

# MILITARY STANDARD

## LOADING OF HAZARDOUS MATERIALS AND ASSOCIATED ITEMS IN MILVAN CONTAINERS

MIL-STD-1386-33

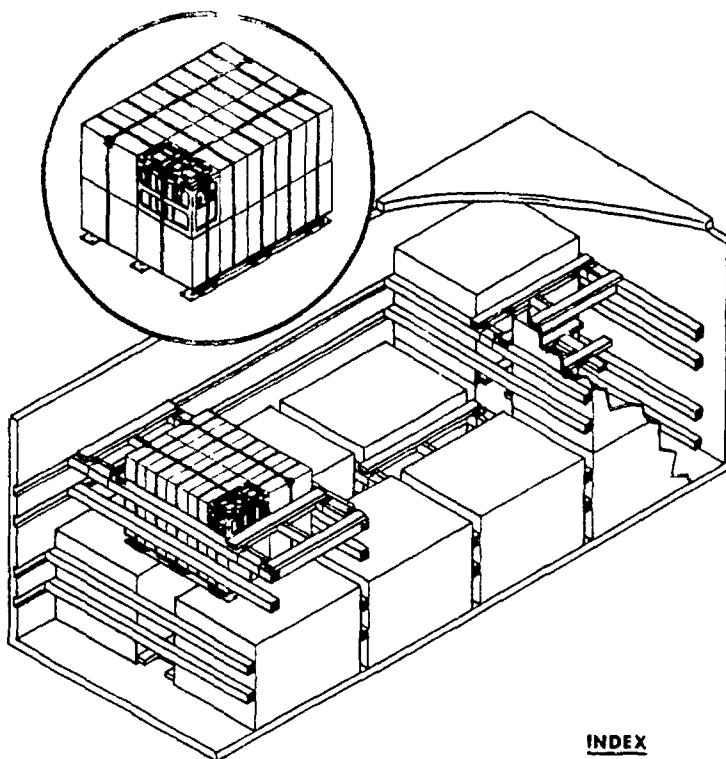
(NAVY)

17 JULY 1974

CARTRIDGE, 20MM  
IN SMALL ARMS AMMUNITION BOX MK 1 MOD 0  
FLEET ISSUE UNIT LOAD

**UNIT LOAD DATA**

UNIT LOAD DRAWING: WR-54/9, WR-54/11 OR WR-54/137  
DIMENSIONS: 47 1/2 L X 37 W X 34 7/8 H  
CUBE: 35.3 CU FT  
OTHER: SEE TABLE 1, PAGE 5

**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-236 (NAVY)

**INDEX**

ITEM	PAGE
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COFC & CONTAINERSHIP	2, 3, 5
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FSC 9140

**AUTHORIZED FOR CONTAINER-ON-  
FLAT-CAR (COFC), CONTAINERSHIP  
AND MOVEMENT ABOARD DEPOT  
(NON-PUBLIC) ROADS ONLY.**

**US COAST GUARD  
APPROVAL  
NOT REQUIRED**

**APPROVED BY  
BUREAU OF EXPLOSIVES**

DATE: 6/12/74

*M.S. Gray* *NYHL* *7/1/74*  
SIGNATURE TECHNICAL DIRECTION AGENT (TDA) DATE  
*A. L. Bell* *7/1/74*  
SIGNATURE ORDISCOM BY DIRECTION DATE

ORIGINATOR

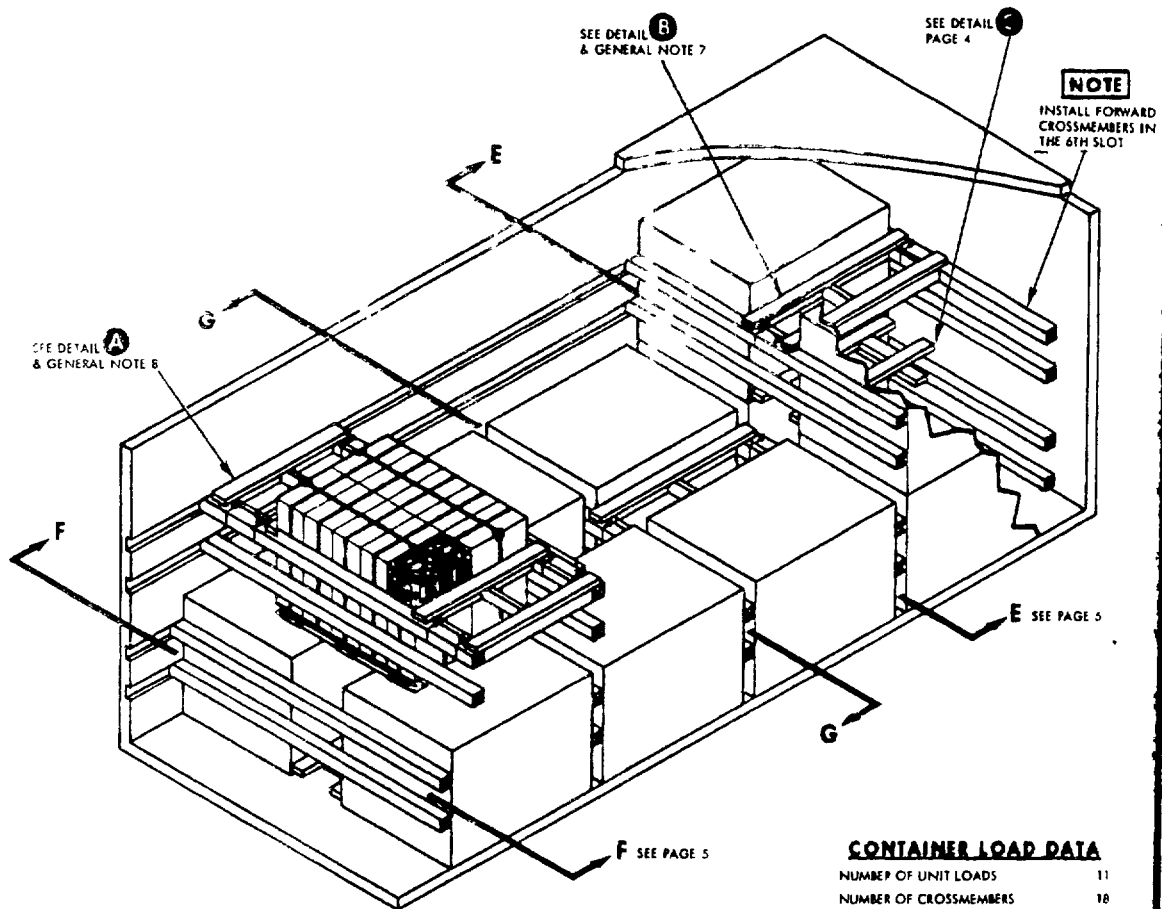
*Charles McBride* *7/1/74*

SIGNATURE

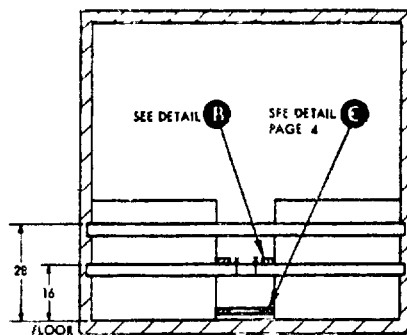
**NAVAL WEAPONS HANDLING LABORATORY  
NAD EARLE, NEW JERSEY**

PAGE 1 OF 5

## MIL-STD-1386-33 (NAVY)

**CONTAINER LOAD DATA**

NUMBER OF UNIT LOADS	11
NUMBER OF CROSSMEMBERS	18
LOAD WEIGHT	SEE TABLE 1, PAGE 5
DUNNAGE WEIGHT	192 LBS
CONTAINER WEIGHT	5,785 LBS
GROSS WEIGHT	SEE TABLE 1, PAGE 5



SECTION G-G

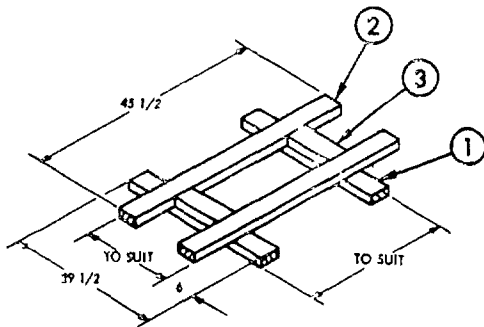
PIECE NO	DESCRIPTION	SIZE	NO PCS REQD	NAIL TO	NUMBER NAILS	SIZE
9	SUPPORT	2 x 4 x 42 1/2	4	8	1 PER JOINT	16c
8	STRUT	2 x 4 TO SUIT	6	SEE 7	-	-
7	LONGITUDINAL	2 x 4 x 37	4	8	2 PER JOINT	16d
6	SUPPORT	2 x 4 x 52 1/2	6	5	1 PER JOINT	16c
5	STRUT	2 x 4 TO SUIT	9	SEE 4	-	-
4	LONGITUDINAL	2 x 4 x 47	6	5	2 PER JOINT	16d
3	SPACER	2 x 4 TO SUIT	10	1	3	10d
2	STRINGER	2 x 4 x 45 1/2	10	1	3 PER JOINT	10d
1	SUPPORT	2 x 4 x 29 1/2	10	SEE 2	-	-
PIECE NO	DESCRIPTION	SIZE	NO PCS REQD	NAIL TO	NUMBER NAILS	SIZE

LIST OF MATERIALS AND NAILING DATA

COFC &amp; CONTAINERSHIP (11 UNIT LOADS)

PAGE 3

## MIL-STD-1386-33 (NAVY)

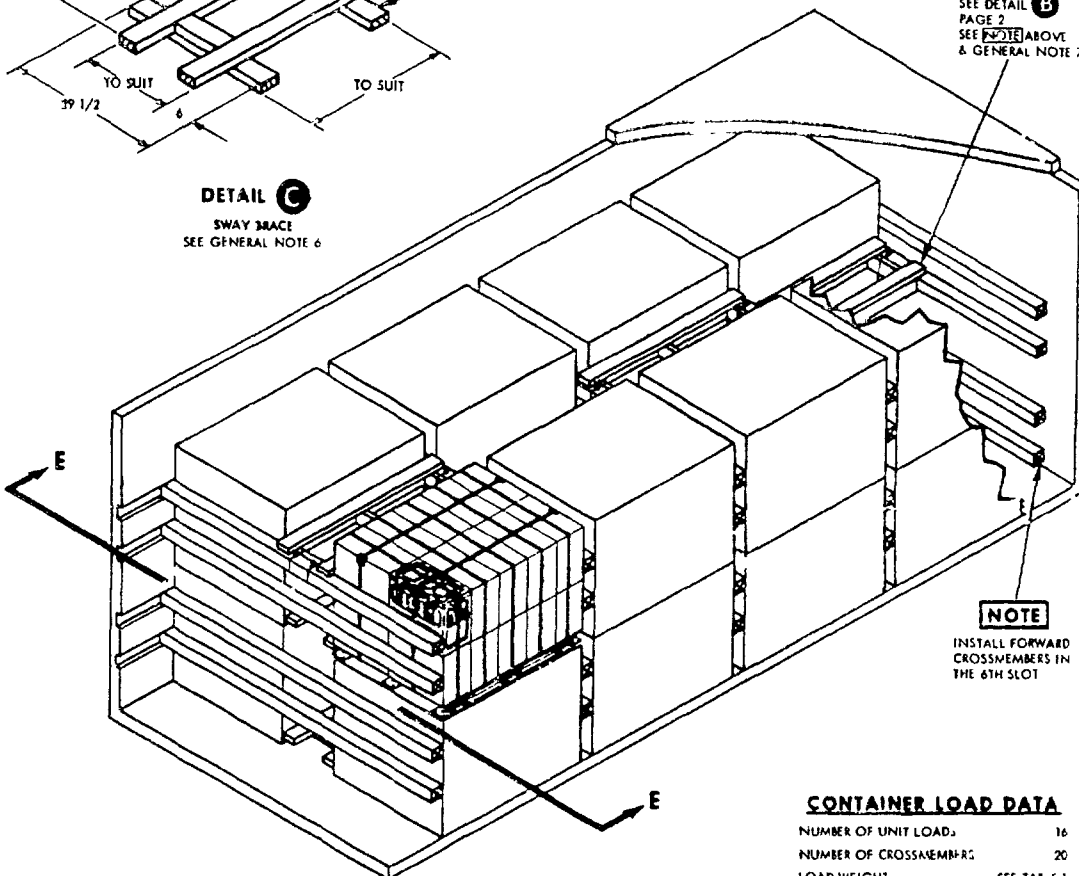


**DETAIL C**  
SWAY BRACE  
SEE GENERAL NOTE 6

**NOTE**

LOCATE SWAY BRACE DETAIL C ON THE 48 AND 60 INCH CROSSMEMBERS IN ALTERNATE BAYS TO PREVENT INTERFERENCE OF SWAY BRACES WITH EACH OTHER

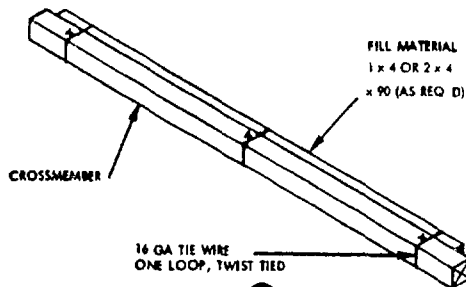
SEE DETAIL B  
PAGE 2  
SEE NOTE ABOVE  
& GENERAL NOTE 7

**NOTE**

INSTALL FORWARD CROSSMEMBERS IN THE 6TH SLOT

**CONTAINER LOAD DATA**

NUMBER OF UNIT LOADS	16
NUMBER OF CROSSMEMBERS	20
LOAD WEIGHT	SEE TABLE I
DUNNAGE WEIGHT	213 LBS
CONTAINER WEIGHT	5 785 LBS
GROSS WEIGHT	SEE TABLE I



**DETAIL D**  
FILL MATERIAL  
SEE GENERAL NOTE 5

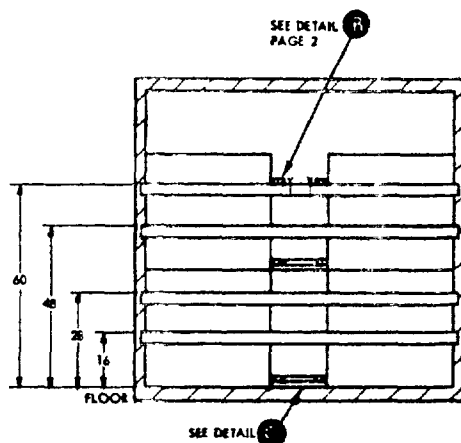
PIECE NO	DESCRIPTION	SIZE	NO PCS REQD	NAIL TO	NUMBER	SIZE
6	SUPPORT	2 x 4 x 52 1/2	8	5	1 PER JOINT	16d
5	STRUT	2 x 4 TO SUIT	12	SEE 4	-	-
4	LONGITUDINAL	2 x 4 x 47	8	5	4	16d
3	SPACER	2 x 4 TO SUIT	16	1	3	10d
2	STRINGER	2 x 4 x 45 1/2	16	1	3 PER JOINT	10d
1	SUPPORT	2 x 4 x 29 1/2	16	SEE 2	-	-
PIECE NO	DESCRIPTION	SIZE	NO PCS REQD	NAIL TO	NUMBER	SIZE
LIST OF MATERIALS AND NAILING DATA						

## MIL-STD-1386 33 (NAVY)

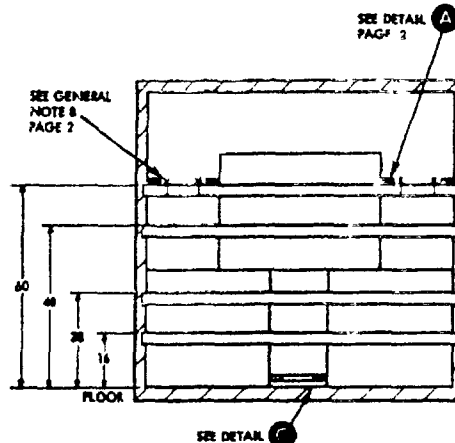
TABLE I

FSN & DODIC NOS	WR NO.	NO. OF UNIT LOADS PER CONTAINER	UNIT LOAD WEIGHT (LBS) *	CONTAINER LOAD WEIGHT (LBS) *	CONTAINER GROSS WEIGHT (LBS) *	HAZARD CLASSIFICATION		PAGE NUMBER OF STD TO BE USED
						DOT	CG	
1305-028-4548-A769	54/11	16	2230	35,680	41,678	A	IV	SEE PAGE 4
1305-028-4547-A77C	54/11	16	2230	35,680	41,678	A	IV	SEE PAGE 4
1305-934-8878-A793	54/137	16	2360	37,760	43,758	A	IV	SEE PAGE 4
1305-934-8879-A794	54/137	16	2360	37,760	43,758	A	IV	SEE PAGE 4
1305-934-8880-A795	54/137	16	2360	37,760	43,758	A	IV	SEE PAGE 4
1305-459-4383-A767	54/137	16	2360	37,730	43,758	A	IV	SEE PAGE 4
1305-247-3728-A797	54/137	16	2360	37,760	43,758	A	IV	SEE PAGE 4
1305-028-1511-A765	54/11	14	2730	38,220	44,218	C	I	SEE COFC & CONTAINER SHIP NO. 1, PAGE 2
1305-516-1125-A765	54/11	11	3330	36,630	42,607	C	I	SEE PAGE 1
1305-516-6398-A776	54/11	11	3370	37,070	43,047	A	IV	SEE PAGE 3
1305-484-1392-A808	54/9	11	3410	37,510	43,487	A	IV	SEE PAGE 3
1305-640-8284-A808	54/9	11	3410	37,510	43,487	A	IV	SEE PAGE 3

\*APPROXIMATE



SECTION E-E



SECTION F-F

REVIEW ACTIVITY  
NAVY - OS

PREPARING ACTIVITY:  
NAVY - OS  
(PROJECT NO. 8140-N209)

**MIL-STD-1386-33 (NAVY)****GENERAL NOTES**

- 1 THIS DOCUMENT GIVES DETAILED INSTRUCTIONS FOR LOADING THE MILVAN CONTAINER WITH FLEET ISSUE UNIT LOADS OF 20 MM CARTRIDGES PACKED IN THE SMALL ARMS AMMUNITION BOX MA 1 MOD 0. THE UNIT LOADS SHALL BE PALLETIZED IN ACCORDANCE WITH WR-54/9, WR-54/11 OR WR-54/137.
- 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 83 INCH HEIGHTS FROM THE CONTAINER FLOOR.

**CAUTION**

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

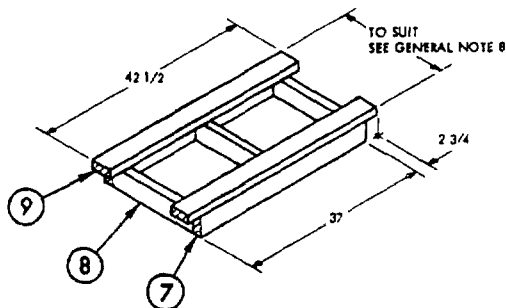
- 4 CONTAINERS ARE EQUIPPED WITH 25 CROSSMEMBERS. UNUSED CROSSMEMBERS MUST REMAIN WITH THE CONTAINERS AND SHALL BE FASTENED INTO THE BELT RAILS FOR SHIPMENT.
- 5 WHEN THE VOID BETWEEN THE CROSSMEMBERS AND THE UNIT LOAD IS GREATER THAN ONE INCH, USE FILL MATERIAL TO SHIM BETWEEN THE CROSSMEMBER AND UNIT LOAD AS SHOWN IN DETAIL D, PAGE 4.
- 6 SWAY BRACE, DETAIL C, PAGE 4, IS ASSEMBLED PLACE. PIECE 1, IS POSITIONED INBOARD OF THE CORNER PALLET POSTS. WITH PIECE 2 AGAINST PALLET SKIDS, NAIL TO PIECE 1 WITH THREE 10d NAILS PER JOINT. CUT PIECE 3 TO FIT BETWEEN PIECE 1 AND 2 AND NAIL TO PIECE 1 WITH THREE 10d NAILS.
- 7 THE LENGTH OF THE STRUT, PIECE 5 OF DETAIL B, SHALL BE SUFFICIENT TO CAUSE THE BRACE TO FILL THE VOID BETWEEN UNIT LOADS WHEN THE UNIT LOADS ARE AGAINST THE CONTAINER SIDE WALLS. TWIST TIE EACH END OF DETAIL B TO CROSSMEMBERS WITH 16 GAUGE SOFT ANNEALED WIRE (2 PLACES).
- 8 THE SWAY BRACE, DETAIL A, IS USED FOR SHIPMENTS OF ELEVEN UNIT LOADS ONLY. THE LENGTH OF THE STRUT, PIECE 8 SHALL BE SUFFICIENT TO CAUSE THE SWAY BRACE TO FILL THE VOID BETWEEN THE UNIT LOAD AND THE CONTAINER SIDE WALL. TWIST TIE EACH END OF DETAIL A TO CROSSMEMBERS WITH 16 GAUGE SOFT ANNEALED WIRE (2 PLACES).
- 9 APPLICABLE MATERIAL SPECIFICATIONS: DUNNAGE LUMBER - FED SPEC MM-L-751, NAILS - FED SPEC FF-N-105 TYPE II, STYLE 10, COMMON BRIGHT STRAPPING - FED SPEC QQ-S-781, TYPE I, CLASS A.
- 10 AFTER BLOCKING AND BRACING HAS BEEN INSPECTED ATTACH SHIPPING DOCUMENTS INSIDE THE CONTAINER IN AN ACCESSIBLE AREA. CLOSE AND SEAL CONTAINER DOORS. ATTACH APPLICABLE PLACARDS TO THE OUTSIDE OF THE CONTAINER FOR THE APPROPRIATE MODE OF TRANSPORTATION AS PRESCRIBED IN OP 2165 (VOL. 1).

**COFC AND CONTAINERSHIP ONLY**

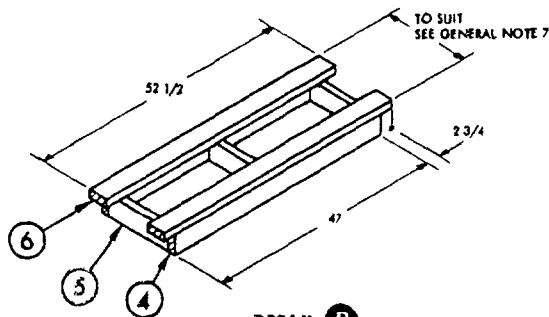
- 1 WHEN SHIPPING FLEET ISSUE UNIT LOADS OF 20 MM CARTRIDGES WR-54/9, WR-54/11 OR WR-54/137 FIRST DETERMINE THE FSN OR DODIC NUMBER FOR THE ITEM TO BE SHIPPED. USING THIS NUMBER, ENTER TABLE 1 AND DETERMINE THE NUMBER OF UNIT LOADS TO BE LOADED INTO THE CONTAINER AND THE PAGE NUMBER OF THE STANDARD TO BE USED. LOAD THE CONTAINER ACCORDING TO THESE INSTRUCTIONS.
- 2 WHEN REQUIRED TO SHIP A CONTAINER LOAD OF FSN 1305-028-1451 DODIC NO. A-765, ONLY 14 UNIT LOADS ARE SHIPPED. FOLLOW THE INSTRUCTIONS FOR LOADING 16 UNIT LOADS AS SHOWN ON PAGE 4 OMITTING THE TWO TOP REAR UNIT LOADS. INSTALL A SWAY BRACE, DETAIL B, FOR THE ONE HIGH BAY ON THE 28 INCH HIGH CROSSMEMBERS.

**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.



**DETAIL A**  
SWAY BRACE FRAME



**DETAIL B**  
SWAY BRACE FRAME

SPECIFICATION ANALYSIS SHEET		Form Approved Budget Bureau No 22-R255
<p><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.</p>		
<p><b>SPECIFICATION</b> MIL-STD-1386-33 (NAVY)</p>		
<p><b>ORGANIZATION</b></p>		
<p><b>CITY AND STATE</b></p>		<p><b>CONTRACT NUMBER</b></p>
<p><b>MATERIAL PROCURED UNDER A</b>  <input type="checkbox"/> DIRECT GOVERNMENT CONTRACT    <input type="checkbox"/> SUBCONTRACT         </p>		
<p><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> </p>		
<p><b>B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES</b></p>		
<p><b>2 COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID</b></p>		
<p><b>3 IS THE SPECIFICATION RESTRICTIVE?</b>  <input type="checkbox"/> YES    <input type="checkbox"/> NO (If "yes", in what way?)         </p>		
<p><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></p>		
<p><b>SUBMITTED BY (Printed or typed name and activity - Optional)</b></p>		<p><b>DATE</b></p>

DD FORM 1426

1 JAN 38

REPLACES EDITION OF 1 OCT 54 WHICH MAY BE USED

S/N 0102-014 1801

C 25254

FOLD

POSTAGE AND FEES PAID

OFFICIAL BUSINESS

DOD 316

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