

# APPENDIX 107A

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

SIGNAL, ILLUMINATION, AIRCRAFT, AN, PACKED 80  
PER WOODEN BOX, UNITIZED 32 BOXES PER 35" X  
45 $\frac{1}{2}$ " PALLET; APPROX BOX SIZE 19 $\frac{3}{8}$ " L X 11 $\frac{1}{4}$ " W  
X 11 $\frac{7}{8}$ " H

PALLET UNIT DATA						
ITEMS INCLUDED		HAZARD CLASSIFICATION <sup>①</sup>				WEIGHT (LBS)
NSN	DODIC	DOT CLASS	CG CLASS	QD CLASS	COMP GROUP	
1370-						
00-529-8552	L225	B	II-C	1.3	G	1,672
00-618-2401	L225	B	II-C	1.3	G	1,672
00-618-5786	L226	B	II-C	1.3	G	1,768
00-028-5949	L227	B	II-C	1.3	G	1,768
00-529-5855	L227	B	II-C	1.3	G	1,768
00-618-5784	L227	B	II-C	1.3	G	1,768
00-801-4014	L227	B	II-C	1.3	G	1,768
00-028-5961	L228	B	II-C	1.3	G	1,768
00-541-9628	L228	B	II-C	1.3	G	1,768
00-618-2403	L228	B	II-C	1.3	G	1,768
00-620-3390	L228	B	II-C	1.3	G	1,768
00-028-5953	L229	B	II-C	1.3	G	1,768
00-028-5955	L229	B	II-C	1.3	G	1,768
00-540-8500	L229	B	II-C	1.3	G	1,768
00-541-9629	L229	B	II-C	1.3	G	1,768
00-540-8505	L230	B	II-C	1.3	G	1,768
00-618-5789	L230	B	II-C	1.3	G	1,768
00-028-5970	L231	B	II-C	1.3	G	1,672
00-618-5790	L231	B	II-C	1.3	G	1,672
00-028-5974	L232	B	II-C	1.3	G	1,704
00-618-5791	L232	B	II-C	1.3	G	1,704
00-028-6597	L233	B	II-C	1.3	G	1,704

<sup>①</sup>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).

NSN	DODIC	DOT CLASS	CG CLASS	QD CLASS	COMP GROUP	WEIGHT (LBS)
1370-						
00-618-2402	L233	B	II-C	1.3	G	1,704
00-618-5793	L234	B	II-C	1.3	G	1,768
00-028-5978	L235	B	II-C	1.3	G	1,768
00-618-5794	L235	B	II-C	1.3	G	1,768
00-618-5774	L236	B	II-C	1.3	G	1,768
00-028-5982	L237	B	II-C	1.3	G	1,768
00-618-5775	L237	B	II-C	1.3	G	1,768
00-800-0409	L237	B	II-C	1.3	G	1,768
00-800-0410	L237	R	II-C	1.3	G	1,768
00-618-5776	L238	B	II-C	1.3	G	1,768
00-028-5985	L239	B	II-C	1.3	G	1,768
00-618-5777	L239	B	II-C	1.3	G	1,768
00-618-5778	L239	B	II-C	1.3	G	1,768

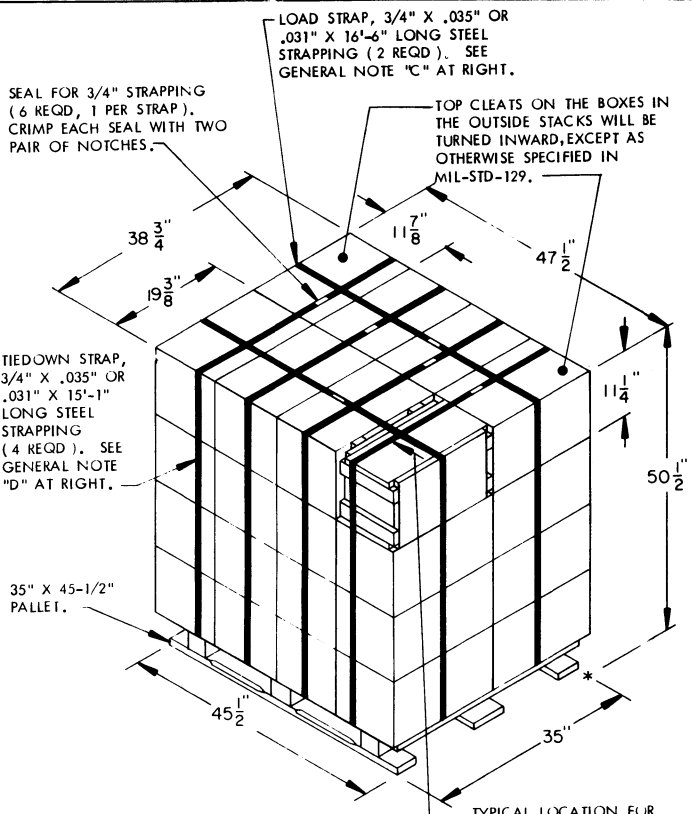
**NOTICE:** THIS APPENDIX CANNOT STAND ALONE BUT MUST BE USED IN CONJUNCTION WITH THE BASIC UNITIZATION PROCEDURES DRAWING 19-48-4116-20PA1002.

REVISIONS				DRAFTSMAN	PROJ ENG		
				<i>BT</i> / bh	WKE/WRF		
				CHECKER	LOG ENGRG OFFICE		
				<i>[Signature]</i>	<i>[Signature]</i>		
APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY ARMAMENT MATERIEL READINESS COMMAND							
				DRSAR - LEP	DRSAR - TMD		
APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND (DARCOM)							
				<i>[Signature]</i>			
U.S. ARMY DARCOM DRAWING							
JUNE 1983							
				CLASS	DIVISION	DRAWING	FILE
				19	48	4116/107A	20PA 1002

DO NOT SCALE

**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. THE LOAD STRAPS MAY BE THREADED THROUGH THE STRAP SLOTS OF A PALLET OR PRE-POSITIONED ON THE PALLET DECK PRIOR TO PLACING 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 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 DARCOM DRAWINGS ARE APPLICABLE FOR OUTLOADING AND STORAGE OF THE ITEMS COVERED BY THIS APPENDIX.
  - CARLOADING ----- DRAWING 19-48-4115-5PA1002
  - TRUCKLOADING ----- DRAWING 19-48-4117-11PA1003
  - STORAGE ----- DRAWING 19-48-4118-1-2-3-4-14-22PA1002
- F. FOR METHOD OF SECURING A STRAP CUTTER TO THE PALLET UNIT, SEE DARCOM DRAWING 19-48-4127-20P1000.
- G. IF ITEMS COVERED HEREIN ARE UNITIZED PRIOR TO ISSUANCE OF THIS APPENDIX, THE BOXES NEED NOT BE REUNITIZED SOLELY TO CONFORM TO THIS APPENDIX.
- H. THE UNITIZATION PROCEDURES DEPICTED HEREIN MAY ALSO BE USED FOR UNITIZING ILLUMINATION SIGNALS WHEN IDENTIFIED BY DIFFERENT NATIONAL STOCK NUMBERS (NSN) THAN WHAT IS SHOWN ON THE TITLE PAGE, 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.
- J. 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 13'-2", AND LOAD STRAP LENGTHS MUST BE DECREASED TO 14'-8". THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 39'-1/4", A GROSS UNIT WEIGHT OF 1,343 POUNDS, AND A UNIT CUBE OF 41.8 CUBIC FEET. ADDITIONALLY, THE UNIT LOAD MAY BE MODIFIED AS DESCRIBED WHEN BEING SHIPPED BY MILVAN OR COMMERCIAL INTERMODAL FREIGHT CONTAINER, CONVENTIONAL VAN TRAILER OR CONVENTIONAL OR HIGH-CAPACITY 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.



**PALLET UNIT**

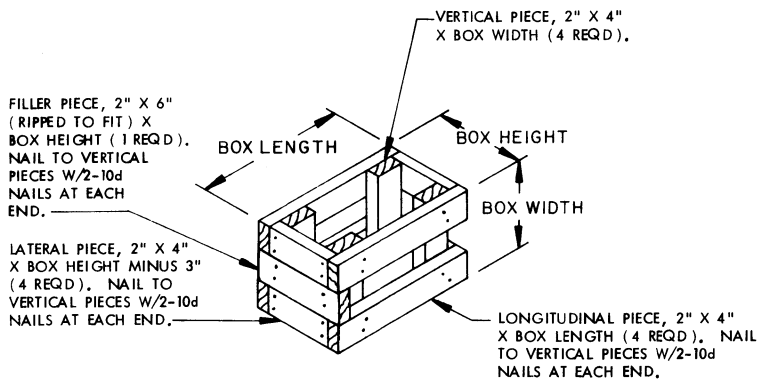
SEE GENERAL NOTE "B" AT RIGHT.

TYPICAL LOCATION FOR SECUREMENT OF A STRAP CUTTER. SEE GENERAL NOTE "F" AT RIGHT.

32 BOXES OF ILLUMINATION SIGNAL (80 PER BOX) @ 53 LBS-----	1,696 LBS (APPROX)
DUNNAGE -----	7 LBS
PALLET -----	65 LBS
<b>TOTAL WEIGHT -----</b>	<b>1,768 LBS (APPROX)</b>
<b>CUBE -----</b>	<b>53.8 CU FT (APPROX)</b>

**BILL OF MATERIAL**

PALLET, 35" X 45-1/2" -----	1 REQD	-----	65 LBS
STEEL STRAPPING, 3/4" -----	93.33 REQD	-----	6.67 LBS
SEAL FOR 3/4" STRAPPING -----	6 REQD	-----	NIL



**FILLER ASSEMBLY**

(FOR MINUS ONE BOX)