# APPENDIX 50

UNITIZATION PROCEDURES FOR AMMUNITION AND COMPONENTS PACKED IN CYLINDRICAL METAL CONTAINERS ON 4-WAY ENTRY METAL PALLETS

MODULAR ARTILLERY CHARGE SYSTEM (MACS), XM231, PACKED 4 PER PA161E1 CYLINDRICAL METAL CONTAINER, UNITIZED 36 PER 46-1/2" X 31-3/8" PALLET; APPROX CONTAINER SIZE 31-3/8" L X 7-1/2" W X 7-1/2" H

NOTICE: THIS APPENDIX CANNOT STAND ALONE BUT MUST BE USED IN CONJUNCTION WITH THE BASIC UNITIZATION PROCEDURES DRAWING 19-48-4231-20PM1006.

A THEMETATE MOLTUBERTZEE

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.

MATERIEL COMMAND DRAWING U.S. ARMY DRAFTSMAN BETTY J. KUNDERT APPROVED, U.S. ARMY INDUSTRIAL OPERATIONS COMMAND NEW **ENGINEER** SANDRA M. SCHULTZ SUPPLY ENGINEERING NOITATROPSVART VALIDATION **ENGINEERING** ENGINEER ING NOTSIVIO NOIZIVIO MOISIVIO LMT-DIZMA w. Fremks AZ3-RA-AT2MA LOGISTICS ENGINEERING DEFICE APPROVED BY DRDER DE COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND FEBRUARY 1997 CLASS NOIZIVIO DRAWING FILE U.S. ARMY DEFENSE AMMUNITION CENTER REVISION NO. 1 **AUGUST 1998** 4231/ 20PM 48 19 50 1006 SEE THE REVISION LISTING ON PAGE 2

DO NOT SCAFE

PALLET UNIT DATA					
ITEMS INCLUDED		HAZARD CLASS AND DIVISION			
NZN	DODIC	AND DIV	131014	APPROX	
		OD CLASS	COMP GROUP	WEIGHT LBS	
1320- UNAS			I	1,476	

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).

## REVISION

REVISION NO. 1, DATED AUGUST 1998, CONSISTS OF:

1. UPDATING STANDARDS AND SPECIFICATIONS.

### GENERAL NOTES

- A. THIS APPENDIX CANNOT STAND ALONE BUT MUST BE USED IN CONJUNCTION WITH THE BASIC UNITIZATION PROCEDURES DRAWING 19-48-4231-20PM1006. 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. BUNDLING STRAPS MUST BE TENSIONED AND SEALED PRIOR
  TO THE APPLICATION OF THE UNITIZING STRAPS. INSTALL
  BUNDLING STRAPS AS CLOSE TO THE OUTER CONTAINER
  RINGS AS POSSIBLE, TO AVOID DAMAGE TO THE
  CONTAINERS. CAUTION: STRAPS MUST NOT BE ALLOWED TO
  OVERLAP.
  - ALTHOUGH THE CONTAINERS DEPICTED IN THE UNIT LOAD AT LEFT ARE CONSTRUCTED WITH INTERLOCKING DEVICES, THE INTERLOCKS WILL NOT FUNCTION PROPERLY UNLESS THE CONTAINERS ARE POSITIONED SO THAT THE "PINS" OF THE INTERLOCKS ARE FACING UPWARD. THIS ORIENTATION WILL AID IN THE PREVENTING OF CONTAINER MOVEMENT, BOTH LATERALLY AND LONGITUDINALLY, DURING SHIPMENT OF THE UNIT LOAD.

THE FOLLOWING AMC DRAWINGS ARE APPLICABLE FOR OUTLOADING AND STORAGE OF THE ITEMS COVERED BY THIS APPENDIX.

CARLDADING - - - 19-48-4242/50-5PM1004 TRUCKLDADING - - 19-48-4243/50-11PM1004 STDRAGE - - - - 19-48-4250/50-1-2-3-4-14-22PM1004

END OPENING ISO CONTAINER - - - 19-48-4245/50-15PM1009 MILVAN - - - - 19-48-4244/50-15PM1008 SIDE OPENING ISO

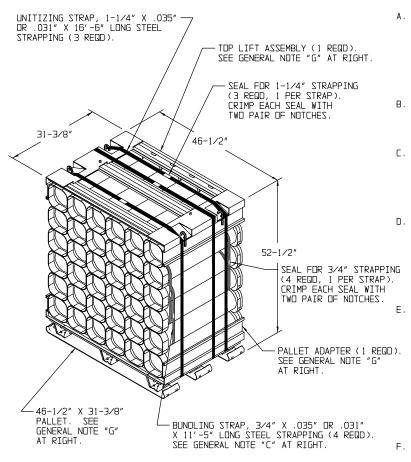
CONTAINER - - - 19-48-4272/50-15PM1016

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

FOR DETAILS OF PALLET AND PALLET ADAPTERS, SEE AMCCOM DRAWING ACVOO300, MIL-A-70788 AND MIL-P-70786.

THE UNITIZATION PROCEDURES DEPICTED HEREIN MAY ALSO BE USED FOR UNITIZING MACS WHEN IDENTIFIED BY DIFFERENT NATIONAL STOCK NUMBERS (NSN) THAN WHAT IS SHOWN ON PAGE 2, PROVIDED THE CONTAINER DOES NOT VARY FROM WHAT IS DELINEATED HEREIN. THE EXPLOSIVE CLASSIFICATION OF OTHER ITEMS MAY BE DIFFERENT THAN WHAT IS SHOWN.

- J. EMPTY OR REJECT PA161E1 CONTAINERS WILL BE USED AS FILLER CONTAINERS AS NECESSARY. FILLER CONTAINERS MUST BE INSTAILED IN THE MIDDLE OF THE TOP LAYER(S) OF CONTAINERS. IF SIX FULL CONTAINERS ARE TO BE OMITTED, ONE FULL LAYER OF CONTAINERS WILL BE OMITTED. WHEN (EMPTY) FILLER CONTAINERS ARE USED IN PLACE OF OMITTED CONTAINERS TO COMPLETELY FILL OUT A LAYER ON A PALLET, THEY WILL BE MARKED AS SPECIFIED IN ACVOOS61.
- K. WHEN TWO OR MORE LAYERS ARE OMITTED, THE BUNDLING STRAP REGUIREMENT WILL CHANGE. A FOUR LAYER UNIT WILL HAVE THE TWO BUNDLING STRAPS OMITTED THAT WERE AROUND THE THIRD, FOURTH AND FIFTH LAYERS. THE REMAINING BUNDLING STRAPS WILL SURROUND THE SECOND THROUGH FOURTH LAYERS. A UNIT WITH THREE OR LESS LAYERS DOES NOT REQUIRE BUNDLING STRAPS.
- L. FOR DETAILS OF PA161E1 CONTAINER SEE ARDEC DRAWING 12972583.



#### PALLET UNIT

SEE GENERAL NOTE "B" AT RIGHT.

TOTAL WEIGHT - - - - - - - - - - - 1,476 LBS (APPROX)
CUBE - - - - - - - - - - - 43.5 CU FT (APPROX)

#### BILL OF MATERIAL

METAL PALLET, 46-1/2" X 31-3/8" - - 1 REGD - - 95 LBS
PALLET ADAPTER - - - - - - - 1 REGD - - 70 LBS
TOP LIFT ASSEMBLY - - - - - 1 REGD - - 75 LBS
STEEL STRAPPING, 3/4" - - - 45.67' REGD - 4.08 LBS
STEEL STRAPPING, 1-1/4" - - 49.50' REGD - 7.50 LBS
SEAL FOR 3/4" STRAPPING - - - 4 REGD - - - NIL
SEAL FOR 1-1/4" STRAPPING - - - 3 REGD - - - NIL

