# APPENDIX 6A

# UNITIZATION PROCEDURES FOR COMPLETE ROUNDS PACKED IN CYLINDRICAL METAL CONTAINERS ON 4-WAY ENTRY PALLETS\*

# PA 104 SERIES CONTAINER

## INDEX

| <u>ITEM</u> PAGE         | _(S) |
|--------------------------|------|
| GENERAL NOTESUNIT DETAIL | 4    |
| DUNNAGE DETAIL           | •    |

| PALLET UNIT DATA  |                              |                                    |                            |  |               |   |  |
|---|------------------------------|------------------------------------|----------------------------|--|---------------|---|--|
| ITEMS INCL  | UDED                         | UDED HAZARD CLASSIFICATION   WEIGH |                            | HAZARD CLASSIFICATION    ■                   |               |   |  |
| NSN   | DODIC                        | DOT<br>CLASS                       | CG<br>CLASS                | QD<br>CLASS                                  | COMP<br>GROUP | (LBS)                                       |  |
| 1315-<br>01-233-2013<br>01-226-7419<br>01-227-0008<br>01-136-9631 | C508<br>C521<br>C523<br>C524 | A<br>B<br>B                        | IV<br>II-B<br>II-B<br>II-B | (12)1, 2<br>(08)1, 2<br>(08)1, 2<br>(08)1, 2 | E<br>C<br>C   | 2, <b>464</b><br>2, 194<br>2, 194<br>2, 244 |  |

• 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).

★ SEE GENERAL NOTE "J" ON PAGE 2.

NOTICE: THIS APPENDIX CANNOT STAND ALONE BUT MUST BE USED IN CONJUNCTION WITH THE BASIC UNITIZATION PROCEDURES DRAWING 19-48-4079-20PM1002.

|          |        | REVIS   | sions                                    | DRAFTSMAN                                      | dh            | LAF.       | WRF           | ii.  | K:<br>R-5-  |
|----------|--------|---------|--|--|---------------|------------|---------------|------|-------------|
| $\vdash$ |        | 18      | Marting 18.                              | CHECKER/<br>GRG/                               |               | <b>M</b> 4 | Ernet         |      |             |
| '        | JUN 86 | 1/1/2   | SMCAR-ESK AMSMC-THO                      | APPROVED,<br>COMMAND                           | U.S. ARMY     | ARMAN      | ENT, MUNITION |      | NO CHEMICAL |
|          |        | et/     | D. PARTUL J. BUNE<br>SMCAR-ESK AMENC-PAD | 2 gith   | HB0           | nlos       | AMERIC-       | 7. ( | byrl        |
| 2        | NOV 87 | الوليار | Willian F Erest                          | MATERIEL                                       | OWNER COMMAND | OF COM     | MANDING GET   | ERAL | U.S. ARMY   |
|          |        |         |  | U.S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL |               |            |               |      |             |
|          |        |         |  | U.S.   | AR            | MY         | AMC           | DF   | RAWING      |
|          |        |         |  |  | APF           | ₹IL        | 1985          |      |             |
|          |        |         |  | CLASS  | DIVIS         | юн         | DRAWING       | 3    | FILE        |
|          |        | 7       |  | 19   | 41            |            | 4079          | /    | 20 PM       |
|          |        |         |  | 19   | 44            |            | 6A            |      | 1002        |

DO NOT SCALE

#### GENERAL NOTES

- A. THIS APPENDIX CANNOT STAND ALONE BUT MUST BE USED IN CONJUNCTION WITH THE BASIC UNITIZING PROCEDURES DRAWING 19-48-4079-20PM1002. 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 CONTAINER, WEIGHT OF THE SPECIFIED ITEM AND METHOD OF UNITIZATION.
- C. FOR OUTLOADING AND STORAGE OF THE ITEMS COVERED BY THIS APPENDIX, CONTACT THE US ARMY DEFENSE AMMUNITION CENTER AND SCHOOL, ATTN: SMCAC-DEO, SAVANNA, IL 61074-9639 FOR SPECIFIC PROCEDURAL GUÍDANCE.
- D. FOR METHOD OF SECURING A STRAP CUTTER TO THE PALLET UNIT, SEE DARCOM DRAWING 19-48-4127-20P1000.
- E. IF ITEMS COVERED HEREIN ARE UNITIZED PRIOR TO ISSUANCE OF THIS APPENDIX,
  THE CONTAINERS NEED NOT BE REUNITIZED SOLELY TO CONFORM TO THIS
- F. FOR DETAILS OF THE PA 104 SERIES CONTAINER, SEE US ARMY ARMAMENT RESEARCH AND DEVELOPMENT COMMAND DRAWING NO. 9345267.

CONTAINER DIMENSIONS -------45-5/8" LONG X 7-1/8" WIDE X 7-1/8" HIGH CONTAINER CUBE----------1.3 CUBIC FEET ( APPROX ) CONTAINER WEIGHT ( WITH ROUND ) --------75 POUNDS ( APPROX )

- G. THE UNITIZATION PROCEDURES SPECIFIED HEREIN MAY ALSO BE USED FOR UNITIZING COMPLETE ROUNDS WHEN IDENTIFIED BY DIFFERENT NATIONAL STOCK NUMBERS (NSN.) THAN THOSE SHOWN ON THE COVER PAGE, PROVIDED THE ITEM IS PACKED IN THE SAME CONTAINER. THE EXPLOSIVE CLASSIFICATION OF OTHER ITEMS MAY BE DIFFERENT THAN THOSE SHOWN.
- H. DIMENSIONS GIVEN FOR DUNNAGE PIECES WILL BE FIELD CHECKED PRIOR TO THEIR ASSEMBLY TO THE PALLET UNIT. CONTAINERS MUST FIT SNUGLY IN THE DUNNAGE ASSEMBLIES.
- J. THE SPECIAL PALLET WILL BE CONSTRUCTED AND ASSEMBLED IN ACCORDANCE WITH A MILITARY SPECIFICATION MIL-P-15011, STYLE 1, TYPE I, CLASS 1 PALLET WITH THE EXCEPTION THAT THE TOP AND BOTTOM DECK BOARDS WILL BE 41' LONG INSTEAD OF 48". ALL OTHER REQUIREMENTS SPECIFIED WITHIN MIL-P-15011 FOR A STYLE 1, TYPE I, CLASS 1 PALLET WILL APPLY TO THE PALLET SPECIFIED WITHIN THIS DRAWING.
- K. THE SPECIAL 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 THE ITEMS COVERED BY THIS APPENDIX.

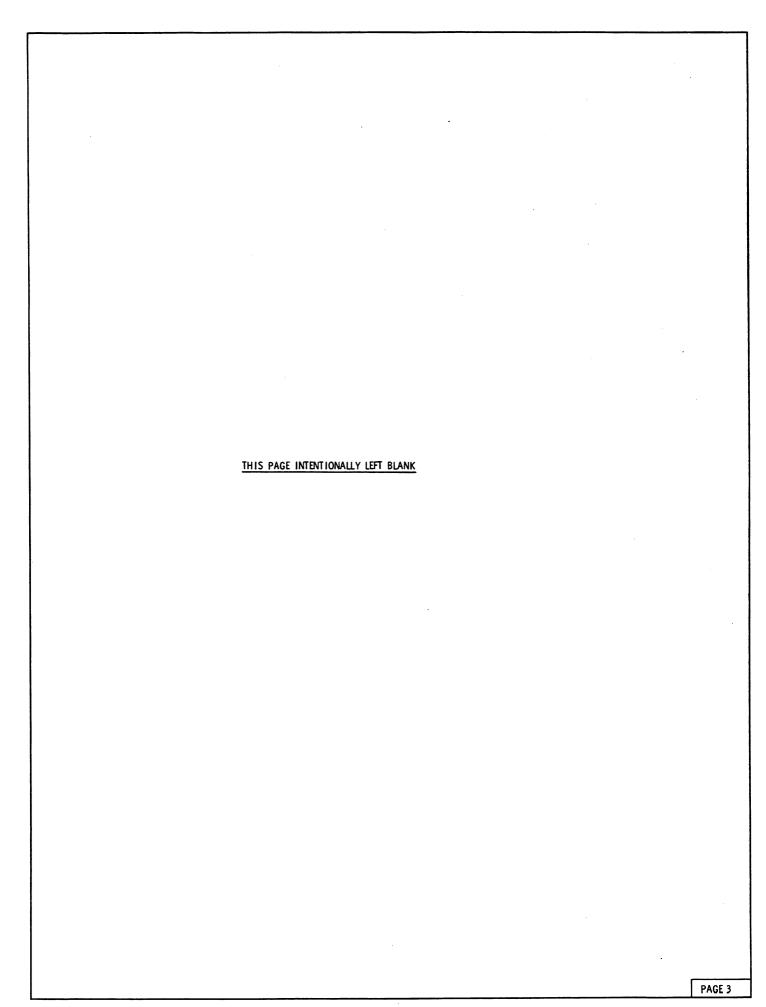
#### REVISION

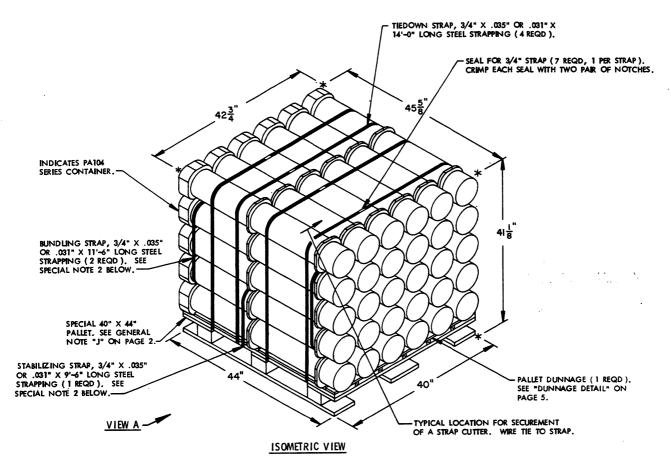
REVISION NO. 1, DATED JUNE 1986, CONSISTS OF:

- ADDING ITEMS BY NATIONAL STOCK NUMBERS (NSN) TO "PALLET UNIT DATA" CHART.
- 2. ADDING STABILIZING STRAP.

REVISION NO. 2, DATED NOVEMBER 1987, CONSISTS OF:

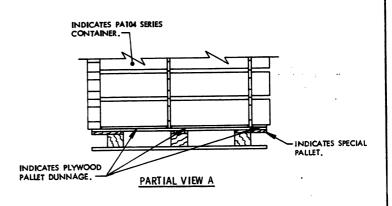
ADDING ITEM BY NATIONAL STOCK NUMBER (NSN) TO "PALLET UNIT DATA" CHART.



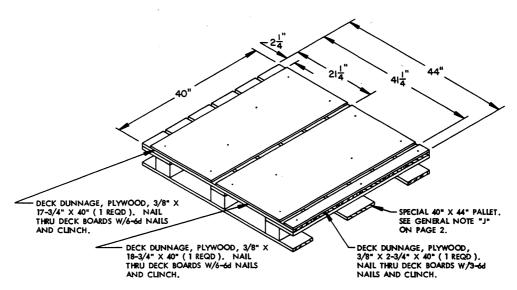


### SPECIAL NOTES:

- LALTHOUGH THE CONTAINERS DEPICTED IN THE UNIT LOAD ABOVE ARE CONSTRUCTED WITH INTERLOCKING DEVICES, THE INTERLOCKS WILL NOT FUNCTION PROPERLY UNLESS THE CONTAINERS ARE POSITIONED SO THAT THE "PINS" OF THE INTERLOCKS ARE IN AN URRIGHT ORIENTATION. THIS ORIENTATION WILL PRECUIDE INTERFERENCE OF THE "PINS" AND THE PLYWOOD PALLET DUNNAGE AND WILL AID IN THE PREVENTION OF CONTAINER MOVEMENT, BOTH LATERALLY AND LONGITUDINALLY, DURING SHIPMENT OF THE UNIT LOAD.
- 2. BUNDLING STRAPS AND STABILIZING STRAP MUST BE TENSIONED AND SEALED PRIOR TO THE APPLICATION OF THE TIEDOWN STRAPS.
- 3.ALL STRAPS MUST BE INSTALLED AS CLOSE AS POSSIBLE TO THE CONTAINER RINGS. <u>CAUTION</u>: STRAPS MUST NOT BE ALLOWED TO OVERLAP.



UNIT DETAIL



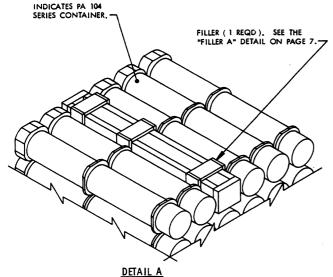
## PALLET DUNNAGE LOCATION

|                                     | BILL OF MATERIAL |                           |
|-------------------------------------|------------------|---------------------------|
| NAILS                               | NO. REQD         | POUNDS                    |
| 6d (2")                             | 15               | 0.09                      |
| STEEL STRAPPING<br>SEAL FOR 3/4" ST | 40" X 44"        | REQD 5.64 LBS<br>REQD NIL |

| UNIT DATA  |       |     |            |
|--|-------|-----|------------|
| CUBE46.4 CUBIC FEET ( APPROX ) CONTAINER30 EACH @ 75 LBS | 2.370 | LBS | ( APPROX ) |
| DUNNAGEPALLET  | 17    | LBS | • • • •    |
| TOTAL WEIGHT   | 2,464 | LBS | ( APPROX ) |

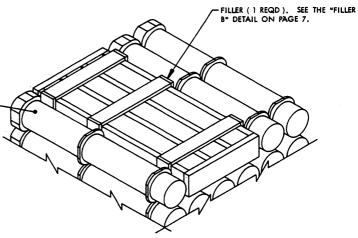
#### SPECIAL NOTES:

- 1. WHEN SIX CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT. A COMPLETE LAYER OF CONTAINERS MUST BE OMITTED, WHEN FIVE CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT, A COMBINATION OF FILLER ASSEMBLIES DEPICTED ON PAGE 7 MUST BE USED. WHEN FOUR OR LESS CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT, A COMBINATION OR ONE OF THE FILLER ASSEMBLIES DEPICTED ON PAGE 7 MAY BE USED. ALL FILLER ASSEMBLIES MUST BE INSTALLED IN THE MIDDLE OF THE TOP LAYER OR LAYERS OF A PALLET UNIT.
- WHEN A "FILLER A" ASSEMBLY IS USED IN COMBINATION WITH A "FILLER B" OR
  "FILLER C" ASSEMBLY, THE "FILLER A" ASSEMBLY MUST BE POSITIONED IN THE
  SECOND LAYER OF CONTAINERS FROM THE TOP OF THE PALLET UNIT AND MUST
  HAVE ITS OVERALL HEIGHT REDUCED FROM 7" TO 6-1/4".
- WHEN TWO "FILLER A" ASSEMBLIES ARE USED IN PLACE OF TWO OMITTED CON-TAINERS, THE FILLER ASSEMBLIES WILL BE SEPARATED BY AT LEAST ONE CONTAINER TO INSURE PROPER FILLER ASSEMBLY RETENTION AND TO PRECLUDE ASSEMBLY INTERFERENCES.



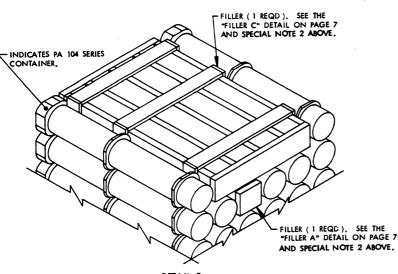
THIS DETAIL DEPICTS PROCEDURES TO BE USED WHEN A STANDARD PALLET UNIT MINUS ONE CONTAINER IS TO BE UNITIZED. THE FILLER ASSEMBLY DEPICTED MUST BE INSTALLED IN THE MIDDLE OF THE TOP LAYER OF THE PALLET UNIT.

INDICATES PA 104 SERIES



DETAIL B

THIS DETAIL DEPICTS PROCEDURES TO BE USED WHEN A STANDARD PALLET UNIT MINUS THREE CONTAINERS IS TO BE UNITIZED. THE FILLER ASSEMBLY MUST BE INSTALLED IN THE MIDDLE OF THE TOP LAYER OF THE PALLET UNIT.

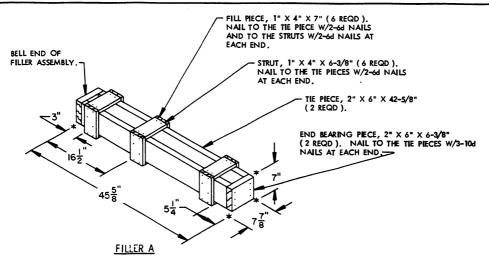


DETAIL C

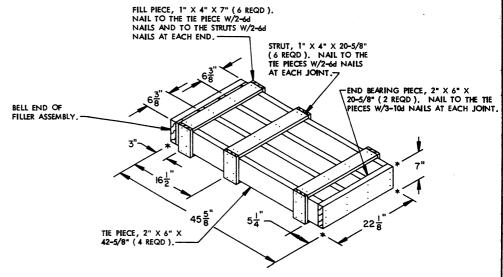
THIS DETAIL DEPICTS PROCEDURES TO BE USED WHEN A STANDARD PALLET UNIT MINUS FIVE CONTAINERS IS TO BE UNITIZED. THE FILLER ASSEMBLIES DEPICTED MUST BE INSTALLED IN THE MIDDLE OF THE TOP LAYERS OF THE PALLET UNIT.

FILLERS AND INSTALLATION PROCEDURES FOR OMITTED CONTAINERS

PAGE 6

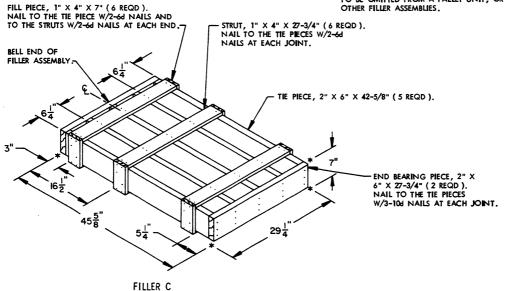


THIS FILLER ASSEMBLY IS TO BE USED WHEN ONE OR TWO CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT, OR IN COMBINATION WITH OTHER FILLER ASSEMBLIES. SEE SPECIAL NOTES 2 AND 3 ON PAGE 6.



#### FILLER B

THIS FILLER ASSEMBLY IS TO BE USED WHEN THREE CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT, OR IN COMBINATION WITH OTHER FILLER ASSEMBLIES.



THIS FILLER ASSEMBLY IS TO BE USED WHEN FOUR CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT, OR IN COMBINATION WITH A "FILLER A" ASSEMBLY.

FILLER AND INSTALLATION PROCEDURES FOR OMITTED CONTAINERS

PAGE 7

