

# APPENDIX 81

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

ROCKET, PRACTICE, 35MM, PACKED 90 PER WIREBOUND  
BOX, UNITIZED 9 BOXES PER 40" X 48" PALLET;  
APPROX BOX SIZE 32 $\frac{3}{4}$ " L X 13 $\frac{5}{16}$ " W X 15 $\frac{15}{16}$ " H

PALLET UNIT DATA						
ITEMS INCLUDED		HAZARD CLASSIFICATION ①				WEIGHT (LBS)
NSN	DOD IC	DOT CLASS	CG CLASS	QD CLASS	COMP GROUP	
1340- 00-143-6911	H708	A	IV	(04)1.2	E	608
00-113-5907	H709	A	IV	(04)1.2	E	608

### REVISION

REVISION NO. 1, DATED OCTOBER 1984, CONSISTS OF:

1. ADDING SUPERSESSION NOTE.
2. UPDATING DRAWING FORMAT TO CONFORM WITH NO. 1 ABOVE.

THIS DRAWING SUPERCEDES DRAWING 19-48-4138/77-20PA1000  
DATED JANUARY 1980.

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).

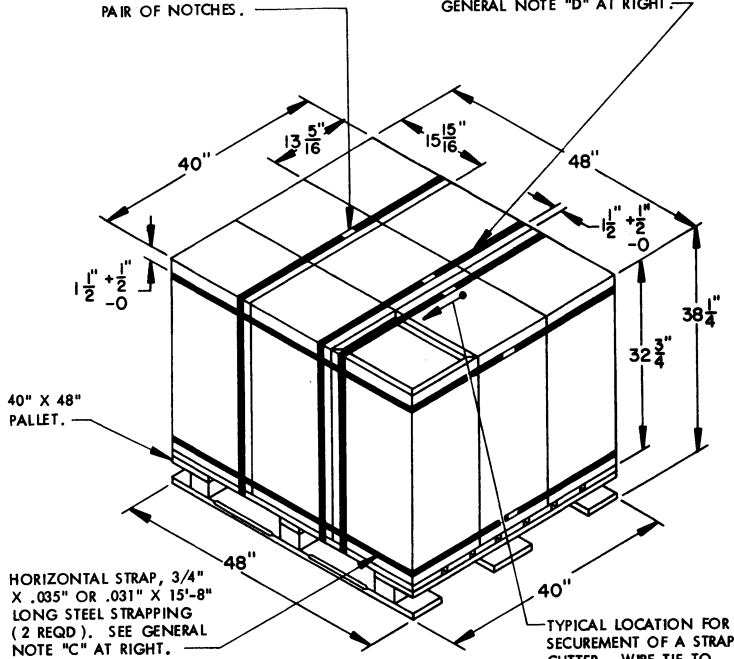
REVISIONS				DATE	BY	FOR USE
1	OCT 84	WRE WRE	(Quantity) SMCAR-ESB	J. D. [Signature]	AMSHC-TMD	WRE WRE
				APPROVED, U. S. ARMY ARMAMENT MATERIEL READINESS COMMAND		
				[Signature]	[Signature]	[Signature]
				APPROVED BY ORDER OF COMMANDING GENERAL, U. S. ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND (ARCOM)		
				[Signature]		
				U. S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL		
				U. S. ARMY DARCOM DRAWING		
				FEBRUARY 1981		
		CLASS	DIVISION	DRAWING	FILE	
		19	48	4116/ 81	20PA 1002	

**DO NOT SCALE**

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

TIEDOWN STRAP, 3/4" X .035"  
OR .031" X 13'-3" LONG STEEL  
STRAPPING (3 REQD). SEE  
GENERAL NOTE "D" AT RIGHT.

### GENERAL NOTES



### PALLET UNIT

SEE GENERAL NOTE "B" AT RIGHT.

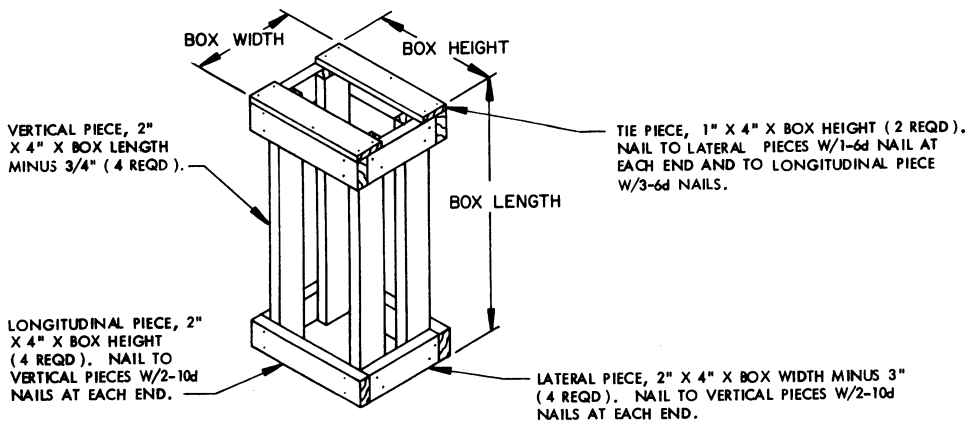
9 BOXES OF 35MM ROCKET (90 PER BOX) @ 58 LBS	-----	522 LBS (APPROX)
DUNNAGE	-----	6 LBS
PALLET	-----	80 LBS
<b>TOTAL WEIGHT</b>	-----	<b>608 LBS (APPROX)</b>
<b>CUBE</b>	-----	<b>42.5 CUBIC FEET (APPROX)</b>

### BILL OF MATERIAL

PALLET, 40" X 48"	-----	1 REQD	-----	80 LBS
STEEL STRAPPING, 3/4"	-----	71.08' REQD	-----	5.08 LBS
SEAL FOR 3/4" STRAPPING	-----	5 REQD	-----	NIL

- 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. INSTALL EACH HORIZONTAL STRAP TO ENIRCLE THE LAYER OF BOXES ON THE PALLET AS SHOWN. HORIZONTAL STRAPS MUST 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 HORIZONTAL STRAPS HAVE BEEN TENSIONED AND SEALED.
- 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 19-48-4118-1-2-3-4-14-22PA1002
- 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 35MM ROCKET 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. IF THERE IS A NEED TO USE FILLER ASSEMBLIES AND AT LEAST TWO PALLETS ARE BEING CONSTRUCTED, NOT MORE THAN 3 FILLERS WILL BE INSTALLED IN ANY ONE PALLET UNIT. ADDITIONAL FILLERS CAN BE PUT IN A SECOND PALLET UNIT AS REQUIRED WHEN THE QUANTITY OF 3 FILLERS IN THE FIRST REDUCED PALLET UNIT IS INSUFFICIENT TO SATISFY THE TOTAL REDUCTION NEEDED. USING TWO PALLET UNITS TO SATISFY THE PALLETIZATION CRITERIA APPLICABLE TO LESS-THAN-FULL PALLET UNITS IS AN EXCEPTION TO THE BASIC PROCEDURES. HOWEVER, THE EXCEPTION IS NECESSARY FOR THE AMMUNITION PACK COVERED BY THIS APPENDIX, TO MOST EFFECTIVELY GET AN ACCEPTABLE, COMPACT AND SOUND PALLET UNIT.



**FILLER ASSEMBLY**  
(FOR MINUS ONE BOX)