

# APPENDIX 26N

## UNITIZATION PROCEDURES FOR BOXED AMMUNITION AND COM- PONENTS ON 4-WAY ENTRY PALLET

**CARTRIDGE, 40MM, PACKED VARIOUS QUAN-  
TITIES PER M548 METAL BOX, UNITIZED 36  
BOXES PER 40" X 48" PALLET; APPROX BOX  
SIZE 18-19/32" L X 8-19/64" W X 14-19/32" 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

<p style="font-size: small;">APPROVED, U.S. ARMY FIELD SUPPORT COMMAND</p> <p style="font-size: x-large; font-family: cursive;"><i>David G. Pichonik</i></p> <p style="font-size: x-small; text-align: right;">TPR</p> <p style="font-size: x-small; text-align: right;">AMSRD-AAR-AIL-TP</p> <p style="font-size: x-large; font-family: cursive;"><i>David [Signature]</i></p> <p style="font-size: x-small; text-align: right;">20 JAN 2005 AMSFS-ST</p> <p style="font-size: small;">APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND</p> <p style="font-size: x-large; font-family: cursive;"><i>Charles P. [Signature]</i></p> <p style="font-size: x-small;">U.S. ARMY DEFENSE AMMUNITION CENTER</p>	<p><b>CAUTION: VERIFY PRIOR TO USE AT WWW.DAC.ARMY.MIL THAT THIS IS THE MOST CURRENT VERSION OF THIS DOCUMENT. THIS IS PAGE 1 OF 4.</b></p>		<p style="font-size: large; font-weight: bold;">APRIL 1982</p>		
DO NOT SCALE		ENGINEER OR TECHNICIAN	BASIC REV.	WILLIAM R. FRERICHS LAURA A. FIEFFER	
TRANSPORTATION ENGINEERING DIVISION		VALIDATION ENGINEERING DIVISION		TESTED	
ENGINEERING DIRECTORATE		CLASS	DIVISION	DRAWING	FILE
[Signature]		19	48	4116/ 26N	20PA1002

PALLET UNIT DATA				
ITEMS INCLUDED		HAZARD CLASS AND DIVISION	● COMPAT-IBILITY GROUP	APPROX WEIGHT LBS
NSN	DODIC			
1310-				
01-159-3161	B472	———— INERT ————		2,324
01-368-7104	B472	———— INERT ————		2,324
01-159-8043	B542	1. 1	E	2,324
01-350-0247	B542	1. 1	E	2,324
01-420-9268	B542	1. 1	E	2,324
00-471-3615	B570	1. 2. 2	E	2,288
01-196-2654	B571	1. 1	E	2,324
01-159-3184	B576	1. 4	C	2,324
01-218-7069	B584	1. 4	C	2,324

● 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 DECEMBER 1983, CONSISTS OF:

1. ADDING ITEM BY NATIONAL STOCK NUMBER (NSN) TO THE "PALLET UNIT DATA" CHART.
2. CHANGING BOX DIMENSIONS.

REVISION NO. 2, DATED DECEMBER 1985, CONSISTS OF:

UPDATING DRAWING TITLE.

REVISION NO. 3, DATED MAY 1986, CONSISTS OF:

ADDING ITEM BY NATIONAL STOCK NUMBER (NSN) TO THE "PALLET UNIT DATA" CHART.

REVISION NO. 4, DATED SEPTEMBER 1993, CONSISTS OF:

ADDING ITEM BY NATIONAL STOCK NUMBER (NSN) TO THE "PALLET UNIT DATA" CHART.

REVISION NO. 5, DATED JULY 1994, CONSISTS OF:

ADDING ITEM BY NATIONAL STOCK NUMBER (NSN) TO THE "PALLET UNIT DATA" CHART.

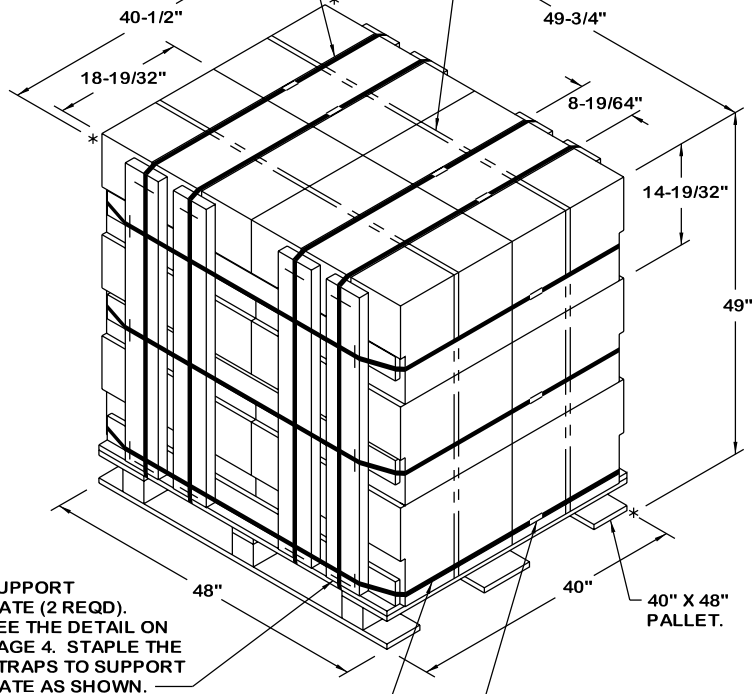
REVISION NO. 6, DATED JANUARY 2005, CONSISTS OF:

1. ADDING ITEM BY NATIONAL STOCK NUMBER (NSN) TO THE "PALLET UNIT DATA" CHART.
2. UPDATING DRAWING FORMAT AND ADDING PAGES 3 AND 4.

TIEDOWN STRAP, 3/4" X .035" OR .031" X 15'-1" LONG STEEL STRAPPING (4 REQD). SEE GENERAL NOTE "D" AT RIGHT.

LOAD STRAP, (ALTERNATIVE FOR HORIZONTAL STRAP), 3/4" X .035" OR .031" X 16'-8" LONG STEEL STRAPPING (2 REQD). SEE GENERAL NOTE "L" BELOW.

**GENERAL NOTES**



HORIZONTAL STRAP, 3/4" X .035" OR .031" X 16'-1" LONG STEEL STRAPPING (3 REQD). SEE GENERAL NOTE "C" AT RIGHT.

**PALLET UNIT**

SEE GENERAL NOTE "B" AT RIGHT.

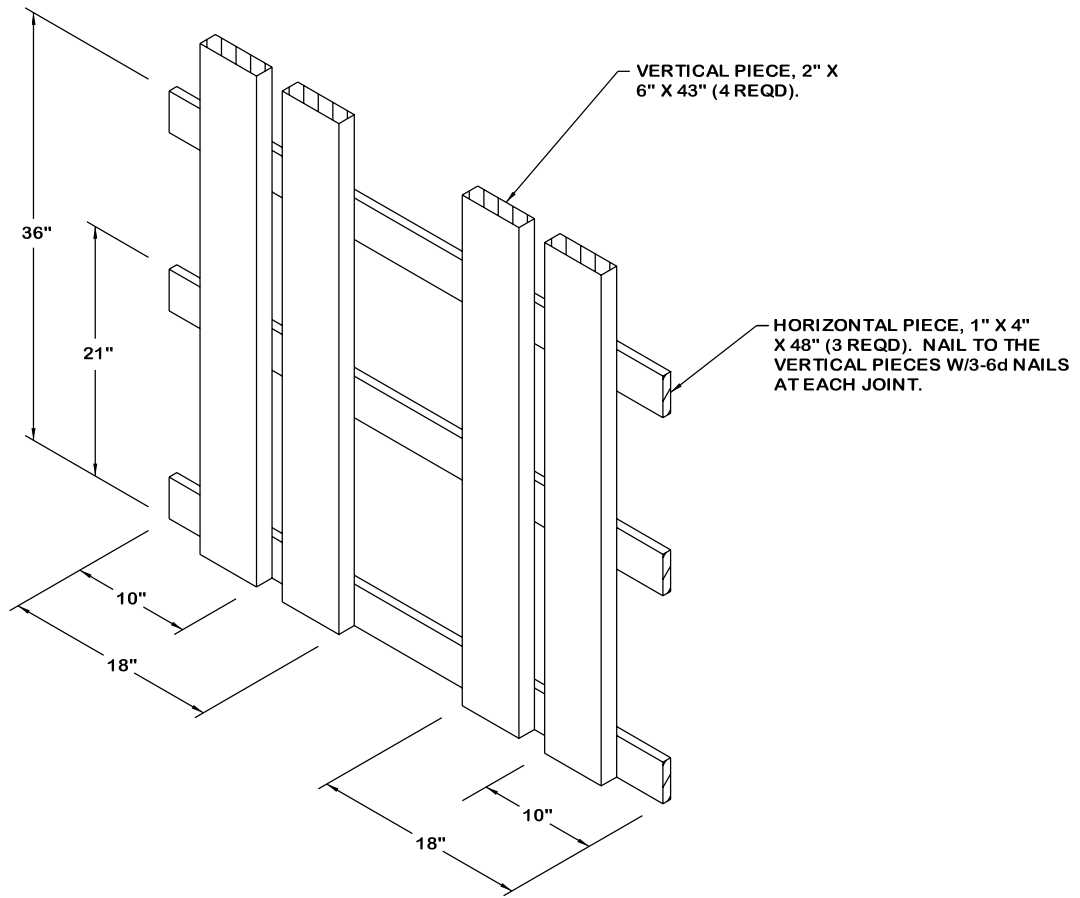
36 BOXES OF 40MM CARTRIDGES (48 PER BOX) @ 60 LBS - 2,160 LBS (APPROX)  
 DUNNAGE - - - - - 84 LBS  
 PALLET - - - - - 80 LBS

TOTAL WEIGHT - - - - - 2,324 LBS (APPROX)  
 CUBE - - - - - 57.1 CU FT (APPROX)

**BILL OF MATERIAL**

LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	24.00	8.00
2" X 6"	28.67	28.67
NAILS	NO. REQD	POUNDS
6d (2")	72	0.43
PALLET, 40" X 48" - - - - -	REQD - - - - -	80 LBS
STEEL STRAPPING, 3/4" - 108.58'	REQD - - - - -	9.70 LBS
SEAL FOR 3/4" STRAPPING - - - - -	7 REQD - - - - -	NIL
STAPLE, 15/16" X 3/4" - - - - -	28 REQD - - - - -	NIL

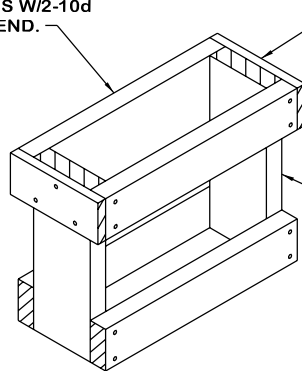
- A. THIS APPENDIX CANNOT STAND ALONE BUT MUST BE USED IN CONJUNCTION WITH THE BASIC UNITIZATION PROCEDURES DRAWING 19-48-4116-20PA1002. TO PRODUCE AN APPROVED UNIT LOAD, ALL PERTINENT PROCEDURES, SPECIFICATIONS AND CRITERIA SET FORTH WITHIN THE BASIC DRAWING WILL APPLY TO THE PROCEDURES DELINEATED IN 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 ENCIRCLE A LAYER OF BOXES ON THE PALLET AND TO BE ALIGNED WITH THE HORIZONTAL PIECES OF THE "SUPPORT GATE" AS SHOWN. HORIZONTAL STRAPS MUST BE TENSIONED AND SEALED PRIOR TO THE APPLICATION OF TIEDOWN STRAPS.
- D. INSTALL EACH TIEDOWN STRAP TO PASS UNDER THE TOP DECK BOARDS OF THE PALLET AND TO BE ALIGNED WITH THE VERTICAL PIECES OF THE "SUPPORT GATE" AS SHOWN. TIEDOWN STRAPS WILL NOT BE APPLIED UNTIL THE HORIZONTAL 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. IF ITEMS COVERED HEREIN ARE UNITIZED PRIOR TO ISSUANCE OF THIS REVISION TO THIS APPENDIX, THE BOXES NEED NOT BE REUNITIZED SOLELY TO CONFORM TO THIS REVISION.
- G. THE UNITIZATION PROCEDURES DEPICTED HEREIN MAY ALSO BE USED FOR UNITIZING 40MM 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.
- H. 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 ITEMS COVERED BY THIS APPENDIX.
- J. ALL DUNNAGE SHALL BE PRESERVATIVE TREATED IN ACCORDANCE WITH GENERAL NOTE "AA" IN THE BASIC PROCEDURES.
- K. WHEN THE UNIT LOAD DEPICTED AT LEFT IS TO BE USED FOR UNITIZING MARINE CORPS AMMUNITION, ONE LAYER OF BOXES MUST BE OMITTED, SUPPORT GATE HEIGHT MUST BE DECREASED TO 28-1/2" AND THE UPPERMOST HORIZONTAL PIECE MUST BE OMITTED, TIEDOWN STRAP LENGTHS MUST BE DECREASED TO 12'-8", AND THE UPPERMOST HORIZONTAL STRAP MUST BE OMITTED. THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 34-1/2", A GROSS UNIT WEIGHT OF 1,101 POUNDS, AND A UNIT CUBE OF 40.0 CUBIC FEET. ADDITIONALLY, THE UNIT MAY BE MODIFIED AS DESCRIBED WHEN BEING SHIPPED BY MILVAN OR ISO INTERMODAL FREIGHT CONTAINER, VAN TRAILER, OR 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.
- L. LOAD STRAPS MAY BE USED IN LIEU OF HORIZONTAL STRAPS. LOAD STRAPS WILL BE LOCATED AS SHOWN IN THE DETAIL AT LEFT. LOAD STRAPS MAY BE PRE-POSITIONED ON THE PALLET DECK OR THREADED THROUGH THE STRAP SLOTS.
- M. FOR DETAILS OF THE M548 METAL BOX SEE LAKE CITY ARSENAL DRAWING 7258943.



**SUPPORT GATE**

(2 REQD)

HORIZONTAL PIECE, 2" X 4" X 17-1/8" (4 REQD). NAIL TO THE VERTICAL PIECES W/2-10d NAILS AT EACH END.



FILL PIECE, 1" X 4" X 8-1/2" (2 REQD). NAIL TO THE VERTICAL PIECE W/3-6d NAILS.

VERTICAL PIECE, 2" X 6" X 14-1/2" (2 REQD).

**FILLER ASSEMBLY**

(FOR MINUS ONE BOX)