

APPENDIX 8C

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

CARTRIDGE, CALIBER .30, BALL, M1, M2 OR M72, OR BLANK, M1909, OR NORMA MAGNUM, XM1163, OR TRACER, M1 OR M25, OR WINCHESTER MAGNUM MATCH, MK248, PACKED VARIOUS QUANTITIES IN M2 SERIES METAL CONTAINERS, 2 PER WIREBOUND BOX, UNITIZED 48 BOXES PER 40" X 48" PALLET; APPROX BOX SIZE 14-1/2" L X 12-3/4" W X 8-3/8" H

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

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U.S. ARMY MATERIEL COMMAND DRAWING

<p>APPROVED, COMBAT CAPABILITIES DEVELOPMENT COMMAND ARMAMENTS CENTER</p> <p>HANSSEN.JO. Digitally signed by HANSSEN.JOSEPH.W. SEPH.W.137.1376495538 6495538 Date: 2021.08.12 13:48:38 -05'00' FCDD-ACE-LTP</p>	<p>CAUTION: VERIFY PRIOR TO USE AT https://www.dau.edu/cop/ammo/Pages/Default.aspx THAT THIS IS THE MOST CURRENT VERSION OF THIS DOCUMENT. THIS IS PAGE 1 OF 4.</p>												
<p>APPROVED, U.S. ARMY JOINT MUNITIONS COMMAND</p> <p>WARD.GINA. Digitally signed by WARD.GINA.M.1369379808 M.1369379808 Date: 2021.08.15 09:53:29 -05'00' AMSJM-MLT</p>	<p>DO NOT SCALE</p>	<p>NOVEMBER 1979</p>											
<p>APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND</p> <p>BRAILSFORD.KEITH Digitally signed by BRAILSFORD.KEITH ANTHONY. H.ANTHONY.10286 1028655661 55661 Date: 2021.08.17 07:26:42 -05'00' U.S. ARMY DEFENSE AMMUNITION CENTER</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">DESIGN ENGINEER</td> <td style="width: 15%;">BASIC</td> <td colspan="2" style="text-align: center;">GEORGE B. FECKE</td> </tr> <tr> <td></td> <td>REV.</td> <td colspan="2" style="text-align: center;">MADELINE BANKS</td> </tr> </table>	DESIGN ENGINEER	BASIC	GEORGE B. FECKE			REV.	MADELINE BANKS		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">REVISION NO. 2</td> <td style="width: 50%;">AUGUST 2021</td> </tr> </table>	REVISION NO. 2	AUGUST 2021	<p>SEE THE REVISION LISTING ON PAGE 2</p>
DESIGN ENGINEER	BASIC	GEORGE B. FECKE											
	REV.	MADELINE BANKS											
REVISION NO. 2	AUGUST 2021												
<p>TEST ENGINEER</p> <p>TEST REPORT NA</p> <p>EXPLOSIVE SAFETY DIRECTORATE</p>	<p>ENGINEERING DIVISON</p> <p>FIEFFER.LAUR A.A.1230375727 Digitally signed by FIEFFER.LAURA.A.1230375727 Date: 2021.08.11 12:09:52 -05'00'</p> <p>FELICIANO.AD IN.1259200373 Digitally signed by FELICIANO.ADIN.1259200373 Date: 2021.08.12 11:45:32 -05'00'</p> <p>FAIRHURST.ROBE RT.JOHN.10157688 80 Digitally signed by FAIRHURST.ROBERT.JOHN.101 5766880 Date: 2021.08.19 08:09:51 -05'00'</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">CLASS</td> <td style="width: 15%;">DIVISION</td> <td style="width: 20%;">DRAWING</td> <td style="width: 50%;">FILE</td> </tr> <tr> <td style="text-align: center;">19</td> <td style="text-align: center;">48</td> <td style="text-align: center;">4116/ 8C</td> <td style="text-align: center;">20PA1002</td> </tr> </table>	CLASS	DIVISION	DRAWING	FILE	19	48	4116/ 8C	20PA1002			
CLASS	DIVISION	DRAWING	FILE										
19	48	4116/ 8C	20PA1002										

PALLET UNIT DATA				
ITEMS INCLUDED		*HAZARD CLASS AND DIVISION	*COMPATI- BILITY GROUP	APPROX WEIGHT (LBS)
NSN	DODIC			
1305-				
01-018-1547	A191	1.4	S	2,974
00-096-3150	A212	1.4	S	3,310
00-047-3871	A222	1.4	S	2,974
00-305-0908	A230	1.4	S	3,354
00-305-0907	A238	1.4	S	3,699
00-565-2636	A246	1.4	S	3,354
01-568-7504	AB43	1.4	S	2,974
01-669-2481	AC33	1.4	S	2,974

*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

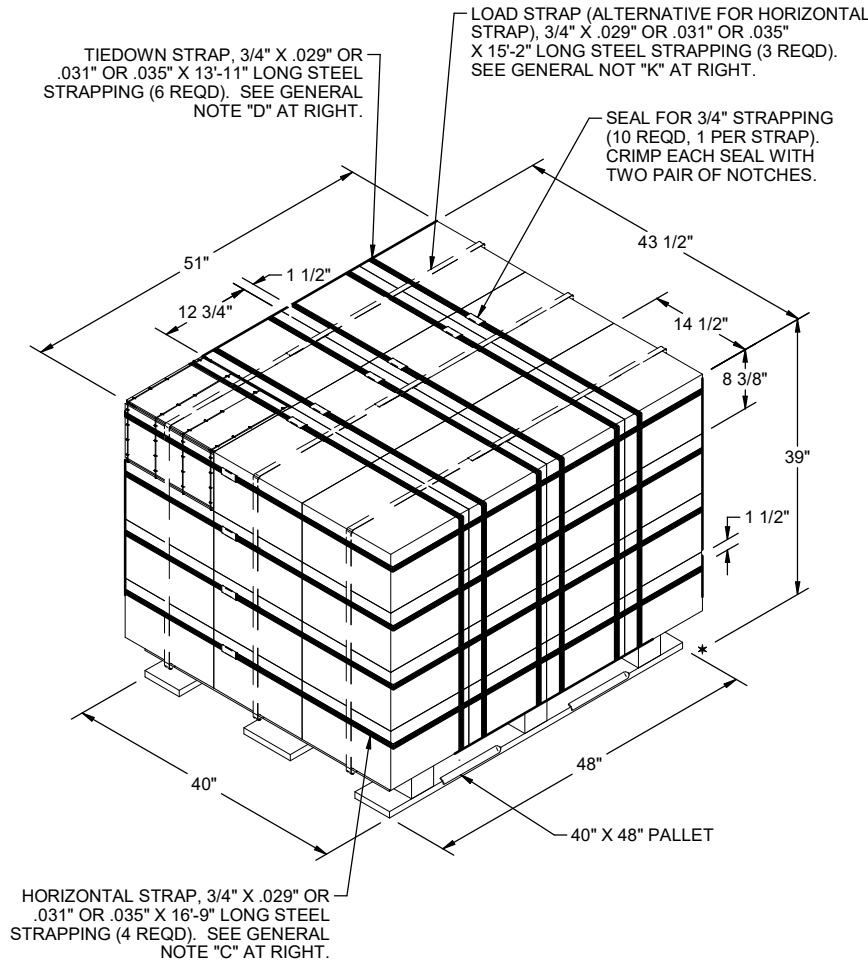
REVISION NO. 1, DATED AUGUST 1994, CONSISTS OF:

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

REVISION NO. 2, DATED AUGUST 2021, CONSISTS OF CHANGES PER ECP R20K2004 INCLUDING:

1. ADDING ITEMS BY NATIONAL STOCK NUMBER TO "PALLET UNIT DATA" CHART.
2. UPDATING WEIGHTS IN "PALLET UNIT DATA" CHART.
3. DELETING ITEM BY NATIONAL STOCK NUMBER TO "PALLET UNIT DATA" CHART AND REMOVING ASSOCIATED THREE LAYER UNIT RESTRICTION.
4. UPDATING DRAWING FORMAT.

GENERAL NOTES



PALLET UNIT
SEE GENERAL NOTE "B" AT RIGHT.

48 BOXES OF .30 CALIBER CARTRIDGES @ 75.1 LBS	3,605 LBS
DUNNAGE	14 LBS
PALLET	80 LBS
TOTAL WEIGHT	3,699 LBS (APPROX)
CUBE	50.1 CU FT (APPROX)

BILL OF MATERIAL			
PALLET, 40" X 48"	1 REQD	80 LBS	
STEEL STRAPPING, 3/4"	148' REQD	13.14 LBS	
SEAL FOR 3/4" STRAPPING	7 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. NOTE THAT THE STRAPS WILL BE LOCATED AS SHOWN, NEAR THE TOP OF EACH LAYER. 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 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 .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.
- H. THE STYLE 1 PALLET DELINEATED IN THE DETAIL AT LEFT NEED NOT HAVE CHAMFERS OR STRAP SLOTS AS SPECIFIED WITHIN MILITARY SPECIFICATION MIL-DTL-15011 WHEN USED FOR THE UNITIZATION OF ITEMS COVERED BY THIS APPENDIX.
- J. 1-1/4" STRAPS MAY BE SUBSTITUTED FOR THE 3/4" STRAPPING SPECIFIED IN THE "PALLET UNIT" AT LEFT. FOUR 1-1/4" TIEDOWN STRAPS WILL REPLACE THE SIX 3/4" TIEDOWN STRAPS SPECIFIED. REFER TO GENERAL NOTE "CC" IN THE BASIC UNITIZATION PROCEDURES DRAWING 19-48-4116-20PA1002 FOR ADDITIONAL GUIDANCE.
- K. 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 POSITIONED ON THE PALLET DECK OR THREADED THROUGH THE STRAP SLOTS. **NOTICE:** WHEN LOAD STRAPS ARE BEING USED IN LIEU OF HORIZONTAL STRAPS, THE THREE OUTBOARD BOXES ON THE 40" SIDES OF THE BOTTOM LAYER OF THE UNIT WILL BE POSITIONED WITH THE TOPS DOWNWARD, AND THE THREE OUTWARD BOXES ON THE 40" SIDES OF THE TOP LAYER OF THE UNIT WILL BE POSITIONED WITH TOPS UPWARDS. LOAD STRAPS MUST BE TENSIONED AND SEALED PRIOR TO THE APPLICATION OF TIEDOWN STRAPS.
- L. IF DEEMED MORE ECONOMICALLY FEASIBLE, THE ALTERNATIVE FILLER ASSEMBLY MAY BE SUBSTITUTED FOR THE FILLER ASSEMBLY TO COMPLETE A LAYER ON A PALLET.
- M. FOR DETAILS OF THE WIREBOUND BOX SEE ARDEC DRAWING 7553659.

