

APPENDIX 65F

UNITIZATION PROCEDURES FOR BOXED AMMUNITION AND COMPONENTS ON 4-WAY ENTRY PALLETS

GRENADE, HAND, PRACTICE, PACKED 25 PER
WOODEN BOX, UNITIZED 36 BOXES PER 35" X
45 $\frac{1}{2}$ " PALLET; APPROX BOX SIZE 17 $\frac{3}{4}$ " L X
16 $\frac{1}{4}$ " W X 7 $\frac{3}{4}$ " H

PALLET UNIT DATA						
ITEMS INCLUDED		HAZARD CLASSIFICATION ^①				WEIGHT
NSN	DODIC	DOT CLASS	CG CLASS	QD CLASS	COMP GROUP	(LBS)
1330- 00-020-5835 00-545-5612	G916 G916	C C	III III	(04)1.2 (04)1.2	G G	2,051 2,051

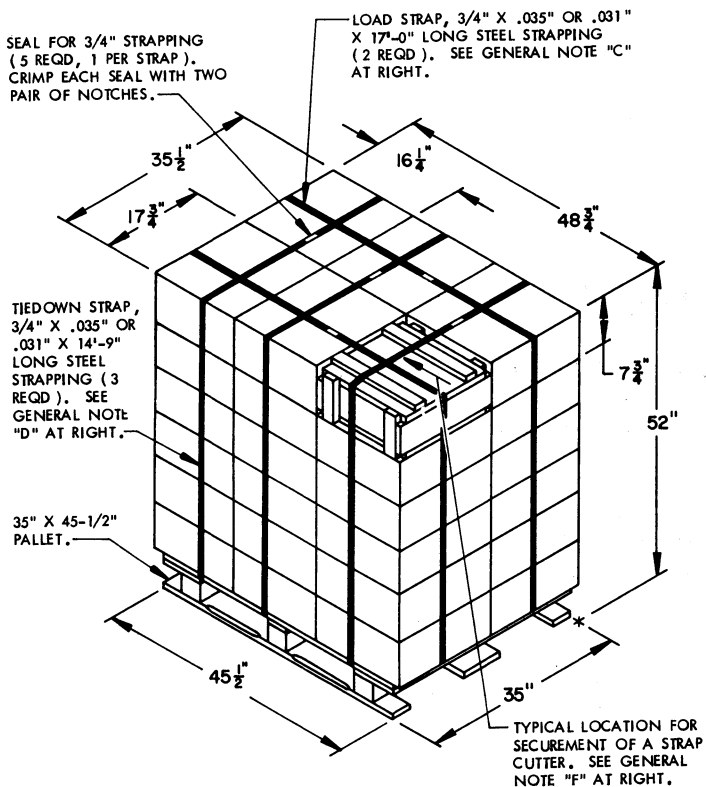
NOTICE: THIS APPENDIX CANNOT STAND ALONE BUT MUST
BE USED IN CONJUNCTION WITH THE BASIC UNITIZATION
PROCEDURES DRAWING 19-48-4116-20PA1002.

① HAZARD CLASSIFICATION DATA CONTAINED IN THE ABOVE CHART IS FOR GUIDANCE AND INFORMATIONAL PURPOSES ONLY. VERIFICATION OF THE SPECIFIED DATA SHOULD BE MADE BY CONSULTING THE MOST RECENT JOINT HAZARD CLASSIFICATION SYSTEM LISTING OR OTHER APPROVED LISTING(S).

REVISIONS																																	
			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="font-size: small;">DRAFTER</td> <td style="font-size: small;">PROJ ENG</td> </tr> <tr> <td><i>RAB</i></td> <td><i>MSW</i></td> </tr> <tr> <td style="font-size: small;">CHECKER</td> <td style="font-size: small;">LOG ENGINE OFFICER</td> </tr> <tr> <td><i>RSE</i></td> <td><i>John Boyd</i></td> </tr> <tr> <td colspan="2" style="font-size: x-small;">APPROVED, U. S. ARMY ARMAMENT, MUNITIONS AND CHEMISTRY COMMAND</td> </tr> <tr> <td colspan="2" style="text-align: center;"><i>H. H. Benton</i></td> </tr> <tr> <td colspan="2" style="font-size: x-small;">APPROVED BY ORDER OF COMMANDING GENERAL, U. S. ARMY MATERIAL DEVELOPMENT AND READINESS COMMAND (DARCOM)</td> </tr> <tr> <td colspan="2" style="text-align: center;"><i>John F. Reynolds</i></td> </tr> <tr> <td colspan="2" style="font-size: x-small;">U. S. ARMY DEFENSE AMBITION CENTER AND SCHOOL</td> </tr> <tr> <td colspan="2" style="text-align: center;">U. S. ARMY DARCOM DRAWING</td> </tr> <tr> <td colspan="2" style="text-align: center;">NOVEMBER 1983</td> </tr> <tr> <td style="font-size: x-small;">CLASS</td> <td style="font-size: x-small;">DIVISION</td> <td style="font-size: x-small;">DRAWING</td> <td style="font-size: x-small;">FILE</td> </tr> <tr> <td style="text-align: center;">19</td> <td style="text-align: center;">48</td> <td style="text-align: center;">4116/ 65F</td> <td style="text-align: center;">20PA 1002</td> </tr> </table>	DRAFTER	PROJ ENG	<i>RAB</i>	<i>MSW</i>	CHECKER	LOG ENGINE OFFICER	<i>RSE</i>	<i>John Boyd</i>	APPROVED, U. S. ARMY ARMAMENT, MUNITIONS AND CHEMISTRY COMMAND		<i>H. H. Benton</i>		APPROVED BY ORDER OF COMMANDING GENERAL, U. S. ARMY MATERIAL DEVELOPMENT AND READINESS COMMAND (DARCOM)		<i>John F. Reynolds</i>		U. S. ARMY DEFENSE AMBITION CENTER AND SCHOOL		U. S. ARMY DARCOM DRAWING		NOVEMBER 1983		CLASS	DIVISION	DRAWING	FILE	19	48	4116/ 65F	20PA 1002
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DO NOT SCALE

SEAL FOR 3/4" STRAPPING
(5 REQD, 1 PER STRAP).
CRIMP EACH SEAL WITH TWO
PAIR OF NOTCHES.



PALLET UNIT

SEE GENERAL NOTE "B" AT RIGHT.

36 BOXES OF HAND GRENADE (25 PER BOX) @ 55 LBS	-----	1,980 LBS (APPROX)
DUNNAGE	-----	6 LBS
PALLET	-----	65 LBS
TOTAL WEIGHT	-----	2,051 LBS (APPROX)
CUBE	-----	52.1 CU FT (APPROX)

BILL OF MATERIAL

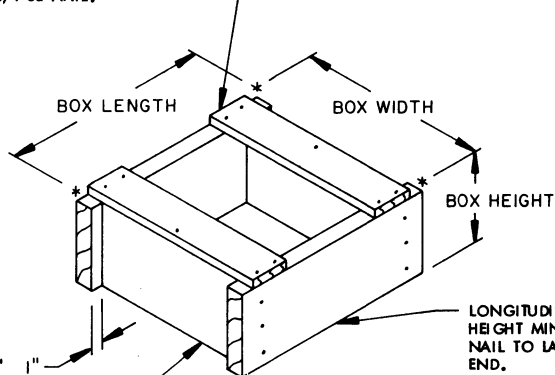
PALLET, 35" X 45-1/2"	-----	1 REQD	-----	65 LBS
STEEL STRAPPING, 3/4"	-----	78.25 REQD	-----	5.59 LBS
SEAL FOR 3/4" STRAPPING	-----	5 REQD	-----	NIL

GENERAL NOTES

- A. THIS APPENDIX CANNOT STAND ALONE BUT MUST BE USED IN CONJUNCTION WITH THE BASIC UNITIZATION PROCEDURES DRAWING 19-48-4116-20PA1002. TO PRODUCE AN APPROVED UNIT LOAD, ALL PERTINENT PROCEDURES, SPECIFICATIONS AND CRITERIA SET FORTH WITHIN THE BASIC DRAWING WILL APPLY TO THE PROCEDURES DELINEATED IN THIS APPENDIX. ANY EXCEPTIONS TO THE BASIC PROCEDURES ARE SPECIFIED IN THIS APPENDIX.
- B. DIMENSIONS, CUBE AND WEIGHT OF A PALLET UNIT WILL VARY SLIGHTLY DEPENDING UPON THE ACTUAL DIMENSIONS OF THE BOXES AND THE WEIGHT OF THE SPECIFIC ITEM BEING UNITIZED.
- C. THE LOAD STRAPS MAY BE THREADED THROUGH THE STRAP SLOTS OF A PALLET OR PRE-POSITIONED ON THE PALLET DECK PRIOR TO PLACING BOXES ON THE PALLET. LOAD STRAPS WILL BE TENSIONED AND SEALED PRIOR TO APPLICATION OF TIEDOWN STRAPS.
- D. INSTALL EACH TIEDOWN STRAP TO PASS UNDER THE TOP DECK BOARDS OF THE PALLET AND TO BE LOCATED AS SHOWN. TIEDOWN STRAPS WILL NOT BE APPLIED UNTIL THE LOAD STRAPS HAVE BEEN TENSIONED AND SEALED. NOTE: IF THE BOXES OF A PALLET UNIT DO NOT OVERHANG THE PALLET DECK SUFFICIENTLY TO ALLOW THE TIEDOWN STRAPS TO CONTACT THE BOXES IN THE BOTTOM LAYER OF THE UNIT, INSTALL EACH TIEDOWN STRAP TO ENIRCLE THE UNIT AND BE POSITIONED ON THE END CLEATS OF THE BOXES IN EACH STACK.
- E. THE FOLLOWING DARCOM DRAWINGS ARE APPLICABLE FOR OUTLOADING AND STORAGE OF THE ITEMS COVERED BY THIS APPENDIX.

CARLOADING	-----	DRAWING 19-48-4115-5PA1002
TRUCKLOADING	-----	DRAWING 19-48-4117-11PA1003
STORAGE	-----	DRAWING 19-48-4118-1-2-3-4-14-22-PA1002
- F. FOR METHOD OF SECURING A STRAP CUTTER TO THE PALLET UNIT, SEE DARCOM DRAWING 19-48-4127-20P1000.
- G. IF ITEMS COVERED HEREIN ARE UNITIZED PRIOR TO ISSUANCE OF THIS APPENDIX, THE BOXES NEED NOT BE REUNITIZED SOLELY TO CONFORM TO THIS APPENDIX.
- H. THE UNITIZATION PROCEDURES DEPICTED HEREIN MAY ALSO BE USED FOR UNITIZING GRENADES WHEN IDENTIFIED BY DIFFERENT NATIONAL STOCK NUMBERS (NSN) THAN WHAT IS SHOWN ON THE TITLE PAGE, PROVIDED THE BOX PACK DOES NOT VARY FROM WHAT IS DELINEATED HEREIN. THE EXPLOSIVE CLASSIFICATION OF OTHER ITEMS MAY BE DIFFERENT THAN WHAT IS SHOWN.
- J. WHEN THE UNIT LOAD DEPICTED AT LEFT IS TO BE USED FOR UNITIZING MARINE CORPS AMMUNITION, TWO LAYERS OF BOXES MUST BE OMITTED, TIEDOWN STRAP LENGTHS MUST BE DECREASED TO 12'-2", AND LOAD STRAP LENGTHS MUST BE DECREASED TO 14'-5". THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 36-1/2", A GROSS UNIT WEIGHT OF 1,390 LBS, AND A UNIT CUBE OF 36.6 CU FT. ADDITIONALLY, THE UNIT LOAD MAY BE MODIFIED AS DESCRIBED WHEN BEING SHIPPED BY MILVAN OR COMMERCIAL INTERMODAL FREIGHT CONTAINER, CONVENTIONAL VAN TRAILER OR CONVENTIONAL OR HIGH-CAPACITY BOXCAR. THE DETERMINATION TO REDUCE THE LOAD BY A LAYER FOR TRANSPORTATION WILL BE MADE BY THE RESPONSIBLE COMMAND AND WILL BE BASED UPON ECONOMICS OF TRANSPORTATION AND HANDLING.

TIE PIECE, 1" X 4" X BOX WIDTH (2 REQD).
NAIL TO LONGITUDINAL PIECES W/2-6d
NAILS AT EACH END AND TO LATERAL PIECE
W/1-6d NAIL.



LATERAL PIECE, 2" X 8"
(RIPPED TO BOX HEIGHT
MINUS 3/4") X BOX WIDTH
MINUS 3" (2 REQD).

LONGITUDINAL PIECE, 2" X 8"
(RIPPED TO BOX
HEIGHT MINUS 3/4") X BOX LENGTH (2 REQD).
NAIL TO LATERAL PIECES W/3-10d
NAILS AT EACH
END.

FILLER ASSEMBLY

(FOR MINUS ONE BOX)