

# APPENDIX 106C

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

**CARTRIDGE, PHOTOFLASH, PACKED 26 PER  
WOODEN BOX, UNITIZED 60 BOXES PER 40" X  
48" PALLET; APPROX BOX SIZE 16-3/16" L X  
9-1/4" W X 10-1/4" 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 OPERATIONS SUPPORT COMMAND</p> <p style="font-size: x-small;">AMSTA-AR-WEP-RP</p> <p style="font-size: x-small;">NLH</p> <p style="font-size: x-small;">AMSOS-TM</p> <p style="font-size: x-small;">APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND</p> <p style="font-size: x-small;">U.S. ARMY DEFENSE AMMUNITION CENTER</p>	<p style="text-align: center;"><b>CAUTION: VERIFY PRIOR TO USE AT WWW.DAC.ARMY.MIL/DET THAT THIS IS THE MOST CURRENT VERSION OF THIS DOCUMENT. THIS IS PAGE 1 OF 4.</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;"><b>DO NOT SCALE</b></td> <td colspan="2" style="text-align: center;"><b>MARCH 1983</b></td> </tr> <tr> <td style="font-size: x-small;">ENGINEER OR TECHNICIAN</td> <td style="font-size: x-small;">BASIC REV.</td> <td colspan="2" style="text-align: center;">WILLIAM R. FRERICHS LAURA A. FIEFFER</td> </tr> <tr> <td colspan="2" style="font-size: x-small;">TRANSPORTATION ENGINEERING DIVISION</td> <td style="font-size: x-small;">REVISION NO. 2</td> <td style="font-size: x-small;">DECEMBER 2002</td> </tr> <tr> <td colspan="4" style="text-align: center; font-size: x-small;">SEE THE REVISION LISTING ON PAGE 2</td> </tr> <tr> <td style="font-size: x-small;">VALIDATION ENGINEERING DIVISION</td> <td style="font-size: x-small;">TESTED</td> <td style="font-size: x-small;">CLASS</td> <td style="font-size: x-small;">DIVISION</td> </tr> <tr> <td style="font-size: x-small;">ENGINEERING DIRECTORATE</td> <td style="font-size: x-small;">TESTED</td> <td style="text-align: center;">19</td> <td style="text-align: center;">48</td> </tr> <tr> <td colspan="2"></td> <td style="text-align: center;">DRAWING</td> <td style="text-align: center;">FILE</td> </tr> <tr> <td colspan="2"></td> <td style="text-align: center;">4116/ 106C</td> <td style="text-align: center;">20PA1002</td> </tr> </table>	<b>DO NOT SCALE</b>		<b>MARCH 1983</b>		ENGINEER OR TECHNICIAN	BASIC REV.	WILLIAM R. FRERICHS LAURA A. FIEFFER		TRANSPORTATION ENGINEERING DIVISION		REVISION NO. 2	DECEMBER 2002	SEE THE REVISION LISTING ON PAGE 2				VALIDATION ENGINEERING DIVISION	TESTED	CLASS	DIVISION	ENGINEERING DIRECTORATE	TESTED	19	48			DRAWING	FILE			4116/ 106C	20PA1002
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PALLET UNIT DATA				
ITEMS INCLUDED		● HAZARD CLASS AND DIVISION	● COMPAT- ABILITY GROUP	APPROX WEIGHT LBS
NSN	DODIC			
1370-00-429-6159	L145	—————INERT—————		3,395

- 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 MAY 1986, CONSISTS OF:

1. UPDATING THE "PALLET UNIT DATA CHART".
2. CHANGING BOX DIMENSIONS.
3. CHANGING PALLET UNIT TO CONFORM WITH 2 ABOVE.

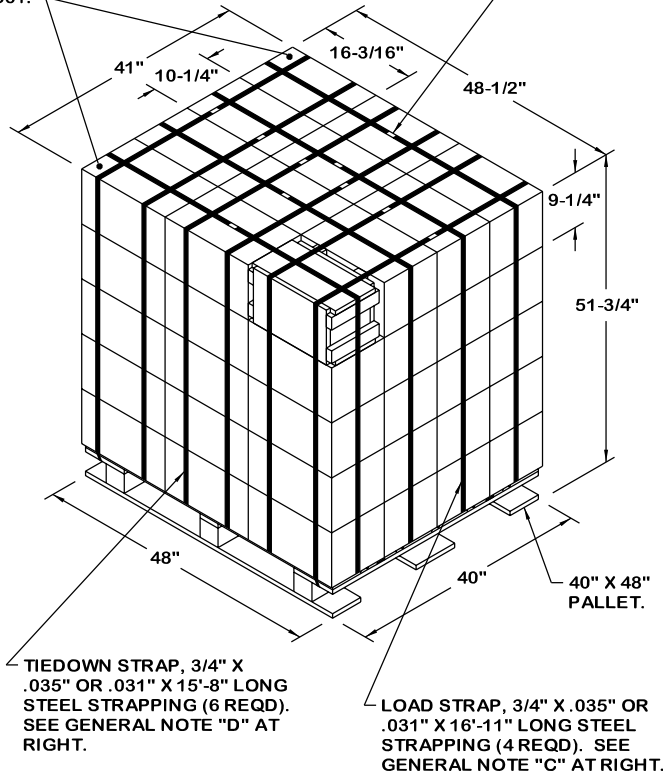
REVISION NO. 2, DATED DECEMBER 2002, CONSISTS OF:

1. CHANGING THE DODIC IN THE "PALLET UNIT DATA CHART".
2. UPDATING DRAWING FORMAT.

**GENERAL NOTES**

TOP CLEATS ON THE BOXES IN THE OUTSIDE STACKS WILL BE TURNED INWARDS, EXCEPT AS OTHERWISE SPECIFIED IN ACV00561.

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



**PALLET UNIT**

SEE GENERAL NOTE "B" AT RIGHT.

60 BOXES OF PHOTOFLASH CTGS (26 PER BOX) @ 55 LBS	- - - - -	3,300 LBS (APPROX)
DUNNAGE	- - - - -	15 LBS
PALLET	- - - - -	80 LBS
<hr/>		
TOTAL WEIGHT	- - - - -	3,395 LBS (APPROX)
CUBE	- - - - -	59.6 CU FT (APPROX)

BILL OF MATERIAL			
PALLET, 40" X 48"	- - - - -	1 REQD	- - - - - 80 LBS
STEEL STRAPPING, 3/4"	- 161.67'	REQD	- - - - - 14.43 LBS
SEAL FOR 3/4" STRAPPING	- - - - -	10 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. THE LOAD STRAPS MAY BE THREADED THROUGH THE STRAP SLOTS OF A PALLET OR PRE-POSITIONED ON THE PALLET DECK PRIOR TO PLACING THE 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 DECK/STRINGER 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 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

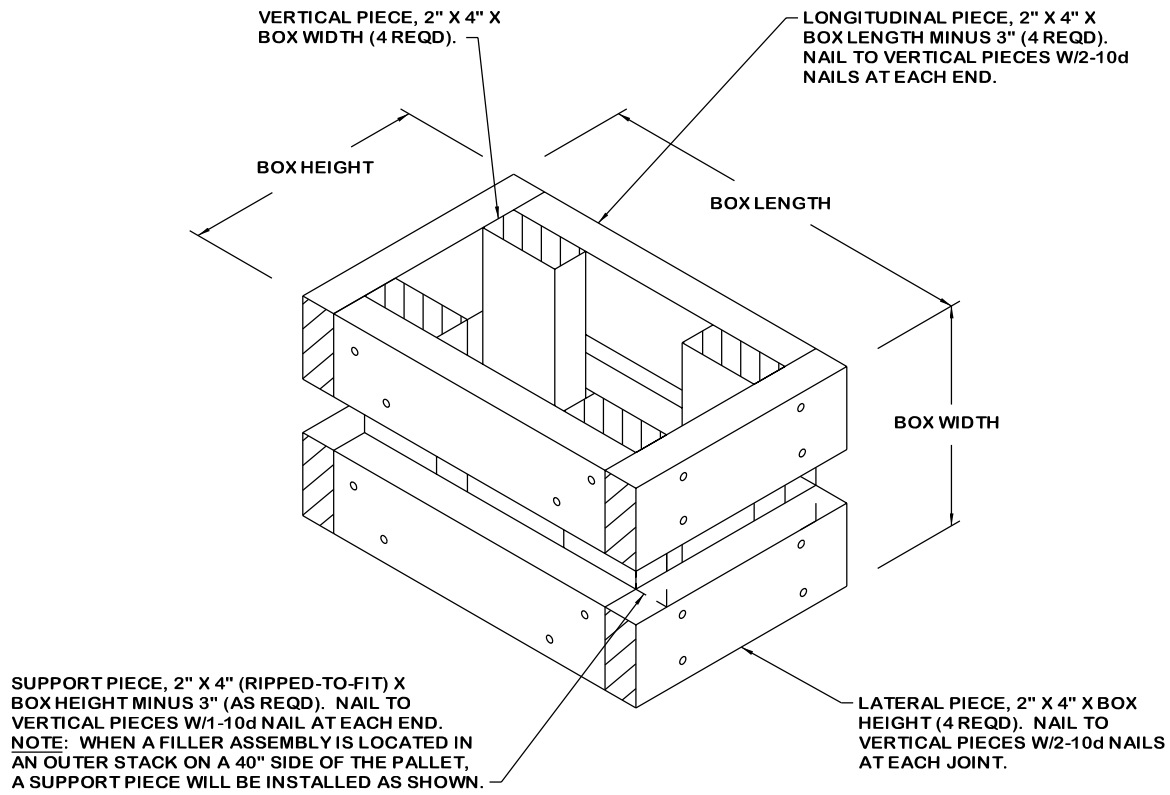
F. IF ITEMS COVERED HEREIN ARE UNITIZED PRIOR TO ISSUANCE OF THIS REVISION TO THIS APPENDIX, THE BOXES NEED NOT BE REUNITIZED SOLELY TO CONFORM TO THIS REVISION.

G. THE UNITIZATION PROCEDURES DEPICTED HEREIN MAY ALSO BE USED FOR UNITIZING PHOTOFLASH 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. 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 14'-1", AND LOAD STRAP LENGTHS MUST BE DECREASED TO 15'-4". THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 42-1/2", A GROSS UNIT WEIGHT OF 2,733 POUNDS, AND A UNIT CUBE OF 48.9 CUBIC FEET. ADDITIONALLY, THE UNIT MAY BE MODIFIED AS DESCRIBED WHEN BEING SHIPPED BY MILVAN OR ISO 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.

J. 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.

K. FOR DETAIL OF THE WOODEN BOX SEE AIR FORCE SPI 00-429-6159.



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