

**MILITARY STANDARD**  
**LOADING OF HAZARDOUS**  
**MATERIALS AND ASSOCIATED ITEMS**  
**IN MILVAN CONTAINERS**  
**MINE, UNDERWATER MK 52 AND MODS**  
**IN CRATE MK 52**  
**FLEET ISSUE UNIT LOAD**

**MIL-STD-1386-47**  
**(NAVY)**

24 FEBRUARY 1975

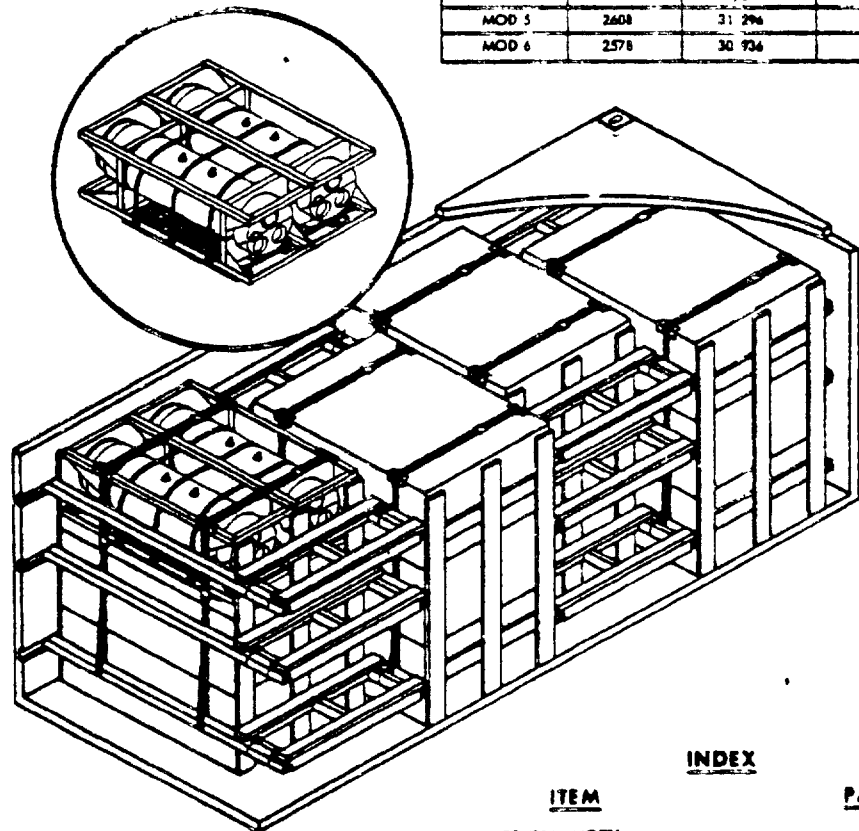
**UNIT LOAD DATA**

UNIT LOAD DRAWING ..... JR-64/208  
 DIMENSIONS ..... 86 1/4" x 39 3/4" x 27 3/4" H  
 CASE ..... 33.9 CU FT  
 WEIGHT ..... 32,725 LB

HAZARD CLASSIFICATION:  
 DOT - EXPLOSIVES A  
 CG - CLASS X-A

**TABLE I**

MK 52 MINE UNDERWATER	UNIT LOAD WT (LBS)	CONTAINER LOAD WEIGHT (LBS)	CONTAINER GROSS WEIGHT (LBS)
MOD 1	2,188	29,236	31,424
MOD 2	2,588	31,056	33,644
MOD 3	2,612	31,344	33,956
MOD 4	2,524	30,288	32,812
MOD 5	2,608	31,296	33,904
MOD 6	2,578	30,936	33,514



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**ITEM**

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GENERAL NOTES  
 COFC, TOFC CONTAINER-  
 SHIP & HIGHWAY

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**NOTES:**

1. UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.
2. FOR CROSS REFERENCE TO ASSOCIATED PALLETIZING, TRUCKLOADING AND CARLOADING MILITARY STANDARDS, REFER TO THE INDEX TO STANDARDS, MIL-HDBK-234 (NAVY).

**FSC 8140**

**AUTHORIZED FOR TRAILER-ON-  
 FLAT-CAR (TOFC), CONTAINER-ON-  
 FLAT-CAR (COFC), CONTAINERSHIP  
 AND HIGHWAY SHIPMENTS**

**APPROVED BY  
 US COAST GUARD**

**APPROVED BY  
 BUREAU OF EXPLOSIVES**

*R. Schenck, Capt. USCG*

*W. F. Grossman*

11-7-74

11/27/4

**ORIGINATOR**

*S. J. ... 2/2/75*

SIGNATURE

**NAVAL WEAPONS HANDLING LABORATORY**

**NAD CARL, NEW JERSEY**

PAGE 1 OF 3

*W. S. Gray, NM 46* 2/20/75  
 SIGNATURE (OPTIONAL) DATE

*J. E. Kelly* 2/20/75  
 SIGNATURE NAVSEAS/COM BY DATE

## MIL-STD-1386-47 (NAVY)

## GENERAL NOTES

1. THIS DOCUMENT GIVES DETAILED INSTRUCTIONS FOR LOADING THE MILVAN CONTAINER WITH THE UNDERWATER MINE MK 52 AND MODS IN CRATE MK 52 WHEN THE MINES ARE PALLETIZED IN ACCORDANCE WITH W2-54/208.
2. THE MILVAN SHALL BE EQUIPPED WITH A MECHANICAL LOAD-BRACING SYSTEM THAT MEETS THE REQUIREMENTS OF THE BUREAU OF EXPLOSIVES PAMPHLET 6C.
3. IN ADDITION TO THE BELT RAILS REQUIRED BY PAMPHLET 6C THE MILVAN CONTAINER HAS BELT RAILS AT THE 72" AND 80" HEIGHTS FROM THE CONTAINER FLOOR.
4. CONTAINERS ARE EQUIPPED WITH 25 CROSSMEMBERS. UNUSED CROSSMEMBERS MUST REMAIN WITH THE CONTAINER AND SHALL BE FASTENED INTO BELT RAILS FOR SHIPMENT.

**CAUTION**

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

5. WHEN THE LONGITUDINAL SLACK BETWEEN A CROSSMEMBER AND THE UNIT LOAD IS GREATER THAN ONE INCH, INSTALL SHIM PIECE 9 TO THE CROSSMEMBER TO FILL THE VOID. TWIST TIE WITH THREE PIECES OF 16 GAUGE SOFT ANNEALED IRON WIRE, AS SHOWN IN DETAIL A. THIS SHIM STRIP MAY BE ADDED OR OMITTED AS REQUIRED.
6. SWAY BRACE, DETAIL D, IS TWIST TIED TO THE CROSSMEMBERS AT BOTH ENDS WITH 16 GAUGE SOFT ANNEALED IRON WIRE. LENGTH OF STRUT, PIECE 4, SHALL BE OF SUFFICIENT THICKNESS TO CAUSE THE SWAY BRACE TO FILL THE VOID BETWEEN THE UNIT LOAD AND THE CONTAINER SIDE WALL.
7. EACH BAY OF UNIT LOADS IS TOWMED DOWN WITH TWO 1 1/4 x .005 STEEL STRAPS. STRAPS ARE ATTACHED TO THE CROSSMEMBERS AS SHOWN IN SECTION 3-5. SECURE EACH END OF STRAP WITH ONE SEAL WITH TWO PAIR OF NOTCHES PER SEAL OR TWO SEALS, BUTTED TOGETHER WITH TWO PAIR OF CRIMPS PER SEAL.
8. APPLICABLE MATERIAL SPECIFICATIONS:  
DUNNAGE LUMBER - FED. SPEC. MM-4-751.  
NAILS - FED. SPEC. FF-N-105, TYPE II, STYLE 10, COMMON NIKHT.  
STRAP - FED. SPEC. QQ-5-781, TYPE I, CLASS A.
9. 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. 1).

## TOFC/COFC, CONTAINERSHIP AND HIGHWAY

1. THE CONTAINER LOAD CONSISTS OF 12 UNIT LOADS WHICH MUST BE LOADED AND DUNNAGED IN ACCORDANCE WITH THIS DOCUMENT.

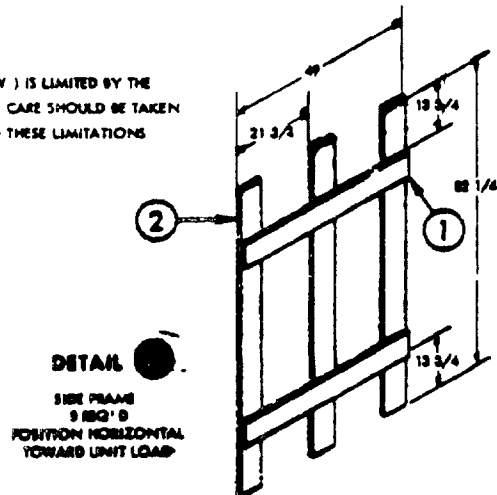
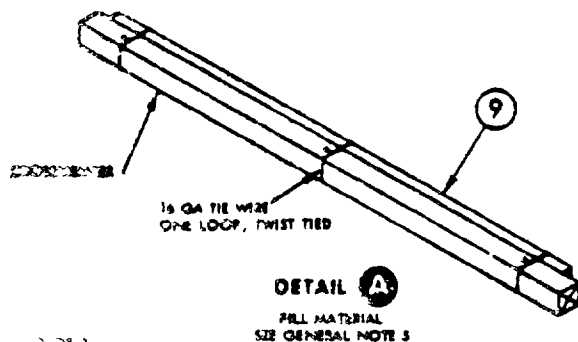
**NOTE**

THE TOP LAYER OF THE LAST BAY MAY BE OMITTED IF CONTAINER HEIGHT PREVENTS LOADING. REMAINING MINES IN THE BAY ARE TOWMED DOWN USING A CROSSMEMBER ON THE 60" HEIGHT. SHIM BETWEEN CROSSMEMBER AND MINE CRATE IS REQUIRED.

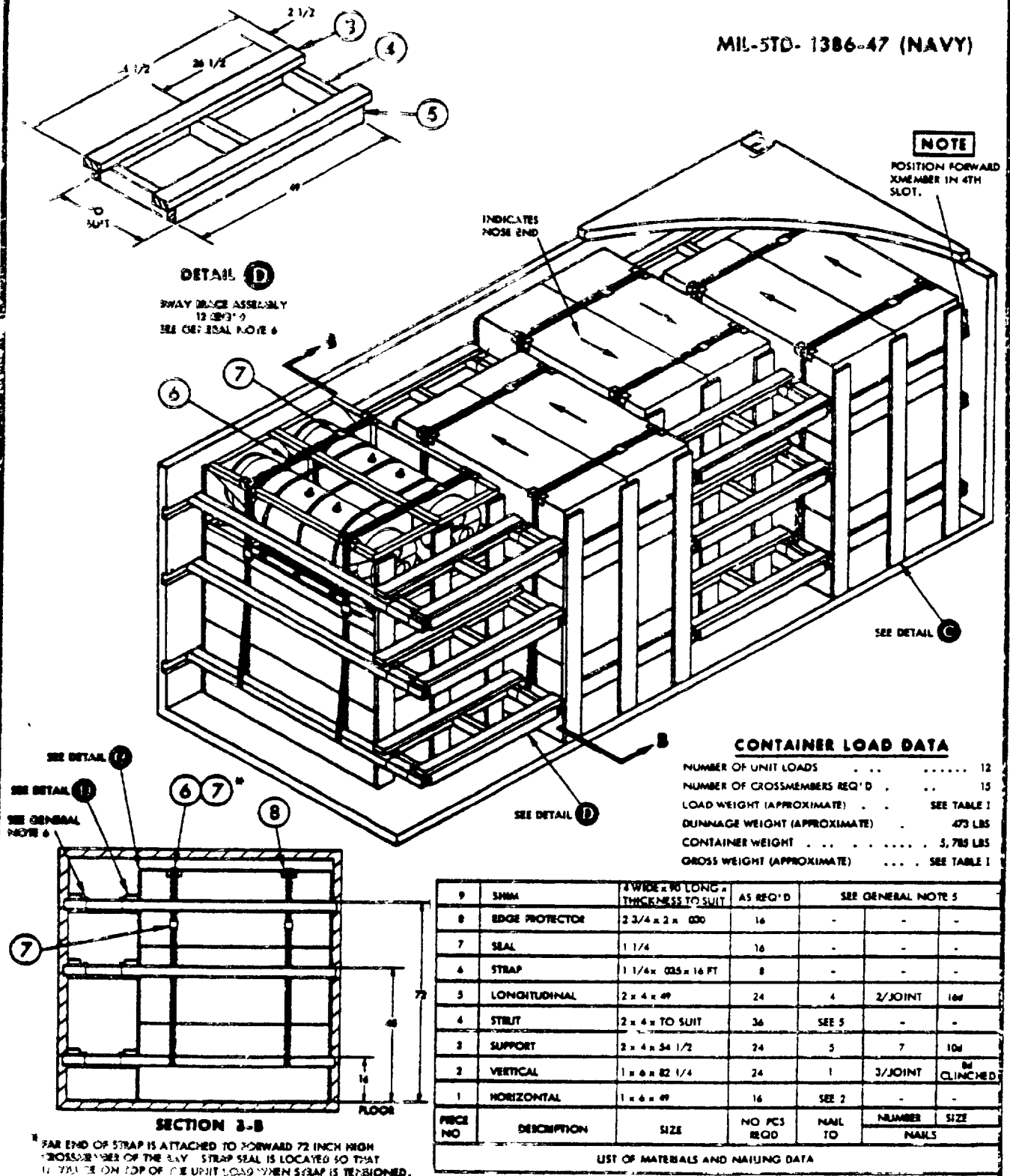
2. THE LOADED MILVAN CONTAINER SHALL BE ON A 20 FT MILVAN CHASSIS EQUIPPED WITH DOUBLE BOGIES WHEN BEING MOVED IN TOPC SERVICE.
3. WHEN THE LOADED CONTAINER IS IN TOPC OR COFC SERVICE, IT SHALL BE ON FLAT RAILCARS THAT COMPLY WITH BUREAU OF EXPLOSIVES PAMPHLET 6C.
4. THE LOADED MILVAN MAY BE TRANSPORTED OVER PUBLIC HIGHWAYS ON A MILVAN CHASSIS EQUIPPED WITH DOUBLE BOGIES OR ON SUITABLE COMMERCIAL EQUIPMENT OF APPROPRIATE CAPACITY.

**NOTE**

IN CERTAIN STATES THE GROSS VEHICLE WEIGHT (G.V.W.) IS LIMITED BY THE DISTANCE BETWEEN THE AXLES OF THE ASSEMBLED RIG. CARE SHOULD BE TAKEN TO SEE THAT THE PROPOSED G.V.W. DOES NOT EXCEED THESE LIMITATIONS.



MIL-STD-1386-47 (NAVY)



TOPS/COFC, CONTAINERSHIP AND HIGHWAY

DESIGN ACTIVITY  
NAVY - C1PREPARING ACTIVITY  
NAVY - OS  
PROJECT NO. 8140-N23-9

<b>SPECIFICATION ANALYSIS SHEET</b>		Form Approved Budget Bureau No 22-R253
<b>INSTRUCTIONS</b> This sheet is to be filled out by personnel either Government or contractor involved in the use of the specification in procurement of products for ultimate use by the Department of Defense. This sheet is provided for obtaining information on the use of this specification which will insure that suitable products can be procured with a minimum amount of delay and at the least cost. Comments and the return of this form will be appreciated. Fold on lines on reverse side, staple in corner, and send to preparing activity. Comments and suggestions submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or serve to amend contractual requirements.		
<b>SPECIFICATION</b> <div style="text-align: center; font-weight: bold; margin-top: 10px;">MIL-STD-1386-47 (Navy)</div>		
<b>ORGANIZATION</b>		
<b>CITY AND STATE</b>	<b>CONTRACT NUMBER</b>	
<b>MATERIAL PROCURED UNDER A</b> <input type="checkbox"/> DIRECT GOVERNMENT CONTRACT <input type="checkbox"/> SUBCONTRACT		
<b>1. HAS ANY PART OF THE SPECIFICATION CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?</b> <b>A. GIVE PARAGRAPH NUMBER AND WORDING</b>		
<b>B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES</b>		
<b>2. COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID</b>		
<b>3. IS THE SPECIFICATION RESTRICTIVE?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO (If "yes", in what way?)		
<b>4. REMARKS (Attach any pertinent data which may be of use in improving this specification. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity.)</b>		
<b>SUBMITTED BY (Printed or typed name and activity - Optional)</b>		<b>DATE</b>

DD FORM 1426

REPLACES EDITION OF 1 OCT 64 WHICH MAY BE USED

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