## APPENDIX 110N

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

FLARE, INFRARED COUNTERMEASURE, OR DECOY, **INFRARED COUNTERMEASURE PACKED 18 OR 30** IN PA19 METAL CONTAINER. UNITIZED 56 CON-TAINERS PER 40" X 48" PALLET; APPROX BOX SIZE 12" L X 6-3/32" W X 10-5/16" 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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DEFENSE AMMUNITION CENTER

#### APPROVED, COMBAT CAPABILITIES DEVELOPMENT COMMAND ARMAMENTS CENTER CAUTION: VERIFY PRIOR TO USE AT https://www.dau.edu/cop/ammo/Pages/Default.aspx HANSSEN.JO Digitally signed by HANSSEN.JOSEPH.W. THAT THIS IS THE MOST CURRENT VERSION OF THIS DOCUMENT. THIS IS PAGE 1 OF 4. SEPH.W.1376 1376495538 Date: 2022.04.26 11:55:12 -05'00' FCDD-ACE-LTP DO NOT SCALE **APRIL 2022** APPROVED, U.S. ARMY JOINT MUNITIONS COMMAND BASIC **MADELINE BANKS** DESIGN WARD.GINA. Digitally signed by WARD.GINA.M.1369379808 **ENGINEER** RF\/ M.1369379808 Date: 2022.07.20 11:17:57 FIEFFER.LAURA Digitally signed by FIEFFER.LAURA A 1230375727 Date: 2022.04.05 12:18:30 -05'00 **ENGINEERING** AMSJM-MLT DIVISON .A.1230375727 APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND CLASS DIVISION DRAWING FILE TEST ENGINEER FELICIANO.AD Digitally signed by FELICIANO.ADIN.1259200373 BRAILSFORD.KEIT Digitally signed by H.ANTHONY.10286 BRAILSFORD.KEITH.ANTHONY. TEST IN.1259200373 Date: 2022.04.07 13:23:36 N/A REPORT 4116/ 20PA1002 Date: 2022.07.20 11:48:40 -05'00' **EXPLOSIVE** 19 48 55661 CUMMINS.PAU Digitally signed by CUMMINS.PAUL.A.1231883122 Date: 2022.04.08 05:48:41-05:00 110N SAFETY

DIRECTORATE

U.S. ARMY MATERIEL COMMAND DRAWING

PALLET UNIT DATA								
ITEMS INCLUDED		*HAZARD	*COMPATI-	APPROX				
NSN	DODIC	CLASS AND DIVISION	BILITY GROUP	WEIGHT (LBS)				
1370-								
01-503-1455	LA21	1.3	G	1,387				
01-658-5870	LA36	1.3	G	1,387				
01-523-0965	LA43	4.2	G	1,824				
01-551-5659	LA61	4.2	G	1,824				
01-575-9374	LA66	1.3	G	1,331				
01-590-4428	LA67	1.3	G	1,331				
01-645-7400	LA76	1.3	G	2,283				
01-670-3077	LA85	1.3	G	1,387				
01-677-6009	LA88	1.3	G	1,337				
01-684-4571	LA90	1.3	G	1,337				

<sup>\*</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).

## COVER/BASE PANEL, 1/2" X 40" X 48' CENTER BASE PANEL ON PALLET DECK AND NAIL BASE TO PALLET W/9-10d NAILS INTO THE POSTS. STAPLE LOAD LOAD STRAP, 3/4" X .035" OR .031" OR .029" X 13'-1" LONG STEEL STRAPPING (3 REQD). SEE AND TIEDOWN STRAPS TO COVER PANEL AS SHOWN. GENERAL NOTE "C" AT RIGHT. TIEDOWN STRAP, 3/4" X .035" OR .031" OR .029" X 11'-10" LONG STEEL STRAPPING SEAL FOR 3/4" STRAPPING (7 REQD, 1 PER STRAP). CRIMP EACH SEAL WITH (4 REQD). SEE GENERAL NOTE "D" AT RIGHT. TWO PAIRS OF NOTCHES. 42 5/8" 50' <del>6</del> 3/32" 12" 27 1/8" 10 5/16" 48' 40" POSITION ALL LOCKING END ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 4. HANDLES OF CLOSURE LATCHES INWARD STAPLE LOAD STRAPS TO "END ASSEMBLY" AS SHOWN. -40" X 48" PALLET

PALLET UNIT
SEE GENERAL NOTE "B" AT RIGHT.

56 CONTAINERS OF FL DUNNAGE PALLET			 	75 LBS
	TOTAL WEIGHT	Т	 = =	2,283 LBS (APPROX)

BILL OF MATERIAL						
LUMBER	LINEAR FEET	BOARD FEET				
1" X 4"	13.33	4.44				
NAILS	NO. REQD	POUNDS				
6d (2") 10d (3")	16 9	0.10 0.14				
PALLET, 40" x 48" 1 REQD 80 LBS PLYWOOD, 1/4" 10.00 SQ FT REQD 6.88 LBS PLYWOOD, 1/2" 26.66 SQ FT REQD 36.67 LBS STEEL STRAPPING, 3/4" - 86.23' REQD 7.70 LBS SEAL FOR 3/4" STRAPPING 7 REQD NIL						

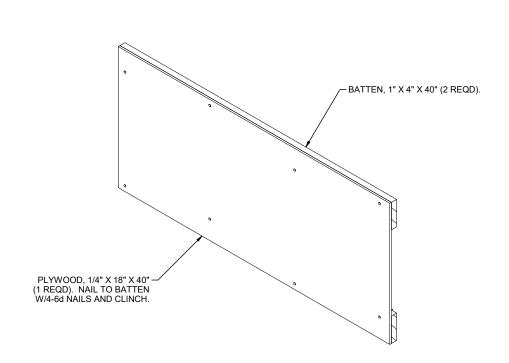
### **GENERAL NOTES**

- 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 MUST BE PRE-POSITIONED ON THE BASE PANEL 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. NOTE THAT THE STRAPS WILL BE LOCATED AS SHOWN, NEAR THE MIDDLE OF EACH BOX. 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 - - - 19-48-4118-1-2-3-4-1422PA1002
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 APPENDIX, THE BOXES NEED NOT BE REUNITIZED SOLELY TO CONFORM TO THIS APPENDIX.
- G. THE UNITIZATION PROCEDURES DEPICTED HEREIN MAY ALSO BE USED FOR UNITIZING FLARES 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. ALL WOODEN DUNNAGE SHALL BE PRESERVATIVE TREATED IN ACCORDANCE WITH GENERAL NOTE "AA" IN THE BASIC PROCEDURES, AND HEAT TREATED IN AC-CORDANCE WITH GENERAL NOTE "JJ" IN THE BASIC PROCEDURES.
- K. FOR DETAILS OF THE PA19 METAL CONTAINER SEE PICATINNY ARSENAL DRAWING 8865541.

PAGE 3



## **END ASSEMBLY**

TWO ASSEMBLIES REQUIRED PER PALLET. FOR A SINGLE LAYER PALLET, REDUCE THE HEIGHT OF THE PLYWOOD TO 8".

