

**MILITARY STANDARD**  
**RAILCAR LOADING OF HAZARDOUS MATERIALS**  
 CHARGE, PROPELLING 8"/55  
 CARTRIDGE TANK MK11 MOD 0 OR MK13 MOD 0  
 IN ADAPTER MK76 MOD 0  
 FLEET ISSUE UNIT LOAD

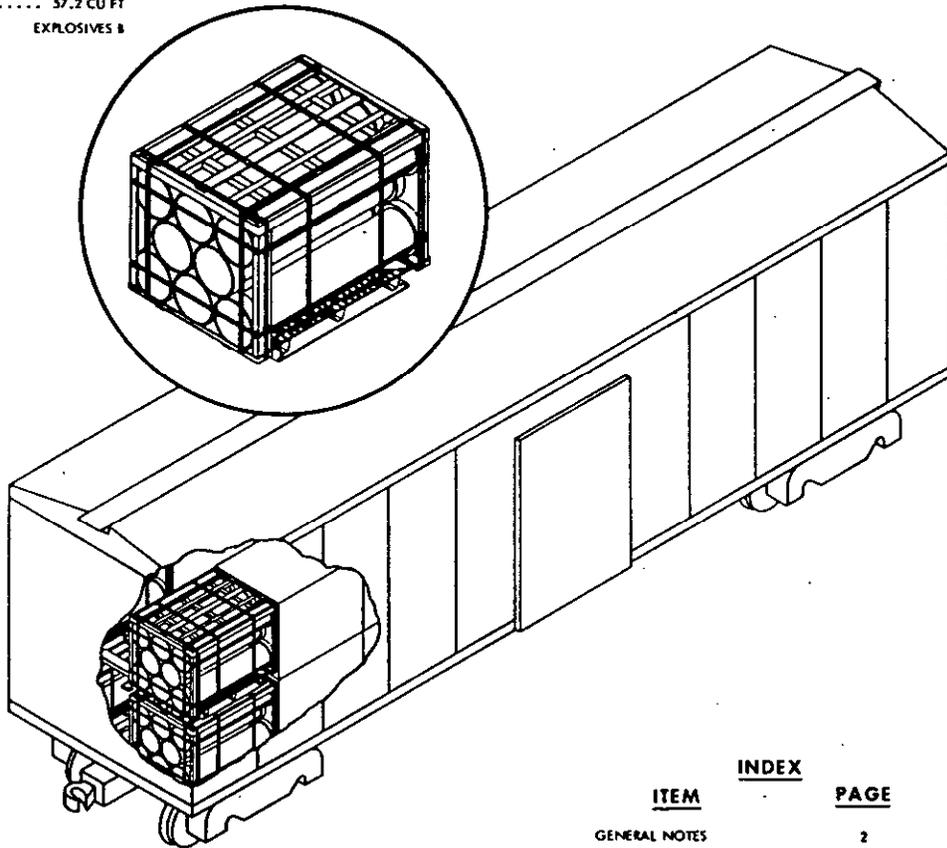
**MIL-STD-1325-83**  
**(NAVY)**

27 SEPTEMBER 1974

SUPERSIDING  
 WR-52/83  
 10 OCTOBER 1967

**UNIT LOAD DATA**

UNIT LOAD DRAWING ..... WR-54/126  
 WEIGHT (APPROX.) ..... 1712 LBS  
 DIMENSIONS ..... 55 1/2 L x 41 3/8 W x 43 H  
 CUBE ..... 57.2 CU FT  
 DOT HAZARD CLASSIFICATION ..... EXPLOSIVES B



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**NOTES:**

- UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.
- FOR CROSS REFERENCE TO ASSOCIATED PALLETIZING, TRUCKLOADING AND CONTAINERLOADING MILITARY STANDARDS, REFER TO INDEX TO STANDARDS MIL-HDBK-226 (NAVY).

FSC 8140

**AUTHORIZED AND RELEASED FOR  
 GENERAL USE.**

**APPROVED BY BUREAU OF EXPLOSIVES**

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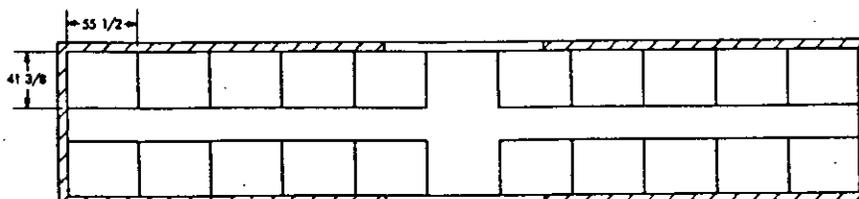
## MIL-STD-1325-83 (NAVY)

## GENERAL NOTES

1. FOR GENERAL INFORMATION CONCERNING ORDERING, INSPECTING, AND PREPARING CARS, AND FOR DUNNAGING MATERIALS, DESIGN, AND INSTALLATION OF DUNNAGE SEE THE GENERAL DOCUMENT MIL-STD-1325 (NAVY) "RAILCAR LOADING OF HAZARDOUS MATERIALS."
2. WHEN PLANNING SHIPMENTS ORDER THE MINIMUM NUMBER OF CARS OF THE CAPACITY REQUIRED FOR THE SHIPMENT.
3. LOADING PLANS SHOWN ARE FOR COMMERCIAL BOXCARS WITH 50 FT 6 INCHES INSIDE LENGTH, 110 INCHES INSIDE WIDTH, AND COMMERCIAL BOXCARS WITH 50 FT 6 INCHES INSIDE LENGTH, 112 INCHES INSIDE WIDTH.
4. THE "LOAD LIMIT" OF A CAR MUST NOT BE EXCEEDED NOR SHOULD THE RAILCAR BE LOADED SO THAT MORE THAN ONE-HALF OF THE "LOAD LIMIT" IS CARRIED BY ONE SET OF TRUCKS.
5. IF END WALLS OF CARS ARE NOT SQUARE THEY MUST BE SQUARED OFF BEFORE STARTING TO LOAD CAR.
6. THE LOAD CONSISTS OF 8"/55 PROPELLING CHARGE CARTRIDGE TANK MK 11 MOD 0 OR MK 13 MOD 0 IN ADAPTER MK 76 MOD 0 PALLETIZED IN ACCORDANCE WITH WR-54/126.
7. THE UNIT LOADS ARE HANDLED AND LOADED WITH A SUITABLE FORK LIFT TRUCK.
8. UNLESS OTHERWISE SPECIFIED NAILING SHALL BE IN ACCORDANCE WITH MIL-STD-1325 (NAVY).
9. ALL STRAP JOINTS SHALL BE CRIMP-TYPE JOINTS MADE WITH A CRIMPING TOOL THAT DOES NOT CUT THE SEAL OR STRAP, RATHER THAN A TOOL THAT MAKES A NOTCH-TYPE JOINT. THE STRAPPING MUST BE IN ACCORDANCE WITH NAVSUP NOTICE 4642 DATED 21 APRIL 1971.
10. APPLICABLE MATERIAL SPECIFICATIONS:
  - DUNNAGE LUMBER - FED. SPEC MM-L-751
  - NAILS - FED. SPEC FF-N-105
  - STRAPPING - FED. SPEC OO-S-781, TYPE I, HEAVY DUTY, CLASS A, DRY (UNLUBRICATED)
  - SEALS - FED. SPEC OO-S-781, STYLE III, HEAVY DUTY.
11. AFTER BLOCKING AND BRACING HAS BEEN INSPECTED ATTACH SHIPPING DOCUMENTS INSIDE THE CAR IN AN ACCESSIBLE AREA, CLOSE AND SEAL BOXCAR DOORS, AND ATTACH APPLICABLE PLACARDS TO THE OUTSIDE OF CAR AS PRESCRIBED IN OP 2165 (VOL. II).

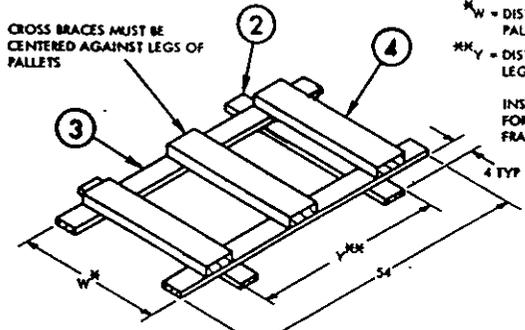
## 50 FT 6 IN. BOXCAR, COMMERCIAL

1. THE CARLOAD CONSISTS OF EITHER 40 UNIT LOADS WHICH MUST BE LOADED AND DUNNAGED IN ACCORDANCE WITH THIS PROCEDURAL DRAWING, OR 56 UNIT LOADS WHICH MAY BE LOADED AS SHOWN IN THE ALTERNATE LOADING PLAN ON PAGE 5 WHEN A BOXCAR IS AVAILABLE WITH A 9 FT 4 INCH OR GREATER INSIDE WIDTH. ALTERNATE CENTER GATE, DETAIL E, MUST BE USED WITH THIS ALTERNATE LOADING PLAN, USING THE SAME NUMBER OF STRUTS, SWAY BRACING AND SLEEPERS ARE NOT REQUIRED BUT DOORWAY PROTECTION WILL BE REQUIRED.
2. WHEN LESS THAN CARLOAD (LCL) QUANTITIES ARE REQUIRED TO BE SHIPPED IN COMMERCIAL BOXCARS AND A PARTIAL LAYER RESULTS. THE PARTIAL LAYER OF LADING SHALL BE BRACED BY MEANS OF END BRACING AND OR PARTIAL LAYER BRACING CONSTRUCTED IN ACCORDANCE WITH WR-52/100. SELECT THE TYPE OF BRACE TO COMPLY WITH THE WEIGHT OF THE UNITS TO BE RETAINED. THE CENTER GATE HEIGHT SHOULD BE ADJUSTED AS REQUIRED. THE WEIGHT DISTRIBUTION REQUIREMENTS OF THE AAR MUST BE COMPLIED WITH, SEE MIL-STD-1325 (NAVY).
3. THE LOADS AS SHOWN ARE BASED ON CARS WHICH HAVE 10 FT WIDE DOORWAY OPENINGS AND ARE EQUIPPED WITH CONVENTIONAL SLIDING TYPE DOORS. THE DEPICTED PROCEDURES AND METHODS OF BLOCKING ARE APPLICABLE TO BOXCARS EQUIPPED WITH CONVENTIONAL SLIDING TYPE DOORS OTHER THAN 10 FT WIDE PROVIDING THE LENGTH OF PIECE 9 IS ADJUSTED AS REQUIRED TO SUIT THE PARTICULAR DOORWAY OPENING.
4. THE DEPICTED PROCEDURES AND METHODS OF BLOCKING ARE ALSO APPLICABLE TO BOXCARS EQUIPPED WITH PLUG TYPE DOORS PROVIDING THE LENGTH OF PIECE 9 IS ADJUSTED AS REQUIRED TO SUIT THE PARTICULAR DOORWAY OPENING. DUNNAGE MATERIAL MUST NOT BE NAILED TO ANY PLUG DOOR, WHETHER MAIN OR AUXILIARY, EXCEPT WHEN THE CAR HAS A COMBINATION OF A CONVENTIONAL SLIDING TYPE DOOR AND A PLUG TYPE DOOR, AND AN ADEQUATE NAILING STRIP IS PROVIDED ON THE PLUG TYPE DOOR. IF LUMBER OF SUFFICIENT LENGTH TO SPAN PLUG DOORS IS NOT AVAILABLE, RANDOM LENGTH MATERIAL, DOUBLED AND SPLICED, BUT WITH JOINTS OF SPLICES OFFSET, MAY BE USED. STACKS WITH MORE THAN HALF OF THE UNIT LOAD IN THE DOORWAY AREA MUST BE UNITIZED WITH TWO LATERALLY APPLIED 1 1/4" STEEL STRAPS PER STACK, EACH TENSIONED AND SEALED WITH TWO DOUBLE CRIMPED SEALS AND A TOP SWAY BRACE CONSISTING OF A STRAPPING BOARD AND CROSS BRACE, TWO PER STACK (SEE DETAIL D) MUST BE INSTALLED BETWEEN THE ROWS OF THE DOORWAY STACKS. STRAP IS SECURED TO STRAPPING BOARD WITH TWO 1 1/4" STAPLES. PIECES 11 AND 12 ARE NOT REQUIRED WHEN PLUG DOOR EQUIPPED BOXCARS ARE USED, EXCEPT WHEN CAR HAS A COMBINATION OF PLUG DOOR AND CONVENTIONAL SLIDING DOOR. PIECES 11 AND 12 ARE REQUIRED FOR THE CONVENTIONAL DOOR. SECURELY CLOSE DOORS AND WIRE TOGETHER WITH A STRONG FLEXIBLE STEEL WIRE INSERTED THROUGH THE HOLES IN THE DOOR LATCH ASSEMBLY ONE OR MORE TIMES AND THE WIRE ENDS TWISTED TOGETHER.



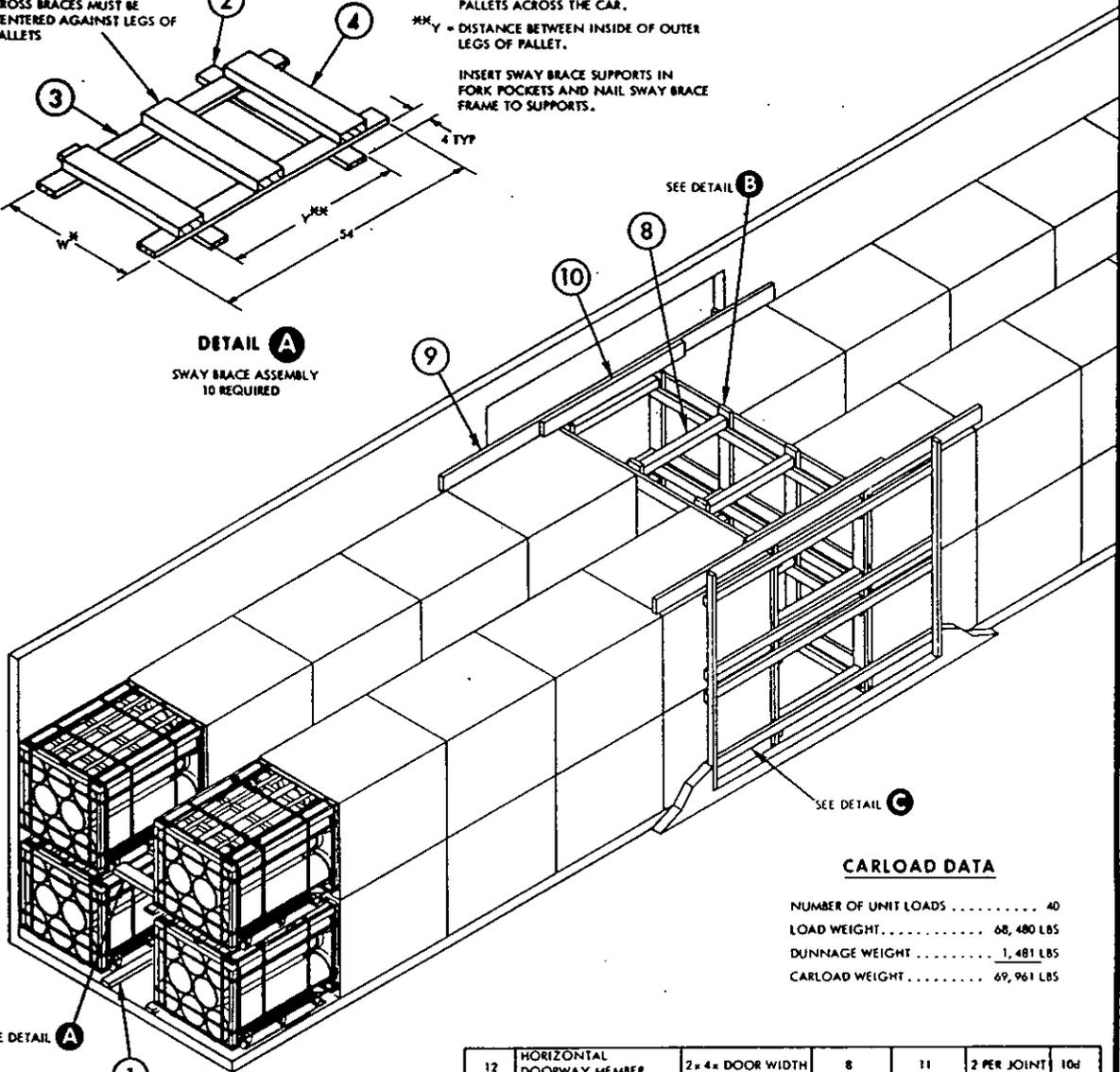
LOADING PLAN

MIL-STD-1325-83 (NAVY)



**DETAIL A**  
SWAY BRACE ASSEMBLY  
10 REQUIRED

$W$  = DISTANCE BETWEEN LEGS OF PALLETS ACROSS THE CAR.  
 $Y$  = DISTANCE BETWEEN INSIDE OF OUTER LEGS OF PALLET.  
 INSERT SWAY BRACE SUPPORTS IN FORK POCKETS AND NAIL SWAY BRACE FRAME TO SUPPORTS.



**CARLOAD DATA**

NUMBER OF UNIT LOADS	40
LOAD WEIGHT	68,480 LBS
DUNNAGE WEIGHT	1,481 LBS
CARLOAD WEIGHT	69,961 LBS

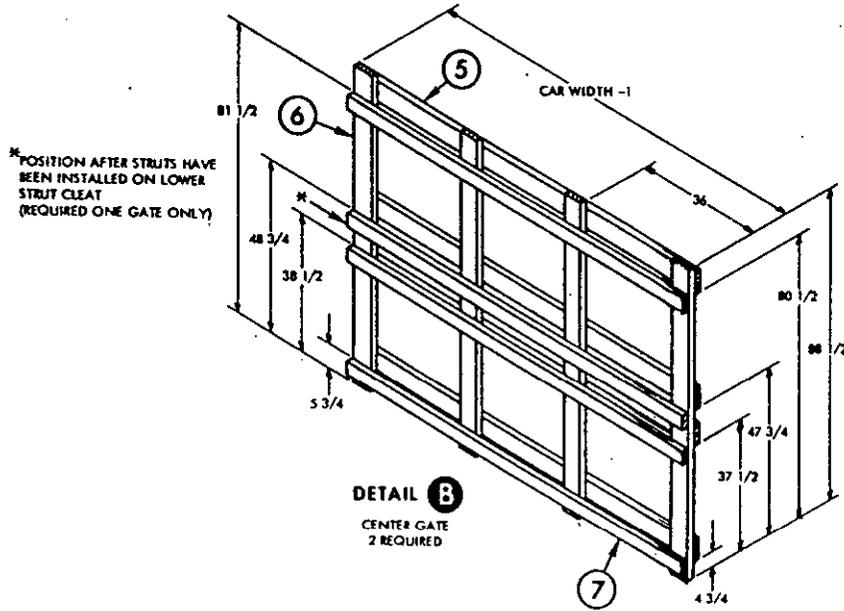
SEE DETAIL A

$W$  = DISTANCE BETWEEN LEGS OF PALLETS ACROSS THE CAR  
 $Y$  = DISTANCE BETWEEN INSIDE OF OUTER LEGS OF PALLET  
 $MM$  PIECE 4 NAILS TO PIECE 5 WITH 10d NAILS, CLINCHED, 3 PER JOINT, AND TO PIECE 3 WITH 6d NAILS, 1 PER JOINT.  
 $MM$  2 x 6 STRUTS DOUBLED AND LAMINATED WITH 10d NAILS MAY BE SUBSTITUTED IN PLACE OF 4 x 4's.

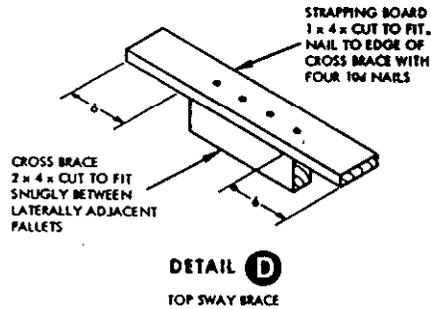
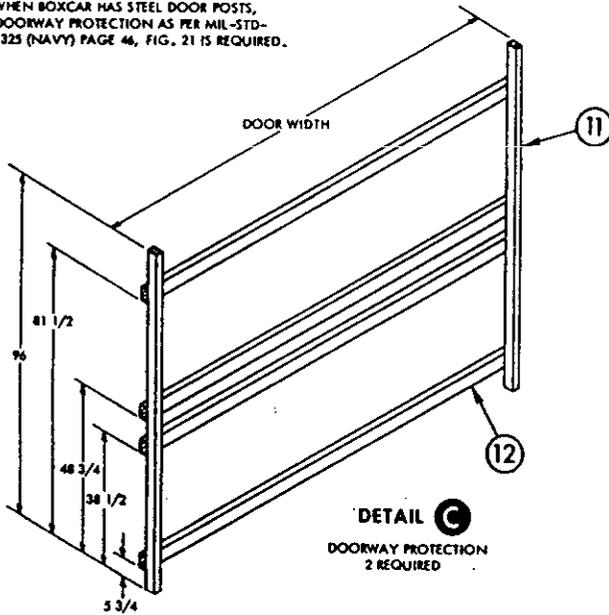
PIECE NO.	DESCRIPTION	SIZE	NO. PCS REQD	NAIL TO	NUMBER NAILS	SIZE
12	HORIZONTAL DOORWAY MEMBER	2 x 4 x DOOR WIDTH	8	11	2 PER JOINT	10d
11	VERTICAL DOORWAY MEMBER	2 x 3 x 96	4	DOOR POST	2 PER FOOT	20d
10	HOLD DOWN CLEAT	2 x 6 x 72	2	9	2 PER FOOT	10d
9	GATE HOLD DOWN	2 x 6 x 14 FT	2	CAR WALL	5 EACH END	10d
8	STRUT	4 x 4 x WEDGE FIT $MM$	16	6	2 PER JOINT	16d
7	CENTER GATE STRUT CLEAT	2 x 4 x CAR WIDTH-1	8	6	3 PER JOINT	10d
6	CENTER GATE VERTICAL	2 x 6 x 88 1/2	8	SEE 5	-	-
5	CENTER GATE HORIZONTAL	2 x 6 x CAR WIDTH-1	8	6	3 PER JOINT	10d
4	CROSS BRACE	2 x 6 x $W$	30	SEE 3	-	-
3	SWAY BRACE LONGITUDINAL	1 x 4 x 54	20	3, 5	SEE NOTE $MM$	-
2	SWAY BRACE SUPPORT	1 x 4 x ( $W$ - 8) $MM$	20	SEE 3	-	-
1	SLEEPER	2 x 4 x 54	20	CAR FLOOR	2 PER FOOT	16d

LIST OF MATERIALS AND NAILING DATA

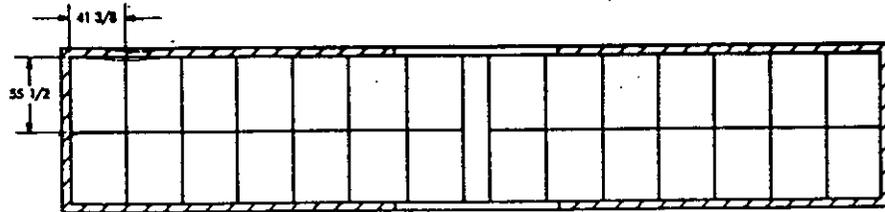
MIL-STD-1325-83 (NAVY)



WHEN BOXCAR HAS STEEL DOOR POSTS, DOORWAY PROTECTION AS PER MIL-STD-1325 (NAVY) PAGE 46, FIG. 21 IS REQUIRED.



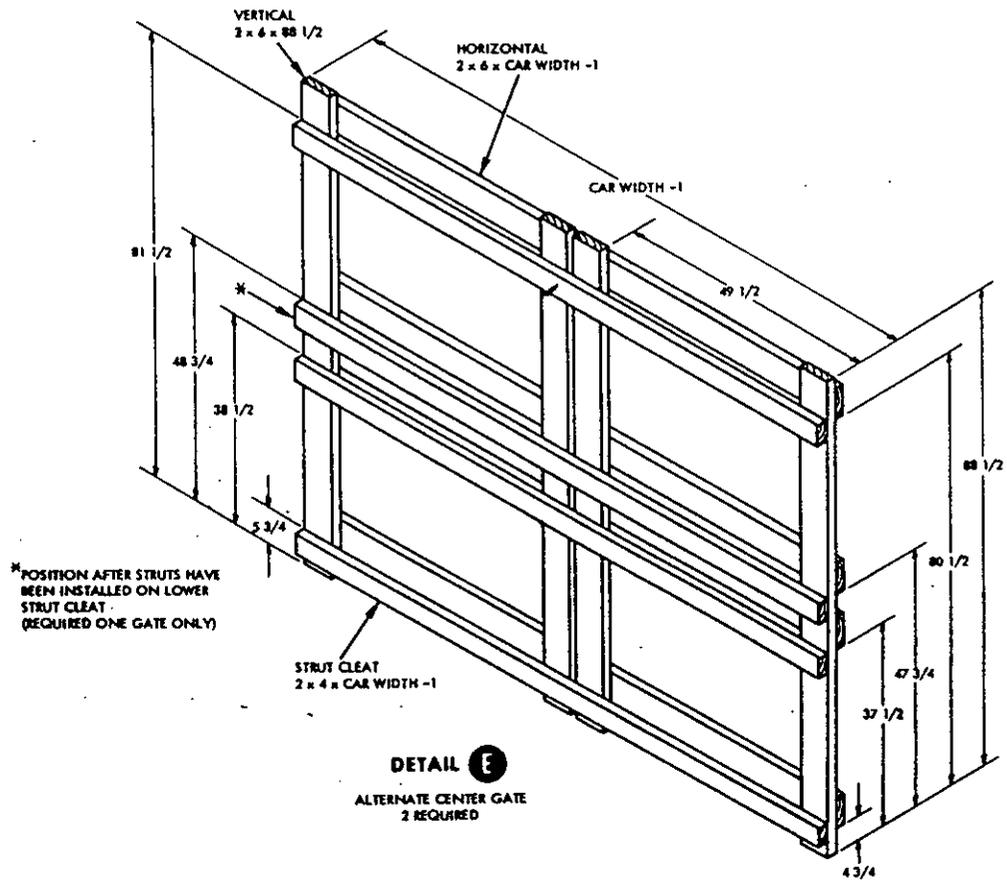
MIL-STD-1325-83 (NAVY)



ALTERNATE LOADING PLAN

**ALTERNATE CARLOAD DATA**

NUMBER OF UNIT LOADS .....	56
LOAD WEIGHT .....	95,872 LBS
DUNNAGE WEIGHT .....	785 LBS
CARLOAD WEIGHT .....	96,657 LBS



REVIEW ACTIVITY  
NAVY - OS, AS

PREPARING ACTIVITY  
NAVY - OS  
(PROJECT NO. 8140-N255)

FOLD

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POSTAGE AND FE

OFFICIAL BUSINESS

Commanding Officer  
Naval Ammunition Depot Earle  
Naval Weapons Handling laboratory  
Colts Neck, New Jersey 07722

Attn: 803

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FOLD

## SPECIFICATION ANALYSIS SHEET

Form Approved  
Budget Bureau No. 22-R255

**INSTRUCTIONS:** 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.

## SPECIFICATION

MIL-STD-1325-83 (NAVY)

## ORGANIZATION

## CITY AND STATE

## CONTRACT NUMBER

## MATERIAL PROCURED UNDER A

 DIRECT GOVERNMENT CONTRACT     SUBCONTRACT

1. HAS ANY PART OF THE SPECIFICATION CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?

A. GIVE PARAGRAPH NUMBER AND WORDING.

B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES

2. COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID

3. IS THE SPECIFICATION RESTRICTIVE?

YES     NO (If "yes", in what way?)

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)

SUBMITTED BY (Printed or typed name and activity - Optional)

DATE

DD FORM 1426  
1 JAN 66

REPLACES EDITION OF 1 OCT 64 WHICH MAY BE USED.

S/N-0102-014-1801 C-25254