

## DEPARTMENT OF THE ARMY SUPPLY BULLETIN

**ROCKET, INCENDIARY, 66 MILLIMETER:  
TPA, 4 ROUND CLIP, XM74  
STORAGE SERVICEABILITY STANDARD**

Headquarters, Department of the Army, Washington, D. C.  
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	Page
Purpose and scope .....	1
Applicable documents .....	1
Safety provisions .....	1
Surveillance .....	1
Inspection .....	2
Tests .....	3
Documentation.....	3
Special instructions .....	3

**1. Purpose and Scope.** *a. Purpose.* This bulletin when used in conjunction with SB 3-30 and SB 742-1 provides the method of determining the serviceability of the ROCKET, INCENDIARY, 66 MILLIMETER: TPA, 4 Round Clip, XM74.

*b. Scope.* The provisions of this bulletin are mandatory for use in conducting depot surveillance on the ROCKET, INCENDIARY, 66 MILLIMETER: TPA, 4 Round Clip, XM74. This bulletin is not intended for use by organizations with stocks in basic loads.

**2. Applicable Documents.** The following Government documents referenced herein form a part of this bulletin to the extent specified.

SB 3-30	--Serviceability Standard for CB Materiel.
SB 9742-1	--Ammunition Surveillance and Quality Evaluation Procedures.
TM 3-1065218-12	--Launcher, Rocket: 66MM, 4 Tube, XM202.
TM 38750	--The Army Maintenance Management System.
TM 743-200	--Storage and Materials Handling (Dept of Def).
TM 743-2001	--Storage and Materials Handling (Dept of Army).
TM 9-130206	--Care, Handling, Preservation, and Destruction of Ammunition.

**3. Safety Provisions.** Refer to SB 3-30, TM 9 1300-206, approved standing operating procedures and special safety requirements listed in Section 8.

**4. Surveillance.** *a. Surveillance Interval.*

(1) *Initial receipt and prestorage inspection.* Initial receipt and prestorage inspection will be conducted in accordance with Supply Bulletins 3-30 and SB 742-1.

(2) *Periodic cycle.* Surveillance will be performed at periodic cycles of 1 year. The first scheduled surveillance will be conducted within six months from the date of receipt at the depot.

(3) *Preissue inspection.* Preissue inspection of the subject item will be performed in accordance with SB 3-30 and/or SB 742-1 and the provisions of paragraphs 5 and 6 of this bulletin when one half or less of the periodic cycle remains. A visual examination will be performed (in accordance with paragraph 5 of this bulletin) on the subject item if more than one half of the periodic cycle remains prior to shipment of the item. If no initial cycle examination has been performed, a complete examination as specified in paragraphs 5 and 6 of this bulletin will be performed prior to shipment.

b. *Basis of surveillance.* Surveillance for the subject item will be conducted on the basis of grand lots, manufacturer's lots, and miscellaneous lots.

c. *Formation of surveillance lots.*

(1) *Grand lot.* A grand lot is created by grouping all lots from one manufacturer into one large single lot for the purpose of economy in surveillance.

(a) *Kind, type and model.* All lots must be the same kind, type and model; ROCKET, INCENDIARY, 66 MILLIMETER: TPA, 4 Round Clip, XM74.

(b) *Manufacture.* All lots must be the product of the same manufacturer or reconditioning agency.

(c) *Packing.* All lots must have the same type packing and identification markings.

(d) *Storage.* All lots must be stored under similar conditions at the same depot.

(e) *Serviceability lot status.* All lots must possess the same serviceability lot status; i.e., serviceability known (based upon prior surveillance) or serviceability unknown. However, when new procurement is involved, serviceability will be based upon acceptance inspection in lieu of prior surveillance.

(2) *Manufacturer's lot.* A manufacturer's lot consists of those items manufactured or assembled by one manufacturing or reconditioning agency's lot identification number.

(a) *Packing.* All items must have the same type packing and identification marking.

(b) *Storage.* All items must be stored under similar conditions at the same depot.

(c) *Serviceability lot status.* All lots must possess the same serviceability lot status; i.e., serviceability known (based upon prior surveillance) or serviceability unknown. However, when new procurement is involved, serviceability will be based upon acceptance inspection in lieu of prior surveillance.

(3) *Miscellaneous lot.* A miscellaneous lot containing not more than 32 clips, will be created by combining small manufacturer's lots or lot fragments possessing the same technical history; i.e., manufactured by the same technical procedure (indicated by the same lot series number).

(a) *Kind, type and model.* All items must be of the same kind, type and model; ROCKET, INCENDIARY, 66 MILLIMETER, TPA, 4 Round Clip, XM74.

(b) *Manufacturer.* Each small lot or lot fragment must be the product of the same manufacturing or reconditioning agency.

(c) *Packing.* All items must have the same type packing and identification marking.

(d) *Storage.* All items must be stored under similar conditions at the same depot.

(e) *Serviceability lot status.* All items must possess the same serviceability lot status; i.e., serviceability known (based upon prior surveillance) or serviceability unknown. However, when new procurement is

involved, serviceability will be based upon acceptance inspection in lieu of prior surveillance.

d. *Sampling.* Sampling will be conducted as follows:

(1) *Containers.* A sample quantity of containers will be randomly selected as indicated in table I and a visual examination will be performed for packaging, packing, marking and preservation as specified in table III.

(2) *End item.* A sample quantity of rocket clips will be randomly selected as indicated in table I and subjected to a visual examination. In addition, the sample will be subjected to the tests specified in section 6. Further, of this sample, specified number of rocket clips as indicated in table I will be forwarded to Edgewood Arsenal for functional testing.

(3) *Shipment of samples.* Shipment of rocket clips for functional testing will be coordinated and directed by the NIPC at the U.S. Army Ammunition Procurement and Supply Agency, ATTN: SMUEA-QA-LM, Joliet, ILL. 60436.

**Table I. Sampling Plan**

Lot Size (Clips)	1	2	3	4	5	6
0 to 32	12*	0	1	12*	0	2
33 to 80	20	1	2	20*	0	2
81 to 160	27	2	3	22	0	2
161 to 320	34	3	4	22	0	2
321 to 480	40	4	5	22	0	2
481 and over	47	5	7	22	0	2

Explanation of column and symbols.

1. Sample size--visual inspection
2. Acceptance number--major defectives--visual
3. Acceptance number--minor defectives--visual
4. Sample size--critical defects--visual
5. Acceptance number--critical defectives--visual
6. Sample size (clips) to be forwarded to Edgewood Arsenal for tests

\*Where sample size exceeds lot size do 100 percent inspection.

(4) *Critical defects.* When examination or testing of an item reveals a critical defect, the lot affected at the depot shall be 100 percent screened for this defect. Items containing a critical defect will be immediately suspended from issue and disposed of in accordance with TM 3-1055-218-12.

(5) *Visual examination.* Only a visual examination of packing for a new or reprocessed unit upon receipt at a depot storage area is required. If used units are received unprocessed at a storage area, a complete visual and functional examination shall be performed in accordance with the instructions contained in this bulletin when reprocessing and repacking.

**5. Inspection.** a. *Visual examination.* The sample will be examined for defects listed in 5b.

b. *Safety criteria.* See section 8.

c. *Classification of defects.* Refer to table II for classification of defects. Defects other than those listed in these tables will be reported. Serviceability will be withheld pending investigation by Commanding Officer, Edgewood Arsenal, Quality Assurance Directorate, Engineering Division, Specifications Branch to

determine proper defect category into which the unlisted defect belongs.

**Table II. Rocket, Incendiary, 66 Millimeter: TPA, 4 Round Clip, XM74**

Categories	Defects	Inspection methods
<i>Critical:</i>		
1	Leakage	Visual
<i>Major:</i>		
101	Bail	6.a.
102	Clip-support assembly strap missing	Visual
103	Separation (Round from clip tube)	6.b.
104	Functioning (Performed by Edgewood Arsenal)	Test

*d. Packaging, Packing, Marking and Preservation.* See SB 742-1.

**6. Tests.** On an annual basis, a sample (size as indicated in Table I) of XM74 Rockets will be forwarded to Edgewood Arsenal for functional testing. Shipment of test samples will be coordinated and directed by the NICP at the U. S. Army Ammunition Procurement and Supply Agency, ATTN: SMUAP-QA-LM, Joliet, ILL. 60436.

*a. Bail.*

(1) *Requirements.* The bail shall readily snap back to its stowed position when released from its fully extended position. No interference between parts is permitted when tested.

(2) *Procedure.* Pull the bail into fully extended position and release.

*b. Separation (Rocket retainer).*

(1) *Requirements.* The maximum end play between the warhead and the inner tube shall be  $\frac{5}{16}$  inch when tested.

(2) *Procedure.* With the inner tube securely held, pull warhead away from inner tube. Gap caused by separation of large O.D. of warhead from inner tube shall not exceed  $\frac{5}{16}$  inch.

**7. Documentation.** *a. Report form.* When reporting data, the following forms will be used.

DA Form 984 --Material Serviceability Report.

DA Form 985 --Data Sheet for Grand Lots, Miscellaneous Lots, or Depot Lots

DA Form 2415 --Ammunition Condition Report.

*b. Permanent history.* Forms as required by TM 38-750 for specific item.

*c. Reporting.*

(1) *Data.* When reporting data, forms specified in 7a and 7b will be prepared in accordance with instructions contained in SB 3-30, SB 742-1 and TM 38-750.

(2) *Submission.* Reports required by this document will be submitted as follows:

(a) Original and one copy to the Commanding Officer, Edgewood Arsenal, ATTN: SMUEA-QAER, Edgewood Arsenal, MD. 21010.

(b) One copy to the Commanding General, U. S. Army Ammunition Procurement and Supply Agency, ATTN: SMUAP-QA-LM, Joliet, ILL. 60436.

(3) *Leakage report.* When a leaking munition is found, a special report (other than the unusual serviceability report) will be sent immediately to the Commanding General, U. S. Army Ammunition Procurement and Supply Agency, ATTN: SMUAP-QA-LM, Joliet, ILL. 60436.

(4) *Critical defects report.* When a critical defect is found, it will be reported immediately to the Commanding General, U. S. Army Ammunition Procurement and Supply Agency, ATTN: SMUAP-QA-LM, Joliet, ILL. 60436. The incident will be reported via teletype, telephone, or letter stating the nomenclature, the lot number of the item involved and the defect encountered.

**8. Special Instructions.** *a. Equipment calibration.*

Prior to an inspection operation or test, all measuring devices that require calibration will be inspected to verify that the calibration interval and equipment limits have not been exceeded.

*b. Errors or omissions.* Comments regarding errors or omissions will be forwarded on DA Form 2028 to Commanding Officer, Edgewood Arsenal, ATTN: SMUEA-QAES-B, Edgewood Arsenal, MD. 21010 and an information copy to the Commanding General, U. S. Army Ammunition Procurement and Supply Agency, ATTN: SMUAP-QA-LM, Joliet, ILL. 60436.

*c. Repackaging.* Repack XM74 Rockets in conformance with the latest marking/packing requirements of MILR-51344.

*d. Safety Criteria for Inspection of XM74 Clips.* The following safety steps should be observed when performing visual examination on XM74 Rocket Clips:

(1) *XM74 clip in overpack*

(a) *Flame visible*

1 Evacuate area and notify appropriate authorities.

2 Wait one hour, warheads will either have exploded or cooled.

3 Submerge overpack in oil if it has not exploded.

4 Remove from area (submerged in container of oil) and dispose of in accordance with TM 3-1055-218-12.

(b) *Smoke emitting from overpack*

1 Submerge overpack in oil.

2 Wait one hour.

3 Remove from area (submerged in container of oil) and dispose of in accordance with TM 3-1055218-12.

- (2) *XM74 clip removed from overpack*
- (a) *Flame visible*
- 1 Evacuate area and notify appropriate authorities.
  - 2 Wait one hour, warheads will either have exploded or cooled.
  - 3 Submerge clip in oil if it has not exploded.
  - 4 Remove from area (submerged in container of oil) and dispose of in accordance with TM 3-1055-218-12.
- (b) *Smoke visible*
- 1 Submerge clip in oil.
  - 2 Wait one hour.

- 3 Remove from area (submerged in container of oil) and dispose of in accordance with TM 3-1055-218-12.
- (c) *XM74 clip discolored with grey/white powder or residue*
- 1 Submerge clip in oil.
  - 2 Remove from area (submerged in container of oil) and dispose of in accordance with TM 3-1055-218-12.
- (3) Suitable oils for submerging XM74 clips.
- (a) Motor oils.
  - (b) No. 2 fuel oil or heavier.

By Order of the Secretary of the Army:

**W. C. WESTMORELAND,**  
**General, United States Army,**  
**Chief of Staff.**

Official:

**VERNE L. BOWERS,**  
**Major General, United States Army,**  
**The Adjutant General.**

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 Army Dep (5)  
 Arsenals (2) except  
 Edgewood (75)  
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 USAAPSA (60)

NG: State AG (3); Div (1)


USAR: None

For explanation of abbreviations used, see AR 310-50.

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RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS

 <p style="font-size: small; margin: 0;"><i>THEN...JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL.</i></p>		SOMETHING WRONG WITH PUBLICATION	
		FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)	
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IN THIS SPACE, TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT.			
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PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER		SIGN HERE	

## 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

### Weights

1 centigram = 10 milligrams = .15 grain  
 1 decigram = 10 centigrams = 1.54 grains  
 1 gram = 10 decigrams = .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

### Liquid Measure

1 centiliter = 10 milliliters = .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

### 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
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