

NOTICE OF  
VALIDATION

INCH POUND

MIL-STD-1320/165(OS)

NOTICE 2

30 SEPTEMBER 1988

MILITARY SPECIFICATION

TRUCKLOADING OF HAZARDOUS MATERIALS  
GUIDED MISSILE, AGM-45 OR 45B (SHRIKE)  
IN CONTAINER CNU-167/E FLEET ISSUE UNIT LOAD

MIL-STD-1320/165(OS) dated 20 JAN.1976, has been reviewed and determined to be valid for use in acquisition.

Preparing Activity:  
Navy - OS

AMSC N/A

FSC 8140

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MIL-STD-1320-165 (NAVY)  
NOTICE 1  
20 January 1976

MILITARY STANDARD  
TRUCKLOADING OF HAZARDOUS MATERIALS  
GUIDED MISSILE, AGM-45A OR 45B (SHRIKE)  
IN CONTAINER CNU-167/E  
FLEET ISSUE UNIT LOAD

TO ALL HOLDERS OF MIL-STD-1320-165 (NAVY)

PAGE 1

1. IN UNIT LOAD DATA, CHANGE DIMENSION "L-----104 1/4"  
to "L-----140 13/16"

Review Activities:  
NAVY - OS, AS

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NAVY - OS  
(Project No. 8140-N326)

FSC 8140

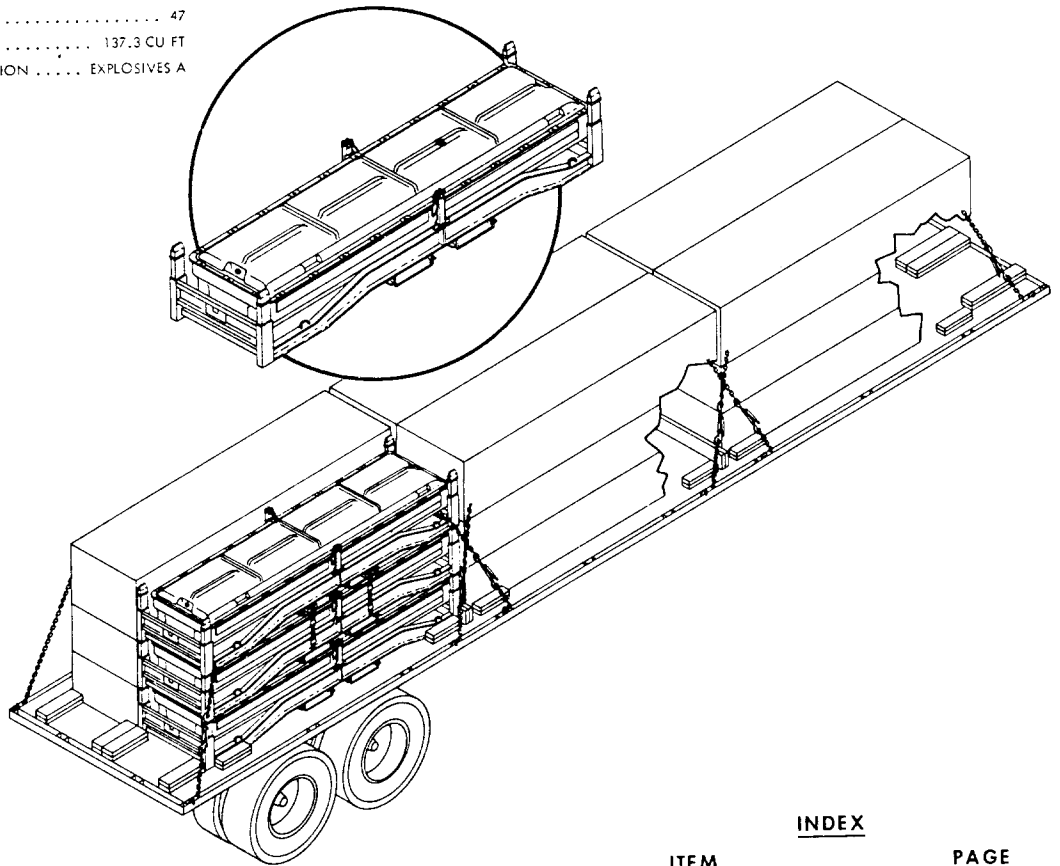
**MILITARY STANDARD**  
**TRUCKLOADING OF HAZARDOUS MATERIALS**  
**GUIDED MISSILE, AGM-45 OR 45B (SHRIKE)**  
**IN CONTAINER CNU-167/E**  
**FLEET ISSUE UNIT LOAD**

**MIL-STD-1320-165**  
**(NAVY)**

30 SEPTEMBER 1975

**UNIT LOAD DATA**

UNIT LOAD DRAWING ..... WR-54 280  
 DIMENSIONS:  
     LENGTH ..... 104 1/4  
     WIDTH ..... 36  
     HEIGHT ..... 47  
 CUBE ..... 137.3 CU FT  
 DOT HAZARD CLASSIFICATION ..... EXPLOSIVES A



- NOTES:  
 1. UNLESS OTHERWISE SPECIFIED ARE IN INCHES.  
 2. FOR CROSS REFERENCE TO ASSOCIATED PALLETIZING, CONTAINER-LOADING AND CARLOADING MILITARY STANDARDS. REFER TO INDEX TO STANDARDS, MIL-HDBK-236.

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**FSC 8140**

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 ONLY**

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 N A D EARLE, NEW JERSEY

## GENERAL NOTES

1. THIS DOCUMENT GIVES DETAILED INSTRUCTIONS FOR TRUCKLOADING THE GUIDED MISSILES AGM-45A OR 45B (SHRIKE) IN THE CNU-167'E CONTAINER.
2. PROCEDURES AND PRACTICES DESCRIBED HEREIN ARE INTENDED FOR 40 FT FLATBED TRAILERS WITH THE TRAILERS TANDEM AXLES LOCATED IN THE "WESTERN POSITION" (AT THE EXTREME REAR OF THE TRAILER). DO NOT USE TRAILERS WITH METAL FLOORS.
3. THE CONTAINERS ARE UNITIZED FORMING THE FLEET ISSUE UNIT LOAD WR-54/280.
4. TO INCREASE THE TOTAL NUMBER OF CONTAINERS IN A TRUCKLOAD ONE ADDITIONAL CONTAINER IS STRAPPED TO THE FLEET ISSUE UNIT LOAD, AS DESCRIBED ON PAGE 7.

### NOTE

WHEN THE TRUCK TRANSPORTATION CYCLE IS COMPLETED, THE TOP CONTAINER IS REMOVED BY CUTTING THE TOP STRAPPING. THE LOOSE CONTAINERS SHALL BE UNITIZED PER WR-54/280 FORMING A FLEET ISSUE UNIT LOAD.

5. ONLY CHAINS AND LOAD BINDERS SHALL BE USED TO SECURE THE CONTAINERS TO THE TRAILER AND THEY SHALL MEET THE FOLLOWING CONDITIONS:
  - (a) CHAIN AND FITTINGS SHALL BE 3/8 INCH AND LOAD BINDERS 3/8 INCH CAPACITY.
  - (b) CHAINS, FITTINGS AND LOAD BINDERS SHALL HAVE A MINIMUM SAFE WORKING LOAD OF 5000 LBS.
  - (c) LOAD BINDERS SHALL BE SAFETY WIRED WITH 16 GAUGE SOFT ANNEALED IRON WIRE OR SECURED USING THE END PIECE OF THE 3/8 CHAIN.
6. PRIOR TO LOADING THE TRAILER AND DURING THE PRELOADING INSPECTION REQUIRED BY NAVORD 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 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.
7. 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.
8. AFTER BLOCKING AND BRACING HAS BEEN INSPECTED, ATTACH SHIPPING DOCUMENTS TO AN ACCESSIBLE AREA AND ATTACH "EXPLOSIVES A" PLACARD TO BOTH SIDES, FRONT AND BACK OF TRAILER.
9. APPLICABLE MATERIAL SPECIFICATIONS: DUNNAGE LUMBER, M/M-L-751; NAILS, FF-N-105, TYPE II, STYLE 10, COMMON BRIGHT.
10. FOR GENERAL TRUCKLOADING PROCEDURES REFER TO THE GENERAL TRUCKLOADING DOCUMENT, MIL-STD-1320.

## FTL 40 FT TRAILER (FLATBED)

1. A FULL TRUCK LOAD OF MISSILES CONSISTS OF 18 CONTAINERS (9 UNIT LOADS). BLOCK AND TIE-DOWN AS SHOWN ON PAGE 3.

TABLE I

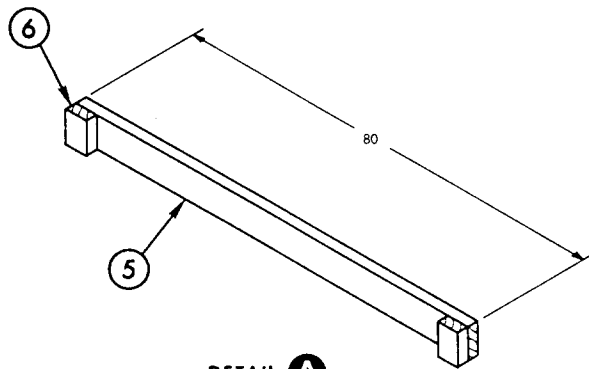
MISSILE	UNIT LOAD WT. (LBS) APPROX.	TRUCKLOAD WT. (LBS) APPROX.
AGM-45A1 TO A4	3450*	31,050*
AGM-45A6	3540*	31,860*
AGM-45A7	3552*	31,963*
AGM-45B3 TO B4	3501	31,509
AGM-45B6	3591	32,319
AGM-45B7	3603	32,421

\* AVERAGE WEIGHT

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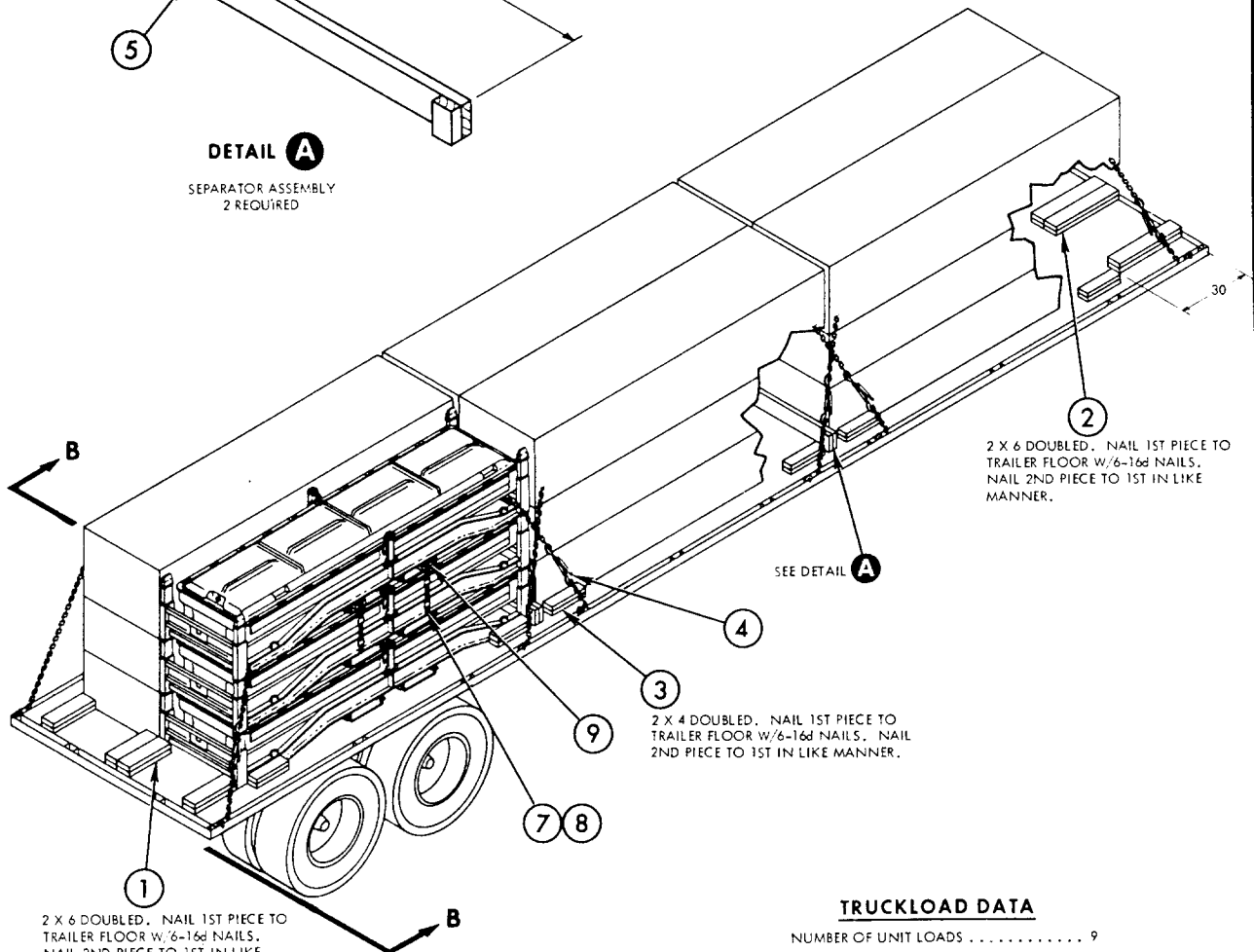
**NOTE**

UNIT LOAD STRAPS  
OMITTED FOR CLARITY.



**DETAIL A**

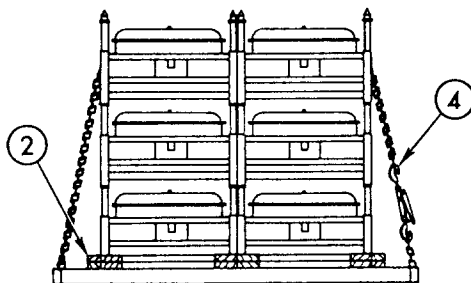
SEPARATOR ASSEMBLY  
2 REQUIRED



**TRUCKLOAD DATA**

NUMBER OF UNIT LOADS ..... 9  
WEIGHT ..... SEE TABLE I

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



VIEW B-B

9	BATTEN	2 x 4 x 35 1/2	12	-	-	-
8	SEAL	FOR 1 1/4 STRAP	12	-	-	-
7	STRAP	1 1/4 x .035 x 12 FT	12	-	-	-
6	CLEAT	2 x 4 x 5 1/2	4	5	3	12d
5	CROSSMEMBER	2 x 6 x 80	2	SEE 6	-	-
4	CHAIN & LOADBINDER	3/8 CAPACITY	6	-	-	-
3	SLEEPER	2 x 4 x 16	24	SEE FIELD NOTE		
2	FWD BACKUP CLEAT	2 x 6 x 30	8	SEE FIELD NOTE		
1	AFT BACKUP CLEAT	2 x 6 x 20	8	SEE FIELD NOTE		
PIECE NO.	DESCRIPTION	SIZE	NO. PCS REQD	NAIL TO	NUMBER	SIZE
					NAILS	

LIST OF MATERIALS AND NAILING DATA

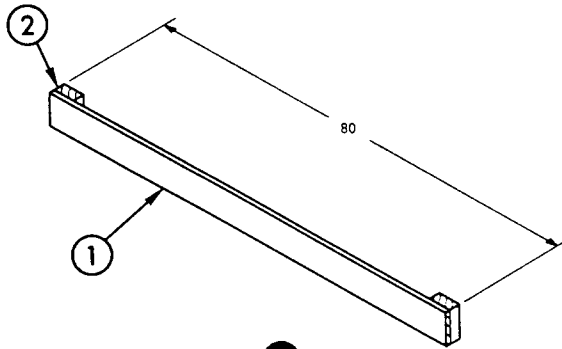
## LTL 40 FT TRAILER (FLATBED)

1. WHEN REQUIRED TO SHIP LESS-THAN-TRUCKLOAD, SELECT THE CORRECT LOAD PATTERN FOR THE NUMBER OF UNIT LOADS TO BE SHIPPED FROM TABLE II AND POSITION THE UNIT LOADS ON THE TRAILER ACCORDINGLY.
2. WHEN BLOCKING THE FRONT AND REAR OF 5 UNIT LOADS OR LESS USE 2 X 6 X 30 INCH BACK UP CLEATS.
3. WHEN THE LOAD PLAN REQUIRES THE STACK TO BE 1.5 UNIT LOADS HIGH (THREE CONTAINERS HIGH). THEY SHALL BE STRAPPED TOGETHER AS SHOWN ON PAGE 7.
4. THE LTL SHOWN ON PAGE 5 IS FOR 5 UNIT LOADS AND THE LTL LOAD SHOWN ON PAGE 6 IS FOR 3 UNIT LOADS. THIS DOES NOT LIMIT LTL SHIPMENTS TO THIS QUANTITY. SHIPMENTS MAY CONSIST OF A GREATER OR LESSER NUMBER OF UNIT LOADS.
5. ACTUAL SHIPPING REQUIREMENTS WILL DETERMINE THE NUMBER OF UNIT LOADS TO BE SHIPPED. THE LOAD PATTERN, BLOCKING, BRACING AND TIE DOWNS SHALL BE IN ACCORDANCE WITH THE APPROPRIATE PARTS OF THIS MILITARY STANDARD AND THE GENERAL TRUCKLOADING DOCUMENT, MIL-STD-1320 (NAVY).

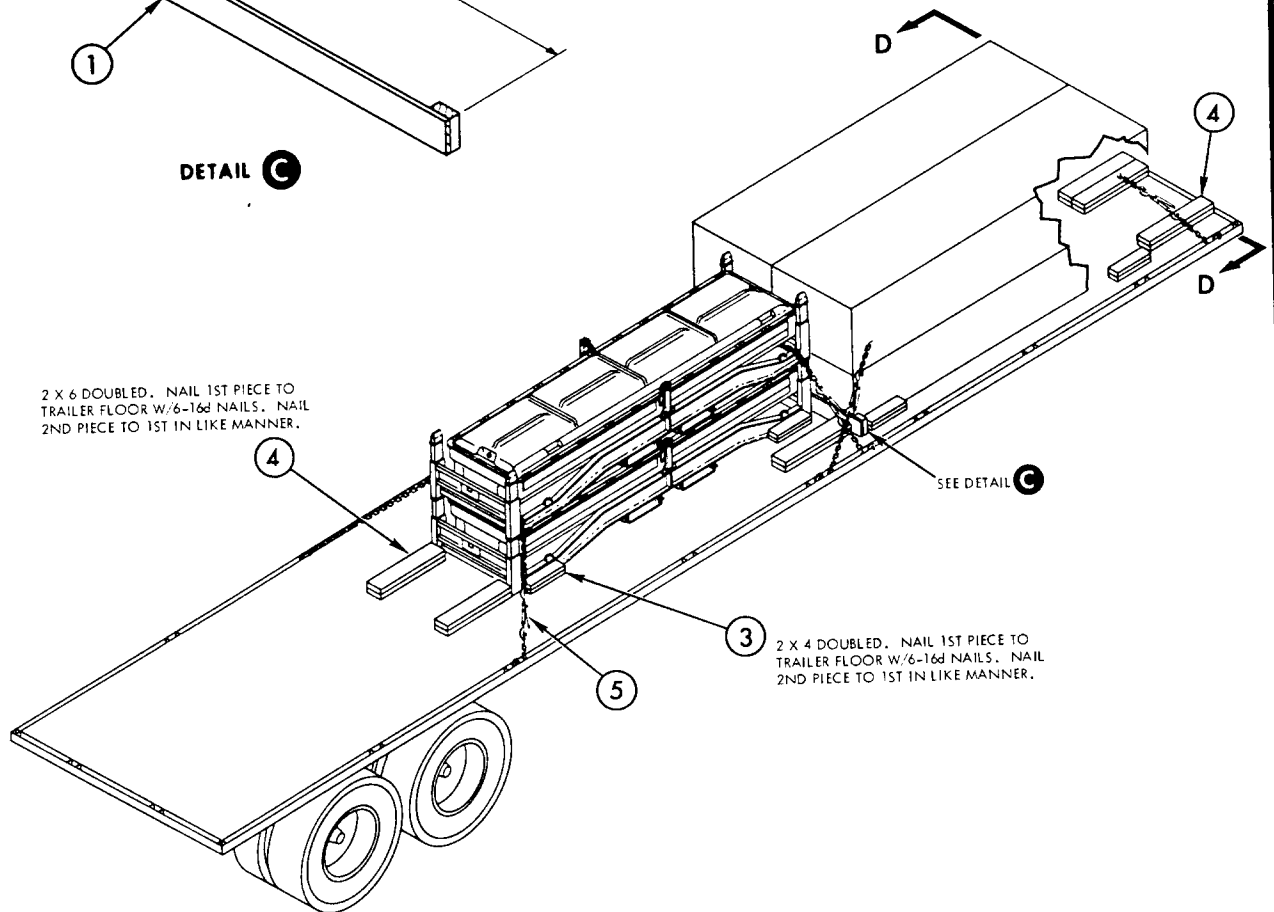
**TABLE II**  
LOAD PATTERN\*

NO. OF UNIT LOADS		FWD	NO. OF UNIT LOADS		FWD
8			4		
7			3		
6			2		
5			1		

\* LOAD PATTERN IS THE FLOOR PLAN FOR THE LOAD. THE NUMBER IN THE BLOCKS IS THE NUMBER OF LAYERS OF UNIT LOADS IN THE STACK. THE NUMBER 1.5 INDICATES THAT THE STACK IS 1.5 UNIT LOADS HIGH (OR THREE CONTAINERS HIGH. SEE GENERAL NOTE 4, AND **NOTE**, PAGE 2).



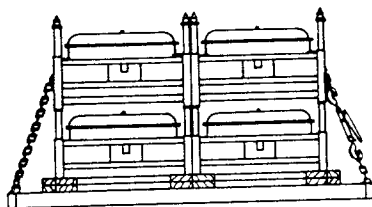
DETAIL C



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

SEE DETAIL C

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



VIEW D-D

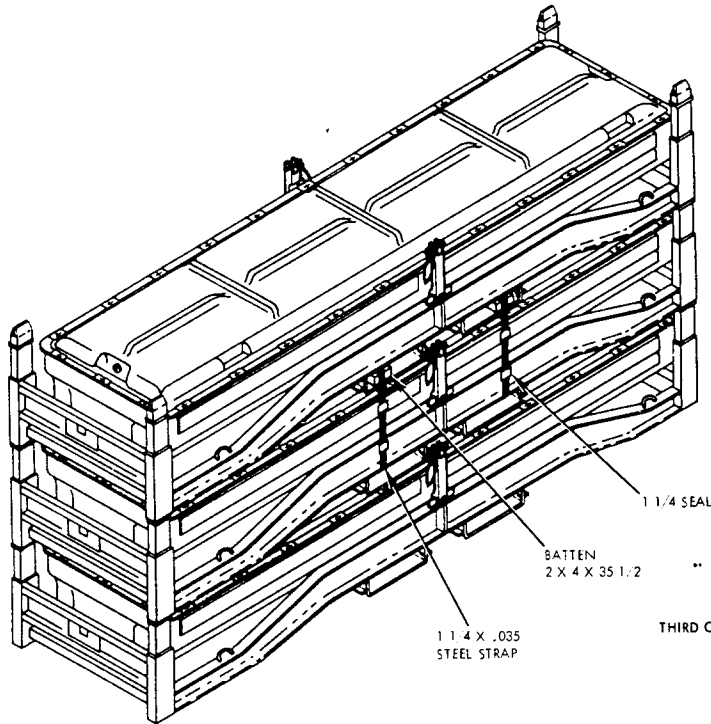
PIECE NO.	DESCRIPTION	SIZE	NO. PCS REQD	NAIL TO	NUMBER NAILS	SIZE
5	CHAIN & LOADBINDER	3/8 INCH	4	-	-	-
4	BACKUP CLEATS	2 x 6 x 30	16	SEE FIELD NOTE		
3	SLEEPER	2 x 4 x 18	16	SEE FIELD NOTE		
2	CLEAT	2 x 4 x 5 1/2	2	-	-	-
1	CROSSMEMBER	1 x 6 x 80	1	2	3	10d

LIST OF MATERIALS AND NAILING DATA

MIL-STD-1320-165 (NAVY)

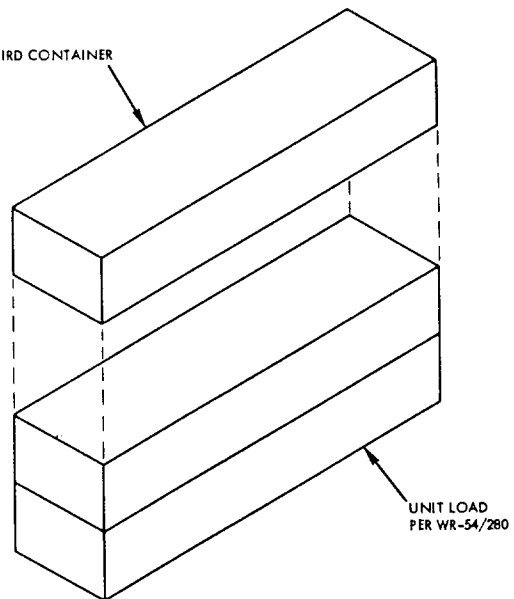
## STACKING AND STRAPPING PROCEDURE

1. POSITION A THIRD CONTAINER ON TOP OF THE UNIT LOAD AS SHOWN IN DETAIL E. MAKE CERTAIN THE SUPPORT POSTS ARE PROPERLY ENGAGED
2. POSITION STRAPPING THROUGH THE FORK POCKETS OF THE TOP CONTAINER OF THE UNIT LOAD AND THROUGH THE FORK POCKETS OF THE MIDDLE CONTAINER.
3. TENSION STRAPPING AND DOUBLE NOTCH SEALS.



### NOTE

UNIT LOAD STRAPS  
OMITTED FOR CLARITY



### DETAIL E

REVIEW ACTIVITIES:  
NAVY - OS, AS

PREPARING ACTIVITY:  
NAVY - OS  
(PROJECT NO. 8140-N300)