

# MILITARY STANDARD

MIL-STD-1320-247  
(NAVY)  
12 JUL 1989

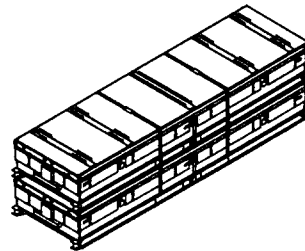
## TRUCKLOADING

### UNIT LOADS

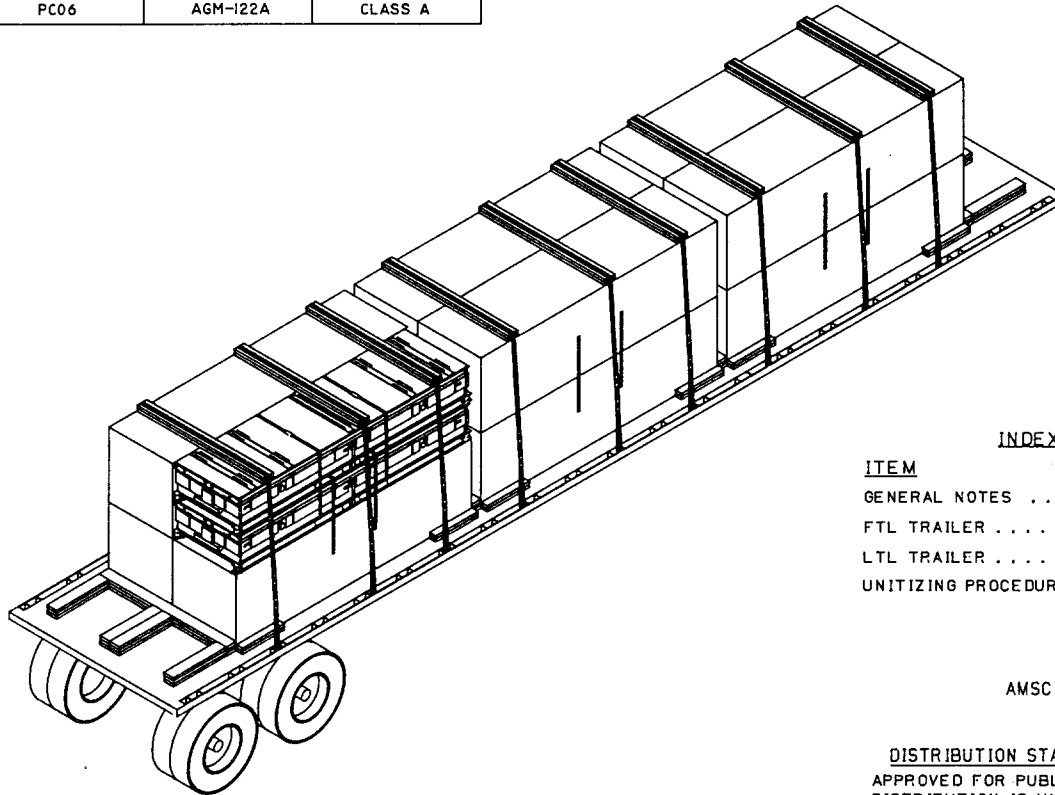
AIM-9M (SIDEWINDER) AND AGM-122A (SIDEARM)  
IN CONTAINERS CNU-435/E AND CNU-434/E RESPECTIVELY

#### UNIT LOAD DATA

UNIT LOAD DOCUMENTS . . . . MIL-STD-1323-352, 354  
DIMENSIONS . . . . . 134 L X 36 1/4 W X 38 1/4 H  
GROSS WEIGHT . . . . . 2604 OR 2774 LBS Δ  
CUBE . . . . . 107.5 CU FT  
Δ DO NOT USE FOR SHIPPING WEIGHT



HAZARD CLASSIFICATION		
DODIC/NALC	ITEM NAME	DOT
PB55	AIM-9M	CLASS A
PC06	AGM-122A	CLASS A



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AMSC NO. - N/A

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#### NOTES:

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

REV LTR	REVISION DESCRIPTION	DATE	TDA	SYSCOM
			APPROVAL	

FSC 8140

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FOR HIGHWAY SHIPMENT ONLY.

*E. Earle* 7/12/89  
SIGNATURE TDA, WPNSTA EARLE DATE  
*A. Carinzi* 7/12/89  
SIGNATURE AIRSYSCOM BY DIRECTION DATE

ORIGINATOR *J. Bender* 7/12/89  
DATE

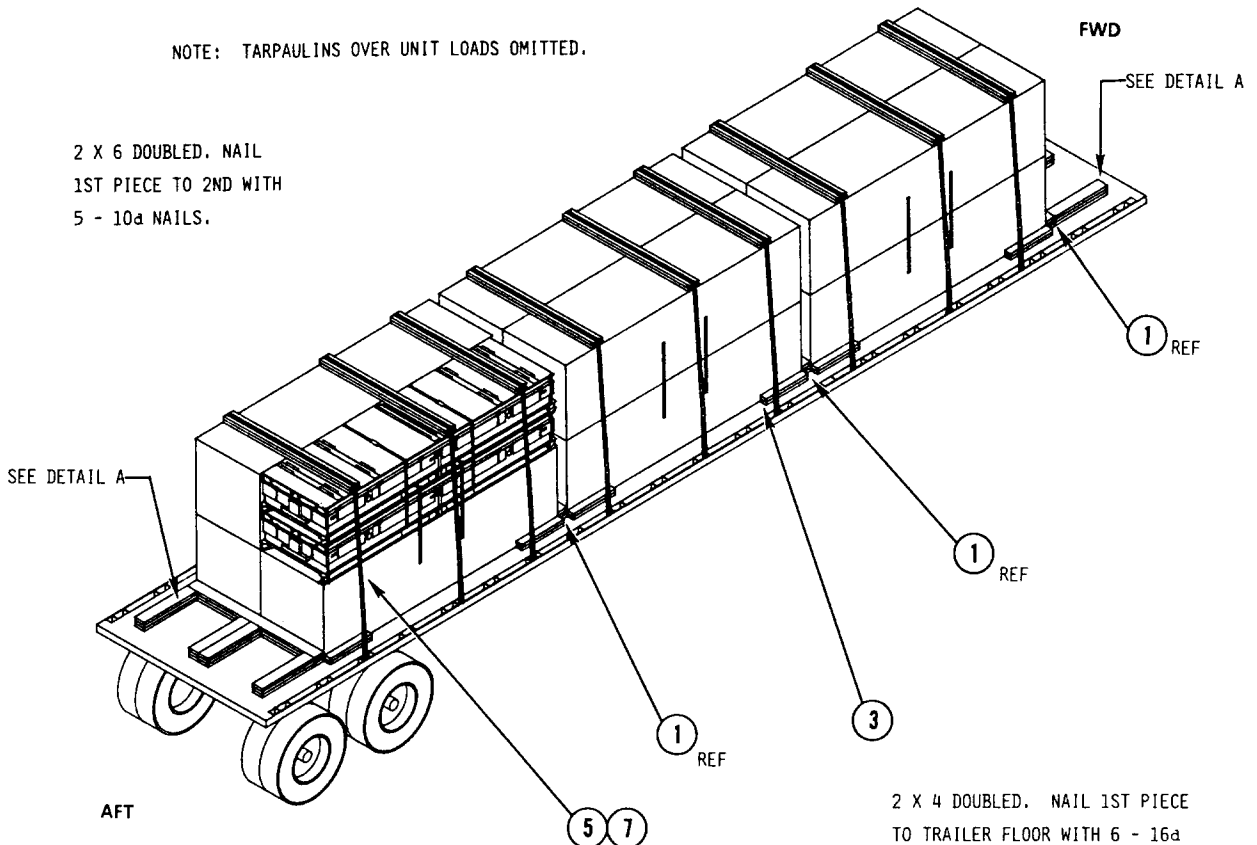
WPNSTA EARLE, NEW JERSEY

**GENERAL NOTES**

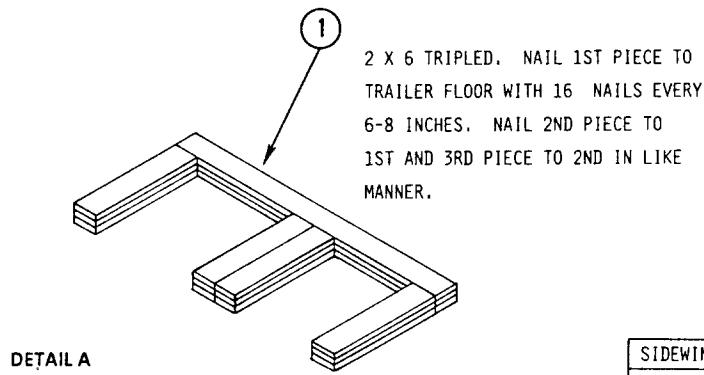
1. THIS DOCUMENT GIVES DETAILED INSTRUCTIONS FOR TRUCKLOADING AIM-9M (SIDEWINDER) AND AGM-122A (SIDEARM) IN SHIPPING AND STORAGE CONTAINERS CNU-435/E AND CNU-434/E, RESPECTIVELY.
2. THE PROCEDURES DESCRIBED HEREIN ARE INTENDED FOR 42 FT THROUGH 48 FT FLATBED TRAILERS WITH THE TRAILER'S TANDEM AXLES LOCATED IN THE "WESTERN POSITION" (AT THE EXTREME REAR OF THE TRAILER). DO NOT USE TRAILERS WITH 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 .050 AND SHALL CONFORM TO AND BE APPLIED AS SPECIFIED IN THE GENERAL TRUCKLOADING DOCUMENT, MIL-STD-1320 (NAVY).
5. CHAINS, 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 WHEN USING STEEL STRAPPING. THE STRAPS SHALL BE STAPLED TO THE PROTECTOR BOARD USING 2-INCH STRAPPING STAPLES. WHEN USING CHAIN, THE CHAINS SHALL BE SECURED TO THE PROTECTOR BOARD BY DRIVING A 10d NAIL THROUGH THE CHAIN LINK AND CLINCHING THE NAIL OVER THE CHAIN. FIVE STAPLES/NAIIS SHALL BE USED FOR EACH TIEDOWN.
7. 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.
8. UNLESS OTHERWISE SPECIFIED, DUNNAGE LUMBER, STEEL STRAPPING, STRAP SEALS, AND NAILS SHALL BE AS SPECIFIED IN THE GENERAL TRUCKLOADING DOCUMENT, MIL-STD-1320 (NAVY).
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 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.
11. AFTER THE TARPULINS ARE IN PLACE, ATTACH "EXPLOSIVES" PLACARDS, AS APPLICABLE, 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).

NOTE: TARPULINS OVER UNIT LOADS OMITTED.

2 X 6 DOUBLED. NAIL  
1ST PIECE TO 2ND WITH  
5 - 10a NAILS.



2 X 4 DOUBLED. NAIL 1ST PIECE  
TO TRAILER FLOOR WITH 6 - 16a  
NAILS. NAIL 2ND PIECE TO 1ST IN  
LIKE MANNER.



2 X 6 TRIPLED. NAIL 1ST PIECE TO  
TRAILER FLOOR WITH 16 NAILS EVERY  
6-8 INCHES. NAIL 2ND PIECE TO  
1ST AND 3RD PIECE TO 2ND IN LIKE  
MANNER.

DETAIL A

2 X 6 TRIPLED. NAIL 1ST  
PIECE TO TRAILER FLOOR WITH  
8 - 16a NAILS. NAIL 2ND PIECE  
TO 1ST AND 3RD PIECE TO 2ND  
IN LIKE MANNER.

**FTL 42 THROUGH 48 FT  
TRAILER (FLATBED)  
(42 FT SHOWN)**

**TRUCKLOAD DATA**

42 THROUGH 48 FT TRAILER

	NO. OF UNIT LOADS	FTL WEIGHT
SIDEWINDER	12	31,248
SIDEARM	12	33,288

12	8	SEAL	SEE NOTE 8 PAGE 2	1-1/4
9	7	SEAL	SEE NOTE 8 PAGE 2	2
12	6	STEEL STRAP	SEE NOTE 8 PAGE 2	1-1/4 X .035 X 14 FT
54	5	STEEL STRAP	SEE NOTES 3,4 6&8 PAGE 2	2 X .050 X 22 FT
18	4	PROTECTOR BOARD	SEE NOTE 6&8 PAGE 2	2 X 6 X 70
24	3	SLEEPER	SEE NOTE 8 PAGE 2	2 X 4 X 24
24	2	BACKUP CLEAT	SEE NOTE 8 PAGE 2	2 X 6 X 30
12	1	CROSSMEMBER	SEE NOTE 8 PAGE 2	2 X 6 X 72
REQ'D	ITEM	DESCRIPTION	MAT'L/DWG	DIMENSIONS

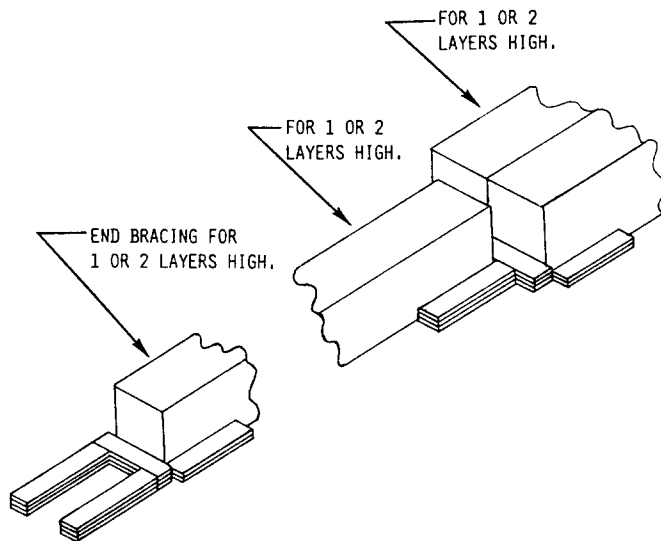
**LIST OF MATERIALS**

**LTL 42 FT AND LONGER TRAILERS (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 I.
2. POSITION UNIT LOADS ON THE TRAILER AS SHOWN IN TABLE I. BLOCK AND TIEDOWN USING THE PRINCIPLES SHOWN ON THIS PAGE AND PAGES 2 AND 3 OF THE GENERAL TRUCKLOADING DOCUMENT, MIL-STD-1320 (NAVY).
3. THE NUMBERS ON EACH ROW OF A STACK IS THE NUMBER OF UNIT LOADS STACKED IN THE ROW.
4. SEE DETAIL B FOR BLOCKING AND BRACING VARIATIONS FOR LTL.
5. FOR UNITIZING, SEE DETAIL C, PAGE 5.

**TABLE I**

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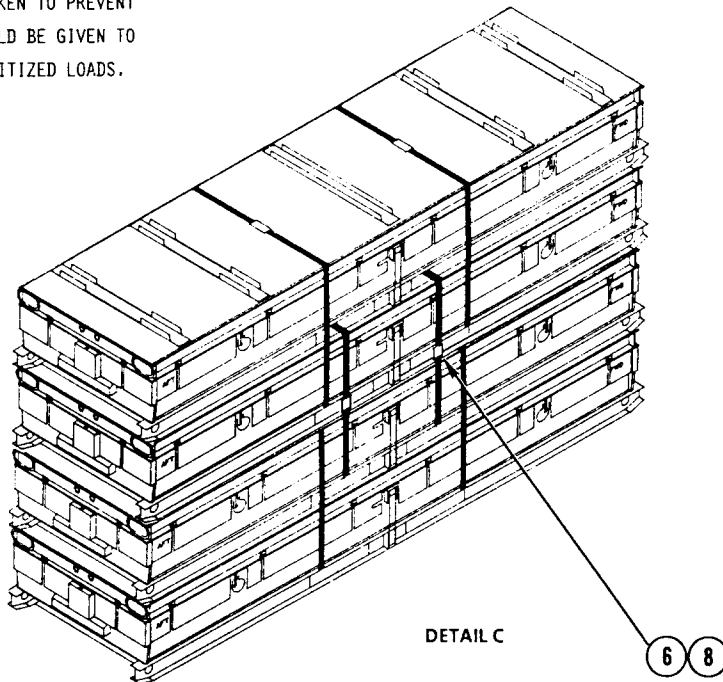
**DETAIL B**  
**LTL BLOCKING AND BRACING**

**UNITIZING PROCEDURE**

1. USING A 6,000 LB FORKTRUCK, STACK ONE UNIT LOAD ON TOP OF THE FIRST UNIT LOAD. BE SURE TO ALIGN THE STACKING FEATURES. POSITION TWO 1-1/4 X .035 STEEL STRAPS THROUGH THE FORK POCKETS OF THE TOP UNIT LOAD AND BOTTOM UNIT LOAD AS SHOWN. TENSION AND SEAL WITH ONE DOUBLE NOTCH SEAL FOR EACH STRAP.

**WARNING**

WHEN LOADING/UNLOADING TRAILERS WITH UNITIZED LOADS, EXTRA CAUTION SHOULD BE TAKEN TO PREVENT TOPPLING. SPECIAL ATTENTION SHOULD BE GIVEN TO APPROPRIATE BACKUP OF OUTBOARD UNITIZED LOADS.

**WARNING**

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

REVIEW ACTIVITY:  
NAVY - OS

PREPARING ACTIVITY:  
NAVY - OS  
(PROJECT NO. 8140-N833)