

MILITARY STANDARD  
TRUCKLOADING

HARPOON Missile  
RGM-84A-2 (TARTAR) or  
RGM-84A-2 (CAP/CAN)  
in Container Mk 632 Mod 0

TO ALL HOLDERS OF MIL-STD-1320-197 (NAVY)

Page 1.

1. In title, "RGM-84A-2 (CAP/CAN)" delete "-2" and substitute "-3."

Page 2.

1. In General Note 1, "RGM-84A-2 (CAP/CAN) delete "-2" and substitute "-3."

Page 6.

1. Add to **WARNING** "When loading/unloading trailers with unitized containers, extra caution should be taken to prevent toppling. Special attention should be given to appropriate backup of outboard containers. Containers shall be deunitized after unloading the vehicle."

Review Activity:

NAVY - OS

Preparing Activity:

NAVY - OS  
(Project No. 8140-N445)

FSC 8140

# MILITARY STANDARD

MIL-STD-1320-197  
(NAVY)

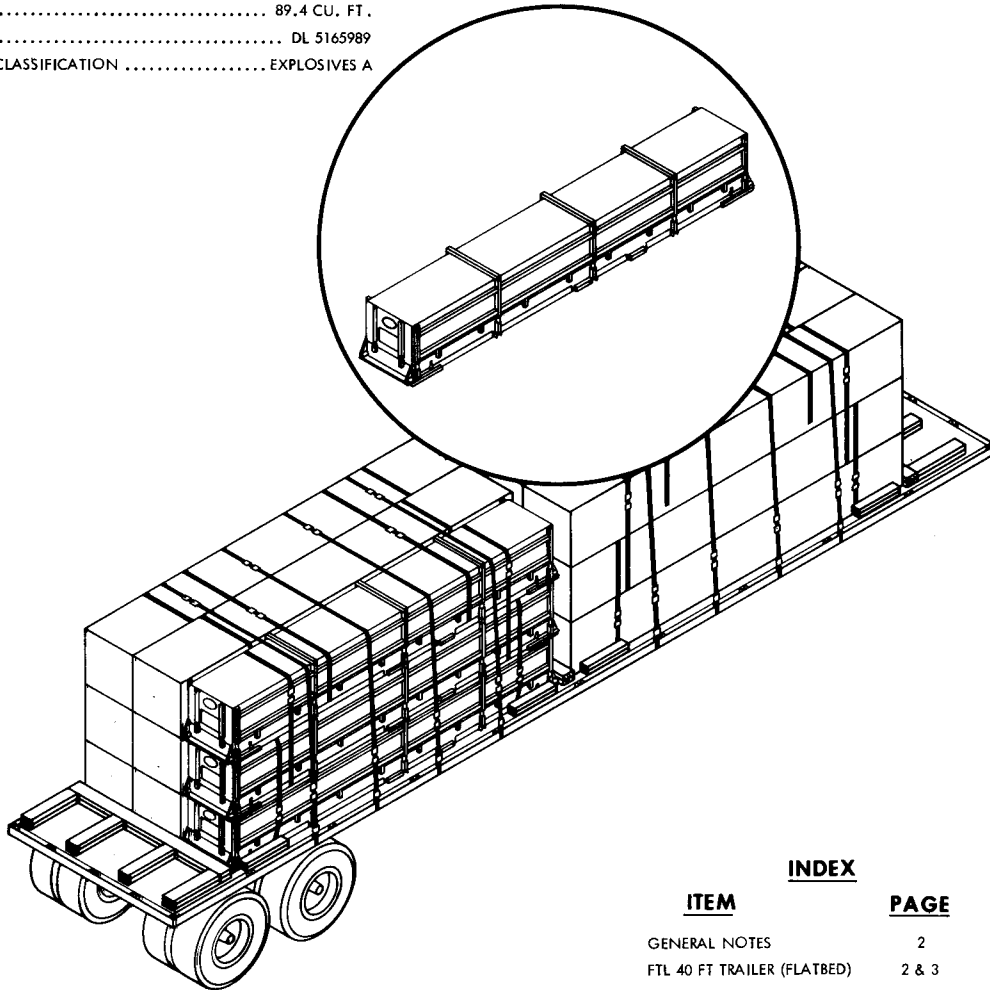
1 MAY 1978

## TRUCKLOADING HARPOON MISSILE RGM-84A-2 (TARTAR) OR RGM-84A-3 (CAP/CAN) IN CONTAINER MK 632 MOD 0



### CONTAINER DATA

DIMENSIONS ..... 193 1/2 L X 28 W X 28 1/2 H  
GROSS WT. (APPROX.) ..... 2200 LBS.  
TARE WT. (APPROX.) ..... 700 LBS.  
CUBE ..... 89.4 CU. FT.  
DWG NO. .... DL 5165989  
DOT HAZARD CLASSIFICATION ..... EXPLOSIVES A



**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).

### INDEX

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*[Signature]* 4/17/78  
TECHNICAL DIRECTION AGENT (TDA) DATE  
*[Signature]* 4/16/78  
SEA SYSCOM, BY DIRECTION DATE

ORIGINATOR *[Signature]* 10 APRIL 1978 DATE  
NAVAL WEAPONS HANDLING CENTER  
WPNSTA EARLE, NEW JERSEY  
PAGE 1 OF 6

## GENERAL NOTES

1. THIS DOCUMENT PROVIDES DETAILED INSTRUCTIONS FOR TRUCKLOADING THE HARPOON MISSILE RGM-84A-2 (TARTAR) OR RGM-84A-1 (CAP/CAN) IN CONTAINER MK 632 MOD 0.
2. THE PROCEDURES AND PRACTICES DESCRIBED HEREIN ARE INTENDED FOR 40 FT. FLATBED TRAILERS. THE TRAILER AXLES SHALL BE LOCATED IN THE "WESTERN" POSITION (AT THE EXTREME REAR OF THE TRAILER). DO NOT USE TRAILERS WITH METAL FLOORS.
3. WHEN CONTAINERS ARE TWO OR THREE HIGH, THEY SHALL BE UNITIZED AS SHOWN ON PAGE 6.

### WARNING

TO AVOID TOPPLING, SPECIAL CARE SHOULD BE TAKEN WHEN MOVING UNITIZED CONTAINERS. THE UNITIZING OF CONTAINERS IS AUTHORIZED AS PART OF THE TRUCKLOADING PROCEDURE ONLY. UNITIZING IS TO ENSURE CONTINUOUS ENGAGEMENT OF THE STACKING FEATURES AND MOVEMENT OF UNITIZED CONTAINERS SHOULD BE LIMITED TO THAT NECESSARY TO LOAD OR UNLOAD THE TRAILER.

4. EACH STACK OF TWO OR THREE HIGH CONTAINERS IS SECURED TOGETHER WITH TWO 1 1/4 X .035 CROSS STRAPS. THE STRAPS PASS OVER THE COVERS OF THE CONTAINERS IN THE TOP LAYER AND RETURN PASSING UNDER THE BOTTOMS OF THE SAME CONTAINERS, BINDING THE TOP LAYER TOGETHER. TENSION STRAPS AND SEAL WITH TWO 1 1/4 SEALS DOUBLE CRIMPED OR ONE 1 1/4 SEAL DOUBLE NOTCHED.
5. CHAINS AND STEEL STRAPS MAY BE USED INTERCHANGEABLY ON A ONE TO ONE BASIS FOR TIEDOWNS.
6. CHAINS, FITTINGS AND LOADBINDERS SHALL MEET THE REQUIREMENTS OF THE BASIC TRUCKLOADING DOCUMENT MIL-STD-1320 (NAVY) AND APPLIED AS SHOWN ON PAGE 5 OF THIS DOCUMENT.
7. STEEL STRAP USED AS TIEDOWNS SHALL BE 2 X .050 AND SHALL CONFORM TO AND BE APPLIED AS SPECIFIED IN THE BASIC TRUCKLOADING DOCUMENT MIL-STD-1320 (NAVY) AND AS SHOWN ON PAGE 3 OF THIS DOCUMENT.
8. PRIOR TO LOADING THE TRAILER AND DURING THE PRELOADING INSPECTION REQUIRED BY OP 2165 AND REPORTED ON DD FORM 626, THE CHAINS, FITTINGS AND LOADBINDERS SHALL BE INSPECTED FOR STRETCH, GOUGING, BENT LINKS, WEAR AND ANY OTHER NOTICEABLE DEFECTS. THE INSPECTOR SHALL CONFIRM THAT THE CHAINS AND LOADBINDERS 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 LOADBINDER.
9. 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.
10. AFTER BLOCKING AND BRACING HAS BEEN INSPECTED, ATTACH SHIPPING DOCUMENTS TO DUNNAGE IN AN ACCESSIBLE AREA AND ATTACH "EXPLOSIVES A" PLACARD TO BOTH SIDES, FRONT AND BACK OF TRAILER.
11. APPLICABLE MATERIAL SPECIFICATIONS: DUNNAGE LUMBER, MM-L-751; NAILS, FF-N-105, TYPE II STYLE 10, COMMON BRIGHT; STRAPPING, QQ-S-781, TYPE I, HEAVY DUTY, FINISH A, B, OR C.
12. FOR GENERAL TRUCKLOADING PROCEDURES REFER TO THE GENERAL TRUCKLOADING DOCUMENT, MIL-STD-1320 (NAVY).

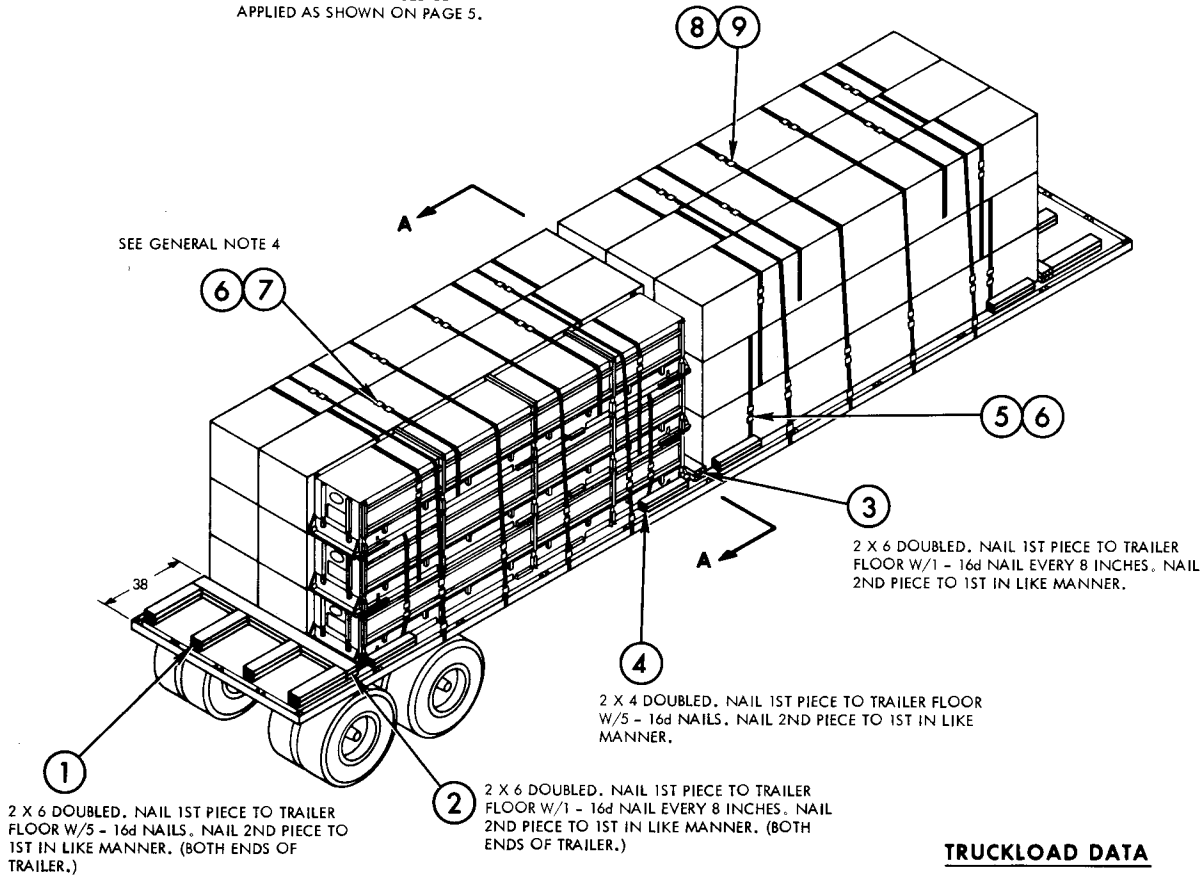
## FTL 40 FT. TRAILER (FLATBED)

1. A FULL TRUCKLOAD FOR A 40 FT. FLATBED TRAILER CONSISTS OF 18 CONTAINERS.

**NOTE**

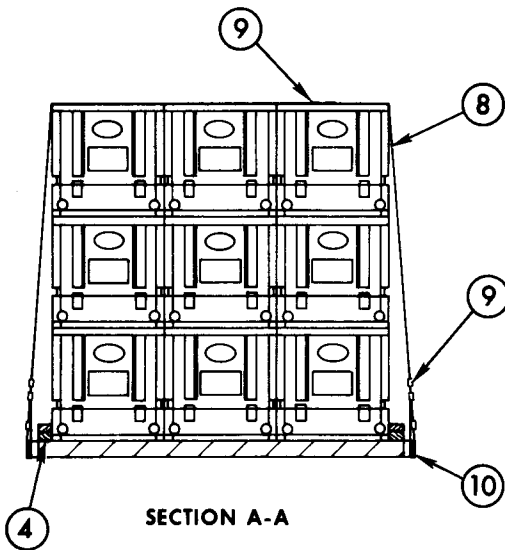
THIS FTL ILLUSTRATES THE USE OF 2 X .050 STRAPS AS TIEDOWNS. CHAINS ARE AN AUTHORIZED ALTERNATE AND SHOULD BE APPLIED AS SHOWN ON PAGE 5.

SEE GENERAL NOTE 4



**TRUCKLOAD DATA**

NUMBER OF UNITS ..... 18  
 WEIGHT (APPROX.) ..... 39,600 LBS.



10	STAKE POCKET PAD (STRAPPING)	2 X .050 X 24	16	-	-	-
9	SEAL	FOR 2 IN. STRAP	64	-	-	-
8	TIE DOWN STRAP	2 X .050 X 29 FT. 0	8	-	-	-
7	CROSS STRAP	1 1/4 X .035 X 20 FT. - 8 IN.	4	-	-	-
6	SEAL	FOR 1 1/4 STRAP	56	-	-	-
5	UNITIZING STRAP	1 1/4 X .035 X 16 FT. 0	24	SEE PAGE 6		
4	SLEEPER	2 X 4 X 24	16	SEE FIELD NOTE		
3	CROSS MEMBER	2 X 6 X 90	2	SEE FIELD NOTE		
2	CROSS MEMBER	2 X 6 X 90	4	SEE FIELD NOTE		
1	END CLEAT	2 X 6 X 28	16	SEE FIELD NOTE		
PIECE NO.	DESCRIPTION	SIZE	NO. OF PIECES REQ'D	NAIL TO	NUMBER	SIZE
					NAILS	

LIST OF MATERIALS & NAILING DATA

# LTL 40 FT. TRAILER (FLATBED)

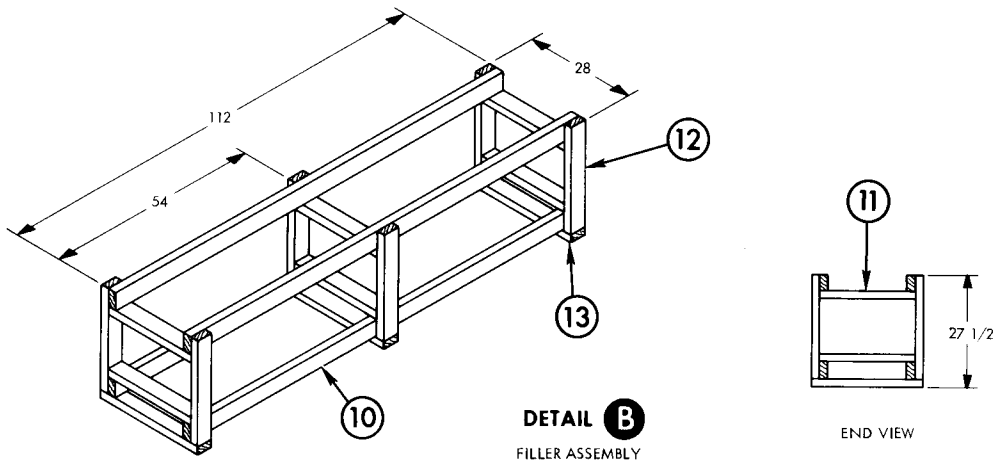
1. WHEN REQUIRED TO SHIP LESS-THAN-TRUCKLOAD, SELECT THE CORRECT LOAD PATTERN FOR THE NUMBER OF CONTAINERS TO BE SHIPPED FROM TABLE I AND POSITION CONTAINERS ON THE TRAILER ACCORDINGLY.

**TABLE I**  
LOAD PATTERN \*

NO. OF CONTAINERS	→ FWD	NO. OF CONTAINERS	→ FWD	NO. OF CONTAINERS	→ FWD
17		12		7	
16		11		6	
15		10		5	
14		9		4	
13		8		3	

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

- WHEN THE CENTER OF THE TOP LAYER OF A STACK DOES NOT HAVE A CONTAINER (SEE LOAD PLAN FOR 14 CONTAINERS), THE FILLER ASSEMBLY DETAIL B SHALL BE USED. SECURE THE ASSEMBLY TO THE TIEDOWNS TO PREVENT LONGITUDINAL MOVEMENT.
- ALL STACKS OF THREE HIGH CONTAINERS SHALL BE SECURED TO THE TRAILER WITH FOUR CHAINS (OR STRAPS), TWO HIGH STACKS SHALL BE SECURED WITH THREE CHAINS (OR STRAPS) AND ONE HIGH STACKS SHALL BE SECURED WITH TWO CHAINS (OR STRAPS).
- THE LTL SHOWN ON PAGE 5 IS FOR FOURTEEN CONTAINERS AND SHOWS THE CORRECT BLOCKING, BRACING AND TIEDOWNS FOR A TRUCKLOAD OF THIS QUANTITY.
- THE LTL PLAN SHOWN ON PAGE 5 DOES NOT LIMIT LTL SHIPMENTS TO THIS QUANTITY. ITS PRESENTATION IS INTENDED TO EXPLAIN THE CORRECT METHODS OF LOADING LTL SHIPMENTS.

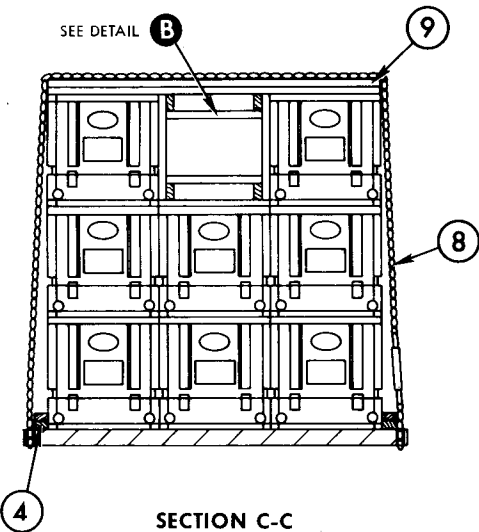
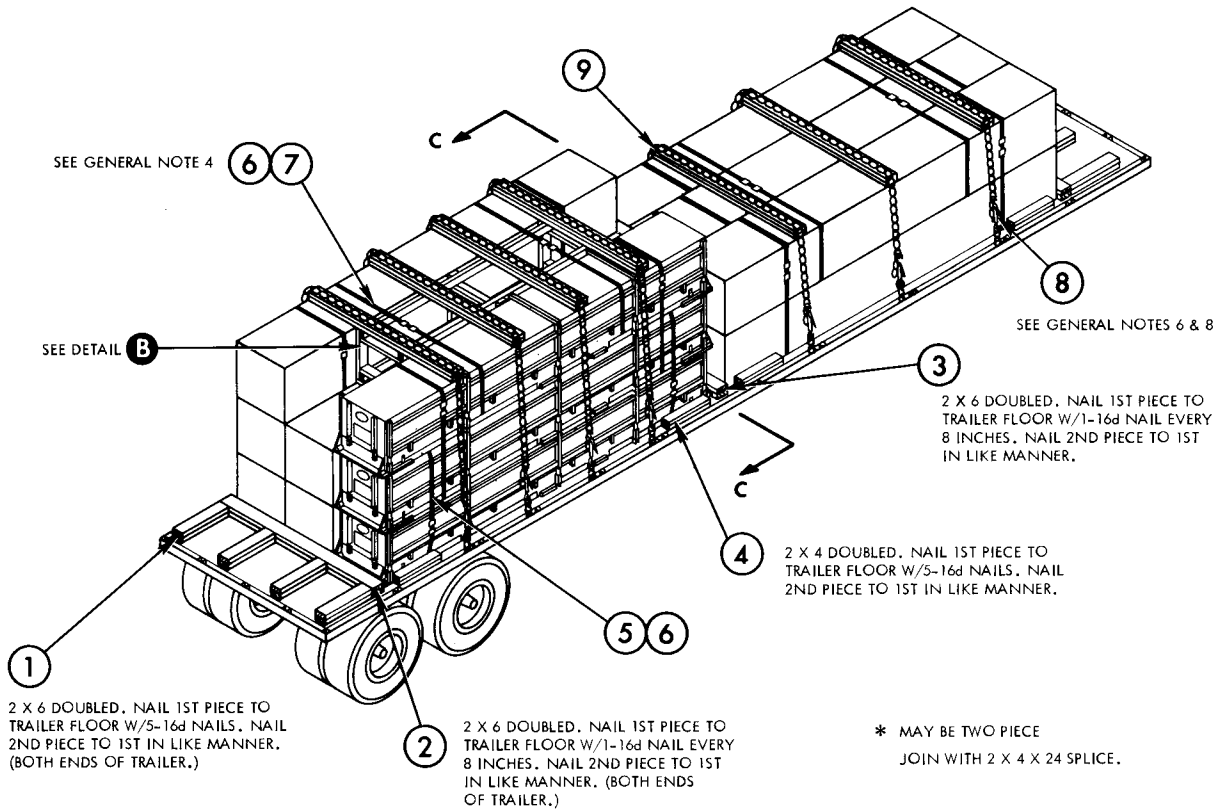


**DETAIL B**  
FILLER ASSEMBLY

END VIEW

**NOTE**

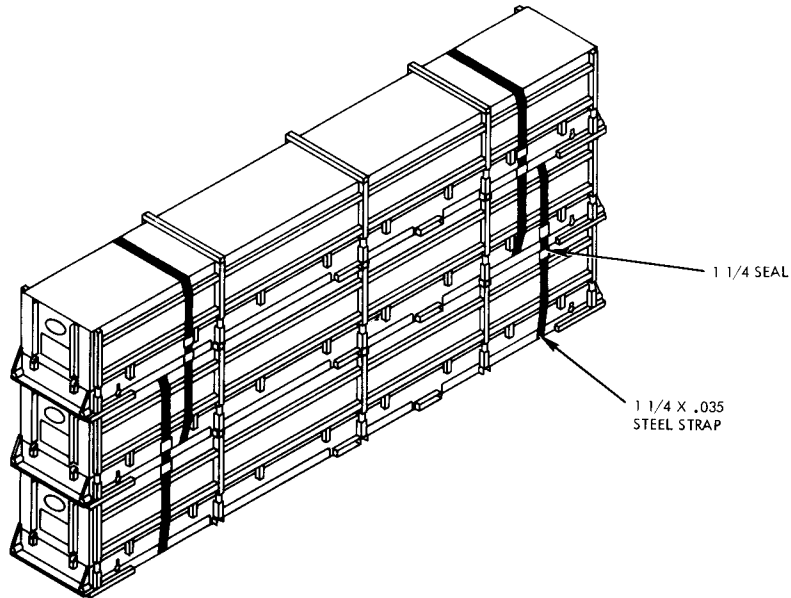
THIS LTL SHOWS THE PROPER APPLICATION OF CHAINS AND LOAD BINDERS, TWO INCH STRAP IS AN AUTHORIZED ALTERNATE AND SHOULD BE APPLIED AS SHOWN ON PAGE 3.



13	SUPPORT	2 X 4 X 28	3	10	2/JOINT	12d
12	VERTICAL	2 X 4 X 26	6	11	2/JOINT	16d
11	CROSS BRACE	2 X 4 X 25	6	10	2/JOINT	12d
10	HORIZONTAL PIECE	2 X 4 X 9 FT - 4*	4	12	2/JOINT	12d
9	PROTECTOR BOARD	2 X 6 X 82	14	DOUBLED & LAMINATED	2/FT	12d
8	CHAIN & LOAD BINDER	5/16 OR 3/8	7	-	-	-
7	CROSS STRAP	1 1/4 X .035 X 20 FT.	4	-	-	-
6	SEAL	FOR 1 1/4 STRAP	40	-	-	-
5	UNITIZING STRAP	1 1/4 X .035 X 16 FT.	16	SEE PAGE 6		
4	SLEEPER	2 X 4 X 24	16	SEE FIELD NOTE		
3	CROSSMEMBER	2 X 6 X 90	2	SEE FIELD NOTE		
2	CROSSMEMBER	2 X 6 X 90	4	SEE FIELD NOTE		
1	END CLEAT	2 X 6 X 28	16	SEE FIELD NOTE		
PIECE NO.	DESCRIPTION	SIZE	NO. OF PIECES REQ'D	NAIL TO	NUMBER	SIZE
					NAILS	

LIST OF MATERIALS & NAILING DATA

## UNITIZING AND HANDLING



### CONTAINER UNITIZING AND BANDING PROCEDURE:

1. PLACE TWO OR MORE PIECES OF LUMBER CROSSWISE ON FLOOR OR GROUND NEXT TO MISSILE CONTAINER.
2. USING FORKLIFT TRUCK OR AN APPROPRIATE HOISTING DEVICE EQUIPPED WITH MK 77 MOD 3 HOISTING SLING, STACK THREE CONTAINERS ON THE LUMBER PIECES.
3. BE CERTAIN THAT 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 INDICATED ABOVE.
5. SEAL EACH STRAP WITH TWO SEALS AND DOUBLE CRIMP.
6. REPEAT THIS OPERATION TO SECURE CENTER CONTAINER TO TOP CONTAINER.

### CONTAINER HANDLING PROCEDURE:

1. UNITIZED CONTAINERS MK 632 MOD 0 ARE HANDLED AND POSITIONED ON FLATBED TRAILERS WITH A SUITABLE FORKLIFT TRUCK. IF NECESSARY CONTAINERS CAN BE LOADED ONE AT A TIME USING AN APPROPRIATE HOISTING DEVICE EQUIPPED WITH MK 77 MOD 3 HOISTING SLING, AND UNITIZED IN POSITION. COMBINATIONS OF THESE PROCEDURES MAY BE REQUIRED.

### WARNING

TO AVOID TOPPLING, SPECIAL CARE SHOULD BE TAKEN WHEN MOVING STACKS OF CONTAINERS. THE UNITIZING OF THE CONTAINERS IS AUTHORIZED AS PART OF THE TRUCKLOADING PROCEDURE ONLY. UNITIZING IS TO ENSURE CONTINUOUS ENGAGEMENT OF THE STACKING FEATURES AND MOVEMENT OF UNITIZED CONTAINERS SHOULD BE LIMITED TO THAT NECESSARY TO LOAD OR UNLOAD THE FLATBED TRAILER.

**"When loading/unloading trailers with unitized containers, extra caution should be taken to prevent toppling. Special attention should be given to appropriate backup of outboard containers. Containers shall be deunitized after unloading the vehicle."**

REVIEW ACTIVITY:  
NAVY - OS

PREPARING ACTIVITY:  
NAVY - OS  
(PROJECT NO. 8140 - N358)