

# TRUCKLOAD SIDEWINDER MISSILE, AIM-9X IN CNU - 609/E & 609A/E CONTAINER

CONTAINER DATA

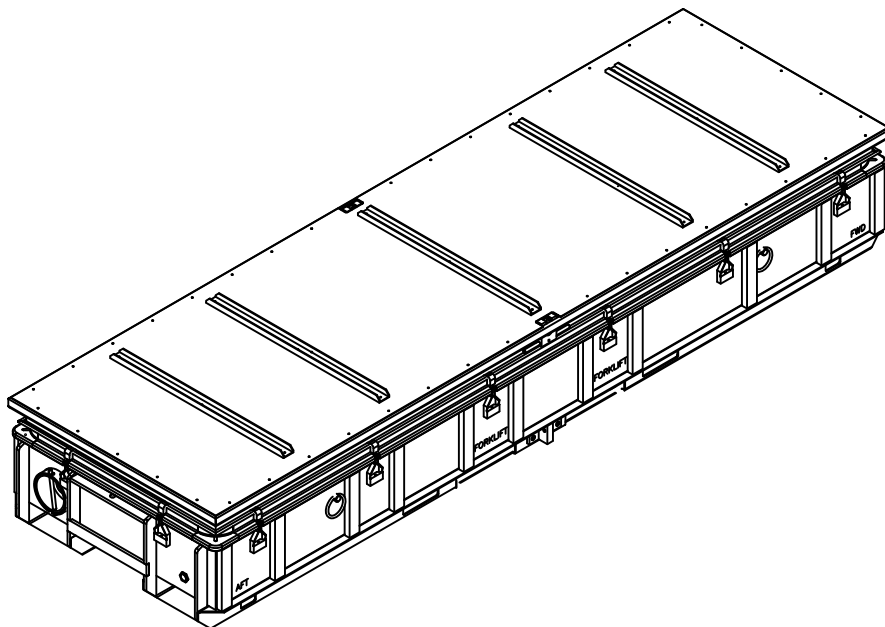
EMPTY WEIGHT OF CONTAINER (CNU-690/E) . . . 633 LB  
 EMPTY WEIGHT OF CONTAINER (CNU-690A/E) . . . 745 LB  
 GROSS WEIGHT OF ONE CONTAINER (CNU-690/E). 843 LB  
 GROSS WEIGHT OF ONE CONTAINER (CNU-690A/E) . 955 LB  
 GROSS WEIGHT OF UNIT LOAD (CNU-690/E) . . . 2949 LB  
 GROSS WEIGHT OF UNIT LOAD (CNU-690A/E) . . . 3173 LB

CONTAINER DIMENSIONS:

OVERALL DIMENSIONS . . . . . 138L x 42W x 23.75H  
 STACKING HEIGHT . . . . . 21.75  
 CUBE . . . . . 80 CU. FT.

UNIT LOAD DIMENSIONS

OVERALL DIMENSIONS . . . . . 138L x 42W x 45.5H  
 STACKING HEIGHT . . . . . 43.5  
 CUBE . . . . . 153 CU. FT.



1. DO NOT USE FOR SHIPPING WEIGHT.
2. WEIGHTS AND OVERALL UNIT LOAD DIMENSIONS ARE APPROXIMATE.
3. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.
4. SEE SW020-AC-SAF-010 FOR THE FOLLOWING INFORMATION:
  - A.) CROSS REFERENCE TO ASSOCIATED PALLETIZING, CONTAINER LOADING AND CAR LOADING MILITARY STANDARDS.
  - B.) HAZARD CLASSIFICATION.

B	SEE NSWC IHD DET EARLE ECP I11067			
A	SEE NSWC IHD DET EARLE ECP I01092	11/13/01	S/ AVS	S/ KZ
REV.	REVISION DESCRIPTION	DATE	TDA	SYSCOM
TECH DATA MANAGEMENT SUPERVISOR		S/ R.E./A.V.S.	6/12/00	DISTRIBUTION STATEMENT A APPROVED FOR PUBLIC RELEASE: DISTRIBUTION IS UNLIMITED  THIS TRUCKLOAD IS AUTHORIZED AND RELEASED FOR HIGHWAY SHIPMENT ONLY.
SYSTEMS ENG. SUPERVISOR		S/ G.B.	6/12/00	
S/ K. H. ZIMMS		6/12/00		
NAVSEASYSKOM ( BY DIRECTION )				
DEPARTMENT OF THE NAVY NAVAL SEA SYSTEMS COMMAND ARLINGTON, VA 22242-5160		CAGE CODE 53711	DWG NO. 6214180	REV. B
		SIZE A	PAGE 1 OF 6	

## GENERAL NOTES:

1. THIS DOCUMENT GIVES DETAILED INSTRUCTIONS FOR TRUCKLOADING AIM-9X SIDEWINDER MISSILES IN CNU-609/E AND CNU-609A/E CONTAINERS ON 40 FT OR GREATER FLATBED TRAILERS.
2. 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.
3. FOR GENERAL TRUCKLOADING PROCEDURES, REFER TO THE GENERAL TRUCKLOADING DOCUMENT, MIL-STD-1320 (NAVY).
4. CONTAINERS MAY BE STACKED UP TO FOUR HIGH (TWO UNIT LOADS HIGH). CONTAINERS SHALL BE UNITIZED IN ACCORDANCE WITH NAVSEA DRAWING 53711-6214173- EXCEPT THAT STACKING UP TO FOUR HIGH IS PERMITTED. IN THE EVENT STEEL STRAPPING IS USED TO STRAP TWO UNIT LOADS TOGETHER, THE STRAPS SHALL PASS THROUGH THE FORK POCKETS OF THE BOTTOM CONTAINER AND THROUGH THE FORK POCKETS OF THE TOP CONTAINER.
5. BECAUSE THIS LOADING PLAN RELIES SIGNIFICANTLY ON WOOD DUNNAGE NAILED TO THE TRAILER FLOOR, THE FLOOR OF THE TRAILER SHALL BE PREDOMINANTLY WOOD.
6. LUMBER SHALL CONFORM TO VOLUNTARY PRODUCT STANDARD PS 20-2005 (AMERICAN SOFTWOOD LUMBER STANDARD).
7. UNITED NATIONS (UN), INTERNATIONAL PLANT PROTECTION COMMISSION (IPPC) RESTRICTIONS REGARDING SOLID WOOD PACKAGING MATERIAL (WPM): IN ACCORDANCE WITH THE REQUIREMENTS OF INTERNATIONAL STANDARDS FOR PHYTOSANITARY MEASURES (ISPM) 15 "GUIDELINES FOR REGULATING WOOD PACKAGING MATERIAL IN INTERNATIONAL TRADE," THE FOLLOWING COMMERCIAL HEAT TREATMENT PROCESS HAS BEEN APPROVED BY THE AMERICAN LUMBER STANDARDS COMMITTEE (ALSC) AND IS REQUIRED FOR ALL NON-MANUFACTURED WPM. WPM SHALL BE CONSTRUCTED FROM HEAT TREATED (HT TO 56 DEGREES CENTIGRADE FOR 30 MINUTES) LUMBER AND CERTIFIED BY AN ACCREDITED AGENCY RECOGNIZED BY THE ALSIC IN ACCORDANCE WITH WOOD PACKAGING MATERIAL POLICY AND WOOD PACKAGING MATERIAL ENFORCEMENT REGULATIONS ([HTTP://WWW.ALSC.ORG](http://www.alsc.org)). EACH PIECE OF WOOD MUST INCLUDE CERTIFICATION MARKINGS IN ACCORDANCE WITH ALSIC STANDARDS AND BE PLACED IN AN UNOBSTRUCTED AREA THAT WILL BE READILY VISIBLE TO INSPECTORS. ALL DUNNAGE USED IN CONFIGURING AND/OR SECURING THE LOAD SHALL ALSO COMPLY WITH ISPM 15 AND BE MARKED WITH AN ALSIC APPROVED DUNNAGE STAMP. FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS RESTRICTION MAY RESULT IN REFUSAL, DESTRUCTION, OR TREATMENT OF MATERIALS AT THE POINT OF ENTRY, POSSIBLY CAUSING UNACCEPTABLE DELAY IN DELIVERY OF NEEDED PARTS.
8. NAILS SHALL CONFORM TO ASTM F1667 DESIGNATION F1667 NL CM S - XX B, WHERE "XX" DESIGNATES THE SIZE (I.E., 10d, 16d, 20d, ETC.).
9. A STAGGERED NAILING PATTERN WILL BE USED WHEN NAILS ARE DRIVEN INTO FLOOR DUNNAGE. THE NAILING PATTERN WILL BE ADJUSTED AS REQUIRED SO THAT A NAIL DOES NOT PENETRATE INTO OR NEAR A CRACK BETWEEN TRAILER FLOOR BOARDS. THE NAILING FOR THE UPPER PIECE OF FLOOR DUNNAGE WILL BE ADJUSTED AS REQUIRED SO THAT A NAIL FOR THAT PIECE WILL NOT BE DRIVEN NEAR A NAIL IN A LOWER PIECE.
10. STEEL STRAPPING SHALL CONFORM TO ASTM D3953, TYPE 1, HEAVY DUTY, FINISH A, B (ANY GRADE), C, OR D. SEALS SHALL CONFORM TO ASTM D3953, CLASS H, FINISH A, B (ANY GRADE), OR C, STYLE I, II, III, OR IV.
11. TO PREVENT TOPPLING OF STACKED CONTAINERS, IT IS NECESSARY TO BAND TOGETHER THE UPPER CONTAINERS OF ADJACENT STACKS. SUCH BANDING IS CALLED A "BUNDLING STRAP", WHICH IS A STEEL STRAP THAT IS PASSED THROUGH THE FORK POCKETS AND OVER THE TOP OF THE UPPER CONTAINERS BEING Banded TOGETHER AS SHOWN ON PAGES 5 & 6..
12. TIEDOWN (FLATBED TRAILERS ONLY):
  - A. THE QUANTITY OF TIEDOWN ASSEMBLIES REQUIRED SHALL BE AS SHOWN IN THE ILLUSTRATIONS. EITHER CHAIN, 4-INCH WEB STRAPS, OR STEEL STRAPPING MAY BE USED FOR TIEDOWN.
  - B. WEB STRAPS:
    - 1) WEB STRAPS ARE THE PREFERRED METHOD OF TIEDOWN, BEING THAT THEY ARE THE EASIEST TO APPLY AND DON'T REQUIRE THE USE OF PROTECTOR BOARDS.
    - 2) WEB STRAP TIEDOWNS SHALL CONFORM TO AND BE APPLIED AS SPECIFIED IN NAVSEA DRAWING 6214037 AND IN THIS DRAWING.
    - 3) ONLY ASSEMBLIES WITH 4-INCH STRAPPING SHALL BE USED.
    - 4) AVOID LOCATING WEB TIEDOWNS ON TOP OF THE STEEL BUNDLING STRAPS, AS TEARING OR FRAYING COULD RESULT.

## GENERAL NOTES: (CONTINUED)

### C. CHAINS:

- 1) CHAIN SHALL CONFORM TO THE NATIONAL ASSOCIATION OF CHAIN MANUFACTURERS WELDED STEEL CHAIN SPECIFICATION. CHAIN SHALL BE GRADE 70 OR BETTER, SIZE 3/8 OR 5/16. GRABHOOKS, LOADBINDERS, AND OTHER LOAD BEARING HARDWARE SHALL HAVE A WORKING LOAD LIMIT AT LEAST THAT OF THE CHAIN AND SHALL BE COMPATIBLE WITH THE SIZE CHAIN BEING USED.
- 2) CHAINS SHALL BE ATTACHED TO THE TRAILER'S STAKE POCKETS, NOT AROUND THE RUBRAIL.
- 3) RATCHET TYPE LOADBINDERS ARE PREFERRED. HOWEVER, IF USING OVER-THE-CENTER TYPE LOADBINDERS, THE HANDLES SHALL BE SECURED IN THE CLOSED POSITION USING .08 DIA OR THICKER STEEL WIRE (ASTM A853; ANNEALED AT FINISH, BLACK OXIDE FINISH, GRADE 1006 OR BETTER).
- 4) TO PREVENT DAMAGE TO THE PALLET FRAMES, DOUBLED 2 X 6 PROTECTOR BOARDS SHALL BE PLACED UNDER THE CHAINS AS SHOWN IN DETAIL K. NAILS SHALL BE USED TO KEEP THE CHAINS IN PLACE ON TOP OF THE PROTECTOR BOARDS. THIS IS ACCOMPLISHED BY DRIVING A NAIL THROUGH ONE CHAIN LINK AND PARTIALLY INTO THE PROTECTOR BOARD ASSEMBLY AND THEN CLINCHING THE NAIL OVER THE CHAIN. USE ONE NAIL NEAR EACH END OF THE PROTECTOR BOARD ASSEMBLIES. DO NOT APPLY NAILS UNTIL AFTER THE CHAINS ARE TENSIONED.

### D. STEEL STRAPPING:

- 1) STRAPPING SHALL BE 2 X .044 OR 2 X .050 AND SHALL CONFORM TO ASTM D3953, TYPE 1, HEAVY DUTY, FINISH A, B (ANY GRADE), C, OR D. SEALS SHALL CONFORM TO ASTM D3953, CLASS H, FINISH A, B (ANY GRADE), OR C, STYLE I, II, III, OR IV.
- 2) STEEL STRAP TIEDOWNS SHALL BE ATTACHED TO THE SIDES OF THE TRAILER BY LOOPING THE STRAP AROUND THE RUB RAIL OR STAKE POCKET AND BACK ONTO ITSELF. A MINIMUM OF ONE SEAL WITH TWO PAIR OF NOTCHES WILL BE USED TO SEAL THE JOINT WHEN A NOTCH-TYPE SEALER IS USED. A MINIMUM OF ONE SEAL WITH TWO PAIR OF CRIMPS WILL BE USED WHEN CRIMP-TYPE SEALERS ARE USED.
- 3) WHERE STRAPPING IS JOINED IN AN END-OVER-END LAP JOINT, A MINIMUM OF ONE SEAL WITH TWO PAIR OF NOTCHES IS REQUIRED WHEN A NOTCH-TYPE SEALER IS USED. WHEN USING A CRIMP-TYPE SEAL, TWO SEALS WITH TWO PAIR OF CRIMPS SHALL BE USED.
- 4) TO PROTECT THE STRAP FROM POSSIBLE SHARP EDGES OF THE RUB RAIL OR STAKE POCKET, AN ADDITIONAL PIECE OF STRAPPING (APPROXIMATELY 18 INCHES) SHALL BE PLACED UNDERNEATH THE STRAP AT THIS LOCATION. IT SHALL BE SECURED TO THE LOAD BEARING STRAP USING ONE SEAL WITH EITHER A SINGLE NOTCH OR A SINGLE CRIMP.
- 5) PROTECTOR BOARDS ARE NOT REQUIRED FOR STEEL STRAP TIEDOWNS.

E. DURING PRE-LOADING INSPECTION REQUIRED BY NAVSEA SW020-AG-SAF-010, ALL CHAIN AND WEB STRAP TIEDOWNS SHALL BE INSPECTED FOR DEFECTS. THE INSPECTION PROCEDURE FOR WEB STRAPS SHALL BE AS SPECIFIED IN DRAWING 6214037. CHAINS, FITTINGS AND LOAD BINDERS SHALL BE INSPECTED FOR STRETCH, GOUGING, BENT LINKS, WEAR, AND ANY OTHER NOTICEABLE DEFECTS THAT WOULD AFFECT THE STRENGTH OF THE ASSEMBLY. RESULTS OF THESE INSPECTIONS SHALL BE RECORDED IN ITEM 12-T OF DD FORM 626. ANY DEFICIENCY SHALL BE CAUSE FOR REJECTION OF THE CHAINS, FITTINGS, BINDERS, OR WEB STRAPPING ASSEMBLIES.

13. AFTER BLOCKING & TIEDOWNS HAVE BEEN INSPECTED, THE LOAD SHALL BE COMPLETELY COVERED WITH FIRE RESISTANT, WATERPROOF TARPULINS. THE TARPULINS MAY BE UNDER TIEDOWNS & PROTECTOR BOARDS.
14. AFTER TARPULINS ARE IN PLACE, ATTACH APPROPRIATE PLACARDING IN ACCORDANCE WITH TITLE 49 CFR. ATTACH SHIPPING DOCUMENTS TO AN ACCESSIBLE AREA ON BACK DECK OF TRAILER.

**NOTE**

UNLESS OTHERWISE STATED, THE FORWARD END OF THE TRAILER SHALL BE ON THE RIGHT SIDE OF ALL FLATBED LOAD CONFIGURATIONS SHOWN ON THIS DOCUMENT (SEE FIGURE BELOW).

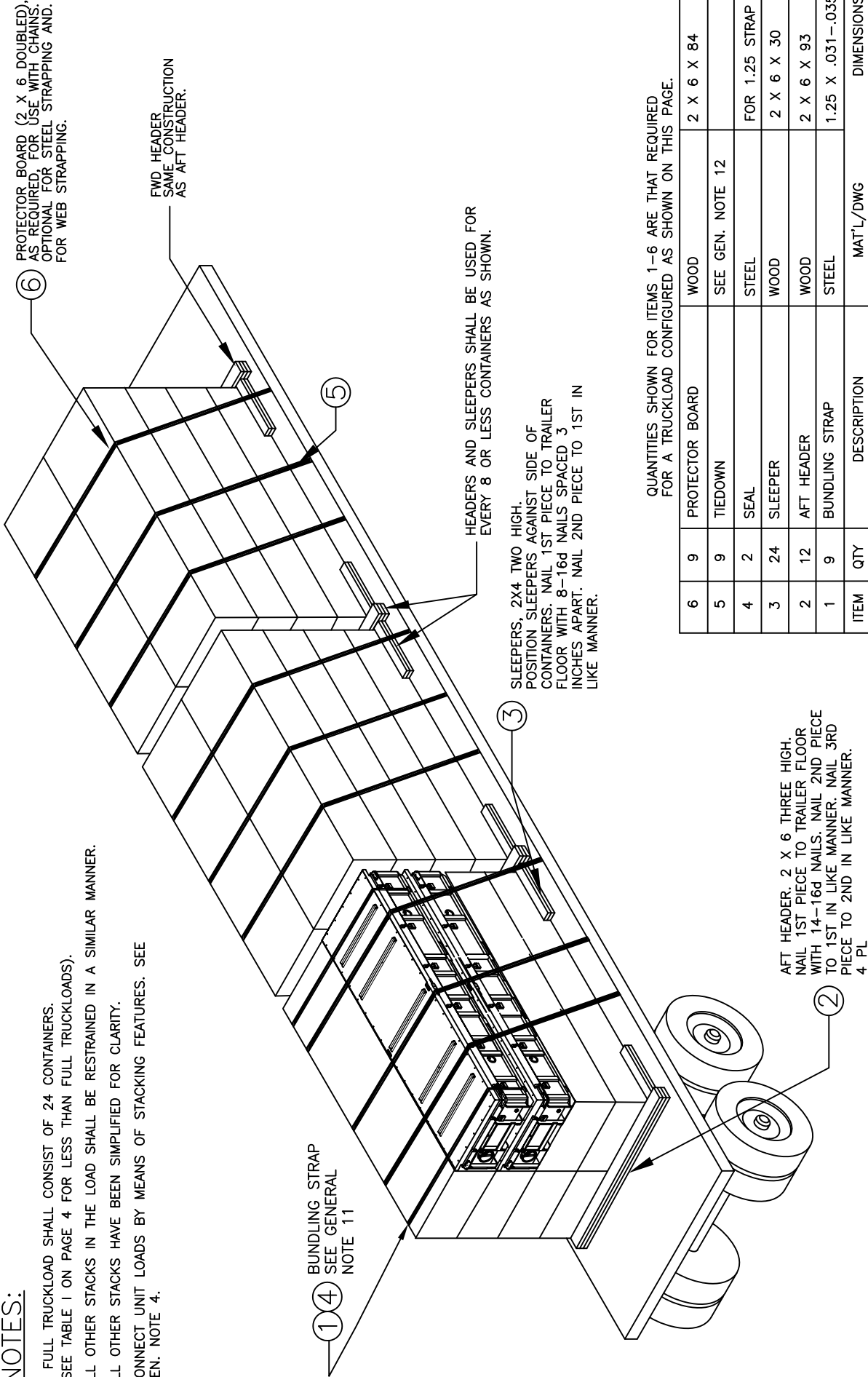
TABLE 1  
SUGGESTED LOAD PATTERNS  
FOR 45 AND 48 FT. FLATBED TRAILERS

# OF CONTAINERS	# OF CONTAINERS	# OF CONTAINERS
24	22	20
18	16	15
14	13	12
11	10	9
8	7	6
5	4	3
2	1	

# FULL TRUCKLOAD LAYOUT - 45 FT. FLATBED TRAILER

## NOTES:

- A FULL TRUCKLOAD SHALL CONSIST OF 24 CONTAINERS. (SEE TABLE 1 ON PAGE 4 FOR LESS THAN FULL TRUCKLOADS).
- ALL OTHER STACKS IN THE LOAD SHALL BE RESTRAINED IN A SIMILAR MANNER.
- ALL OTHER STACKS HAVE BEEN SIMPLIFIED FOR CLARITY.
- CONNECT UNIT LOADS BY MEANS OF STACKING FEATURES. SEE GEN. NOTE 4.



QUANTITIES SHOWN FOR ITEMS 1-6 ARE THAT REQUIRED FOR A TRUCKLOAD CONFIGURED AS SHOWN ON THIS PAGE.

ITEM	QTY	DESCRIPTION	MAT'L/DWG	DIMENSIONS
6	9	PROTECTOR BOARD	WOOD	2 X 6 X 84
5	9	TIEDOWN	SEE GEN. NOTE 12	
4	2	SEAL	STEEL	FOR 1.25 STRAP
3	24	SLEEPER	WOOD	2 X 6 X 30
2	12	AFT HEADER	WOOD	2 X 6 X 93
1	9	BUNDLING STRAP	STEEL	1.25 X .031 - .035

### LIST OF MATERIALS

REV.	B	SIZE A	CAGE CODE	PAGE	5	OF	6
			53711				

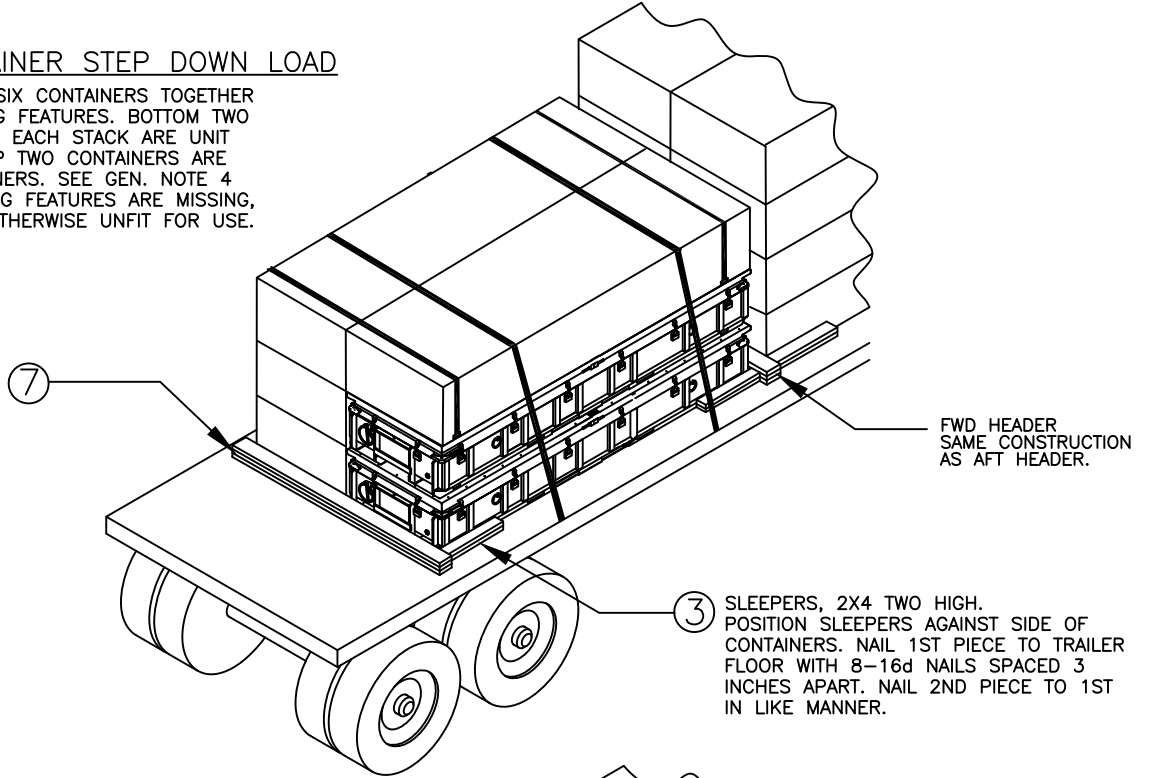
NAVSEA 6214180  
DWG NO.

# LESS THAN FULL TRUCKLOAD LAYOUT

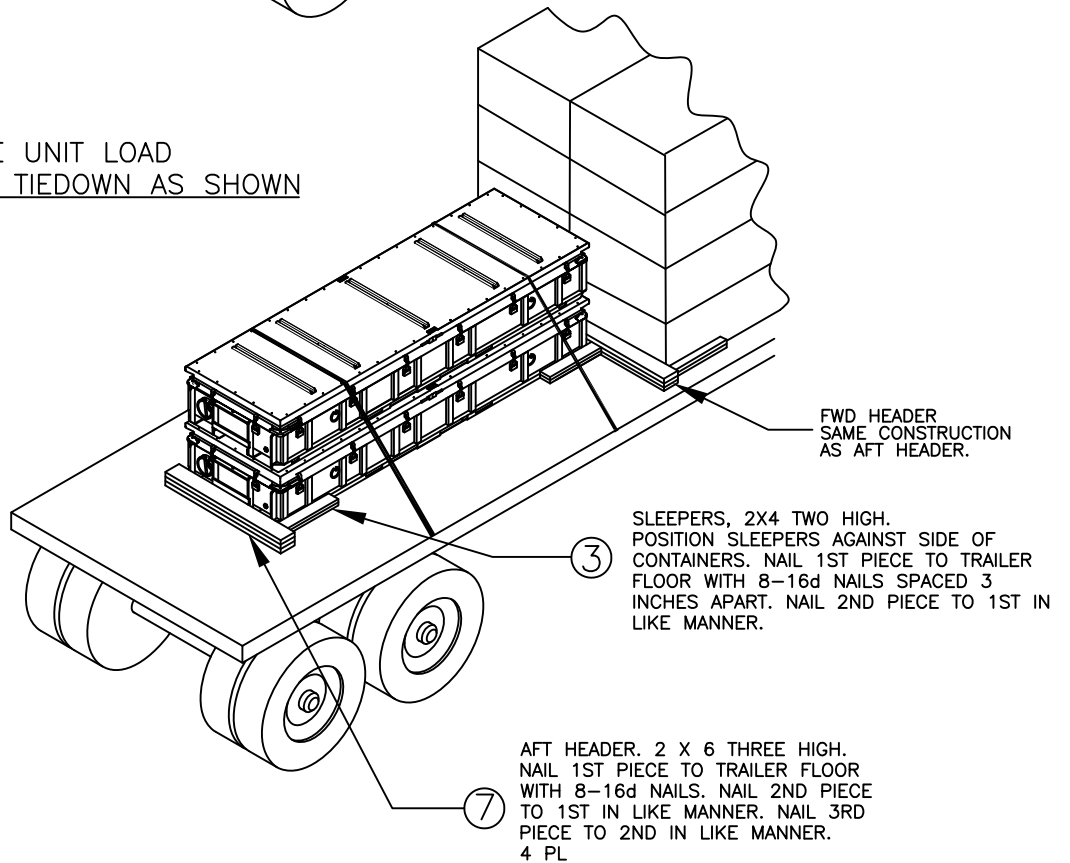
THE SHIPPER/CARRIER SHALL MODIFY THE FULL TRUCKLOAD PROCEDURE WITH THE TECHNIQUES PROVIDED HERE TO SHIP THE DESIRED QUANTITY OF CONTAINERS.

## SIX CONTAINER STEP DOWN LOAD

CONNECT THE SIX CONTAINERS TOGETHER USING STACKING FEATURES. BOTTOM TWO CONTAINERS OF EACH STACK ARE UNIT LOADS AND TOP TWO CONTAINERS ARE SINGLE CONTAINERS. SEE GEN. NOTE 4 IF ANY STACKING FEATURES ARE MISSING, DAMAGED OR OTHERWISE UNFIT FOR USE.



## SINGLE UNIT LOAD BLOCKING AND TIEDOWN AS SHOWN



ITEM	QTY	DESCRIPTION	MAT'L/DWG	DIMENSIONS
7	3	AFT HEADER	WOOD	2 X 6 X 48

LIST OF MATERIALS