

AD-A276 185

SEC



MENTATION PAGE

Form Approved
OMB No 0704-0188
Exp Date Jun 30 1986

1a REPORT SECURITY CLASSIFICATION Unclassified		1b RESTRICTIVE MARKINGS	
2a SECURITY CLASSIFICATION AUTHORITY DTIC		3 DISTRIBUTION/AVAILABILITY OF REPORT Unlimited	
2b DECLASSIFICATION/DOWNGRADING SCHEDULE DTIC EXEMPT DATE 23 1994		5 MONITORING ORGANIZATION REPORT NUMBER(S) This document has been approved for public release and sale; its distribution is unlimited.	
4 PERFORMING ORGANIZATION REPORT NUMBER(S) DOD POP HMTR/AYD 94-05668		7a NAME OF MONITORING ORGANIZATION	
6a NAME OF PERFORMING ORGANIZATION Packaging Division, AED	6b OFFICE SYMBOL (if applicable) SMCAR-AEP	7b ADDRESS (City, State, and ZIP Code)	
6c. ADDRESS (City, State, and ZIP Code) U.S. Army ARDEC Picatinny Arsenal, NJ 07806-5000		9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER	
8a. NAME OF FUNDING / SPONSORING ORGANIZATION	8b OFFICE SYMBOL (if applicable)	10. SOURCE OF FUNDING NUMBERS	
8c. ADDRESS (City, State, and ZIP Code)		PROGRAM ELEMENT NO.	PROJECT NO.
		TASK NO.	WORK UNIT ACCESSION NO.
11. TITLE (Include Security Classification) Performance Oriented Packaging Report for 105mm Howitzer Ammunition			
12 PERSONAL AUTHOR(S) Bill Ingold			
13a. TYPE OF REPORT Final	13b. TIME COVERED FROM _____ TO _____	14 DATE OF REPORT (Year, Month, Day) 94-01-10	15 PAGE COUNT
16. SUPPLEMENTARY NOTATION			
17. COSATI CODES		18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)	
FIELD	GROUP	Performance Oriented Packaging, POP, 105mm Howitzer Ammunition, MIL-B-2427 Wood Box.	
19. ABSTRACT (Continue on reverse if necessary and identify by block number)			
This POP report is for 105mm Howitzer Ammunition, which is packaged 2 cartridges per MIL-B-2427 wood box. This report describes the results of testing for this item.			
20 DISTRIBUTION/AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT <input type="checkbox"/> DTIC USERS		21 ABSTRACT SECURITY CLASSIFICATION Unclassified	
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94-05668



DTIC QUALITY ASSURANCE

I. REPORT NUMBER: DOD POP HMTR/AYD 94-001

II. TITLE: Performance Oriented Packaging Report for 105mm Howitzer Ammunition

AUTHOR: Bill Ingold

PERFORMING ACTIVITY: ARDEC

ADDRESS: Department of the Army
ARDEC, SMCAR-AEP
HQ, U.S. Army Armament, Munitions, and Chemical Command
Picatinny Arsenal, NJ 07806-5000

DATE: 10 Jan 94

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NTIS CRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
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1. DATA SHEET

CONTAINER

Type: Box
UN Code: 4C1
Nomenclature: BOX, PACKING, AMMUNITION, FOR 105MM HOWITZER
AMMUNITION IN FIBER CONTAINER, M105A3

BOX, PACKING, AMMUNITION FOR 105MM HOWITZER
AMMUNITION WITHOUT FUZE IN FIBER CONTAINER,
PA55

Specification Number: Type II, Grade A, Class 5, Mil-B-2427
Drawing Number: 7549072 and 9271047
Material: Wood
Gross Weight: 146 pounds
Outside Dimensions: 37 1/4" x 11 15/16" x 7 19/32"
Inside Dimensions: 32" x 10 3/8" x 5 1/4"

PRODUCT

Name: 105MM Howitzer Cartridges
Drawing Number: N/A
United Nations Number: Various
Physical State: Solid
Amount per Container: 2 - 105mm Howitzer Cartridges

2. BACKGROUND, TESTS, AND RESULTS

Reference the following document:
a. 49 CFR, October 1, 1993 Edition

A Stacking Test was conducted on three containers with a weight of 2,325 pounds per container for 24 hours. This weight exceeds the minimum requirement for a 10' stack height which is 2,178 pounds.

A Loose Cargo Test was conducted on three containers for one hour. The packages were tested at a vibration table frequency such that the bottom of the packages were raised 1/4" from the platform, which exceeds the requirement of 1/16".

A Seven Foot Drop Test was conducted on three containers that were subjected to 6, three foot drops, and the Loose Cargo Test. The three containers were dropped twice at seven feet covering the following orientations: top, bottom, long side, short side, and a top corner at the closure. This exceeds the requirement of one drop per container at four feet.

Test results indicated no leakage or spillage of the contents from the containers following any of the tests conducted, meeting the requirements of the 49 CFR.