

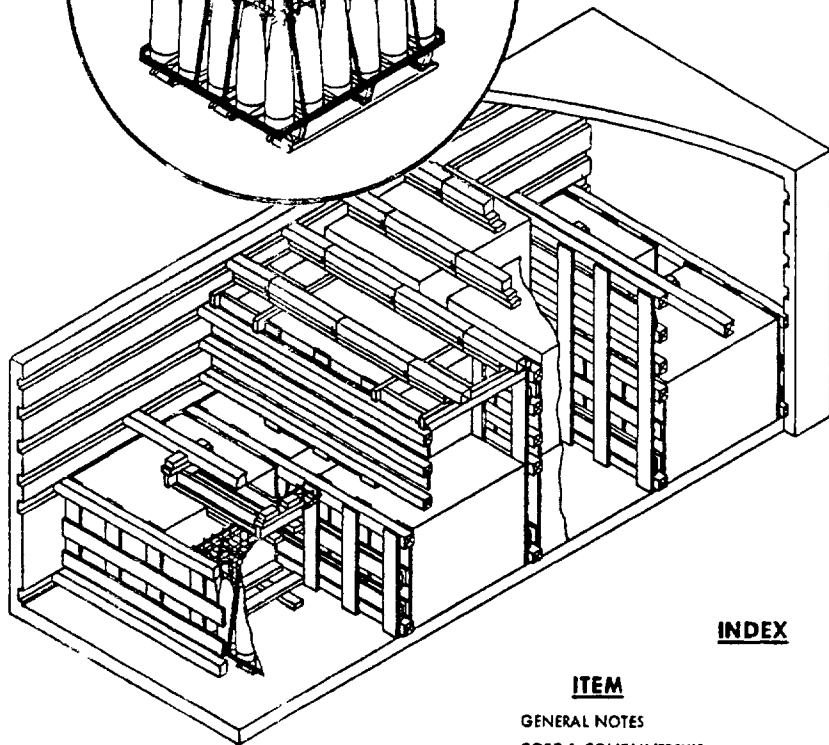
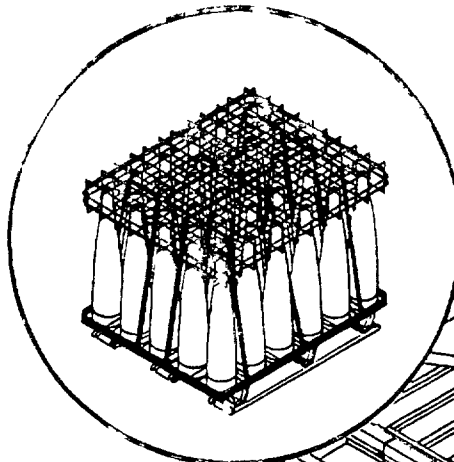
MILITARY STANDARD**MIL-STD-1386-13
(NAVY)**

10 NOVEMBER 1972

**LOADING OF HAZARDOUS
MATERIALS AND ASSOCIATED ITEMS
IN MILVAN CONTAINERS
PROJECTILE, 6 INCH AAC OR HC
WITH PROTECTIVE CAP MK 4
IN PALLET ADAPTER MK 20
FLEET ISSUE UNIT LOAD**

UNIT LOAD DATA

UNIT LOAD DRAWING WR-51/8
WEIGHT 7340 LBS
DIMENSIONS 48" x 40" W x 37 5/8" H
CUBE 11.8 CU FT
DANGER CLASSIFICATION EXPLOSIVES A
DANGER CLASS X

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NOTES

- UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
- FOR CROSS REFERENCE TO ASSOCIATED PALLETIZING, TRUCKLOADING AND CARLOADING MILITARY STANDARDS REFER TO THE INDEX TO STANDARDS, MIL-HDBK-236

AUTHORIZED FOR TRAILER-ON-FLATCAR (TOFC), CONTAINER-ON-FLATCAR (COFC), CONTAINERSHIP, AND HIGHWAY SHIPMENTS.

**APPROVED BY
US COAST GUARD**

John C. ...
DATE 10 November 1972

**APPROVED BY
BUREAU OF EXPLOSIVES**

A. G. ...
DATE 10/31/72

ORIGINATOR

A. R. ...
SIGNATURE

**NAVAL WEAPONS HANDLING LABORATORY
M A R 1015 NEW JERSEY**

MIL STD-1385-13 (NAVY)

GENERAL NOTES

- THIS DOCUMENT GIVES DETAILED INSTRUCTIONS FOR LOADING THE MILVAN CONTAINER WITH FLEET ISSUE UNIT LOADS OF 6 INCH AAC OR HC (PROJECTILES WITH PROTECTIVE CAP MK 4) IN PALLET ADAPTER MK 20. THE UNIT LOAD SHALL BE IN ACCORDANCE WITH VV-54/B.
- THE MILVAN SHALL BE EQUIPPED WITH A MECHANICAL LOAD-BRACING SYSTEM THAT MEETS THE REQUIREMENTS OF THE BUREAU OF EXPLOSIVES PAMPHLET 6 C AND SHIPPED ON FLATCARS THAT MEET THE REQUIREMENTS OF PAMPHLET 6 C.
 - IN ADDITION TO THE BELT RAILS REQUIRED BY PAMPHLET 6 C, THE MILVAN CONTAINER HAS BELT RAILS AT THE 72 AND 83 INCH HEIGHTS FROM THE CONTAINER FLOOR.
 - CONTAINERS ARE EQUIPPED WITH 25 CROSSMEMBERS. UNUSED CROSSMEMBERS MUST REMAIN WITH THE CONTAINER AND SHALL BE FASTENED TO BELT RAILS FOR SHIPMENT.

CAUTION

WHEN POSITIONING CROSSMEMBERS MAKE A VISUAL CHECK
TO ENSURE THAT CROSSMEMBERS ARE LOCKED SECURELY IN PLACE

- THE DUNNAGE SPECIFIED IS OF NOMINAL SIZE. FOR EXAMPLE, 1×4 MATERIAL IS ACTUALLY $3/4$ THICK BY $3 \frac{5}{8}$ WIDE AND 2×6 MATERIAL IS ACTUALLY $1 \frac{5}{8}$ THICK BY $5 \frac{1}{2}$ WIDE.
- WHEN THE VOID BETWEEN THE CROSSMEMBER AND THE SEPARATOR GATE IS GREATER THAN ONE INCH, USE FILL MATERIAL TO SHIM BETWEEN CROSSMEMBER AND GATE AS SHOWN IN DETAIL J.
- APPLICABLE MATERIAL SPECIFICATIONS
DUNNAGE LUMBER - FED. SPEC MM-L-751
NAILS - FED. SPEC FF-N-105, COMMON CEMENT COATED
- AFTER BLOCKING AND BRACING HAS BEEN INSPECTED ATTACH SHIPPING DOCUMENTS INSIDE THE CONTAINER IN AN ACCESSIBLE AREA, CLOSE AND SEAL CONTAINER DOORS, AND ATTACH APPLICABLE PLACARDS TO THE OUTSIDE OF THE CONTAINER FOR THE APPROPRIATE MODE OF TRANSPORTATION AS PRESCRIBED IN OP 2165 VOL. I.

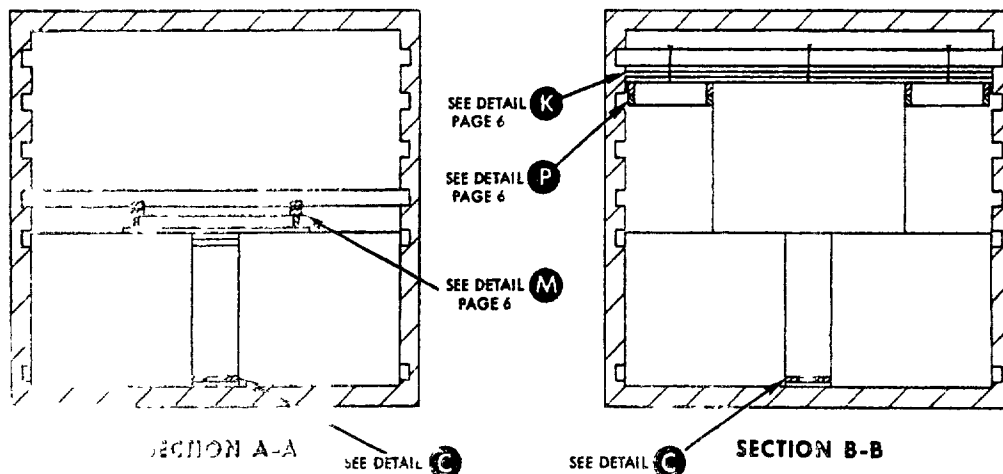
COFC AND CONTAINERSHIP ONLY

- THE CONTAINERLOAD CONSISTS OF 11 UNIT LOADS WHICH MUST BE LOADED AND DUNNAGED IN ACCORDANCE WITH THIS DOCUMENT.

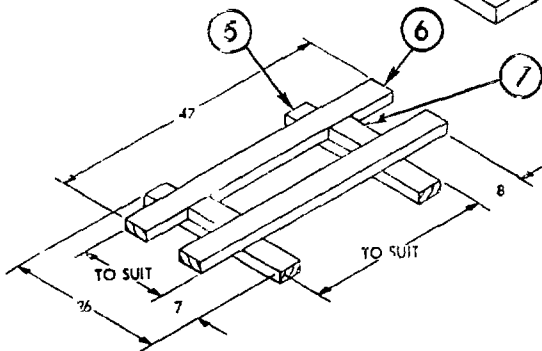
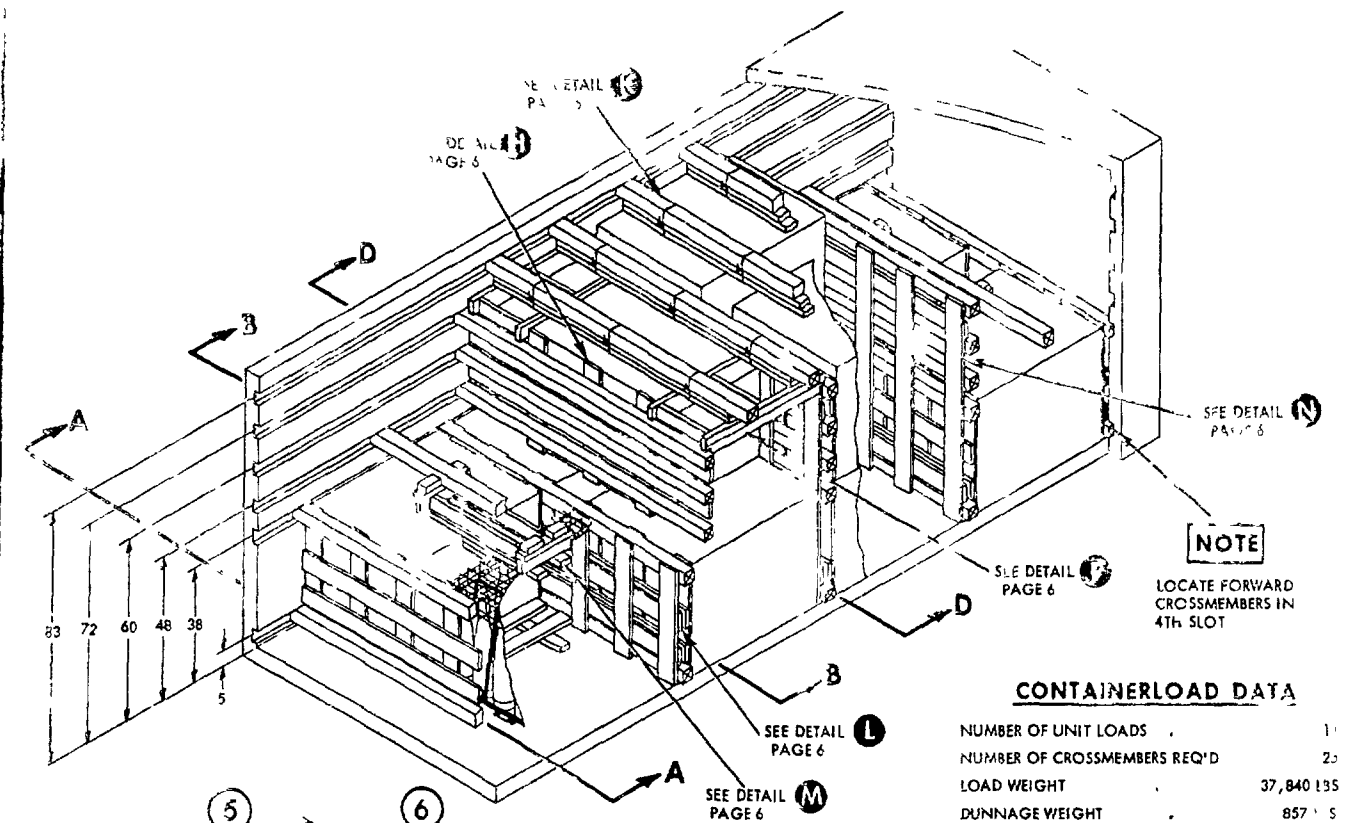
WARNING

BECAUSE THE WEIGHT LOADED INTO THIS CONTAINER EXCEEDS
34,000 LBS, THE MILVAN CHASSIS CANNOT BE USED TO TRANSPORT
THE LOADED CONTAINER ON PUBLIC HIGHWAYS. THE LOADED
CONTAINER MAY BE TRANSPORTED OVER DEPOT ROADS USING MILVAN
CHASSIS EQUIPPED WITH DOUBLE BOGIES OR COMMERCIAL EQUIPMENT
OF APPROPRIATE CAPACITY.

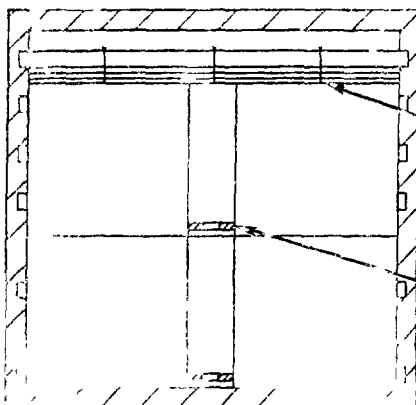
- SWAY BRACE, DETAIL C, IS ASSEMBLED IN PLACE. PIECE 5 IS POSITIONED INBOARD OF THE OUTER LEGS OF THIS PALLET SKIDS AND PIECE 6 IS POSITIONED AGAINST THE PALLET LEGS. NAIL PIECE 6 TO PIECE 5 WITH THREE 10d NAILS PER JOINT. CUT PIECE 7 TO FIT BETWEEN PIECES 6 AND NAIL TO PIECE 5 WITH THREE 10d NAILS.
- LENGTH OF CROSSMEMBERS PIECE 9 SHALL BE SUFFICIENT TO CAUSE DETAIL P TO FILL THE VOID BETWEEN THE UNIT LOAD AND THE CONTAINER SIDEWALL. POSITION ASSEMBLY WITH PIECE 10 AGAINST CONTAINER SIDEWALL.
- SHIM, PIECE 12, SHALL BE OF SUFFICIENT THICKNESS TO FILL THE VOID BETWEEN THE TOP OF THE UNIT LOAD AND THE BOTTOM OF THE CROSSMEMBER.
- SHIM, PIECE 14, MAY CONSIST OF MORE THAN ONE PIECE OF DIFFERENT THICKNESSES AND SHOULD CAUSE THE ASSEMBLY TO FILL THE VOID BETWEEN THE LADING AND THE CROSSMEMBER. PIECES MAY BE ADDED TO OR OMITTED AS REQUIRED.



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**DETAIL C**

SWAY BRACE
5 REQ'D
TO BE ASSEMBLED IN PLACE
SEE NOTE 2



* C W - CONTAINER WIDTH

** - CLINCH D

| | | | | | | |
|-----------|---------------------|--------------------------------------|---------------------|-------------|------------|------|
| 19 | VERTICAL | 1 x 6 x 72 | 18 | 8 | 3/JOINT | 6d** |
| 18 | HORIZONTAL | 1 x 6 x C W * -1 | 6 | SEE 9 | - | - |
| 17 | SHIM | 4 WIDE x 90 LONG x THICKNESS TO SUIT | 4 | LAMINATE | 5/JOINT | 10d |
| 16 | SPACER | 2 x 4 x TO SUIT | 8 | 11, 16 | 3 | 10d |
| 15 | RETAINER | 2 x 4 x 6 | 8 | 14 | 2 | 10d |
| 14 | SHIM | 2 x THICKNESS TO SUIT x 18 | AS REQ'd | 12 | 3 | 10d |
| 13 | SUPPORT | 2 x 4 x TO SUIT | 4 | SEE 11 & 12 | - | - |
| 12 | RISEP | 2 x 4 x 18 | 4 | 13 | 2/JOINT | 10d |
| 11 | LOWER BEARING PIECE | 2 x 4 x 4" | 4 | 15 | 3 | 10d |
| 10 | SPACER | 1/2 PLYWOOD 2 WIDE x 47 LONG | 2 | 8 | 4 | 6d |
| 9 | CROSSMEMBER | 2 x 6 x TO SUIT | 6 | SEE 8 | SEE NOTE 3 | |
| 8 | LONGITUDINAL | 2 x 6 x 47 | 4 | 9 | 3/JOINT | 10d |
| 7 | SPACER | 2 x 4 x TO SUIT | 10 | 5 | 3 | 10d |
| 6 | STRINGER | 2 x 4 x 47 | 10 | 5 | 3/JOINT | 10d |
| 5 | SUPPORT | 2 x 4 x 26 | 10 | SEE 6 & 7 | - | - |
| 4 | VERTICAL | 1 x 6 x 38 | 3 | 3 | 3/JOINT | 6d** |
| 3 | HORIZONTAL | 1 x 6 x C W * -1 | 2 | SEE 4 | - | - |
| 2 | VERTICAL | 1 x 6 x 38 | 30 | 1 | 3/JOINT | 6d** |
| 1 | HORIZONTAL | 1 x 6 x C W * -1 | 10 | SEE 2 | - | - |
| PIECE NO. | DESCRIPTION | SIZE | NO. OF PIECES REQ'D | FILE NO. | NUMBER | SIZE |

LIST OF MATERIALS & NAILING DATA

SECTION E-E, TOP OF CONTAINERSHIP AND HIGHWAY

BE CAUSE THE WEIGHT TO BE PLACED INTO THIS CONTAINER DOES NOT EXCEED 34,000 LBS THE MILVAN CHASSIS WITH DOUBLE BOGIES CAN BE USED TO TRANSPORT THE TOP OF CONTAINERSHIP AND HIGHWAY COMMERCIAL EQUIPMENT OF APPROPRIATE CAPACITY AND BE USED FOR HIGHWAY MOUNT

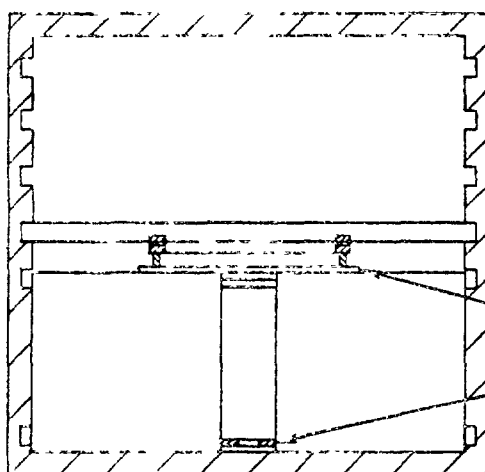
NOTE

IN CERTAIN STATES THE GROSS VEHICLE WEIGHT (G.V.W.) CONSISTING OF CONTAINER, CHASSIS AND TRACTOR IS LIMITED BY THE DISTANCE BETWEEN THE FIRST AND THE LAST AXLES OF THE ASSEMBLED RIG. CARE SHOULD BE TAKEN TO SEE THAT THE PROPOSED G.V.W. DOES NOT EXCEED THESE LIMITATIONS. IF IT DOES, THE WEIGHT MAY BE REDUCED BY REDUCING THE NUMBER OF UNIT LOADS IN THE CONTAINER AS FOLLOWS:

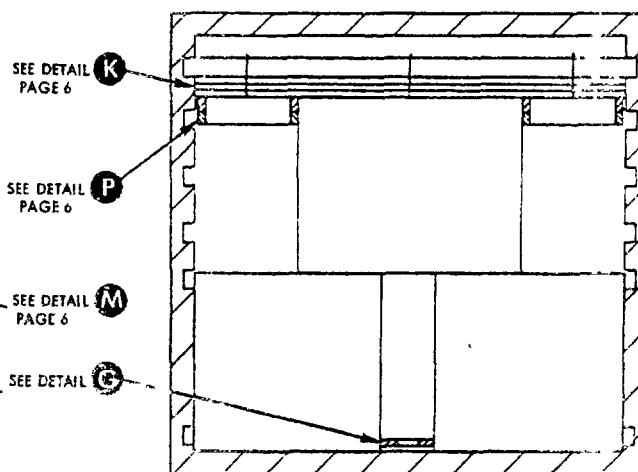
- (1) OMIT THE UNIT LOAD IN THE SECOND LAYER
- (2) OMIT ADDITIONAL UNIT LOADS STARTING AT THE REAR OF THE CONTAINER

WHEN REDUCING THE NUMBER OF UNIT LOADS IN A CONTAINER THE REMAINING UNIT LOADS SHALL BE BLOCKED AND BRACED USING THE PRINCIPLES OF THIS DOCUMENT

- 2 SWAY BRACE, DETAIL G, IS ASSEMBLED IN PLACE. PIECE 5 IS POSITIONED INBOARD OF THE OUTER LEGS OF THE PALLET SKIDS AND PIECE 6 IS POSITIONED AGAINST THE PALLET LEGS. NAIL PIECE 6 TO PIECE 5 WITH THREE 10d NAILS PER JOINT. CUT PIECE 7 TO FIT BETWEEN PIECES 6 AND NAIL TO PIECE 5 WITH THREE 10d NAILS.
- 3 LENGTH OF CROSSMEMBERS PIECE 9 SHALL BE SUFFICIENT TO CAUSE DETAIL P TO FILL THE VOID BETWEEN THE UNIT LOAD AND THE CONTAINER SIDEWALL. POSITION ASSEMBLY WITH PIECE 10 AGAINST CONTAINER SIDEWALL.
- 4 SHIM, PIECE 12, SHALL BE OF SUFFICIENT THICKNESS TO FILL THE VOID BETWEEN THE TOP OF THE UNIT LOAD AND THE BOTTOM OF THE CROSSMEMBER.
- 5 SHIM, PIECE 14, MAY CONSIST OF MORE THAN ONE PIECE OF DIFFERENT THICKNESSES AND SHOULD CAUSE THE ASSEMBLY FILL THE VOID BETWEEN THE LADING AND THE CROSSMEMBER. PIECES MAY BE ADDED TO OR OMITTED AS REQUIRED.

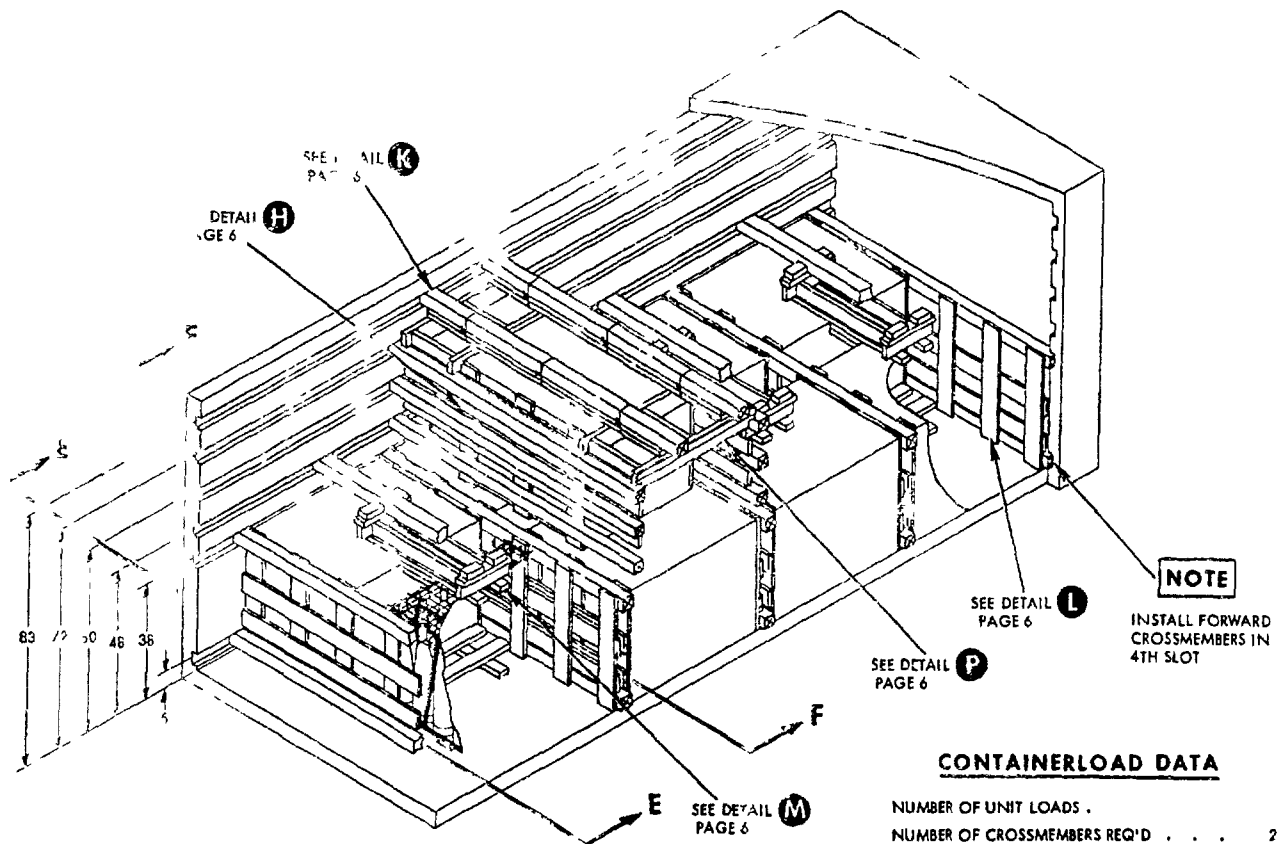


SECTION E-E



SECTION F-F

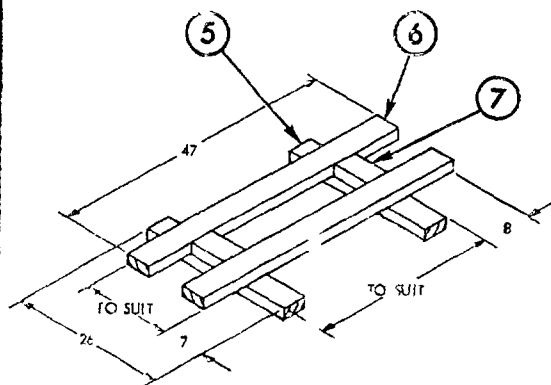
MIL-STD-1386-13 (NAVY)



CONTAINERLOAD DATA

| | |
|--|------------|
| NUMBER OF UNIT LOADS | 9 |
| NUMBER OF CROSSMEMBERS REQ'D | 21 |
| LOAD WEIGHT | 30,960 LBS |
| DUNNAGE WEIGHT | 762 LBS |
| CONTAINER WEIGHT | 5,785 LBS |
| GROSS WEIGHT | 37,507 LBS |

*C W - CONTAINER WIDTH
 ** - CLINCHED



DETAIL G

SWAY BRACE
 4 REQUIRED
 TO BE ASSEMBLED IN PLACE
 SEE NOTE 2

| 17 | SHIM | 4 WIDE x 90 LONG x THICKNESS TO SUIT | 2 | LAMINATE | 5/JOINT | 10d |
|----------------------------------|---------------------|--------------------------------------|--------------------|-------------|----------|------|
| 16 | SPACER | 2 x 4 x TO SUIT | 12 | 11, 16 | 3 | 10d |
| 15 | RETAINER | 2 x 4 x 6 | 12 | 14 | 2 | 10d |
| 14 | SHIM | 2 x THICKNESS TO SUIT x 18 | AS REQ'D | 12 | 3 | 10d |
| 13 | SUPPORT | 2 x 4 x TO SUIT | 6 | SEE 11 & 12 | - | - |
| 12 | RISEP | 2 x 4 x 18 | 6 | 13 | 2/JOINT | 10d |
| 11 | LOWER BEARING PIECE | 2 x 4 x 47 | 6 | 12 | 3 | 10d |
| 10 | SPACER | 1/2 PLYWOOD 2 WIDE x 47 LONG | 2 | 8 | 4 | 6d |
| 9 | CROSSMEMBER | 2 x 6 x TO SUIT | 6 | SEE 8 | SEE NOTE | 3 |
| 8 | LONGITUDINAL | 2 x 6 x 47 | 4 | 9 | 3/JOINT | 10d |
| 7 | SPACER | 2 x 4 x TO SUIT | 8 | 5 | 3 | 10d |
| 6 | STRINGER | 2 x 4 x 47 | 8 | 5 | 3/JOINT | 10d |
| 5 | SUPPORT | 2 x 4 x 26 | 8 | SEE 6 & 7 | - | - |
| 4 | VERTICAL | 1 x 6 x 38 | 6 | 3 | 3/JOINT | 6d |
| 3 | HORIZONTAL | 1 x 6 x C.W * -1 | 4 | SEE 4 | - | - |
| 2 | VERTICAL | 1 x 6 x 33 | 48 | 1 | 3/JOINT | 6d |
| 1 | HORIZONTAL | 1 x 5 x C.W * -1 | 16 | SEE 2 | - | - |
| PIECE NO | DESCRIPTION | SIZE | NO OF PIECES REQ'D | NAIL TO | NUMBER | SIZE |
| LIST OF MATERIALS & NAILING DATA | | | | | | |

WALL TO 1935-33 (DIAG)

