subpriorities for radio, and/or radar and other electronic equipment).
Radio		1	Transmitters, oscillators and frequency generators
		2	Receiver
		3	Remote control units or switchboards, and. operating terminals
		4	Power supply and/or generator set

Table 1-1. Priorities /or Destruction of Aircraft and Associated Equipment — Continued

Equipment	Priority	Sub-priority	Parts
		5	Antennae
		6	Tuning heads
Radar and other	1		Frequency determining components, records, electronic operating instructions, which are subject equipment to security regulations, and identification material.
		2	Antennae and associated components such as radiators, reflectors, and optics.
		3	Transmission lines and waveguides
		4	Transmitter high voltage components
		5	Control consoles, displays, and plotting boards
Radar and other	x	6	Cable systems
electronic	x	7	Automatic devices
equipment (cont)	x	8	Other control panels and generators
Aircraft and associated equipment	6	x	Electrical, fuel, and hydraulic systems

SECTION IV DEGREE OF DAMAGE

1-7. GENERAL.

Methods of destruction should achieve such damage to equipment and essential spare parts that it will not be possible to restore the equipment to a usable condition in the combat zone either by repair or cannibalization.

1-8. CLASSIFIED EQUIPMENT.

Classified equipment must be destroyed in such a degree as to prevent duplication by, or revealing means of operation or function to, the enemy.

1-9. ASSOCIATED CLASSIFIED DOCUMENTS.

Any classified documents. notes, instructions. or other written material pertaining to function, operation, maintenance, or employment, including drawings or part lists, must be destroyed in a manner to render them useless to the enemy.

CHAPTER 2
METHODS OF DESTRUCTION

SECTION I DESCRIPTION AND ORDER OF DESTRUCTION METHODS

2-1. SELF-DESTRUCTION DEVICES.

a. The self-destruction device is a superior method for the destruction of classified equipment.

b. Built-in self-destruction devices should be set off even if the aircraft containing equipment with self-destruction devices is to be destroyed. These devices should be permitted to do their work at least partially before incendiaries or explosives (especially the latter) are set off. An explosion might blow parts or classified documents to safety where the enemy might find them.

2-2. DESTRUCTION BY IMPROPER OPERATION.

WARNING

This method of destruction can be extremely dangerous. In the case of propeller driven aircraft, engine seizure can cause crankshaft/propeller shaft failure. Personnel should evacuate the aircraft and stay clear of propeller and turbine wheel areas.

The aircraft and/or auxiliary power unit engines can be destroyed by draining all oil from the internal working parts and operating the engine until seizure occurs. Refer to paragraphs 2-11 and 2-12 below.

2-3. GENERAL PROCEDURES PERTAINING TO EITHER FIRE, DEMOLITION, OR MECHANICAL DESTRUCTION METHODS.

a. Remove and discharge all portable fire extinguishers.

b. Discharge permanently installed fire extinguishers.

c. Activate all self-destruction devices.

d. Remove all publications and destroy by fire. Publications are difficult to destroy so that no intelligible information remains on any page. Burn such matter in small lots. Ensure that it is completely consumed.

2-4. FIRE.

WARNING

Exercise extreme care when using petroleum products to destroy equipment by fire. These materials are highly flammable.

a. General. The destruction of equipment by use of fire is an effective method of destroying low-melting-point metal items, and equipment made from flammable materials. Mechanical destruction should be completed before initiating destruction by fire. When metallic items are to be destroyed, flammable materials should be packed under and around them, soaked with a flammable petroleum product, and ignited. Proper concentration of flammable materials will provide a hotter and more destructive fire.

b. Procedures. Prior to fire ignition and with time permitting, the following procedures may be accomplished:

(1) Remove and invert battery.

(2) Remove engine cowling and smash magneto, spark plugs, and front and rear engine sections. On gas turbine engines, smash fuel control and fuel manifold.

(3) Within the aircraft, smash instruments and avionic equipment, and also cut control cables, wire bundles, and hydraulic lines.

(4) Outside the aircraft, break off antenna masts and pitot tubes, and also open oil and fuel drain cocks, break oil lines, and puncture fuel cells.

(5) Accomplish all applicable instructions in paragraphs 2-2 and 2-3 above.

(6) Saturate the aircraft interior with a combustible fuel.

(7) Ignite the fire using one of the methods listed in c below.

c. Fire Ignition Methods.

(1) From a safe distance, discharge either a signal cartridge, flare, or an incendiary grenade into the fuel vapor field.

(2) Prepare an extremely narrow fuel trail to a safe distance from the fuel vapor field and ignite the fuel trail with the aid of an ignited rag or paper attached to the end of a 6-foot minimum length pole.

(3) Locate an aircraft battery a safe distance away from the fuel vapor field and create a spark within the fuel vapor field by positioning the bare ends of two insulated wires .020 inch apart, within the fuel vapor field, and touching the opposite bare ends of the insulated wires to the battery posts.

2-5. GUNFIRE.

For information on the use of gunfire to destroy equipment refer to paragraph 2-12 below.

2-6. DEMOLITION (EXPLOSIVES).

WARNING

Destruction of aircraft using explosives shall be performed in an area free of personnel to prevent injury which may be caused by flying fragments.

Demolition assistance from trained demolition technicians should be requested from engineering units in the immediate area. If demolition assistance is not available, information on the use of explosives to destroy equipment can be found in , Explosives and Demolitions.

2-7. MECHANICAL.

Any mechanical means may be used, such as hammers. axes. crowbars, or cranes. For mechanical destruction, refer to paragraph b above, and accomplish steps (1) through (5).

2-8. USE OF NATURAL SURROUNDINGS.

Natural surroundings can be used effectively for disposal by submerging equipment and repair parts under water such as lakes, ponds, bogs, and swamps. Equipment can also be concealed by hiding in caves or by burial, the latter being preferable. Where the surrounding area does not lend itself to such disposal, the wide dispersal of material preferably into heavy underbrush, can serve as a denial or delaying measure.

SECTION II SPECIAL INSTRUCTIONS FOR AIRCRAFT AND ASSOCIATED EQUIPMENT

2-9. GENERAL.

Army aircraft of all types and the equipment installed therein are so similar that particular instructions for individual aircraft and individual equipment is not necessary. It is true, however, that the placement of a demolition charge can be the difference between minor damage or complete destruction. Refer to paragraph 2-6 above.

2-10. SELF-DESTRUCTION DEVICES.

The actuation devices for self-destruction systems are always displayed in a prominent location, usually a button marked in red, and protected by a shield to eliminate the possibility of accidental actuation. Refer to paragraph 2-1 above.

2-11. IMPROPER OPERATION.

Improper operation is a temporary disabling method in the respect that the engines can be replaced. In some rare instances, the engines may operate successfully again after cooling takes place. For complete destruction, follow this method with the fire destruction method. If fire destruction is not desired, refer to paragraph 2-12 below.

2-12. GUNFIRE.

The firing of a grenade launcher or small arms rounds Into the front or rear case of the engine is standard practice for complete engine destruction.

2-13. SPARE PARTS AND BENCH STOCK.

All spare parts and bench stock should be destroyed using any or all of the methods listed above. Destroy similar parts or like items to prevent interchange.

2-14. CALL FOR FIRE.

In the modern battlefield, the use of the precision guided munitions, such as hellfire missiles of JDAMS to destroy army aircraft will allow for rapid egress of the battle area to minimize capture of the crew by the enemy. The decision to destroy the aircraft by direct or indirect fire precision munitions must be made by considering the availability of the time and the effects of collateral damage. Every effort should be made to assess full destruction of the aircraft to ensure that the aircraft will not be used for intelligence or information warfare purposes.

By Order of the Secretary of the Army:

GEORGE W. CASEY, JR.
General, United States Army
Chief of Staff

Official:

JOYCE E. MORROW
Administrative Assistant to the
Secretary of the Army
0832601

Distribution:

To be distributed in accordance with the initial distribution number (IDN) 340908, requirements for calibration procedure TM 750-244-1-5.

These are the instructions for sending an electronic 2028

The following format must be used if submitting an electronic 2028. The subject line must be exactly the same and all fields must be included; however only the following fields are mandatory: 1, 3, 4, 5, 6, 7, 8, 9, 10, 13, 15, 16, 17, and 27.

From: “Whomever” whomever@wherever.army.mil
To: 2028@redstone.army.mil

Subject: DA Form 2028

1 ***From: Joe Smith***
2 *Unit: home*
3 ***Address: 4300 Park***
4 ***City***: Hometown
5 ***St: MO***
6 ***Zip: 77777***
7 ***Date Sent***: 19--OCT--93
8 ***Pub no***: 55--2840--229--23
9 ***Pub Title: TM***
10 ***Publication Date***: 04--JUL--85
11 *Change Number*: 7
12 *Submitter Rank*: MSG
13 ***Submitter FName***: Joe
14 *Submitter MName*: T
15 ***Submitter LName***: Smith
16 ***Submitter Phone***: 123--123--1234
17 ***Problem: 1***
18 *Page: 2*
19 *Paragraph: 3*
20 *Line: 4*
21 *NSN: 5*
22 *Reference: 6*
23 *Figure: 7*
24 *Table: 8*
25 *Item: 9*
26 *Total: 123*

27 ***Text***:
This is the text for the problem below line 27.

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS For use of this form, see AR 25--30; the proponent agency is ODISC4.	Use Part II (*reverse*) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/ Supply Manuals (SC/SM)	DATE 8/30/02

TO: (*Forward to proponent of publication or form)(Include ZIP Code*)	FROM: (*Activity and location)(Include ZIP Code*)
Commander, U.S. Army Aviation and Missile Command ATTN: AMSAM--MMC--MA--NP Redstone Arsenal, AL 35898	MSG, Jane Q. Doe 1234 Any Street Nowhere Town, AL 34565

PART 1 - ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS

PUBLICATION/FORM NUMBER	DATE	TITLE
TM 9-1005-433-24	16 Sep 2002	Organizational, Direct Support, And General Support Maintenance Manual for Machine Gun, .50 Caliber M3P and M3P Machine Gun Electrical Test Set Used On Avenger Air Defense Weapon System

ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON
1	WP0005 PG 3		2			Test or Corrective Action column should identify a different WP number.

* *Reference to line numbers within the paragraph or subparagraph.*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/ AUTOVON, PLUS EXTENSION	SIGNATURE
MSG, Jane Q. Doe, SFC	788-1234	

TO: (Forward direct to addressee listed in publication)	FROM: (Activity and location) (Include ZIP Code)	DATE
Commander, U.S. Army Aviation and Missile Command ATTN: AMSAM-MMC-MA-NP Redstone Arsenal, AL 35898	MSG, Jane Q. Doe 1234 Any Street Nowhere Town, AL 34565	8/30/02

PART II - REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER	DATE	TITLE

PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION

PART III - REMARKS (*Any general remarks or recommendations or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.*)

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
MSG, Jane Q. Doe, SFC	788-1234	

USAPA V3.01

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS **For use of this form, see AR 25--30; the proponent agency is ODISC4.**	Use PartII(*reverse*) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/ Supply Manuals (SC/SM)	DATE
TO*: (Forward to proponent of publication or form)(Include ZIP Code)* Commander, U.S. Army Aviation and Missile Command ATTN: AMSAM-MMC-MA-NP Redstone Arsenal, AL 35898	FROM*: (Activity and location)(Include ZIP Code)*	

PART 1 --ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS

PUBLICATION/FORM NUMBER	DATE	TITLE

ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON

* *Reference to line numbers within the paragraph or subparagraph.*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/ AUTOVON, PLUS EXTENSION	SIGNATURE

TO: *(Forward direct to addressee listed in publication)* Commander, U.S. Army Aviation and Missile Command ATTN: AMSAM-MMC-MA-NP Redstone Arsenal, AL 35898	**FROM:** *(Activity and location) (Include ZIP Code)*	**DATE**

PART II --REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER	DATE	TITLE

PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION

PART III --REMARKS *(Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE

The Metric System and Equivalents

Linear Measure

1 centimeter = 10 millimeters = .39 inch
1 decimeter = 10 centimeters = 3.94 inches
1 meter = 10 decimeters = 39.37 inches
1 dekameter = 10 meters = 32.8 feet
1 hectometer = 10 dekameters = 328.08 feet
1 kilometer = 10 hectometers = 3,280.8 feet

Liquid Measure

1 centiliter = 10 milliters = .34 fl. ounce
1 deciliter = 10 centiliters = 3.38 fl. Ounces
1 liter = 10 deciliters = 33.81 fl. ounces
1 dekaliter = 10 liters = 2.64 gallons
1 hectoliter = 10 dekaliters = 26.42 gallons
1 kiloliter = 10 hectoliters = 264.18 gallons

Weights

1 centigram = 10 milligrams = .15 grain
1 decigram = 10 centigrams = 1.54 grains
1 gram = 10 decigram = .035 ounce
1 decagram = 10 grams = .35 ounce
1 hectogram = 10 decagrams = 3.52 ounces
1 kilogram = 10 hectograms = 2.2 pounds
1 quintal = 100 kilograms = 220.46 pounds
1 metric ton = 10 quintals = 1.1 short tons

Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet
1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet
1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. Inch
1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. Inches
1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

Approximate Conversion Factors

To change	*To*	*Multiply by*	*To change*	*To*	*Multiply by*
inches	centimeters	2.540	ounce-inches	Newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29,573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	Newton-meters	1.356	metric tons	short tons	1.102
pound-inches	Newton-meters	.11296			

Temperature (Exact)

°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C

PIN: 014028-000