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SECURITY CLASSIFICATION OF THIS Form Approved EPORT DOCUMENTATION PAGE OMB No. 0704 2188 1a. REPORT SECURITY CLASSIFICATION 16 RESTRICTIVE MARKINGS Unclassified 2a. SECURITY CLASSIFICATION AUTHORITY 3 DISTRIBUTION / AVAILABILITY OF REPORT 2b. DECLASSIFICATION / DOWNGRADING SCHEDULE 4. PERFORMING ORGANIZATION REPORT NUMBER(S) 5 MONITORING ORGANIZATION REPORT NUMBER(S) DOD POP HMTR/AYD 90-005 6a. NAME OF PERFORMING ORGANIZATION 6b. OFFICE SYMBOL 7a. NAME OF MONITORING ORGANIZATION (If applicable) Packaging Division SMCAR-AEP 6c. ADDRESS (City, State, and ZIP Code) U.S. Army Armament Research, Development 7b. ADDRESS (City, State, and ZIP Code) Engineering Center Picatinny Arsenal, NJ 07806-5000 8a. NAME OF FUNDING / SPONSORING 8b OFFICE SYMBOL 9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER **ORGANIZATION** (If applicable) 8c. ADDRESS (City, State, and ZIP Code) 10. SOURCE OF FUNDING NUMBERS PROGRAM **PROJECT** TASK WORK UNIT ELEMENT NO NO NO ACCESSION NO. 11. TITLE (Include Security Classification) Performance Oriented Packaging Testing of M257 Flare Warhead with MK66 Motor 12. PERSONAL AUTHOR(S) Anthony D'Angelo 13a. TYPE OF REPORT 13b TIME COVERED 14 DATE OF REPORT (Year, Month, Day) 15. PAGE COUNT Final FROM TO 2 16. SUPPLEMENTARY NOTATION 18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number) 17 COSATI CODES FIELD GROUP SUB-GROUP Performance Oriented Packaging, POP, M257 Warhead Wood Box 19. ABSTRACT (Continue on reverse if necessary and identify by block number) This report contains the testing and test results performed on the M257 flare warhead (packed 3 warheads and 3 motors). Approved for public releases Description of This intent 20. DISTRIBUTION/AVAILABILITY OF ABSTRACT 21 ABSTRACT SECURITY CLASSIFICATION Unaclassified ☐ UNCLASSIFIED/UNLIMITED ☐ SAME AS RPT ☐ DTIC USERS 22a. NAME OF RESPONSIBLE INDIVIDUAL 22b TELEPHONE (Include Area Code) 22c OFFICE SYMBOL 201-724-4976 SMCAR-AEP Anthony D'Angelo **DD Form 1473, JUN 86** Previous editions are obsolete SECURITY CLASSIFICATION OF THIS PAGE

### 1. DATA:

#### Container:

Type: Container, Wood

UN Code: 4Cl

Nomenclature: Box, Ammunition Packing: Wood, Nailed

Specification Number: MIL-B-2427

Drawing Number: 9357963

Material: Wood

Capacity: 37.1 kg (81 lbs)

Dimensions: 122.1 cm x 31.1 cm x 20.6 cm (48 1/16 in. x 12 1/4 in. x 9 3/8 in.)

Gross Weight: 61.4 kg (135 lbs)

## Product:

Name: Rocket Flare M257 with MK66 Motor

Drawing Number: 12624792 United Nations Number: 0254 United Nations Packing Group: II

Physical State: Solid

Amount per Container: 3 Rockets & 3 Motors

### 2. BACKGROUND:

This report contains the testing and test results performed on the M257 Flare Warhead with MK66 motors. The wood box (PN 9357963) will pack 3 warheads and 3 motors in accordance with drawing no. 12624792. Test were performed in accordance with Performance Oriented Packaging test regulations.

### 3. TEST:

Boxes were dropped once each from 1.2 meters (4 feet). The boxes were dropped on a 3 inch solid steel plate reinforced by 18 inches of crushed rock in 5 different orientations. The orientations were as follows:

Bottom

Top

Statement "A" per telecon Anthony

Side, long Side, short

Bottom corners

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All drops were conducted at ambient temperature.

### 4. RESULTS:

The containers passed all tests since none of the contents were discharged. They are considered safe for international transportation in accordance with Performance Oriented Packaging regulations.

# 5. REFERENCED MATERIAL:

A. United Nations, "Transport of Dangerous Goods," 6th Edition.

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