

# APPENDIX 131B

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

**IGNITER, TIME BLASTING FUSE, M60 OR M81,  
PACKED 60, 90 OR 108 PER WIREBOUND BOX, UNIT-  
IZED 48 BOXES PER 40" X 48" PALLET; APPROX BOX  
SIZE 14-7/16" L X 12-17/32" 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:**

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### U.S. ARMY MATERIEL COMMAND DRAWING

<p><b>APPROVED, U.S. ARMY RESEARCH, DEVELOPMENT AND ENGINEERING COMMAND</b></p> <p>REHMSTEDT.MA RK.J.1230548400</p> <p style="font-size: small;">Digitally signed by REHMSTEDT.MARK.J.1230548400 DN: cn=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, c=US, email=REHMSTEDT.MARK.J.1230548400 Date: 2011.08.17 09:55:07 -0500</p> <p style="text-align: right;"><b>RDAR-EIL-TP</b></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>									
<p><b>APPROVED, U.S. ARMY JOINT MUNITIONS COMMAND</b></p> <p>CASILLAS.GILBE RT.J.1230393644</p> <p style="font-size: small;">Digitally signed by CASILLAS.GILBERT.J.1230393644 DN: cn=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, c=US, email=CASILLAS.GILBERT.J.1230393644 Date: 2011.08.31 08:51:43 -0500</p> <p style="text-align: right;"><b>AMSJM-LIT</b></p>	<p><b>DO NOT SCALE</b></p>	<p style="font-size: large; font-weight: bold;">MAY 2011</p>										
<p><b>APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND</b></p> <p>CARNEY.GARY.BURTON.1038708038 RTON.1038708038</p> <p style="font-size: small;">Digitally signed by CARNEY.GARY.BURTON.1038708038 DN: cn=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, c=US, email=CARNEY.GARY.BURTON.1038708038 Date: 2011.09.19 07:46:50 -0500</p> <p style="text-align: center;"><b>U.S. ARMY DEFENSE AMMUNITION CENTER</b></p>	<p><b>TRANSPORTATION ENGINEERING DIVISION</b></p> <p>FIEFFER.LAUR A.A.1230375727</p> <p style="font-size: small;">Digitally signed by FIEFFER.LAURA.A.1230375727 DN: cn=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, c=US, email=FIEFFER.LAURA.A.1230375727 Date: 2011.05.09 08:24:35 -0500</p>	<p><b>ENGINEER OR TECHNICIAN</b></p> <p>BASIC</p> <p>REV.</p>	<p><b>WILLIAM R. FRERICHS</b></p> <p><b>CLINTON T. COSGROVE</b></p>	<p><b>REVISION NO. 2</b></p>	<p><b>SEE THE REVISION LISTING ON PAGE 2</b></p>							
	<p><b>VALIDATION ENGINEERING DIVISION</b></p> <p>BARICKMAN. PHILIP.W.123 0202202</p> <p style="font-size: small;">Digitally signed by BARICKMAN.PHILIP.W.1230202202 DN: cn=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, c=US, email=BARICKMAN.PHILIP.W.1230202202 Date: 2011.08.11 09:04:24 -0500</p>	<p><b>ENGINEERING DIRECTORATE</b></p> <p>BEAVER.JERRY .W.1230949952</p> <p style="font-size: small;">Digitally signed by BEAVER.JERRY.W.1230949952 DN: cn=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, c=US, email=BEAVER.JERRY.W.1230949952 Date: 2011.05.10 08:45:36 -0500</p>	<p><b>TESTED</b></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>CLASS</th> <th>DIVISION</th> <th>DRAWING</th> <th>FILE</th> </tr> <tr> <td style="text-align: center; font-weight: bold;">19</td> <td style="text-align: center; font-weight: bold;">48</td> <td style="text-align: center; font-weight: bold;">4116/ 131B</td> <td style="text-align: center; font-weight: bold;">20PA1002</td> </tr> </table>	CLASS	DIVISION	DRAWING	FILE	19	48	4116/ 131B	20PA1002
CLASS	DIVISION	DRAWING	FILE									
19	48	4116/ 131B	20PA1002									

PALLET UNIT DATA				
ITEMS INCLUDED		*HAZARD CLASS AND DIVISION	*COMPATIBILITY GROUP	APPROX WEIGHT (LBS)
NSN	DODIC			
1375-				
00-283-9452	M766	1. 4	S	1, 403
01-442-0939	MN08	1. 4	S	1, 403
01-555-0128	MN08	1. 4	S	1, 507
01-608-6847	MN08	1. 4	S	1, 603

\*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 MARCH 1997, CONSISTS OF:

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

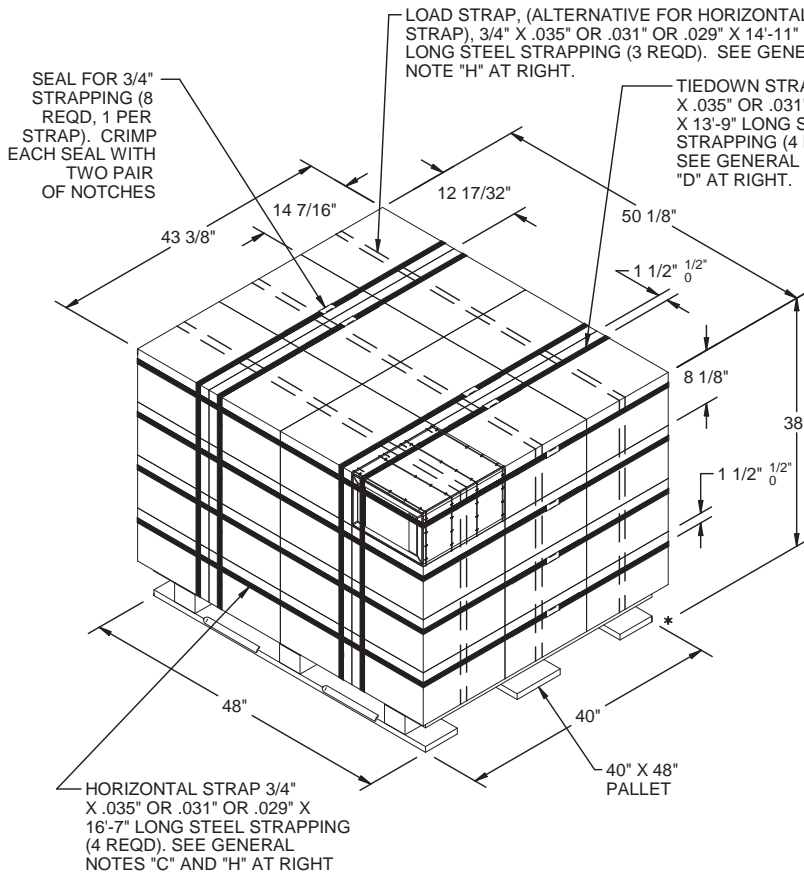
REVISION NO. 2, DATED MAY 2011, CONSISTS OF:

1. ADDING ITEMS BY NATIONAL STOCK NUMBER (NSN) TO "PALLET UNIT DATA" CHART.
2. ADDING PAGES 3 AND 4

**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. 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 THE 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 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 IGNITERS 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. 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.
- J. IF DEEMED MORE ECONOMICALLY FEASIBLE, THE ALTERNATIVE FILLER ASSEMBLY MAY BE SUBSTITUTED FOR THE FILLER ASSEMBLY TO COMPLETE A LAYER ON A PALLET.
- 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 ITEMS COVERED BY THIS APPENDIX.
- L. FOR DETAILS OF THE WIREBOUND BOX SEE NAVAL ORDNANCE COMMAND DRAWING 2128182 (60 PACK) OR ARDEC DRAWING 13019661 (90 PACK).



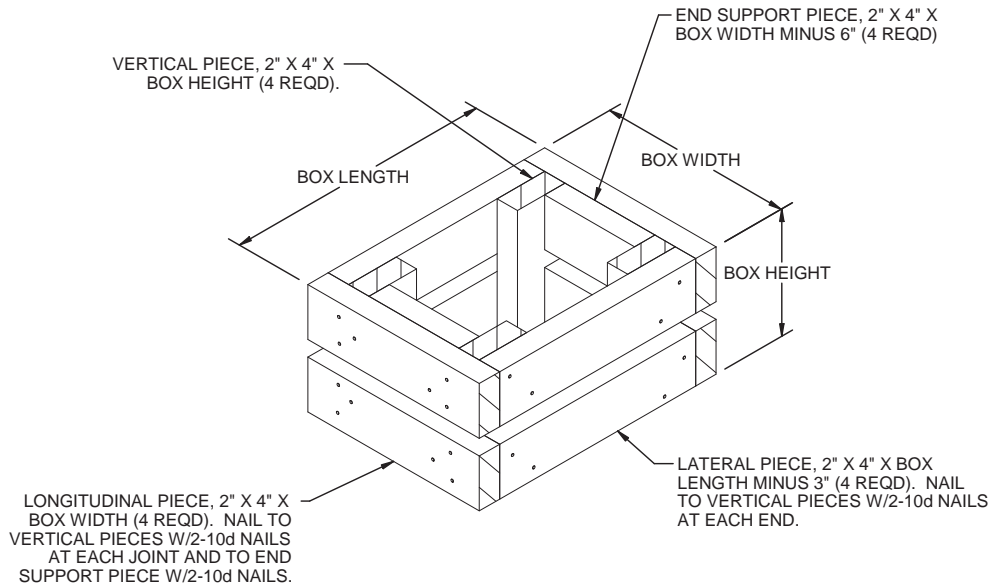
**PALLET UNIT**

SEE GENERAL NOTE "B" AT RIGHT.

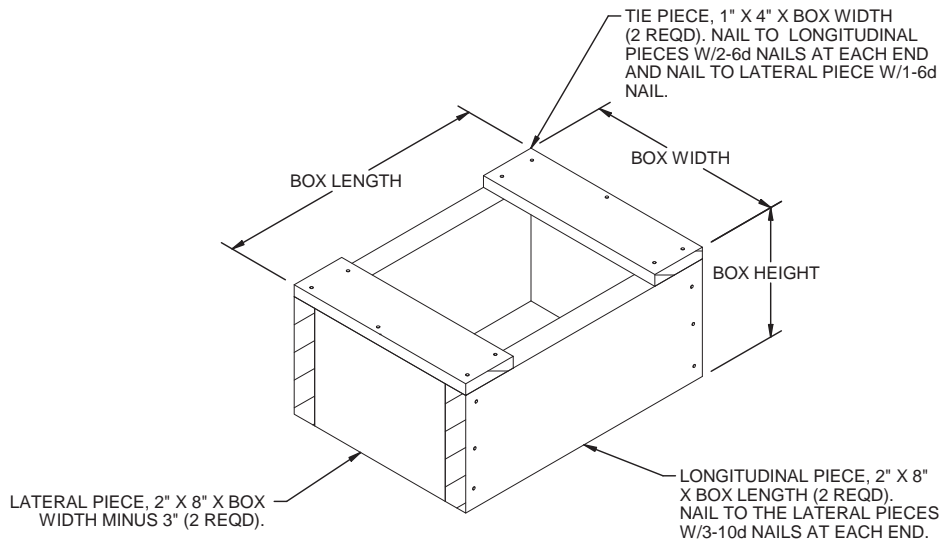
48 BOXES OF IGNITER (108 PER BOX) @ 31.5 LBS	- - - - -	1,512 LBS
DUNNAGE	- - - - -	11 LBS
PALLET	- - - - -	80 LBS
<b>TOTAL WEIGHT</b>	- - - - -	<b>1,603 LBS (APPROX)</b>
<b>CUBE</b>	- - - - -	<b>47.8 CU FT (APPROX)</b>

**BILL OF MATERIAL**

PALLET, 40" X 48"	- - - - -	1 REQD	- - - - -	80 LBS
STEEL STRAPPING, 3/4"	- 124.58'	REQD	- - - - -	11.12 LBS
SEAL FOR 3/4" STRAPPING	- - - - -	8 REQD	- - - - -	NIL



**FILLER ASSEMBLY**  
(FOR MINUS ONE BOX)



**ALTERNATIVE FILLER ASSEMBLY**  
(FOR MINUS ONE BOX)  
SEE GENERAL NOTE "J" ON PAGE 3