

# MILITARY STANDARD TRUCKLOADING

MIL-STD-1320-17A  
(NAVY)

11 MARCH 1993

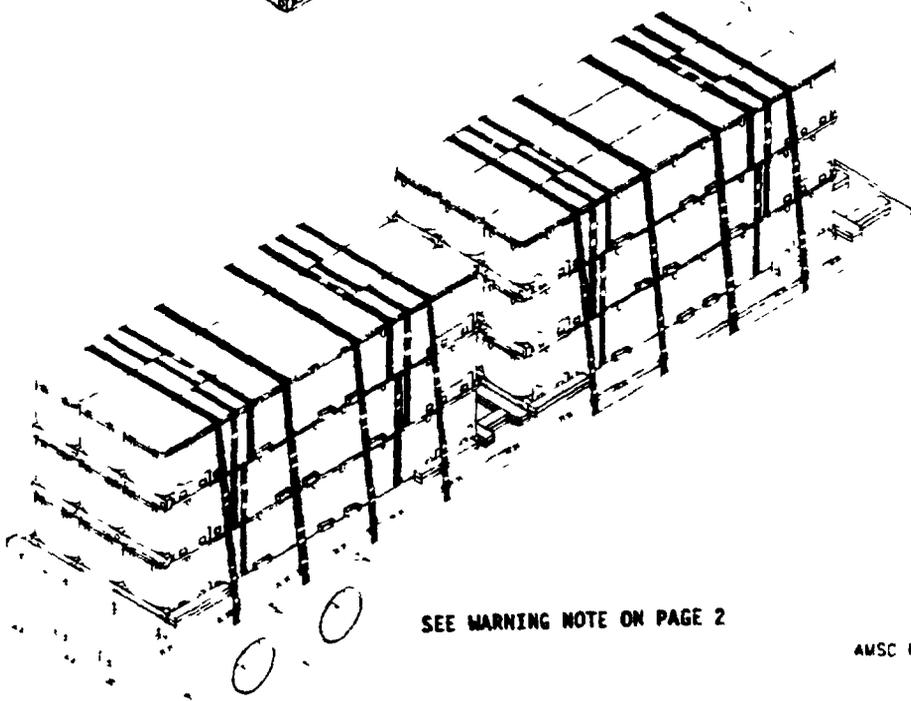
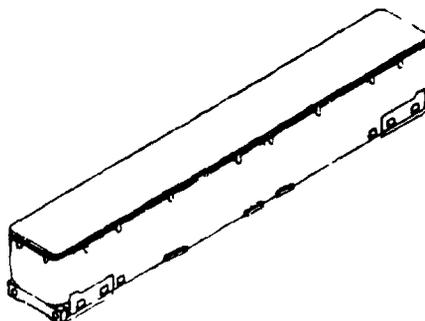
TERRIER MISSILE AND STANDARD(ER) MISSILE  
IN CONTAINER MK 199 MOD 0 AND 1

SUPERSIDING  
MIL STD 1320-17  
5 APRIL 1991

## CONTAINER DATA

DIMENSIONS 1 18' W 2' H - 29 1/4"  
GROSS WEIGHT SEE TABLE 1 PAGE 2  
TARE WEIGHT 750 LBS  
CUBE 85.5 CU FT

FOR HAZARD CLASSIFICATION SEE  
SW020 AC SAF-010



SEE WARNING NOTE ON PAGE 2

AMSC NG - N/A

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APPROVED FOR PUBLIC RELEASE  
DISTRIBUTION IS UNLIMITED

NOTES

- 1 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
- 2 FOR CROSS REFERENCE TO ASSOCIATED PALLETIZING, CONTAINERLOADING AND CARLOADING MILITARY STANDARDS REFER TO INDEX TO STANDARDS MIL-HDBK 236 (NAVY)

A	ADDED AIR RIDE WARNING NOTE ON PAGES 1 & 2	11 MAR 1993		
REV	REVISION DESCRIPTION	DATE	TDA	SYSCOM
1 TR				APPROVAL

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ORIGINATOR

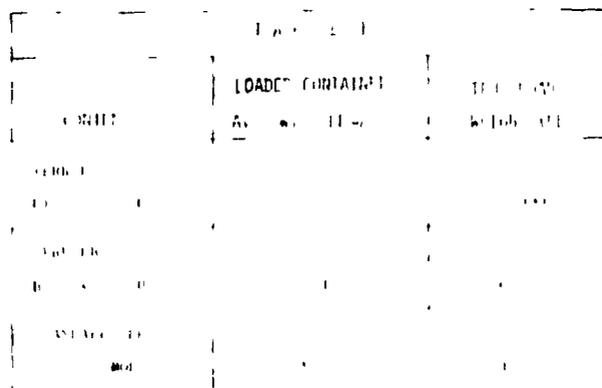
WPNSTA EARLE, NEW JERSEY

## MIL-STD-1320-17A (NAVY)

## GENERAL NOTES

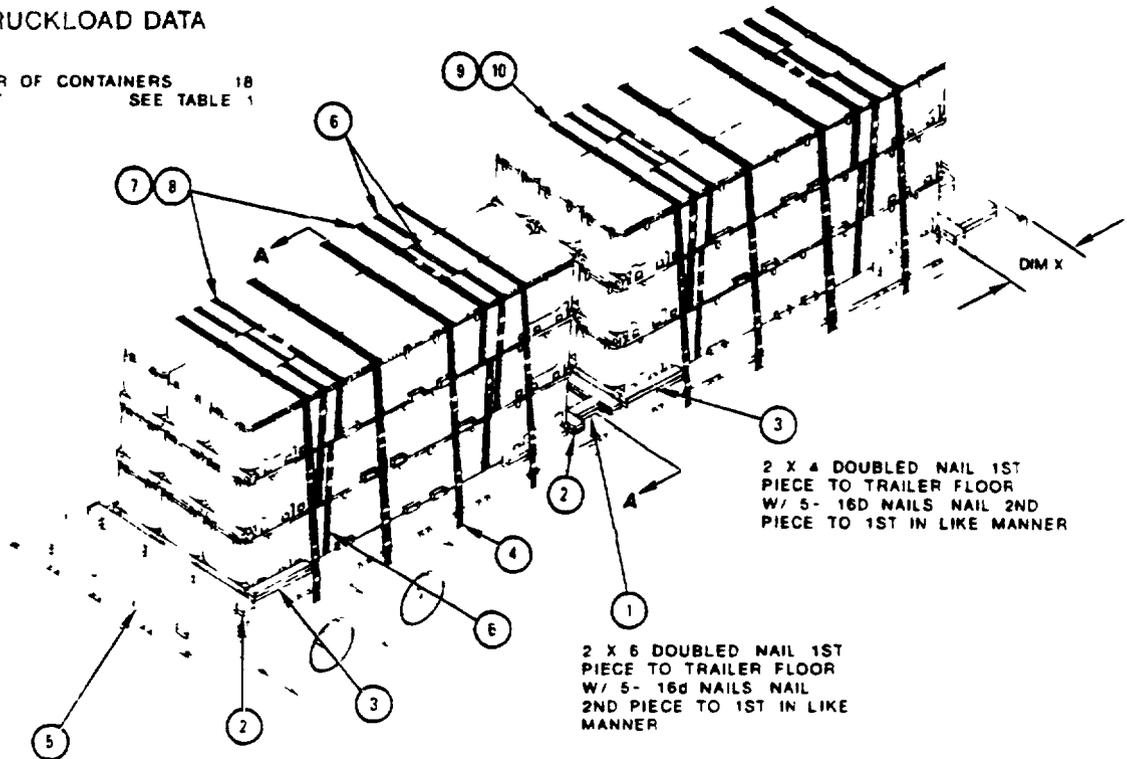
- 1 THIS DOCUMENT GIVES DETAILED INSTRUCTIONS FOR TRUCKLOADING THE TERRIER MISSILE AND THE STANDARD (ER) MISSILE IN THE SHIPPING AND STORAGE CONTAINER MF 197 MOD 1 AND MOD 2
- 2 THE PROCEDURES DESCRIBED HEREIN ARE INTENDED FOR 40 FT OR LONGER FLATBED OR ENCLOSED (VAN) TRAILERS WITH THE TRAILER'S TANDEM AXLES LOCATED IN THE WESTERN POSITION (AT THE EXTREME REAR OF THE TRAILER). DO NOT USE TRAILERS WITH ALL METAL FLOORS
- 3 CHAINS AND STEEL STRAPPING MAY BE USED INTERCHANGEABLY ON A ONE TO ONE BASIS FOR TIEDOWNS
- 4 STEEL STRAPPING USED AS TIEDOWNS SHALL BE 2 X D50 AND SHALL CONFORM TO AND BE APPLIED AS SPECIFIED IN THE GENERAL TRUCKLOADING DOCUMENT MIL STD 1320 (NAVY)
- 5 CHAIN FITTINGS AND LOAD BINDERS SHALL CONFORM TO AND BE APPLIED AS SPECIFIED IN THE GENERAL TRUCKLOADING DOCUMENT MIL STD 1320 (NAVY). EXCEPT THAT THE CHAIN GRAB HOOKS SHALL BE ATTACHED TO THE STAKE POCKETS (NOT AROUND THE RUB RAIL)
- 6 PROTECTOR BOARDS (DOUBLED 2 X 6 S) SHALL BE USED UNDER THE TIEDOWNS. STRAPS SHALL BE SECURED TO THE PROTECTOR BOARDS USING 2 INCH STRAPPING STAPLES. WHEN USING CHAIN THE CHAINS SHALL BE SECURED TO THE PROTECTOR BOARDS BY DRIVING A 10d NAIL THROUGH THE CHAIN LINK AND CLINCHING THE NAIL OVER THE CHAIN. FIVE STAPLES/NAILS SHALL BE USED FOR EACH TIEDOWN
- 7 BEFORE LOADING ONTO THE TRAILER CONTAINERS SHALL BE UNITIZED AS SHOWN ON PAGE 10 ON FLATBED TRAILERS. CONTAINERS MAY BE UNITIZED THREE HIGH IN ENCLOSED TRAILERS. CONTAINERS MAY BE UNITIZED TWO HIGH
- 8 PRIOR TO LOADING THE TRAILER AND DURING PRELOADING INSPECTION REQUIRED BY NAVSEA OP 2165 AND REPORTED ON DD FORM 626 THE CHAINS, FITTINGS, AND LOAD BINDERS SHALL BE INSPECTED FOR STRETCH, GOUGING, BENT LINKS, WEAR, AND ANY OTHER NOTICEABLE DEFECTS. THE INSPECTOR SHALL CONFIRM THAT THE CHAINS, FITTINGS, AND LOAD BINDERS HAVE BEEN INSPECTED AND SHALL SO NOTE IN ITEM NO. 22 OF DD FORM 626. ANY DEFICIENCY SHALL BE CAUSE FOR REJECTION OF A CHAIN OR LOAD BINDER
- 9 UNLESS OTHERWISE SPECIFIED DUNNAGE LUMBER, STEEL STRAPPING, STRAP SEALS, AND NAILS SHALL BE AS SPECIFIED IN THE GENERAL TRUCKLOADING DOCUMENT MIL STD 1320 (NAVY)
- 10 THE MAXIMUM GROSS WEIGHT OF THE TRACTOR TRAILER AND THE ALLOWABLE AXLE WEIGHTS ARE THE RESPONSIBILITY OF THE CARRIER. THE CARRIER WILL ADVISE THE SHIPPER OF THESE LIMITATIONS, AND THE SHIPPER SHALL LOAD THE TRAILER IN SUCH A MANNER THAT THE TRACTOR TRAILER WILL NOT EXCEED THESE LIMITATIONS
- 11 AFTER THE BLOCKING, BRACING, AND TIEDOWNS HAVE BEEN INSPECTED, THE CONTAINERS SHALL BE COMPLETELY COVERED WITH FIRE RESISTANT, WATERPROOF TARPULINS. THE TARPULINS MAY BE UNDER THE TIEDOWNS AND THE PROTECTOR BOARDS
- 12 AFTER THE TARPULINS ARE IN PLACE, ATTACH THE PROPER EXPLOSIVES PLACARDS TO BOTH SIDES, FRONT, AND BACK OF THE TRAILER, AND ATTACH THE SHIPPING DOCUMENTS TO AN ACCESSIBLE AREA ON THE BACK DECK OF THE TRAILER
- 12 FOR GENERAL TRUCKLOADING PROCEDURES REFER TO THE GENERAL TRUCKLOADING DOCUMENT MIL STD-1320 (NAVY)

**\* WARNING** SM-2 AND ER MISSILES MUST BE TRANSPORTED ON "AIR RIDE TRUCKS"



TRUCKLOAD DATA

NUMBER OF CONTAINERS 18  
WEIGHT SEE TABLE 1



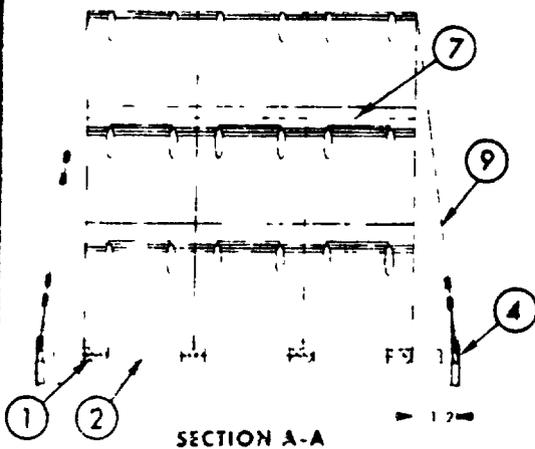
2 X 6 DOUBLED NAIL 1ST PC TO TRAILER FLOOR W/ 8 16d NAILS NAIL 2ND PC TO 1ST IN LIKE MANNER

2 X 6 DOUBLED NAIL 1ST PIECE TO TRAILER FLOOR W/ 1- 16d NAIL EVERY 8 INCHES NAIL 2ND PIECE TO 1ST IN LIKE MANNER

2 X 4 DOUBLED NAIL 1ST PIECE TO TRAILER FLOOR W/ 5- 16d NAILS NAIL 2ND PIECE TO 1ST IN LIKE MANNER

2 X 6 DOUBLED NAIL 1ST PIECE TO TRAILER FLOOR W/ 5- 16d NAILS NAIL 2ND PIECE TO 1ST IN LIKE MANNER

TRAILER LENGTH	DIMENSION X
40 FT	38 5
42 FT	50
44 FT	62
45 FT	68
48 FT	86



REQ'D	ITEM	DESCRIPTION	MAT'L / DWG	DIMENSIONS
64	10	SEAL		FDR 2 STRAP
8	9	TIE-DOWN STRAP		2 X 050 X 32 FT 0
56	8	SEAL		FDR 1 1/4 STRAP
4	7	CROSS STRAP		1 1/4 X 035 X 21 FT 0
24	6	UNITIZING STRAP		1 1/4 X 035 X 17 FT 0
16	5	END CLEAT	SEE FIELD NOTE	2 X 6 X 30
16	4	STAKE POCKET PAD (STRAPPING)		2 X 050 X 24
16	3	SLEEPER	SEE FIELD NOTE	2 X 4 X 30
8	2	CROSS MEMBR	SEE FIELD NOTE	7 X 6 X 88
8	1	CLFAT	SEE FIELD NOTE	2 X 6 X 18

LIST OF MATERIALS

MIL-STD-1320-17 A (NAVY)

FTL-40 FT TRAILER (VAN TYPE)

## NOTE

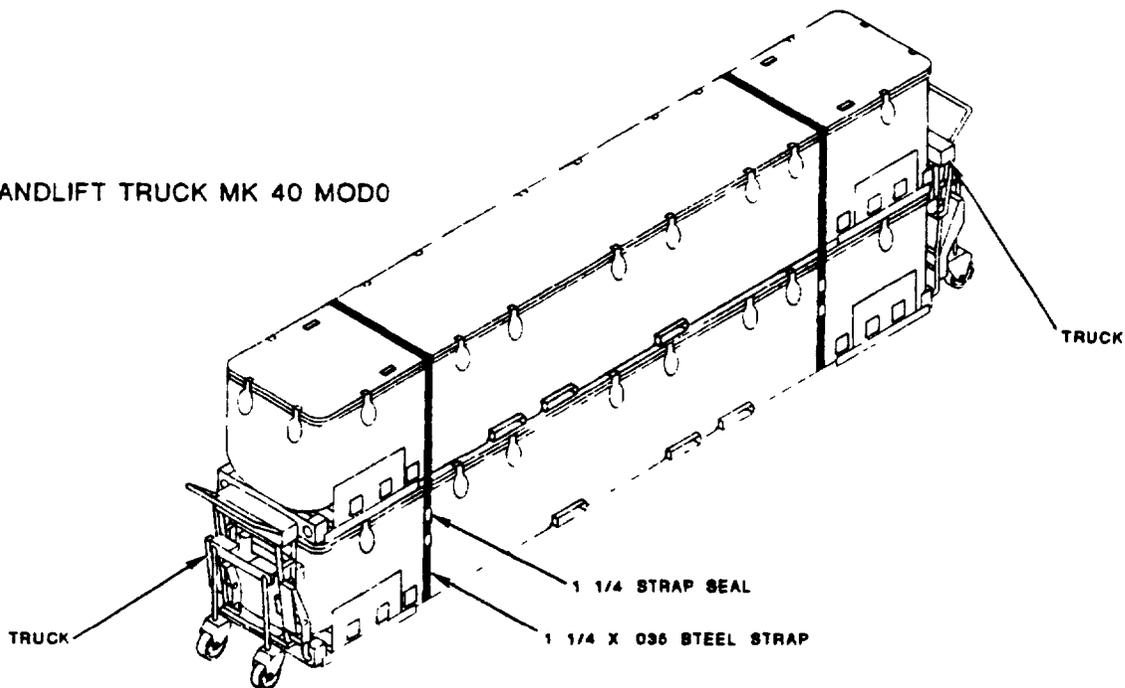
SHIPMENTS IN VAN TYPE TRAILERS ARE AUTHORIZED ONLY WHEN FLAT BED TRAILERS ARE NOT AVAILABLE

1 A FULL TRUCKLOAD FOR A 40 FT VAN CONSISTS OF 12 MISSILE CONTAINERS WEIGHTS OF LOADED CONTAINERS AND FULL TRUCKLOAD ARE SHOWN IN TABLE III

CONTENTS	LOADED CONTAINER AVG WT (LBS)	TRUCKLOAD WEIGHT (LBS)
TERRIER BT-3 3A 3B & 3C	2066	24 860
TERRIER HT-3 & 3A HT-R	2040	24,480
STANDARD (ER) MK 61 & MODS	1924	23 088

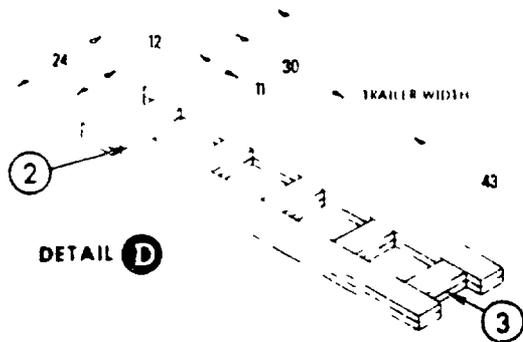
2 CONTAINERS ARE HANDLED AND POSITIONED INTO VAN TYPE TRAILERS WITH TWO(2) MK 40 MOD 0 HAND LIFT TRUCKS (SEE BELOW) OR A COMBINATION OF HAND LIFT TRUCKS AND FORK LIFT TRUCKS

HANDLIFT TRUCK MK 40 MOD0



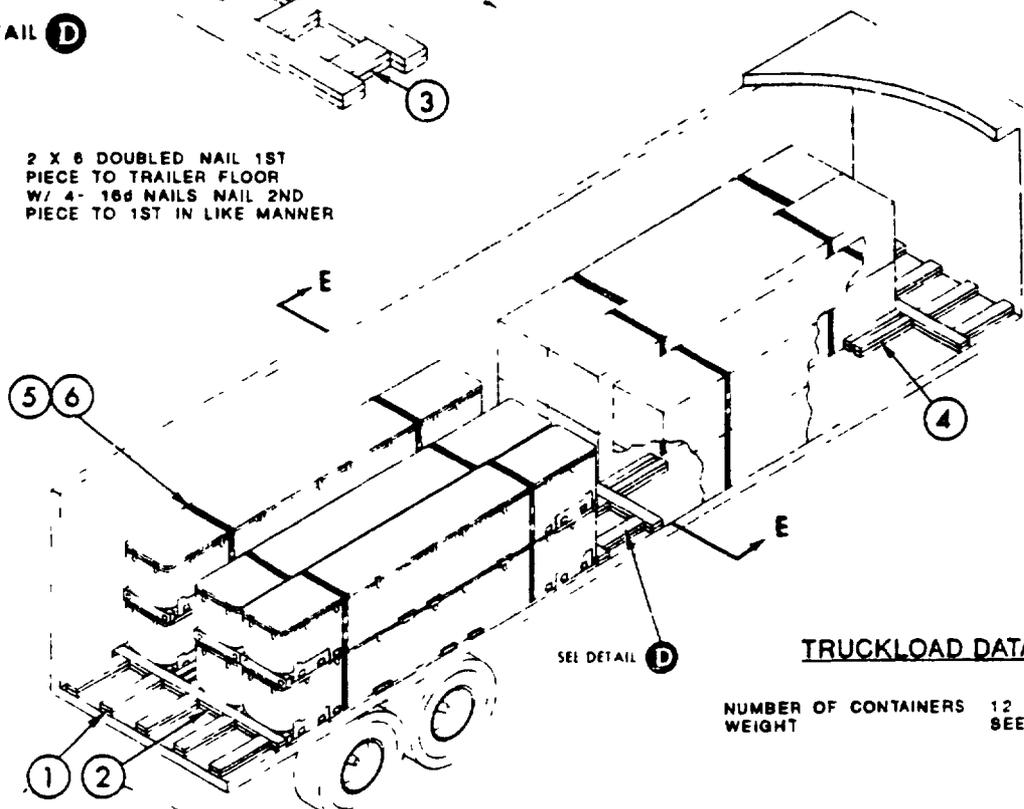
## WARNING

TO AVOID TOPPLING SPECIAL CARE SHOULD BE TAKEN WHEN MOVING STACKS OF CONTAINERS BY HAND LIFT TRUCK ESPECIALLY WHEN THE SURFACE IN THE DIRECTION OF THE MOVE IS UNEVEN OR NOT LEVEL THE UNITIZING OF CONTAINERS IS AUTHORIZED AS PART OF THE TRUCKLOADING PROCEDURE ONLY UNITIZING FACILITATES HANDLING IN LOADING AND UNLOADING THE VAN AND MOVEMENT OF UNITIZED CONTAINERS SHOULD BE LIMITED TO THAT NECESSARY TO LOAD OR UNLOAD THE VAN



DETAIL **D**

2 X 6 DOUBLED NAIL 1ST  
PIECE TO TRAILER FLOOR  
W/ 4- 16d NAILS NAIL 2ND  
PIECE TO 1ST IN LIKE MANNER



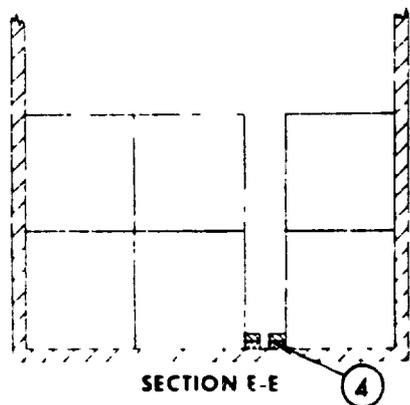
**TRUCKLOAD DATA**

NUMBER OF CONTAINERS 12  
WEIGHT SEE TABLE III

2 X 6 DOUBLED NAIL 1ST PC  
TO TRAILER FLOOR W/6 16d  
NAILS NAIL 2ND PC TO 1ST  
IN LIKE MANNER

2 X 6 DOUBLED NAIL 1ST  
PIECE TO TRAILER FLOOR  
W/1- 16d NAIL EVERY 8  
INCHES NAIL 2ND PIECE  
TO 1ST IN LIKE MANNER

**FTL-40 FT TRAILER (VAN TYPE)**



SECTION E-E

2 X 4 DOUBLED NAIL 1ST  
PIECE TO TRAILER FLOOR  
W/8- 16d NAILS NAIL 2ND  
PIECE TO 1ST IN LIKE MANNER

TW<sup>B</sup> - TRAILER WIDTH

24	6	SEAL		FOR 1 1/4 STRAP
12	5	STRAP		1 1/4 X 0.35 X 17 FT 0
16	4	SI FFPR	SEE SECTION E E	2 X 4 X 30
10	3	CLEAT	SEE DETAIL D	2 X 6 X 12
8	2	CROSSMEMBER	SEE FIELD NOTE	2 X 6 X TW <sup>B</sup> -1
20	1	END CLEAT	SEE FIELD NOTE	2 X 6 X 30
REQ'D	ITEM	DESCRIPTION	MAT'L/DWG	DIMENSIONS

**LIST OF MATERIALS**

MIL-STD-1320-17A(NAVY)

LTL 40 FT TRAILER (VAN TYPE)

1 WHEN REQUIRED TO SHIP LESS THAN TRUCKLOAD BY VAN  
 SELECT THE CORRECT LOAD PATTERN FOR THE NUMBER OF  
 CONTAINERS TO BE SHIPPED FROM TABLE IV POSITION  
 THE CONTAINERS IN THE TRAILER ACCORDINGLY AND  
 BLOCK AND BRACE USING THE PRINCIPLES OF THE FIG  
 ON PAGE 7

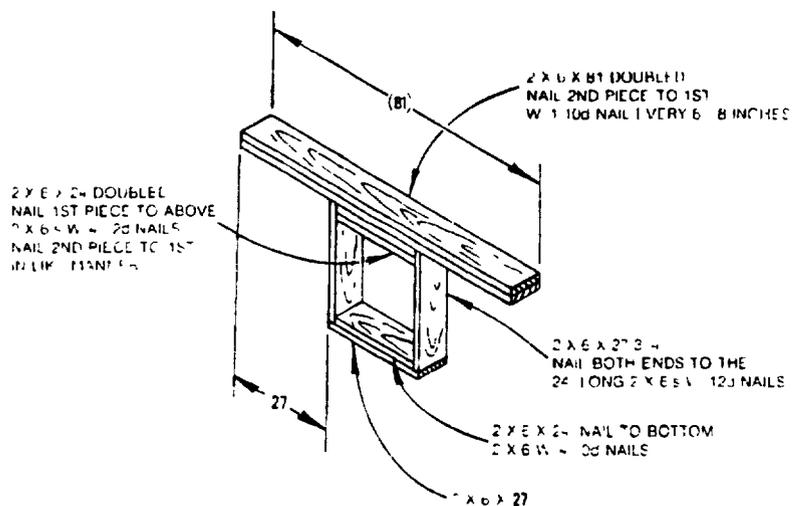
TABLE IV

NUMBER OF CONTAINERS	LOAD PATTERN	FWD	NUMBER OF CONTAINERS	LOAD PATTERN	FWD
11		2	5		1
10		2	4		1
9		2	3		1
6		2	2		1
7		2	1		1
6		1			

LOAD PATTERN SHOWS FLOOR PLAN FOR TRAILER NUMBER INDICATES THE NUMBER OF CONTAINERS IN A LAYER

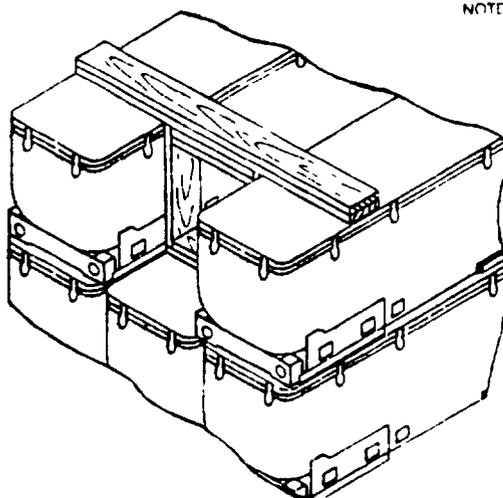
DETAIL **F**

ALTERNATE FILLER ASSEMBLY



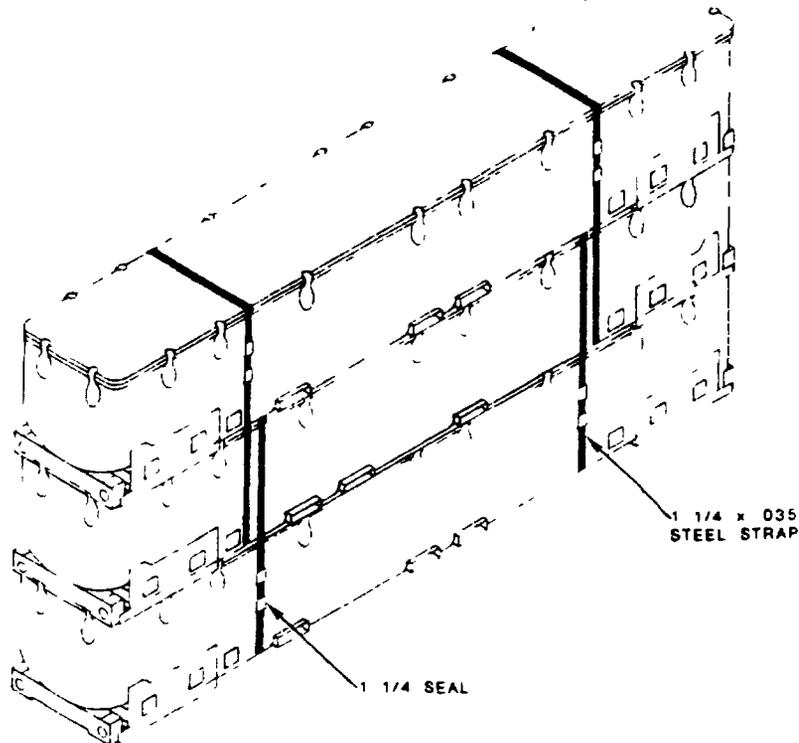
NOTE

FILLER ASSEMBLY SHALL BE POSITIONED SUCH THAT THE SPACER BOARDS DO NOT TOUCH THE CONTAINER LATCHES



MIL-STD-1320-17A(NAVY)

## UNITIZING &amp; HANDLING PROCEDURE



## CONTAINER UNITIZING PROCEDURE

- 1 PLACE TWO OR MORE PIECES OF LUMBER CROSSWISE ON FLOOR OR GROUND NEXT TO CONTAINER
- 2 USING FORK LIFT TRUCK OR AN APPROPRIATE HOISTING DEVICE EQUIPPED WITH A MA 77 MOD 3 HOISTING SLING STACK CONTAINERS ON THE LUMBER PIECES
- 3 BE CERTAIN THAT THE NESTING FEATURES AND BEARING SURFACES ARE PROPERLY POSITIONED TO PREVENT SHIFTING IN LATERAL AND LONGITUDINAL DIRECTIONS
- 4 SECURE BOTTOM CONTAINER TO CENTER CONTAINER WITH TWO STRAPS POSITIONED AS SHOWN ABOVE
- 5 SEAL WITH TWO SEALS PER STRAP AND DOUBLE CRIMP
- 6 REPEAT THIS OPERATION TO SECURE CENTER CONTAINER TO TOP CONTAINER

## CONTAINER HANDLING PROCEDURE

- 1 CONTAINERS ARE HANDLED AND POSITIONED ON FLATBED TRAILERS WITH A SUITABLE HOISTING DEVICE EQUIPPED WITH A MA 77 MOD 3 SLING OR PLACED IN POSITION WITH A FORK LIFT TRUCK
- 2 SEE PAGE 6 FOR HANDLING PROCEDURE IN VANS

## WARNING

TO AVOID TOPPLING SPECIAL CARE SHOULD BE TAKEN WHEN MOVING STACKS OF CONTAINER. THE UNITIZING OF THE CONTAINERS IS AUTHORIZED A PART OF THE TRUCKLOADING PROCEDURE ONLY. UNITIZING IS TO ENSURE CONTINUOUS ENGAGEMENT OF THE STACKING FEATURE. AND MOVEMENT OF UNLITTED CONTAINERS SHOULD BE LIMITED TO THAT NECESSARY TO LOAD OR UNLOAD THE TRAILER.

PREPARING ACTIVITY  
NAVY 05  
PROJECT NO 0140 N7061

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL		OMB Approval No 22-R255
<p><b>INSTRUCTIONS</b> The purpose of this form is to solicit beneficial comments which will help achieve procurement of suitable products at reasonable cost and minimum delay or will otherwise enhance use of the document. DoD contractors, government activities, or manufacturers/vendors who are prospective suppliers of the product are invited to submit comments to the government. Fold on lines on reverse side, staple in corner, and send to preparing activity. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements. Attach any pertinent data which may be of use in improving this document. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity.</p>		
<p><b>DOCUMENT IDENTIFIER AND TITLE</b> MIL STD-1320-17A, TERRIER MISSILE &amp; STANDARD MISSILE IN MK 199 0/1 CONTR.</p>		
<p><b>NAME OF ORGANIZATION AND ADDRESS</b></p>		<p><b>CONTRACT NUMBER</b></p>
		<p><b>MATERIAL PROCURED UNDER A</b> <input type="checkbox"/> DIRECT GOVERNMENT CONTRACT <input type="checkbox"/> SUBCONTRACT</p>
<p><b>1 HAS ANY PART OF THE DOCUMENT CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?</b> A. GIVE PARAGRAPH NUMBER AND WORDING</p> <p>B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES</p>		
<p><b>2 COMMENTS ON ANY DOCUMENT REQUIREMENT CONSIDERED TOO RIGID</b></p>		
<p><b>3 IS THE DOCUMENT RESTRICTIVE?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO (If "Yes", in what way?)</p>		
<p><b>4 REMARKS</b></p>		
<p><b>SUBMITTED BY</b> (Printed or typed name and address - Optional)</p>		<p><b>TELEPHONE NO</b></p>
		<p><b>DATE</b></p>

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1 JAN 72

REPLACES EDITION OF 1 JAN 66 WHICH MAY BE USED

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