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 DATE *7/19/54*

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TRUCKLOADING OF WP LOADED AMMUNITION PACKED IN WOODEN BOXES

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PAGE 2 GENERAL NOTES & MISC. DETAILS
 PAGE 3 & 4 TYPICAL LOADING METHOD
 PAGE 5 & 6 TABULAR DATA
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ITEMS INCLUDED

57MM RIFLE	81 MM MORTAR
60MM MORTAR	90MM GUN
75 MM GUN	105 MM HOW.
75MM RIFLE	105MM RIFLE
75MM HOW.	4.2" MORTAR
76 MM GUN	120 MM GUN
ROCKETS & HEADS	GRENADES, RIFLE

CAUTION: GENERAL NOTES PAGE 2 WILL BE THOROUGHLY READ PRIOR TO LOADING OPERATIONS. LOAD WEIGHT SHOWN IN TABULAR DATA MAY BE INCREASED TO MEET LOAD LIMITS BY APPLYING PARTIAL LAYER AS SHOWN ON PAGE 3.

TRUCKLOADING OF WP LOADED AMMUNITION PACKED IN WOODEN BOXES			
DESIGNED BY <i>J.P. DW</i>	TRACER <i>PK WP</i>	EXAMINER <i>ADC</i>	TITLE <i>ADC</i>
DESIGNED BY <i>JDB</i>	CHALLENGER <i>PK WP</i>	EXAMINER	EXAMINER <i>John P. Diachin</i> COLONEL ORDN CORPS U.S.A.
REVISIONS			APPROVED BY ORDER OF THE CHIEF OF ORDNANCE <i>Storstarkey</i> COLONEL ORDN CORPS U.S.A.
1	1-14-53	<i>J.P.S.</i>	ORDNANCE CORPS U.S.A.
			20 October 1954
			CLASS DIVISION DRAWING FILE
			19 48 4010 11A1000

BOX POSITIONS, RISERS & FILLERS

GENERAL NOTES

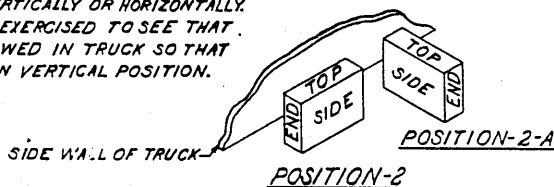
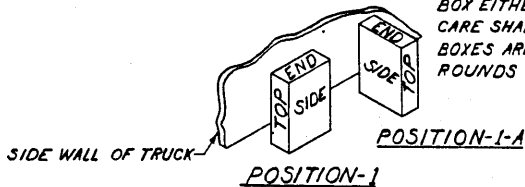
1. WP AND/OR PWP LOADED ITEMS OF AMMUNITION WILL ALWAYS BE POSITIONED "NOSE END UP" IN SHIPPING, WITH THE EXCEPTION OF THE 3.5" WP FILLED ROCKET, WHICH WILL BE POSITIONED "NOSE END DOWN."
2. FLOOR AREA OF TYPICAL LOADS SHOWN IN TABULAR DATA IS 27'-5" X 7'-5". MAXIMUM LOADS SHOWN DO NOT EXCEED 25,000 LBS. THIS WEIGHT MAY BE INCREASED, HOWEVER, PROVIDED THE LOAD LIMITS OF THE STATES THRU WHICH THE TRUCK TRAVELS ARE NOT EXCEEDED.
3. MOTOR CARRIERS ARE RESPONSIBLE FOR SUPERVISION OVER TOTAL WEIGHT, AND DISTRIBUTION OF THE LOAD ON THEIR VEHICLE. INSTALLATIONS SHOULD REQUIRE ORIGIN CARRIER TO PROVIDE SUCH SUPERVISION, TO ASSURE COMPLIANCE WITH LAWS OF ALL STATES THRU WHICH ANY TRUCK SHIPMENT WILL PASS.
4. IN THOSE CASES WHEREIN TRAILERS DO NOT HAVE REAR CORNER STUDS TO BRACE AGAINST, BLOCKING WILL EXTEND TO DOORWAY, SO THAT DOORS, WHEN CLOSED, WILL PREVENT POSSIBLE SHIFTING OF LOAD.

MATERIAL SPECIFICATIONS

LUMBER: SEE PARA. 5400, ORDM 3-4, VOL. 2, DTD. 3 MAY, 1954.
 NAILS: COMMON, CEMENT COATED, FED. SPEC. FF-N-101.
 ALT: ANNULARLY GROOVED NAILS OF SAME SIZE.
 STEEL STRAPPING: 1 1/2" X .035, TYPE 1, CLASS "A ORC", FED. SPEC. QQ-5-781A.

5. AN ADDITIONAL PARTIAL LAYER MAY BE ADDED TO AMOUNTS SHOWN IN TABULAR DATA, TO MEET PERMISSIBLE LOAD LIMITS.

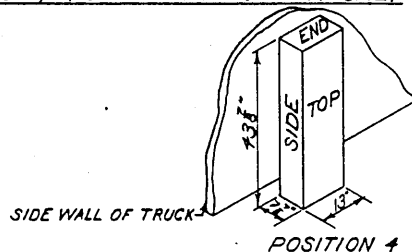
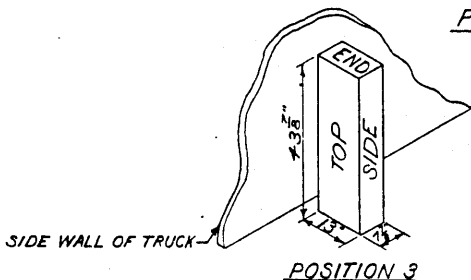
NOTE: 60 MM MORTAR WP ARE PACKED IN BOX EITHER VERTICALLY OR HORIZONTALLY. CARE SHALL BE EXERCISED TO SEE THAT BOXES ARE STOWED IN TRUCK SO THAT ROUNDS ARE IN VERTICAL POSITION.



NOTE: COMBINATIONS OF POSITIONS 1 & 1A MAY BE USED TO UTILIZE AS MUCH OF THE WIDTH OF THE TRAILER AS POSSIBLE.

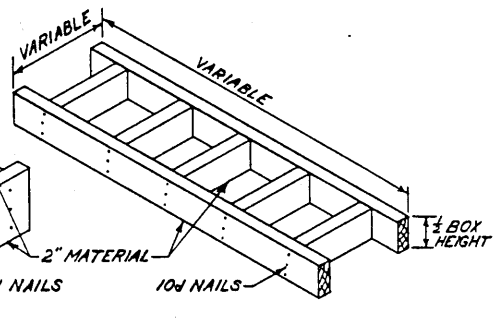
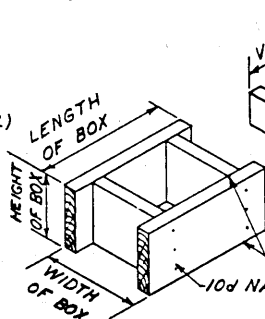
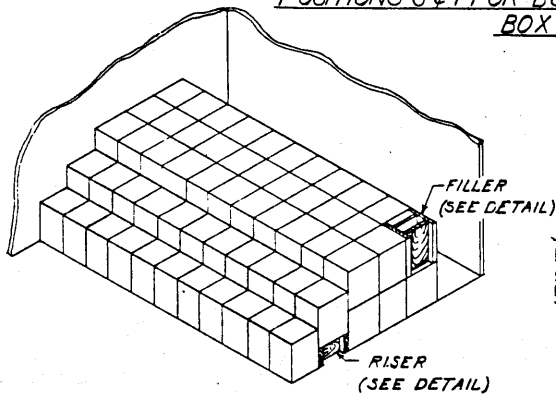
NOTE: COMBINATIONS OF POSITIONS 2 & 2-A MAY BE USED TO UTILIZE AS MUCH OF THE WIDTH OF THE TRAILER AS POSSIBLE.

POSITIONS 1, 1-A, 2 & 2-A 60 MM MORTAR ONLY

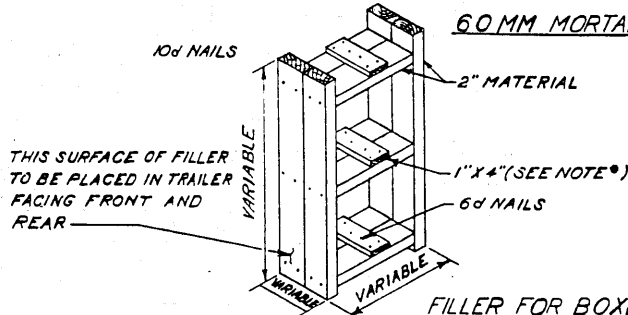


NOTE: SOMM GUN BOXES SHOWN.

POSITIONS 3 & 4 FOR BOXED ITEMS OTHER THAN 60 MM MORTAR BOX POSITIONS AUTHORIZED

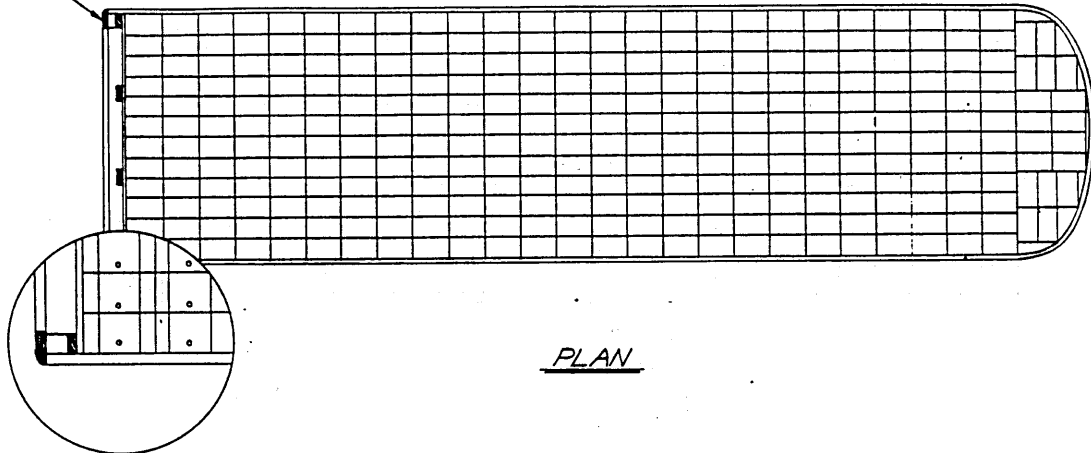


60 MM MORTAR ONLY



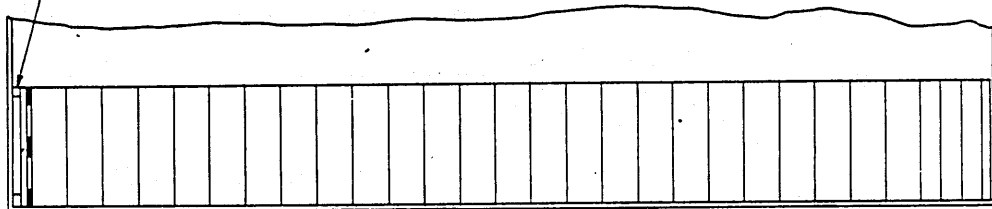
NOTE: MAY BE CONSTRUCTED OF ONE PIECE OR OF MULTIPLE PIECES AS SHOWN. WHEN CONSTRUCTED OF ONE, 1" X 4" PIECES WILL NOT BE REQUIRED.

SEE NOTE 4, PAGE 2

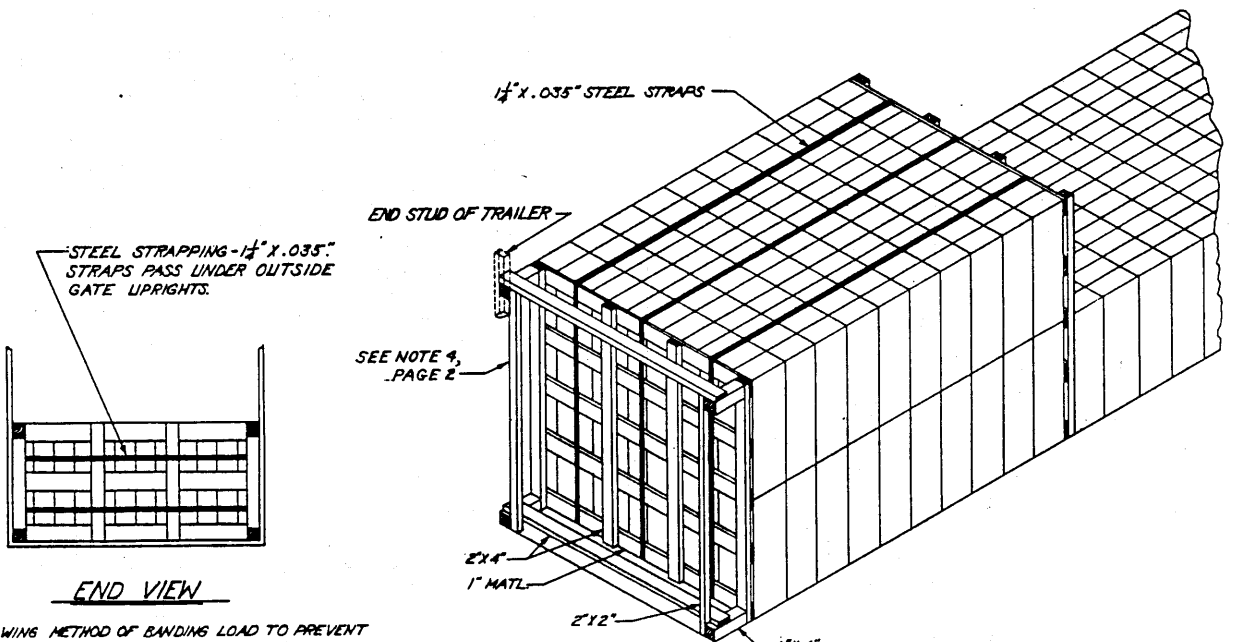


PLAN

4"x4" CUT TO FIT SNUG
TOE-NAIL TO GATE

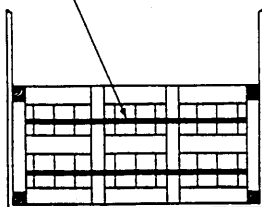


SIDE ELEVATION



METHOD OF BRACING PARTIAL LAYERS

STEEL STRAPPING - 1/4" x .035"
STRAPS PASS UNDER OUTSIDE
GATE UPRIGHTS.



END VIEW

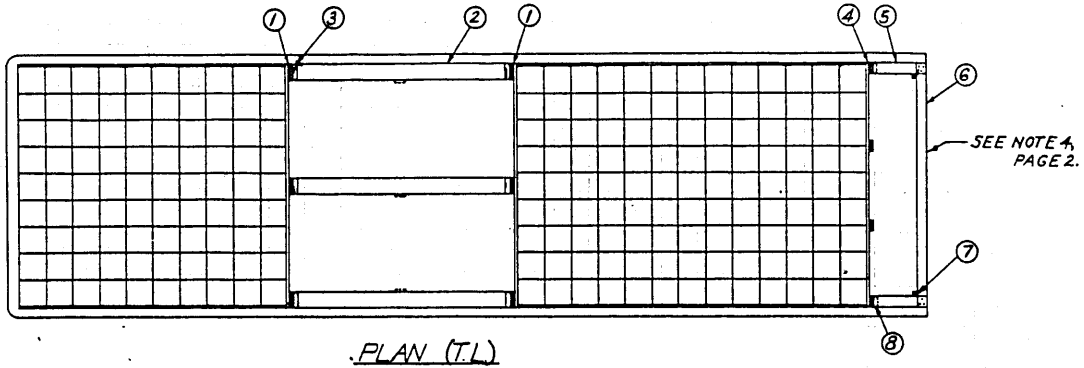
NOTES:

1. SHOWING METHOD OF BANDING LOAD TO PREVENT SIDEWISE MOVEMENT. THIS BANDING TO BE USED ONLY WHEN WIDTH OF TRUCK IS 2" OR MORE IN EXCESS OF WIDTH OF LOAD.
2. GATES WILL BE CONSTRUCTED OF 2"x4" VERTICAL MEMBERS & 1" MATERIAL FOR CROSS MEMBERS. USE 3-5/8" NAILS AT EACH JOINT.

NOTE:

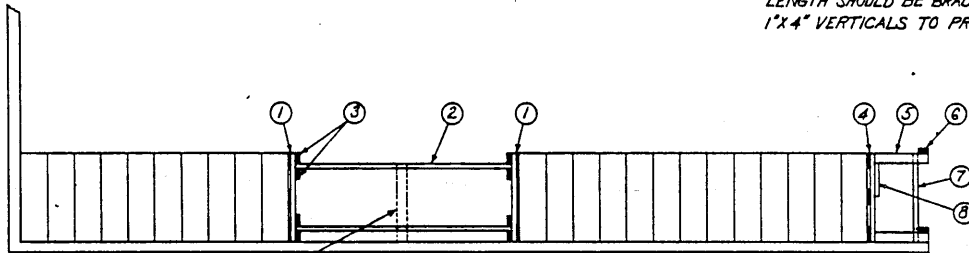
PARTIAL LAYER BRACED AS SHOWN MAY BE APPLIED TO MEET LOAD LIMITS.

TYPICAL LOADING METHODS (TL & LTL)



PLAN (TL)

NOTE* STRUTS GREATER THAN 6'-0" IN LENGTH SHOULD BE BRACED AT CENTER WITH 1"x4" VERTICALS TO PREVENT SPRINGING.

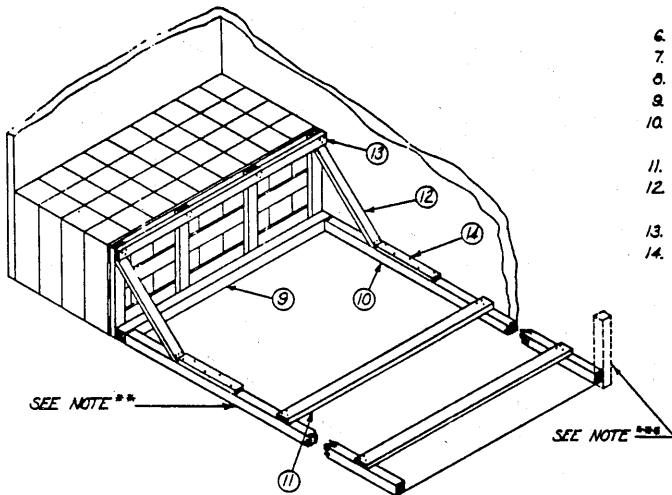


ELEVATION (TL)

SEE NOTE*

KEY NUMBERS & NOTES

1. GATE, (2 REQ) 1"x6" HORIZONTALS, 2"x6" UPRIGHTS. NAIL HORIZONTALS TO VERTICALS $\frac{1}{3}$ -8d NAILS EACH JOINT.
2. STRUTS, 2"x6" CUT TO FIT, (6 REQ) TOENAIL TO GATE UPRIGHT $\frac{1}{3}$ -12d NAILS EACH JOINT.
3. CLEAT, 2"x4"x6", (24 REQ) POSITION AS SHOWN. NAIL TO GATE UPRIGHT WITH 3-12d NAILS.
4. GATE, (1 REQ) 1"x6" HORIZONTALS, 2"x4" UPRIGHTS. NAIL HORIZONTALS TO VERTICALS WITH 3-8d NAILS EACH JOINT.
5. 4"x4" CUT TO FIT, (4 REQ) POSITION AS SHOWN. TOENAIL TO GATE UPRIGHTS $\frac{1}{3}$ -12d NAILS EACH JOINT.
6. 2"x4"x TRAILER WIDTH, (2 REQ) NAIL TO PCS ⑤ $\frac{1}{3}$ -12d NAILS EACH JOINT.
7. 2"x2" LOAD HEIGHT, (2 REQ) NAIL TO PCS ⑤ $\frac{1}{3}$ -12d NAILS EACH JOINT.
8. 2"x4"x12", (2 REQ) NAIL TO GATE UPRIGHT $\frac{1}{3}$ -12d NAILS.
9. 4"x4"x TRAILER WIDTH, (1 REQ) POSITION AS SHOWN.
10. 4"x4" CUT TO FIT, (2 REQ) TOENAIL TO PC ⑨ $\frac{1}{3}$ -12d NAILS EACH JOINT. EXTEND TO REAR OF TRAILER.
11. 2"x4"x TRAILER WIDTH, (2 REQ) NAIL TO PC ⑩ $\frac{1}{3}$ -12d NAILS EACH END.
12. 2"x4" CUT TO FIT, (2 REQ) DOUBLE BEVEL EACH END, POSITION AT 45° ANGLE. TOENAIL TO GATE UPRIGHT & PC ⑩ $\frac{1}{3}$ -12d NAILS EACH JOINT.
13. 2"x4"x TRAILER WIDTH, (1 REQ) NAIL TO EACH GATE UPRIGHT $\frac{1}{3}$ -12d NAILS.
14. 2"x4"x 24", (2 REQ) NAIL TO PC ⑩ $\frac{1}{3}$ -12d NAILS.



ISOMETRIC (LTL)
METAL FLOOR

NOTE:**

WHEN USING TRAILERS WITH WOODEN FLOORS, PCS ⑩ WILL BE 2"x4"x APPROX. 4'-0" DOUBLED. NAIL BOTTOM PC TO FLOOR USING 1-16d NAIL EVERY 6", AND TOP PIECE TO ONE BELOW IN LIKE MANNER. BLOCKING TO REAR OF TRAILER NOT REQD.

NOTE:***

IF THERE ARE NO CORNER STUDS, A SECOND PC ⑨ WILL BE POSITIONED ACROSS TRAILER AT REAR. PCS ⑫ WILL BE CUT TO FIT BETWEEN PCS ⑨. TOENAIL REAR PC ⑨ TO PCS ⑩ USING 2-12d NAILS EACH JOINT.

AIC SYMBOL	BOX WT. (LBS)	BOX DIMENSIONS	BOXES / LOAD				APPROX. LOAD WEIGHT (LBS)	AIC SYMBOL	BOX WT. (LBS)	BOX DIMENSIONS	BOXES / LOAD				APPROX. LOAD WEIGHT (LBS)
			LENGTH	WIDTH	FULL LAYERS	TOTAL BOXES					LENGTH	WIDTH	FULL LAYERS	TOTAL BOXES	
57 MM. RIFLE							81 M.M. MORTAR								
RIJAA	43.4	21 7/8 x 9 3/8 x 9 3/8	35 @ 3/4	5 @ 3/4	1	365	15,841	R4FPB	42.4	27 1/2 x 9 1/2 x 6 1/2	32 @ 9 1/4	14 @ 6 1/2	1	448	18,995
RIJCA	37	22 1/2 x 7 1/2 x 8 1/2	37 @ 3/4	6 @ 7/8	1	427	15,799	R4FTA	48	29 1/2 x 9 1/2 x 6 1/2	32 @ 9 1/4	12 @ 6 1/2	1	432	20,736
RIJCB	43.4	21 7/8 x 9 3/8 x 9 3/8	35 @ 3/4	5 @ 3/4	1	365	15,841	R4FWA	45	27 1/2 x 9 1/2 x 6 1/2	32 @ 9 1/4	14 @ 6 1/2	1	448	20,160
RIJTA	37	22 1/2 x 7 1/2 x 8 1/2	37 @ 3/4	6 @ 7/8	1	427	15,799	R4HNA	45	27 1/2 x 9 1/2 x 6 1/2	47 @ 6 1/2	9 @ 9 1/4	1	423	19,035
RIJUA	38	22 x 7 1/2 x 8 1/2	37 @ 3/4	6 @ 7/8	1	427	16,226	R4HPA	42	29 1/2 x 9 1/2 x 6 1/2	32 @ 9 1/4	12 @ 6 1/2	1	432	18,144
60 M.M. MORTAR							90 M.M. GUN								
R4CBA	61	18 x 14 x 8 1/2	36 @ 3/4	4 @ 1/2	2	356	21,716	P5RKA	130	43 1/2 x 13 x 7 3/8	16 @ 13	12 @ 7 3/8	1-	192	24,960
R4CBB	61	18 x 14 x 8 1/2	36 @ 3/4	4 @ 1/2	2	356	21,716	P5RQA	130	43 1/2 x 13 x 7 3/8	16 @ 13	12 @ 7 3/8	1-	192	24,360
R4CBC	61	17 1/2 x 13 1/2 x 8 1/2	37 @ 3/4	5 @ 1/2	2	370	22,570	P5RSA	130	43 1/2 x 13 x 7 3/8	16 @ 13	12 @ 7 3/8	1-	192	24,360
R4CJA	63.5	17 1/2 x 14 1/2 x 7 1/2	39 @ 7/8	5 @ 1/2	2	390	24,765	P5SX	135	43 1/2 x 13 x 8 1/4	27 @ 9 1/4	3 @ 13	1-	183	24,705
R4CJB	63.5	17 1/2 x 14 1/2 x 7 1/2	39 @ 7/8	5 @ 1/2	2	390	24,765								
R4CPA	49.7	15 1/2 x 14 1/2 x 7 1/2	20 @ 15/16	4 @ 7/8	2	488	24,254								
							105 M.M. HOWITZER								
								RAQDA	120	37 1/2 x 12 1/2 x 7	28 @ 7	5 @ 12 1/4	1-	204	24,480
								RAQDS	120	37 1/2 x 12 1/2 x 7	28 @ 7	3 @ 12 1/4	1-	204	24,430
								RAQMA	120	36 1/2 x 12 1/2 x 7	28 @ 7	5 @ 12 1/4	1-	204	24,480
RIRJA	117	32 1/2 x 9 1/2 x 9 1/2	23 @ 9 1/4	9 @ 9 1/4	1-	207	24,219	RAQMS	120	37 1/2 x 12 1/2 x 7	28 @ 7	5 @ 12 1/4	1-	204	24,460
RIRJB	63.3	31 1/2 x 9 1/2 x 6 1/2	43 @ 6 1/2	9 @ 9 1/4	1-	387	24,497	RIQJA	123	36 1/2 x 12 1/2 x 7	27 @ 7	5 @ 12 1/4	1-	199	24,477
RIRTA	63.3	31 1/2 x 9 1/2 x 6 1/2	43 @ 6 1/2	9 @ 9 1/4	1-	387	24,497	RIQJC	127	23 1/2 x 11 1/2 x 11 1/2	27 @ 11 1/2	7 @ 11 1/2	1	199	24,003
								RIUIA	121	36 1/2 x 12 1/2 x 7	28 @ 7	5 @ 12 1/4	1-	204	24,684
								RIUIA	121	36 1/2 x 12 1/2 x 7	27 @ 7	5 @ 12 1/4	1-	199	24,477
								RIUTA	120	36 1/2 x 12 1/2 x 7	27 @ 7	5 @ 12 1/4	1-	204	24,480
								RIUWA	123	36 1/2 x 12 1/2 x 7	28 @ 7	6 @ 12 1/4	1-	200	24,600
							75 M.M. HOWITZER								
RIMIB	111	29 1/2 x 9 1/2 x 9 1/2	25 @ 9 1/4	9 @ 9 1/4	1-	225	24,975								
RIMIC	59.8	28 1/2 x 9 1/2 x 6 1/2	46 @ 6 1/2	9 @ 9 1/4	1-	414	24,757								
RIVGA	59.8	28 1/2 x 9 1/2 x 6 1/2	46 @ 6 1/2	9 @ 9 1/4	1	414	24,757								
RIVHA	59.8	28 x 9 1/2 x 6 1/2	46 @ 6 1/2	9 @ 9 1/4	1	414	24,757								
							105 M.M. RIFLE								
								RASCA	150	46 1/2 x 13 x 8 1/2	24 @ 3 1/2	6 @ 13	1-	160	24,000
							4.2" MORTAR								
								R4NBA	68.5	25 1/2 x 11 1/2 x 6 3/4	27 @ 11 1/2	13 @ 6 3/4	1	351	24,043
								R4NBB	70	27 1/2 x 11 1/2 x 7 1/4	43 @ 7 1/4	7 @ 11 1/2	1	301	21,070
								R4NIA	69	25 1/2 x 10 1/2 x 6 3/4	27 @ 10 1/2	13 @ 6 3/4	1-	351	24,219
RINAA	76.5	34 1/2 x 12 1/2 x 7 1/2	40 @ 7 3/8	6 @ 12 1/4	1	290	22,185	RANKA	68.5	25 1/2 x 11 1/2 x 6 3/4	27 @ 11 1/2	13 @ 6 3/4	1	351	24,043
RINBA	73	33 1/2 x 11 1/2 x 7 1/2	44 @ 7 3/8	4 @ 11 1/4	1	344	24,112	RAOBA	70	27 1/2 x 7 1/2 x 11 1/4	43 @ 7 1/4	7 @ 11 1/2	1	301	21,070
RINQA	76.5	34 1/2 x 12 1/2 x 7 1/2	40 @ 7 3/8	6 @ 12 1/4	1	290	22,185	RAOHA	69	25 1/2 x 10 1/2 x 6 3/4	27 @ 10 1/2	13 @ 6 3/4	1-	351	24,219
							76 M.M. GUN								
RANNA	85	39 1/2 x 11 1/2 x 7 1/2	36 @ 7 1/4	8 @ 11 1/4	1-	288	24,480								
RITEA	70	37 x 9 1/2 x 6 1/2	39 @ 6 1/2	9 @ 9 1/4	1-	351	24,570								
RITJA	70	37 x 9 1/2 x 6 1/2	39 @ 6 1/2	9 @ 9 1/4	1-	351	24,570								
							120 M.M. GUN								
								RATGA	66.5	27 1/2 x 8 x 7 1/2	34 @ 7 1/2	11 @ 8	1-	374	24,871

A/C SYMBOL	BOX WT. (LBS.)	BOX DIMENSIONS	BOXES/LOAD				APPROX. LOAD WEIGHT (LBS.)	A/C SYMBOL	BOX WT. (LBS.)	BOX DIMENSIONS	BOXES/LOAD				APPROX. LOAD WEIGHT (LBS.)
			LENGTH	WIDTH	FULL LAYERS	TOTAL BOXES					LENGTH	WIDTH	FULL LAYERS	TOTAL BOXES	
GRENADE, RIFLE, (WP)															
S4NIA	31.5	19 1/2 x 10 1/2 x 16 1/2	16 @ 19 1/2	10 @ 10 1/2	4	640	20,160								
S4NIB	34.5	19 1/2 x 7 1/2 x 16 1/2	16 @ 19 1/2	11 @ 7 1/2	4	704	24,288								
ROCKETS, 2.36"															
S9AKA	68.	22 1/2 x 15 1/2 x 11 1/2	27 @ 11 1/2 21 @ 15 1/2	5 @ 15 1/2 1 @ 11 1/2	2	312	21,216								
S9AMA	63.	21 1/2 x 13 x 11	24 @ 13	8 @ 11	2	384	24,192								
S9AMB	68.	23 x 15 1/2 x 11 1/2	27 @ 11 1/2 21 @ 15 1/2	5 @ 15 1/2 1 @ 11 1/2	2	312	21,216								
S9ARA	68.	21 1/2 x 13 x 11	24 @ 13	8 @ 11	1	192	13,056								
S9ALIA	68.	21 1/2 x 13 x 11	24 @ 13	8 @ 11	1	192	13,056								
S9AEA	120.	22 1/2 x 15 1/2 x 11 1/2	27 @ 11 1/2 21 @ 15 1/2	5 @ 15 1/2 1 @ 11 1/2	1	156	18,720								
S9AEB	120.	22 1/2 x 15 1/2 x 11 1/2	27 @ 11 1/2 21 @ 15 1/2	5 @ 15 1/2 1 @ 11 1/2	1	156	18,720								
S9AIA	120.	22 1/2 x 15 1/2 x 11 1/2	27 @ 11 1/2 21 @ 15 1/2	5 @ 15 1/2 1 @ 11 1/2	1	156	18,720								
S9AIB	120.	22 1/2 x 15 1/2 x 11 1/2	27 @ 11 1/2 21 @ 15 1/2	5 @ 15 1/2 1 @ 11 1/2	1	156	18,720								
ROCKET, 3.5" (W.P)															
S9JGA	53.	20 1/2 x 14 x 16 1/2	22 @ 14 17 @ 16 1/2	7 @ 6 3/8 3 @ 14 1/2	1	295	15,635								
ROCKET HEAD 4.5" (PWP)															
S9EGA	95.	23 1/2 x 10 1/2 x 10 1/2	31 @ 10 1/2	8 @ 10 1/2	1	248	23,560								
ROCKET HEAD 4.5" (W.P)															
S9EFA	95.	23 1/2 x 10 1/2 x 10 1/2	31 @ 10 1/2	8 @ 10 1/2	1	248	23,560								

