

APPENDIX 117

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

SMOKE POT, PACKED ONE PER STEEL DRUM,
UNITIZED 27 DRUMS PER 40" X 48" PALLET;
DRUM SIZE 13 $\frac{7}{8}$ " DIA X 15 $\frac{1}{2}$ " H

PALLET UNIT DATA						
ITEMS INCLUDED		HAZARD CLASSIFICATION ^①				WEIGHT (LBS)
NSN	DODIC	DOT CLASS	CG CLASS	QD CLASS	COMP GROUP	
1365- 01-096-1455	K867	C	II-E	1.3	G	1,470

REVISION

- REVISION NO. 1, DATED AUGUST 1988, CONSISTS OF:
1. CHANGING DRUM DIAMETER.
 2. UPDATING PALLET UNIT TO CONFORM TO 1. ABOVE.

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).

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

DO NOT SCALE

REVISIONS				DESIGNED <i>WRF/SES</i>	PROJ ENG <i>WRF/SES</i>	CHECKED <i>RS/</i>	LOS ENGINE OFFICE <i>WRF/SES</i>
1	AUG 88	<i>WRF/SES</i>	<i>William Ernst</i>	<i>WRF/SES</i>	<i>WRF/SES</i>	<i>RS/</i>	<i>WRF/SES</i>
				APPROVED, U. S. ARMY ARMAMENT MATERIEL READINESS COMMAND <i>Paul H. Kuster</i> DRSR - MAD			
				APPROVED BY ORDER OF COMMANDER GENERAL, U. S. ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND (DARCOM) <i>John A. Boyd</i> DRSR - TND			
				U. S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL			
				U. S. ARMY DARCOM DRAWING			
				MAY 1980			
		CLASS	DIVISION	DRAWING	FILE		
		19	48	4116/ 117	20PA 1002		

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

STAPLE, 15/16" WIDE BY 3/4" LEG LENGTH (12 REQD, 2 PER TIEDOWN STRAP AND 4 PER HORIZONTAL STRAP).

TOP ASSEMBLY (1 REQD). SEE THE TOP/BOTTOM ASSEMBLY DETAIL BELOW. STAPLE HORIZONTAL STRAP TO TOP ASSEMBLY.

TIEDOWN STRAP, 3/4" X .035" OR .031" X 16'-2" LONG STEEL STRAPPING (3 REQD). SEE GENERAL NOTE "D" AT RIGHT.

HORIZONTAL STRAP, 3/4" X .035" OR .031" X 16'-3" LONG STEEL STRAPPING (2 REQD). SEE GENERAL NOTE "C" AT RIGHT.

BOTTOM ASSEMBLY (1 REQD). SEE THE TOP/BOTTOM ASSEMBLY DETAIL BELOW. STAPLE HORIZONTAL STRAP TO BOTTOM ASSEMBLY.

40" X 48" PALLET.

TYPICAL LOCATION FOR SECUREMENT OF A STRAP CUTTER. SEE GENERAL NOTE "F" AT RIGHT.

PALLET UNIT

SEE GENERAL NOTE "B" AT RIGHT.

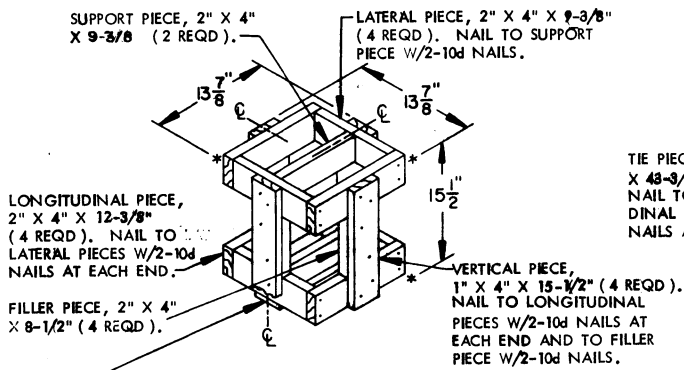
27 DRUMS OF SMOKE POTS (1 PER DRUM) @ 48 LBS ----- 1,296 LBS (APPROX)
 DUNNAGE ----- 94 LBS
 PALLET ----- 80 LBS

TOTAL WEIGHT ----- 1,470 LBS (APPROX)
 CUBE ----- 63.3 CU FT (APPROX)

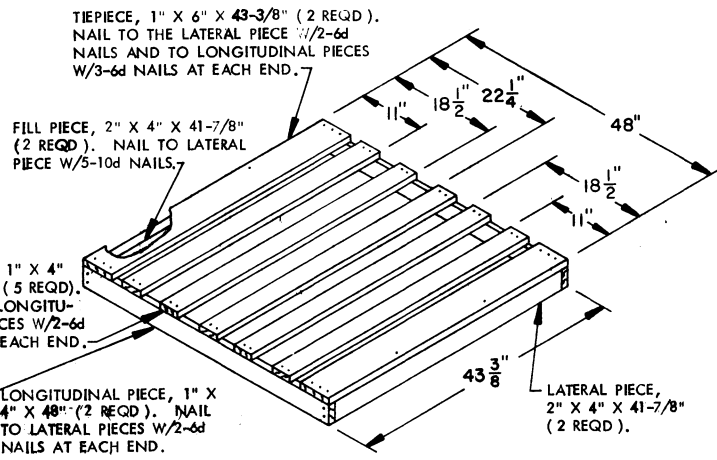
GENERAL NOTES

- 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 DRUMS AND THE WEIGHT OF THE SPECIFIC ITEM BEING UNITIZED.
- C. INSTALL EACH HORIZONTAL STRAP TO ENIRCLE EACH DUNNAGE ASSEMBLY. 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 AMC (DARCOM) DRAWINGS ARE APPLICABLE FOR UNLOADING AND STORAGE OF THE ITEMS COVERED BY THIS APPENDIX.
 CARLOADING ----- DRAWING 19-48-4115-5PA1002
 TRUCKLOADING ----- DRAWING 19-48-4117-11PA1003
 STORAGE ----- DRAWING 19-48-4118-1-2-14-22PA1002
- 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 DRUMS NEED NOT BE REUNITIZED SOLELY TO CONFORM TO THIS APPENDIX.
- H. THE UNITIZATION PROCEDURES DEPICTED HEREIN MAY ALSO BE USED FOR UNITIZING SMOKE POTS WHEN IDENTIFIED BY DIFFERENT NATIONAL STOCK NUMBERS (NSN) THAN WHAT IS SHOWN ON THE TITLE PAGE, PROVIDED THE DRUM 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 PALLET UNITS ARE BEING CONSTRUCTED, NOT MORE THAN 5 FILLERS WILL BE INSTALLED IN ANY ONE PALLET UNIT. ADDITIONAL FILLERS CAN BE PLACED IN A SECOND PALLET UNIT AS REQUIRED WHEN THE QUANTITY OF 5 FILLERS IN THE FIRST REDUCED PALLET UNIT IS INSUFFICIENT TO SATISFY THE TOTAL REDUCTION NEEDED. ALSO, THE FILLERS MUST BE INSTALLED ONLY IN THE TOP LAYER OF THE PALLET UNIT. 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 OBTAIN AN ACCEPTABLE, COMPACT AND SOUND PALLET UNIT.
- K. THE STYLE 1 PALLET DELINEATED IN THE DETAIL AT LEFT NEED NOT HAVE CHAMFERS OR STRAP SLOTS AS SPECIFIED WITHIN MILITARY SPECIFICATION MIL-P-15011 WHEN USED FOR THE UNITIZATION OF THE ITEMS COVERED BY THIS APPENDIX.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	52.15	17.38
1" X 6"	14.46	7.23
2" X 4"	27.92	18.61
NAILS	NO. REQD	POUNDS
6d (2")	102	0.60
10d (3")	20	0.31
PALLET, 40" X 48" ----- 1 REQD ----- 80 LBS		
STEEL STRAPPING, 3/4" ----- 81.00 REQD ----- 5.79 LBS		
SEAL FOR 3/4" STRAPPING ----- 4 REQD ----- NIL		
STAPLE, 15/16" X 3/4" ----- 12 REQD ----- NIL		



FILLER ASSEMBLY



TOP/BOTTOM ASSEMBLY

NAIL EACH BOTTOM ASSEMBLY TIE PIECE TO PALLET DECK W/2-6d NAILS.