

APPENDIX 8

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

CARTRIDGE, CALIBER .30, PACKED VARIOUS
QUANTITIES IN M19 SERIES METAL CONTAINERS,
4 PER WIREBOUND BOX, UNITIZED 40 BOXES PER
35" X 45-1/2" PALLET; APPROX BOX SIZE
17-1/2" L X 11-1/2" W X 8-1/8" H

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

DISTRIBUTION STATEMENT A.

APPROVED FOR PUBLIC RELEASE;
DISTRIBUTION IS UNLIMITED.

U.S. ARMY MATERIEL COMMAND DRAWING			
APPROVED, U.S. ARMY ARMAMENT, MUNITIONS AND CHEMICAL COMMAND <i>NLH</i> <i>David A. Piskovick</i> SMCAR-ESK	DRAFTSMAN INGBORG DEPPE ENGINEER SANDRA M. SCHULTZ		
APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND <i>John L. Byrd</i> U.S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL	SUPPLY ENGINEERING DIVISION <i>J. J. Michel</i>	TRANSPORTATION ENGINEERING DIVISION <i>W. Zurek</i>	VALIDATION ENGINEERING DIVISION <i>ACM [Signature]</i>
LOGISTICS ENGINEERING OFFICE		<i>William F Ernst</i>	
JULY 1979			
REVISION NO. 2	AUGUST 1994	CLASS	DIVISION
SEE THE REVISION LISTING ON PAGE 2		DRAWING	FILE
		19	48
		4116/ 8	20PA 1002

DO NOT SCALE

PALLET UNIT DATA				
ITEMS INCLUDED		HAZARD CLASS AND DIVISION ●		APPROX WEIGHT LBS
NSN	DDIC	OD CLASS	COMP GROUP	
1305-				
00-926-3933	A201	1.4	S	2,436
00-126-3856	A205	1.4	S	3,076
00-301-1664	A205	1.4	S	3,036
00-028-6186	A207	1.4	S	3,596
00-028-6159	A209	1.4	S	3,596
00-028-6516	A209	1.4	S	3,596
00-028-6517	A209	1.4	S	3,596
00-545-5611	A212	1.4	S	2,356
00-028-6215	A216	1.4	S	3,036
00-301-1665	A216	1.4	S	3,036
00-555-6780	A216	1.4	S	3,036
00-028-6542	A218	1.4	S	2,356
00-935-9298	A230	1.4	S	3,436
00-143-7151	A231	1.4	S	2,676
00-028-6551	A236	1.4	S	3,516
00-546-5830	A247	1.4	S	3,476

● 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

REVISION NO. 1, DATED JANUARY 1991, CONSISTS OF:

1. ADDING GENERAL NOTES "J", "L" AND "M".
2. DELETING ITEMS BY NATIONAL STOCK NUMBER FROM THE "PALLET UNIT DATA" CHART.
3. ADDING ITEMS BY NATIONAL STOCK NUMBER TO THE "PALLET UNIT DATA" CHART.

REVISION NO. 2, DATED AUGUST 1994, CONSISTS OF:

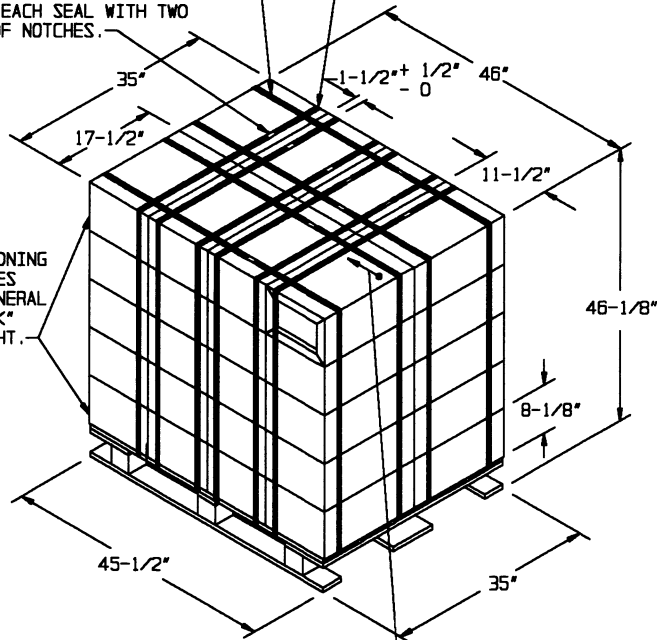
1. DELETING ITEM BY NATIONAL STOCK NUMBER FROM THE "PALLET UNIT DATA" CHART.
2. ADDING ITEMS BY NATIONAL STOCK NUMBER TO THE "PALLET UNIT DATA" CHART.
3. CHANGING WEIGHT OF ITEMS BY NATIONAL STOCK NUMBER IN THE "PALLET UNIT DATA" CHART.

LOAD STRAP, 3/4" X .035" OR .031" X 15'-7"
LONG STEEL STRAPPING (4 REQD). SEE GENERAL
NOTES "C" AND "J" AT RIGHT.

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

TIEDOWN STRAP, 3/4" X .035"
OR .031" X 13'-9" LONG
STEEL STRAPPING (6 REQD).
SEE GENERAL NOTES "D" AND
"J" AT RIGHT.

FOR
POSITIONING
OF BOXES
SEE GENERAL
NOTE "K"
AT RIGHT.



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

PALLET UNIT

SEE GENERAL NOTE "B" AT RIGHT.

40 BOXES OF .30 CAL CTG (1,120 PER BOX) @ 90 LBS - - - 3,600 LBS (APPROX)
DUNNAGE - - - - - 11 LBS
PALLET - - - - - 65 LBS

TOTAL WEIGHT - - - - - 3,676 LBS (APPROX)
CUBE - - - - - 43.0 CU FT (APPROX)

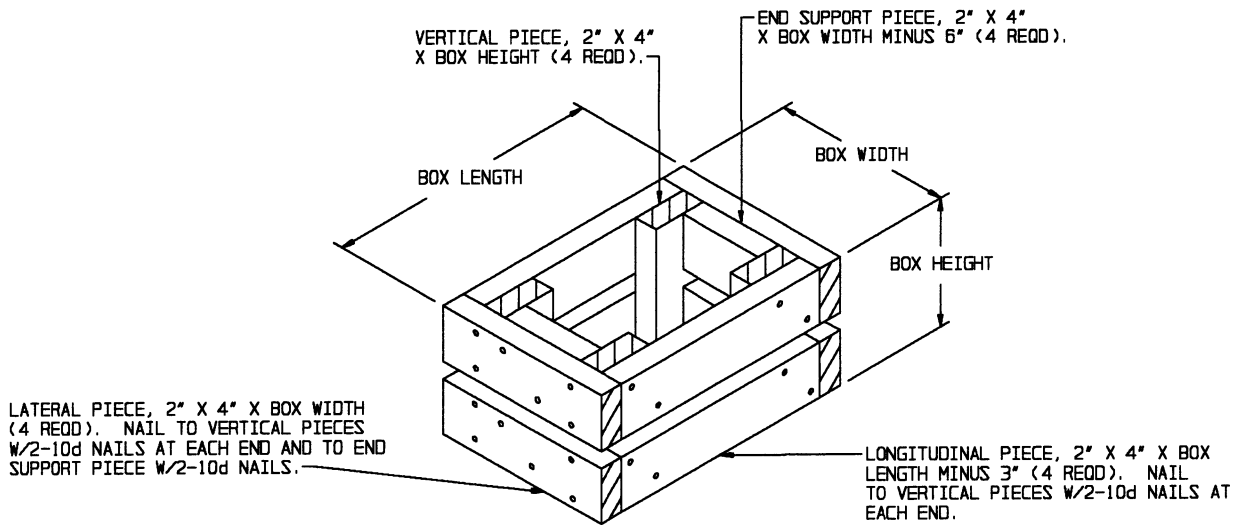
BILL OF MATERIAL

PALLET, 35" X 45-1/2"	1 REQD	65 LBS
STEEL STRAPPING, 3/4"	144.83' REQD	10.35 LBS
SEAL FOR 3/4" STRAPPING	10 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 MUST BE PRE-POSITIONED ON THE PALLET DECK PRIOR TO PLACING BOXES ON THE PALLET. LOAD 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. NOTE THAT THE STRAPS WILL BE LOCATED AS SHOWN, NEAR THE SIDE CLEATS OF THE END PANELS OF THE BOX. TIEDOWN STRAPS WILL NOT BE APPLIED UNTIL THE LOAD STRAPS HAVE BEEN TENSIONED AND SEALED.
- E. THE FOLLOWING AMC DRAWINGS ARE APPLICABLE FOR OUTLOADING AND STORAGE OF THE ITEMS COVERED BY THIS APPENDIX.

CARLOADING	- - - -	19-48-4115-5PA1002
TRUCKLOADING	- - - -	19-48-4117-11PA1003
STORAGE	- - - -	19-48-4118-1-2-3-4-14-22PA1002
END OPENING ISO CONTAINER	- - - -	19-48-4153-15PA1002
MILVAN	- - - -	19-48-4166-15PA1003
SIDE OPENING ISO CONTAINER	- - - -	19-48-4267-15PA1009
- F. FOR METHOD OF SECURING A STRAP CUTTER TO THE PALLET UNIT, SEE AMC 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 .30 CALIBER CARTRIDGES WHEN IDENTIFIED BY DIFFERENT NATIONAL STOCK NUMBERS (NSN) THAN WHAT IS SHOWN ON PAGE 2, 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. 1-1/4" STRAP MAY BE SUBSTITUTED FOR THE 3/4" STRAPPING SPECIFIED IN THE PALLET UNIT DETAIL AT LEFT. IF 1-1/4" STRAPPING IS USED, OMIT THE CENTER TWO TIEDOWN STRAPS, OMIT TWO LOAD STRAPS, AND POSITION THE LOAD STRAPS APPROXIMATELY 7" IN FROM THE OUTER EDGES OF THE PALLET UNIT.
- K. POSITION THE TWO OUTBOARD BOXES ON THE 35" SIDES OF THE BOTTOM LAYER OF THE UNIT WITH THE TOPS DOWNWARD, AND THE TWO OUTBOARD BOXES ON THE 35" SIDES OF THE TOP LAYER OF THE UNIT WITH THE TOPS UPWARD.
- L. THE STYLE 1A 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 ITEMS COVERED BY THIS APPENDIX.
- M. WHEN THE UNIT LOAD DEPICTED AT LEFT IS TO BE USED FOR UNITIZING MARINE CORPS AMMUNITION, ONE LAYER OF BOXES MUST BE OMITTED, TIEDOWN STRAP LENGTHS MUST BE DECREASED TO 12'-4", AND LOAD STRAP LENGTHS MUST BE DECREASED TO 14'-2". THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 38", AND A GROSS UNIT WEIGHT OF 2,955 POUNDS, AND A UNIT CUBE OF 35.4 CUBIC FEET. ADDITIONALLY, THE UNIT MAY BE MODIFIED AS DESCRIBED WHEN BEING SHIPPED BY MILVAN OR COMMERCIAL INTERMODAL FREIGHT CONTAINER. 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.



FILLER ASSEMBLY
 (FOR MINUS ONE BOX)