

APPENDIX 5C

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

**CARTRIDGE, 5.56MM, SAW, PACKED 800 PER PA108
METAL CONTAINER, 2 CONTAINERS PER WIRE-
BOUND BOX, UNITIZED 36 BOXES PER 40" X 48"
PALLET; APPROX BOX SIZE 17" L X 13-3/8" W X 9-
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.**

DISTRIBUTION STATEMENT A:

**APPROVED FOR PUBLIC RELEASE
DISTRIBUTION IS UNLIMITED.**

U.S. ARMY MATERIEL COMMAND DRAWING

<p>APPROVED, U.S. ARMY RESEARCH, DEVELOPMENT AND ENGINEERING COMMAND</p> <p>PENNOCK.AMA NDA.C.1380042 157</p> <p><small>Digitally signed by PENNOCK.AMANDA.C.138004217 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=PENNOCK.AMANDA.C.138004215 Date: 2017.08.23 09:07:24 -05'00'</small></p> <p style="text-align: right;">RDAR-EIL-TP</p>	<p>CAUTION: VERIFY PRIOR TO USE AT HTTPS://MHP.REDSTONE.ARMY.MIL THAT THIS IS THE MOST CURRENT VERSION OF THIS DOCUMENT. THIS IS PAGE 1 OF 4.</p>		<p style="font-size: 24pt; font-weight: bold;">JANUARY 1985</p>					
<p>APPROVED, U.S. ARMY JOINT MUNITIONS COMMAND</p> <p>RUS.ALLEN.J .1230354282</p> <p><small>Digitally signed by RUS.ALLEN.J.1230354282 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=RUS.ALLEN.J.1230354282 Date: 2017.08.31 15:19:33 -05'00'</small></p> <p style="text-align: right;">AMSJM-MMT</p>	<p>DO NOT SCALE</p>	<p>REVISION NO. 9</p> <p>AUGUST 2017</p>						
<p>APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND</p> <p>SHIMP.UPTON .R.1231257183</p> <p><small>Digitally signed by SHIMP.UPTON.R.1231257183 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=SHIMP.UPTON.R.1231257183 Date: 2017.09.11 16:06:29 -05'00'</small></p> <p style="text-align: center;">U.S. ARMY DEFENSE AMMUNITION CENTER</p>	<p>DESIGN ENGINEER</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">BASIC</td> <td style="width: 80%;">ROBERT A. REGAZZI</td> </tr> <tr> <td>REV.</td> <td>MADELINE BANKS</td> </tr> </table>	BASIC	ROBERT A. REGAZZI	REV.	MADELINE BANKS	<p>ENGINEERING DIVISON</p> <p>FIEFFER.LAUR A.A.1230375727</p> <p><small>Digitally signed by FIEFFER.LAURA.A.1230375727 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=FIEFFER.LAURA.A.1230375727 Date: 2017.08.09 07:32:41 -05'00'</small></p>	<p>SEE THE REVISION LISTING ON PAGE 2</p>	
BASIC	ROBERT A. REGAZZI							
REV.	MADELINE BANKS							
<p>TEST ENGINEER</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">TEST REPORT</td> <td style="width: 80%;">NA</td> </tr> </table>	TEST REPORT	NA	<p>TEST ENGINEER</p> <p>FELICIANO.AD IN.1259200373</p> <p><small>Digitally signed by FELICIANO.ADON.1259200373 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=FELICIANO.ADON.1259200373 Date: 2017.08.10 10:19:56 -05'00'</small></p>	<p>CLASS</p> <p>19</p>	<p>DIVISION</p> <p>48</p>	<p>DRAWING</p> <p>4116/5C</p>	<p>FILE</p> <p>20PA1002</p>	
TEST REPORT	NA							
<p>EXPLOSIVE SAFETY DIRECTORATE</p> <p>THOMAS.CARL.AN THONY.1104621372</p> <p><small>Digitally signed by THOMAS.CARL.ANTHONY.1104621372 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=THOMAS.CARL.ANTHONY.1104621372 Date: 2017.08.14 14:18:44 -05'00'</small></p>	<p>REVISION LISTING ON PAGE 2</p>		<p>SEE THE REVISION LISTING ON PAGE 2</p>					

PALLET UNIT DATA				
ITEMS INCLUDED		*HAZARD CLASS AND DIVISION	*COMPATIBILITY GROUP	APPROX WEIGHT (LBS)
NSN	DODIC			
1305-				
01-258-8692	A062	1.4	S	2,790
01-363-7560	A062	1.4	S	2,790
01-252-0153	A064	1.4	S	2,790
01-361-8038	A064	1.4	S	2,790
01-258-8694	A075	1.4	S	2,178
01-393-7050	AA01	1.4	S	2,708
01-393-7052	AA02	1.4	S	2,726
01-411-6098	AA08	1.4	S	1,782
01-467-3026	AA44	1.4	S	2,790
01-533-5663	AB03	1.4	S	2,790
01-533-5657	AB04	1.4	S	2,790
01-568-0799	AB40	1.4	S	2,790
01-559-3332	AB56	1.4	S	2,790
01-582-7502	AB66	1.4	S	2,754
01-596-4478	AB73	1.4	S	2,790
01-596-4416	AB75	1.4	S	2,790
01-596-4391	AB76	1.4	S	2,790
01-651-5896	AC10	1.4	S	2,754

*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. 2, DATED FEBRUARY 1989, CONSISTS OF:

1. REMOVING ONE LAYER OF BOXES FROM PALLET UNIT.
2. CHANGING UNITIZATION PROCEDURES TO CONFORM TO 1 ABOVE.

REVISION NO. 3, DATED SEPTEMBER 1993, CONSISTS OF:

1. ADDING ITEMS BY NATIONAL STOCK NUMBER TO THE "PALLET UNIT DATA" CHART.
2. ADDING ALTERNATIVE STRAPPING.
3. ADDING ALTERNATIVE FILLER ASSEMBLY.
4. COMBINING NOTES "J" (1-1/4" STRAPS) AND "K" (HORIZONTAL STRAPS).
5. ADDING NEW GENERAL NOTE "L" (ALTERNATIVE FILLER).

REVISION NO. 4, DATED DECEMBER 1994, CONSISTS OF:

1. ADDING ITEMS BY NATIONAL STOCK NUMBER TO THE "PALLET UNIT DATA" CHART.
2. CHANGING THE WEIGHT OF ITEMS ON "PALLET UNIT DATA" CHART.
3. DELETING GENERAL NOTE "N" (OUTBOARD BOX POSITION).

REVISION NO. 5, DATED MARCH 1996, CONSISTS OF:

1. ADDING ITEM BY NATIONAL STOCK NUMBER TO THE "PALLET UNIT DATA" CHART.
2. CHANGING THE WEIGHT OF AN ITEM ON THE "PALLET UNIT DATA" CHART.
3. DELETING GENERAL NOTE RELATING TO STRAP CUTTER AND RELETTERING OTHER GENERAL NOTES.

REVISION NO. 6, DATED JANUARY 2000, CONSISTS OF:

1. ADDING ITEM BY NATIONAL STOCK NUMBER TO THE "PALLET UNIT DATA" CHART.
2. CHANGING TO NEW DRAWING FORMAT.

REVISION NO. 7, DATED NOVEMBER 2013, CONSISTS OF CHANGES PER ECP R12K2038 NOR 14:

1. ADDING ITEMS BY NATIONAL STOCK NUMBERS TO THE "PALLET UNIT DATA" CHART.
2. UPDATING TITLE IN COVER PAGE (PACKED 800 PER PA108).
3. UPDATING CALLOUTS TO REFLECT THE .029" STRAP REFERENCE.
4. UPDATING TABLE FORMAT AND WEIGHTS IN "PALLET UNIT DATA" CHART.

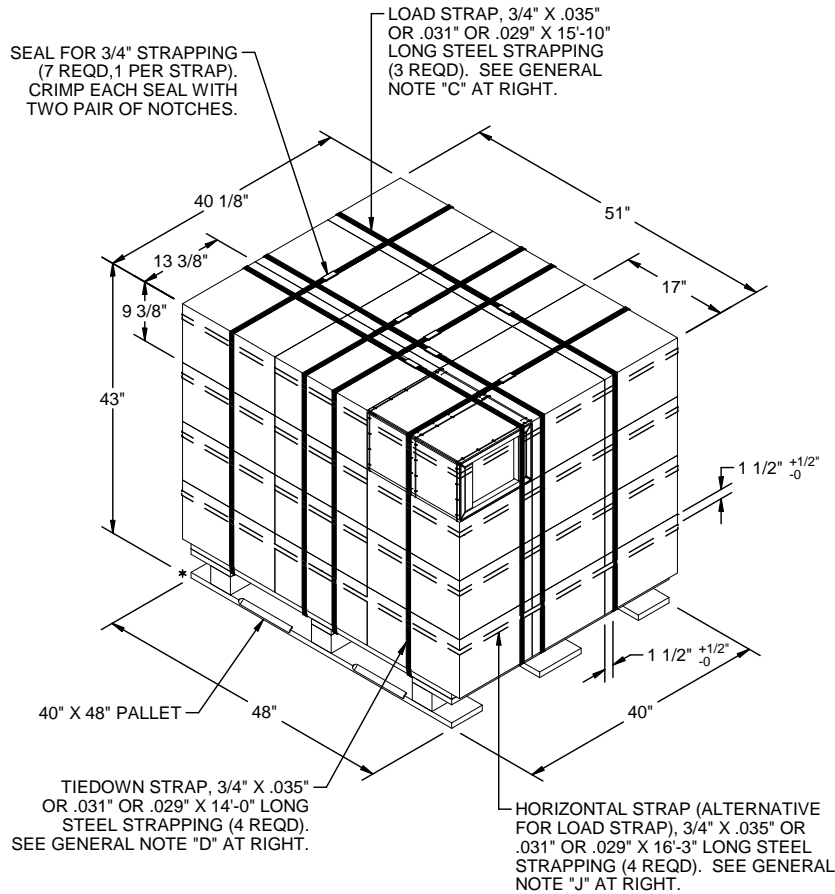
REVISION NO. 8, DATED MAY 2015, CONSISTS OF CHANGES PER ECP R14K9001-NOR 18:

1. ADDING ITEM BY NATIONAL STOCK NUMBER TO THE "PALLET UNIT DATA" CHART.
2. UPDATING PALLET SPECIFICATION IN GENERAL NOTE "L".

REVISION NO. 9, DATED AUGUST 2017, CONSISTS OF CHANGES PER ECP R16S2008 NOR 7:

ADDING ITEM BY NATIONAL STOCK NUMBER TO THE "PALLET UNIT DATA" CHART

GENERAL NOTES



PALLET UNIT

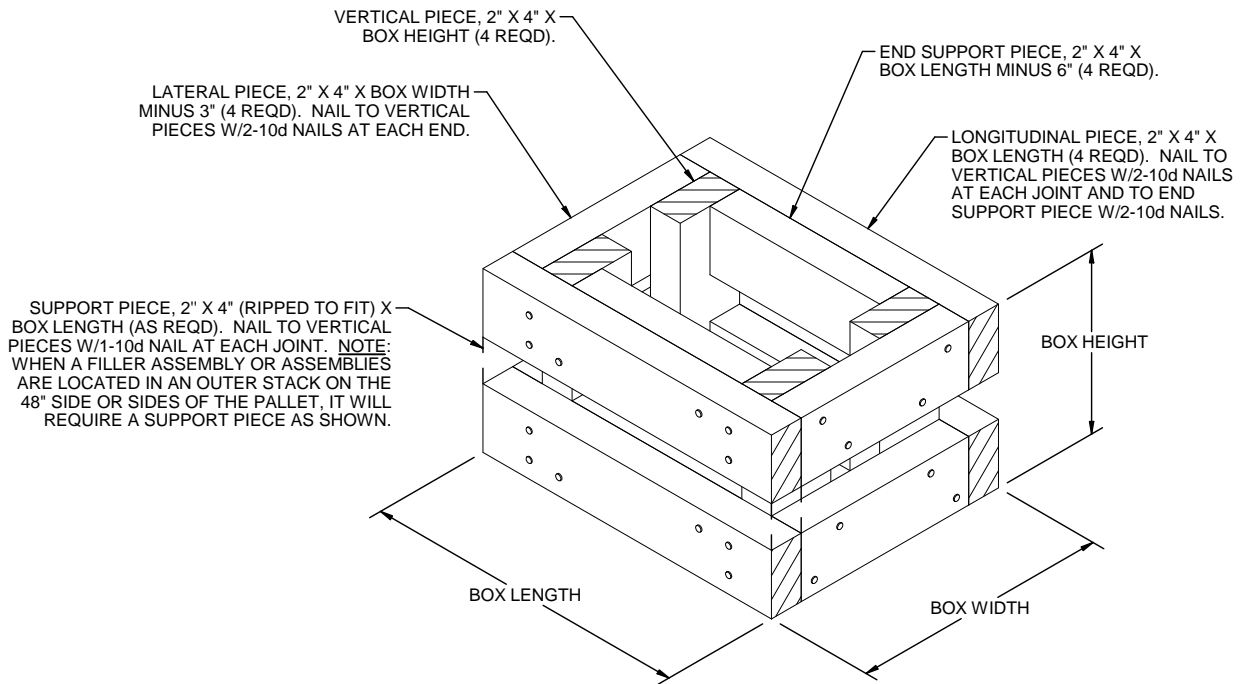
SEE GENERAL NOTE "B" AT RIGHT.

36 BOXES OF 5.56MM CTG (1,600 PER BOX) @ 75.0 LBS	---	2,700 LBS
DUNNAGE	---	10 LBS
PALLET	---	80 LBS
TOTAL WEIGHT	---	2,790 LBS (APPROX)
CUBE	---	50.9 CU FT (APPROX)

- 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. NOTE THAT THE LOAD STRAPS WILL BE LOCATED AS SHOWN. LOAD STRAPS MUST BE TENSIONED AND SEALED PRIOR TO APPLICATION OF TIEDOWN STRAPS.
- D. INSTALL EACH TIEDOWN STRAP TO PASS UNDER TOP DECK BOARDS OF THE PALLET AND TO BE LOCATED AS SHOWN. TIEDOWN STRAPS WILL NOT BE APPLIED UNTIL THE LOAD STRAPS HAVE BEEN TENSIONED AND SEALED.
- E. THE FOLLOWING AMC DRAWINGS ARE APPLICABLE FOR UNLOADING 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 5.56MM 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. 1-1/4" STRAPS MAY BE SUBSTITUTED FOR THE 3/4" STRAPPING SPECIFIED IN THE "PALLET UNIT" AT LEFT. THREE 1-1/4" TIEDOWN STRAPS WILL REPLACE THE FOUR 3/4" TIEDOWN STRAPS SPECIFIED UNLESS THE UNIT LOAD WEIGHT EXCEEDS 3,300 LBS, IN WHICH CASE FOUR 1-1/4" TIEDOWN STRAPS ARE REQUIRED. OMIT A CENTER TIEDOWN STRAP. REFER TO GENERAL NOTE "CC" IN THE BASIC UNITIZATION DRAWING 19-48-4116-20PA1002 FOR ADDITIONAL GUIDANCE.
- J. HORIZONTAL STRAPS MAY BE USED IN LIEU OF LOAD STRAPS. HORIZONTAL STRAPS WILL BE LOCATED AS DIMENSIONED IN THE DETAIL AT LEFT.
- K. IF DEEMED MORE ECONOMICALLY FEASIBLE, THE ALTERNATIVE FILLER ASSEMBLY MAY BE SUBSTITUTED FOR THE FILLER ASSEMBLY TO COMPLETE A LAYER ON A PALLET.
- L. 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.
- M. FOR DETAILS OF THE WIREBOUND BOX SEE ARDEC DRAWING 12590217.

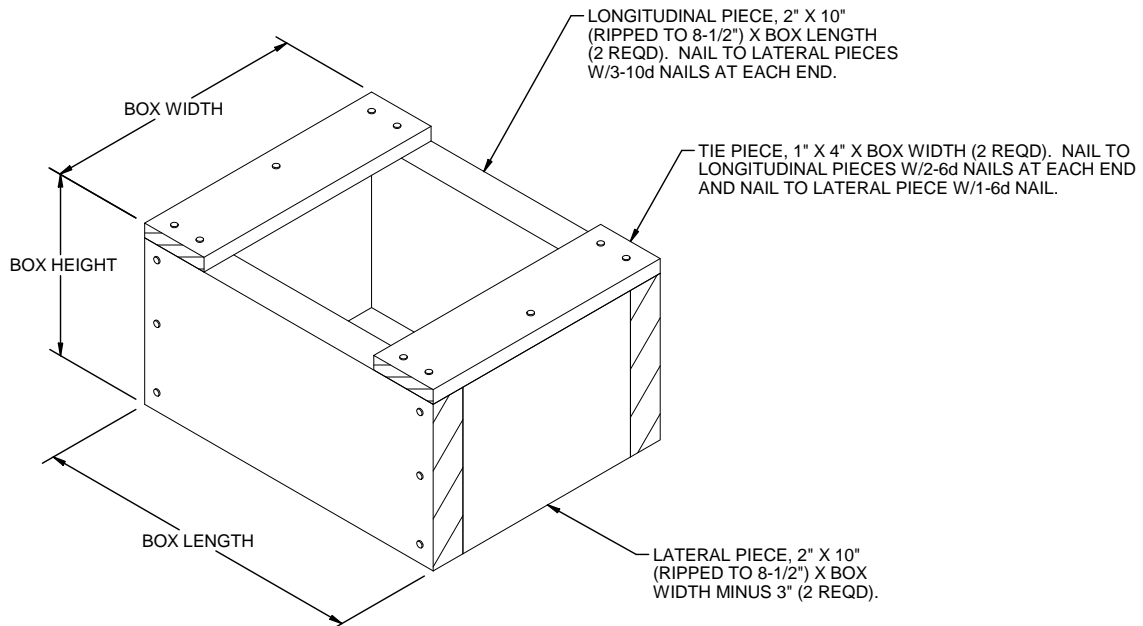
BILL OF MATERIAL

PALLET, 40" X 48"	---	1 REQD	---	80 LBS
STEEL STRAPPING, 3/4"	---	103.50' REQD	---	9.24 LBS
SEAL FOR 3/4" STRAPPING	---	7 REQD	---	NIL



FILLER ASSEMBLY

(FOR MINUS ONE BOX)



ALTERNATIVE FILLER ASSEMBLY

(FOR MINUS ONE BOX)
SEE GENERAL NOTE "K" ON PAGE 3.