

**NOTES:**

1. THE IDENTIFICATION MARKINGS ON THE PALLETIZED UNIT LOADS SHALL INCLUDE THE FOLLOWING (SEE NOTES 2, 3, 4 AND 5). UNIT LOADS REQUIRE THE ADDITION OF ONLY THE IDENTIFICATION MARKINGS THAT ARE NOT VISIBLE ON THE BOXES.

- A) NSN
- B) DODIC/NALC
- C) LOT NUMBER
- D) QUANTITY
  - (1) BY LOT (IF MORE THAN ONE LOT, SEE NOTE 5A)
  - (2) TOTAL QUANTITY (IF ONE LOT)
- E) ITEM DESCRIPTION (NOMENCLATURE)
- F) GROSS WEIGHT IN LBS.
- G) PROPER SHIPPING NAME (PSN) AND UNITED NATIONS (UN) IDENTIFICATION NUMBER
- H) UN PERFORMANCE ORIENTED PACKAGING (POP) CERTIFICATION MARKING

2. UNIT LOADS OF AMMUNITION REQUIRE THE ADDITION OF IDENTIFICATION MARKING APPLIED TO TWO ADJACENT SIDES OF THE LOAD (SEE FIGURE 1):

- A) THE IDENTIFICATION MARKING THAT IS NOT VISIBLE ON THE BOXES SHALL BE ADDED TO THE UNIT LOAD. THIS ADDITIONAL MARKING IS NORMALLY LIMITED TO PARTIAL NOMENCLATURE SUCH AS 100 GRENADES OR 10 CARTRIDGES, GROSS WEIGHT OF THE UNIT LOAD, APPLICABLE MIXED LOT IDENTIFICATION, AND ANY LIGHT BOX/EMPTY BOX DATA (QUANTITY PER BOX OR NUMBER OF EMPTY BOXES).
- B) UNLESS OTHERWISE SPECIFIED, UNIT LOADS MAY HAVE ONE OR MORE BOXES TURNED TO PRESENT A BLANK SURFACE FOR MARKING. MARKING SHALL BE APPLIED BY TAGGING, STENCILING, STAMPING, MACHINE PRINTING, OR LABELS MEETING MIL-PRF-61002 REQUIREMENTS (USING PREPRINTED LABELS, SECURED ON ALL FOUR CORNERS WITH STAPLES ON WOOD BOXES). WATERPROOF MARKING BOARDS MAY BE USED WHEN IT IS IMPOSSIBLE TO OBTAIN A BLANK SURFACE FOR MARKING. APPROVAL MUST BE OBTAINED BY THE ARMY CONTRACTING COMMAND (ACC) PRIOR TO USING MARKING BOARDS.
- C) BOXES WHICH MUST HAVE ALL NOSE ENDS POINTED IN THE SAME DIRECTION SUCH AS ROCKETS AND WHITE PHOSPHORUS (WP) ROUNDS SHALL NOT BE TURNED TO CONFORM TO NOTE 2(B).
- D) WHEN THE UNIT LOAD IS CONFIGURED IN SUCH A WAY THAT THE PSN AND UN IDENTIFICATION NUMBER ARE NOT VISIBLE, THE TOP LAYER SHALL BE TURNED TOP OUT TO PERMIT THE PSN AND UN IDENTIFICATION NUMBER TO BE VISIBLE. WHEN IT IS NOT PRACTICAL TO TURN THE ENTIRE TOP LAYER, TWO DIAGONAL CORNER BOXES ON THE TOP LAYER SHALL BE TURNED TO EXPOSE THE PSN AND THE UN IDENTIFICATION NUMBER.

(CONTINUED AT RIGHT)

DISTRIBUTION STATEMENT A.  
 APPROVED FOR PUBLIC RELEASE;  
 DISTRIBUTION IS UNLIMITED.

(CONTINUED FROM LEFT)

E) UN POP CERTIFICATION MARKING SHALL BE EXPOSED ON AT LEAST ONE PLACE ON THE UNIT LOAD.

3. UNIT LOADS OF UNPACKAGED AMMUNITION.

- A) UNIT LOADS OF OTHERWISE UNPACKAGED AMMUNITION SUCH AS SEPARATE LOADING PROJECTILES REQUIRE ADDITION OF ONLY THOSE IDENTIFICATION MARKINGS THAT ARE NOT VISIBLE ON THE PROJECTILES. ANY ADDITIONAL MARKINGS ARE NORMALLY LIMITED TO QUANTITY, NOMENCLATURE, GROSS WEIGHT, AND MIXED LOT IDENTIFICATION, INCLUDING QUANTITY PER LOT.
- B) MARKING MAY BE APPLIED DIRECTLY TO THE PALLET USING METHODS SPECIFIED IN NOTE 2B. WATERPROOF PAPER, METAL, CLOTH OR PLASTIC SHIPPING TAGS MAY BE USED WHEN THE MARKINGS CANNOT BE APPLIED DIRECTLY TO THE PALLET LOAD. TAGS SHOULD BE ATTACHED TO THE UNIT LOAD BY CORROSION-RESISTANT WIRE OR PLASTIC TIES. IN ADDITION TO USING WIRE OR PLASTIC TIES, TAGS MAY ALSO BE ATTACHED BY STAPLES.
- C) THE LOCATION AND CONTENT OF IDENTIFICATION MARKINGS SHALL BE SPECIFIED ON THE AMMUNITION PACKING AND MARKING DRAWINGS FOR SEPARATE LOADING PROJECTILES.

4. UNIT LOADS OF CYLINDRICAL CONTAINERS.

- A) UNIT LOADS OF CYLINDRICAL CONTAINERS (SUCH AS PROPELLING CHARGES, COMPLETE ROUNDS, ETC.) SHALL HAVE ADDITIONAL UNIT LOAD IDENTIFICATION MARKINGS APPLIED DIAGONALLY AT OPPOSITE ENDS OF THE UPPER LAYER OF THE LOAD BY WATERPROOF TAG, LABEL, STENCILING OR STAMPING IN A CONTRASTING COLOR. (SEE NOTES 2B AND 3B).
- B) UNIT LOAD IDENTIFICATION MARKINGS SHALL INCLUDE GROSS WEIGHT, QUANTITY, MIXED LOT AND EMPTY/LIGHT CONTAINER INFORMATION.
- C) CONTAINERS SHALL BE POSITIONED SO THAT THE PSN AND UN IDENTIFICATION NUMBER ARE VISIBLE ON AT LEAST ONE CONTAINER ON ONE SIDE OF THE LOAD. THE ORIENTATION OF THE CONTAINERS SPECIFIED IN THE UNITIZATION DRAWINGS SHALL BE FOLLOWED.

(NOTES CONTINUED ON PAGE 2)

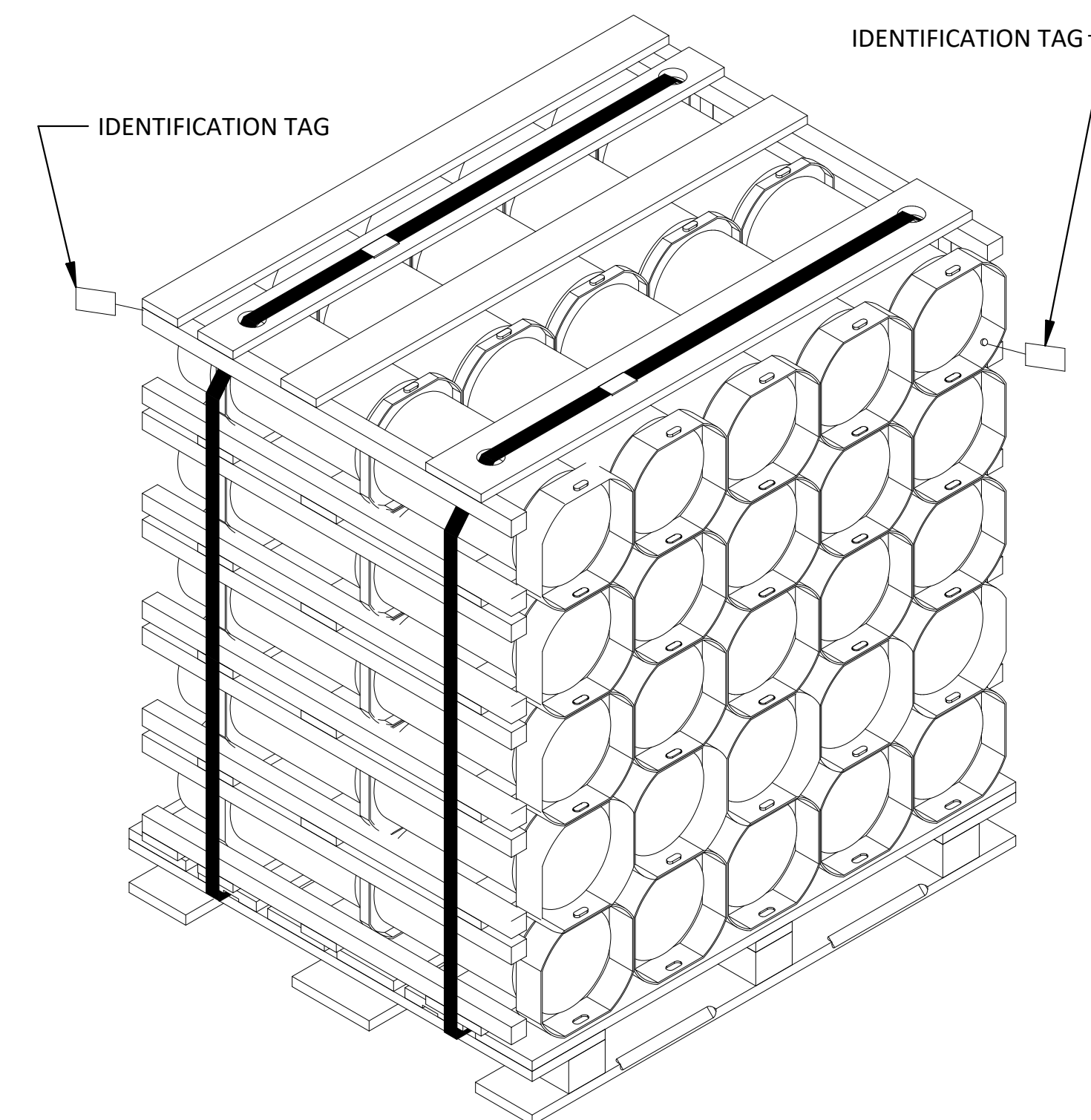
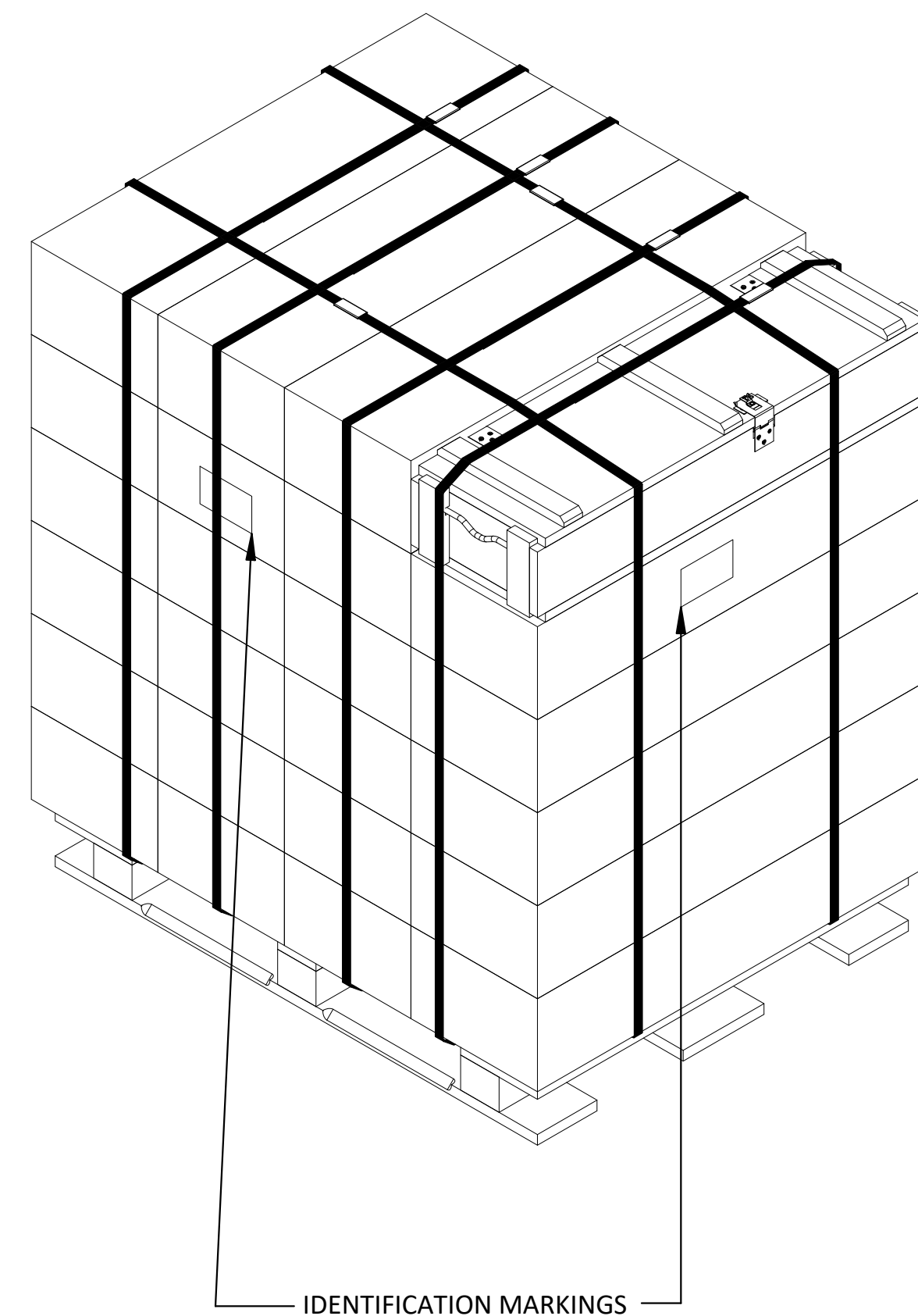


FIGURE 1

PART NO. ACV00561

REVISION		APPROVED	
LTR.	DESCRIPTION	ENG.	DATE
-	PRODUCT BASELINE ERR R7S2021 97-06-05	MB	SCHULTZ 97-06-23
A	NOR R1K3002 01-08-16	MB	RLV 01-08-16
B	NOR R1K3007 02-03-13	MB	HJS 02-04-01
C	ECP R3K3017 03-03-03 & ECP R3K3024 03-06-13	MB	WILLIS 03-07-11
D	ECP R05T5076 05-03-22	MB	WILLIS 05-10-07
E	ECP R07T2013 07-08-14	MB	FIEFFER 07-12-18
F	ECP R08K3008 08-11-26	MB	FIEFFER 08-12-02
G	ECP R17S2024 18-01-03	MB	FIEFFER 18-01-26
H	ECP R19K3009 21-06-15	MB	FIEFFER 22-06-29

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

REVISION STATUS OF SHEETS	
SHEET	REVISION
1 OF 2	H
2 OF 2	H

UNLESS OTHERWISE NOTED DIMENSIONS ARE IN INCHES		DATE 97-06-05	DESIGN ACTIVITY U.S. ARMY COMBINED ARMS SUPPORT COMMAND DEFENSE AMMUNITION CENTER (DAC) MCALESTER, OKLAHOMA 74501-9053
TOLERANCES: XX XXX ±.06 ±.005 ±0°15' ±1/64 125		TEST REPORT NA	TEST ENGINEER Jerry Krohn
REMOVE ALL BURRS AND SHARP EDGES 0.10 R OR CHAMFER MAX.		PRINCIPAL ENGINEER Schultz	
MATERIAL		THOMAS J. MICHELS CHIEF, EXPLOSIVES SAFETY ENGINEERING DIVISION	UNIT LOAD MARKING FOR SHIPMENT AND STORAGE, AMMUNITION AND EXPLOSIVES
NEXT ASSEMBLY USED ON		WILLIAM F. ERNST DEPUTY DIRECTOR FOR EXPLOSIVE SAFETY	SIZE D 28620
APPLICATION		ARTHUR J. PODSIADLO DEFENSE AMMUNITION CENTER	DRAWING No. ACV00561
			REV. H
			SCALE NONE
			UNIT WT
			SHEET 1 OF 2

**NOTES (CONTINUED FROM SHEET 1):**

**5. UNIT LOADS COMPRISED OF MULTIPLE LOTS.**

A) UNIT LOADS OF AMMUNITION AND EXPLOSIVES COMPRISED OF MORE THAN ONE LOT SHALL BE MARKED WITH THE APPROPRIATE LOT NUMBERS. IN ADDITION, THE LOT NUMBER AND QUANTITY OF EACH LOT IN UNIT LOADS OF MIXED LOTS SHALL BE LISTED ON A PLAIN WHITE LABEL OR TAG, AS APPLICABLE, AND SHALL BE PLACED ADJACENT TO OTHER IDENTIFICATION MARKINGS.

B) THE MAXIMUM SIZE OF THE LABEL OR TAG SHALL BE 4 BY 4 INCHES, AND THE LETTERING SHALL NOT BE LESS THAN A 0.25 INCH IN HEIGHT.

**6. FULL CARLOAD OR FULL TRUCKLOAD SHIPMENTS.**

A) A PACKAGE OR UNIT OF MILITARY EXPLOSIVES (INCLUDING AMMUNITION) SHIPPED BY OR ON BEHALF OF THE DOD IN FREIGHT CONTAINER LOADS, CAR LOADS OR TRUCK LOADS (INCLUDING EXCLUSIVE USE) WHICH ARE LOADED AND UNLOADED BY THE SHIPPER OR BY DOD ARE EXEMPT FROM HAZARD WARNING LABELING REQUIREMENTS.

B) ALL OCONUS SHIPMENTS (EXCEPT THOSE IN INTER-MODAL CONTAINERS) REQUIRE TWO HAZARD WARNING LABELS BE AFFIXED ON ADJACENT SIDES TO EACH UNIT LOAD OF PALLETIZED CARGO OR ONE HAZARD WARNING LABEL BE AFFIXED TO EXTERIOR PACKAGE OF LOOSE CARGO IN ACCORDANCE WITH CFR TITLE 49 AND THE APPLICABLE INTERNATIONAL MODAL DOCUMENT REQUIREMENTS. THE MARKING AND LABELING REQUIREMENTS IMPOSED BY FOREIGN GOVERNMENTS SHALL BE OBSERVED AS PRESCRIBED BY THE SERVICE DIRECTING THE SHIPMENT. LABELS SHALL NOT BE APPLIED DIRECTLY TO THE END ITEM.

**7. BAR CODING UNIT LOADS (SEE FIGURE 2).**

A) AMMUNITION AND EXPLOSIVES PALLETIZATION/PACKAGING LABEL (AEPPL) BAR CODING REQUIREMENTS SHALL BE IAW DEVCOM DRAWING 12999545. UNLESS OTHERWISE SPECIFIED, THE FIRST AEPPL BAR CODE LABEL SHALL BE APPLIED ON THE UPPER RIGHT QUADRANT ON THE SHORT DIMENSION OF THE UNIT LOAD. THE OTHER LABEL WILL BE PLACED ON EITHER ADJACENT SIDE. FOUR STAPLES SHALL BE USED, ONE ON EACH CORNER OF EACH LABEL, (PROVIDED THAT IT IS SAFE TO DO SO), TO SECURE THE BAR CODE LABEL FOR PALLETIZED WOOD BOXES.

B) MULTIPLE LOT/SERIAL LABELS SHALL BE PLACED IN SEQUENCE AS SHOWN ON DRAWING 12999545.

(CONTINUED AT RIGHT)

**(CONTINUED FROM LEFT)**

C) FOR SQUARE BELL CYLINDRICAL CONTAINERS WITH METAL TOP LIFT, 2 X 4 INCH AEPPL BAR CODES SHALL BE PLACED IN THE FOLLOWING TWO LOCATIONS ON ADJACENT SIDES. ONE AEPPL BAR CODE SHALL BE PLACED ON THE SIDE OF THE METAL TOP ADAPTER. THE OTHER LABEL SHALL BE PLACED IN THE UPPER RIGHT HAND QUADRANT, ON THE BOTTOM/END, OF A SINGLE CONTAINER. ON 105MM AND 120MM TANK AMMUNITION CONTAINERS, THE 2 X 4 INCH, UNIT LOAD AEPPL BAR CODE ON THE END OF THE CONTAINER MAY COVER UP THE DODIC MARKING AND THE INDIVIDUAL CONTAINER AEPPL BAR CODE ON ONE CONTAINER PER UNIT LOAD.

8. LIGHT LOAD MARKINGS. WHEN A LIGHT OR EMPTY BOX OR CONTAINER IS ORIENTED SUCH THAT THE ORANGE COLOR IS NOT VISIBLE IN THE UNIT LOAD (I.E., TOP NOT VISIBLE), ADDITIONAL MARKING MUST BE PAINTED OR MARKED IN ORANGE SIMILAR TO COLOR CHIP 32246 OF AMS-STD-595, AS DESCRIBED IN 8A AND 8B BELOW.

A) WOODEN BOXES. WHEN THE BOTTOM, SIDES OR END SURFACES OF AN EMPTY OR LIGHT (LITE) BOX IS VISIBLE WITHIN A UNIT LOAD, THEN THESE SURFACES SHALL ALSO BE MARKED OR STENCILED WITH THE WORDS "EMPTY" OR "LIGHT BOX" ("LITE BOX") IN A CONTRASTING ORANGE PAINT SCHEME, IN THE LARGEST PRACTICAL SIZE LETTERS.

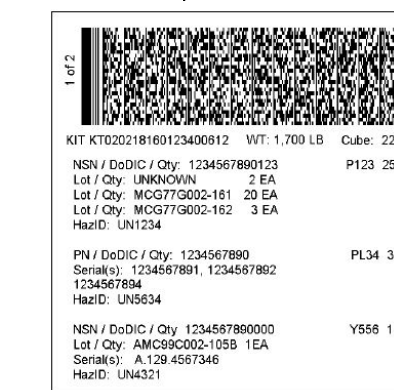
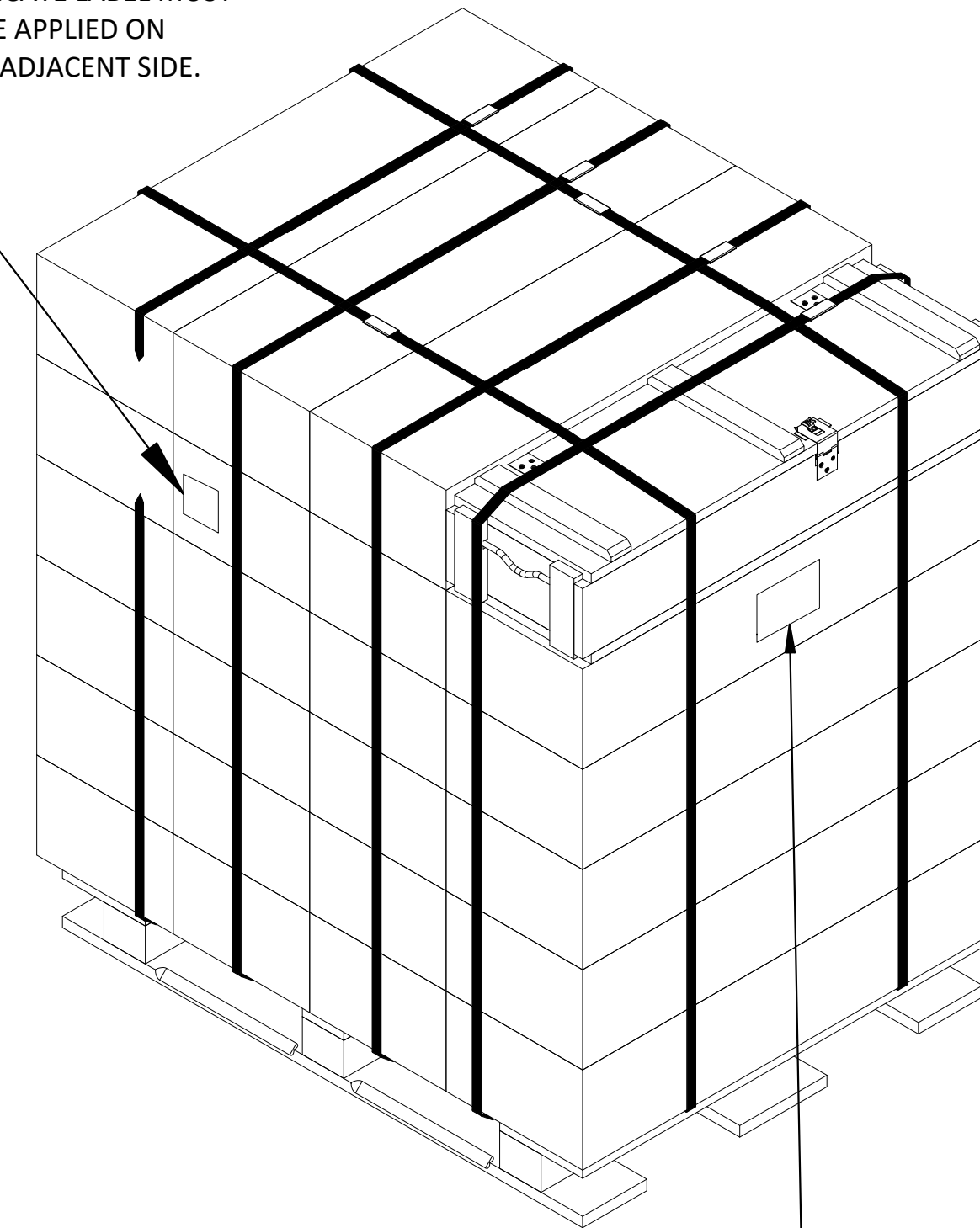
B) CYLINDRICAL CONTAINERS. AN EMPTY/LIGHT (LITE) CYLINDRICAL CONTAINERS SHALL BE IDENTIFIED AS SUCH BY MARKING OR STENCILING THE WORDS "EMPTY" OR "LIGHT BOX" ("LITE BOX") IN A CONTRASTING ORANGE PAINT SCHEME ON THE BOTTOM, OPPOSITE SIDES, AND THE COVER OR COVER LATCH OF THE CYLINDER.

C) UNIT LOADS CONTAINING EMPTY/LIGHT BOXES SHALL BE IDENTIFIED BY QUANTITY PER BOX AND/OR NUMBER OF EMPTY BOXES. THIS INFORMATION SHALL BE SHOWN NEAR THE OTHER PALLET IDENTIFICATION MARKINGS.

D) LESS THAN FULL UNIT LOADS OF UNPACKAGED AMMUNITION SUCH AS SEPARATE LOADING PROJECTILES SHALL BE IDENTIFIED BY AN ORANGE TAG PLACED ON TWO DIAGONAL CORNERS OF THE LOAD, WITH THE TAG MARKED AS "LIGHT (LITE) LOAD". SUCH LOADS MUST BE CONSTRUCTED SO THAT THE LONGITUDINAL CENTER OF GRAVITY IS THE SAME AS FOR A FULL LOAD.

9. ALL NON-MANUFACTURED WOOD USED IN THE UNIT LOAD WILL BE HEAT TREATED AND MARKED TO SHOW CONFORMANCE TO THE INTERNATIONAL PLANT PROTECTION CONVENTION STANDARDS (IPPC) AND INTERNATIONAL STANDARD FOR PHYTOSANITARY MEASURES 15 (ISPM 15). SEE DAC DRAWING ACV00831 FOR ISPM 15 CERTIFICATION MARKING AND PLACEMENT DETAILS.

**NOTE:**  
A DUPLICATE LABEL MUST ALSO BE APPLIED ON EITHER ADJACENT SIDE.



REVISION		APPROVED	
LTR.	DESCRIPTION	ENG.	BY DATE
-	PRODUCT BASELINE ERR R7S2021 97-06-05	MB	SCHULTZ 97-06-23
A	NOR R1K3002 01-08-16	MB	RLV 01-08-16
B	NOR R1K3007 02-03-13	MB	HJS 02-04-01
C	ECP R3K3017 03-03-03 & ECP R3K3024 03-06-13	MB	WILLIS 03-07-11
D	ECP R05T5076 05-03-22	MB	WILLIS 05-10-07
E	ECP R07T2013 07-08-14	MB	FIEFFER 07-12-18
F	ECP R08K3008 08-11-26	MB	FIEFFER 08-12-02
G	ECP R17S2024 18-01-03	MB	FIEFFER 18-01-26
H	ECP R19K3009 21-06-15	MB	FIEFFER 22-06-29

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

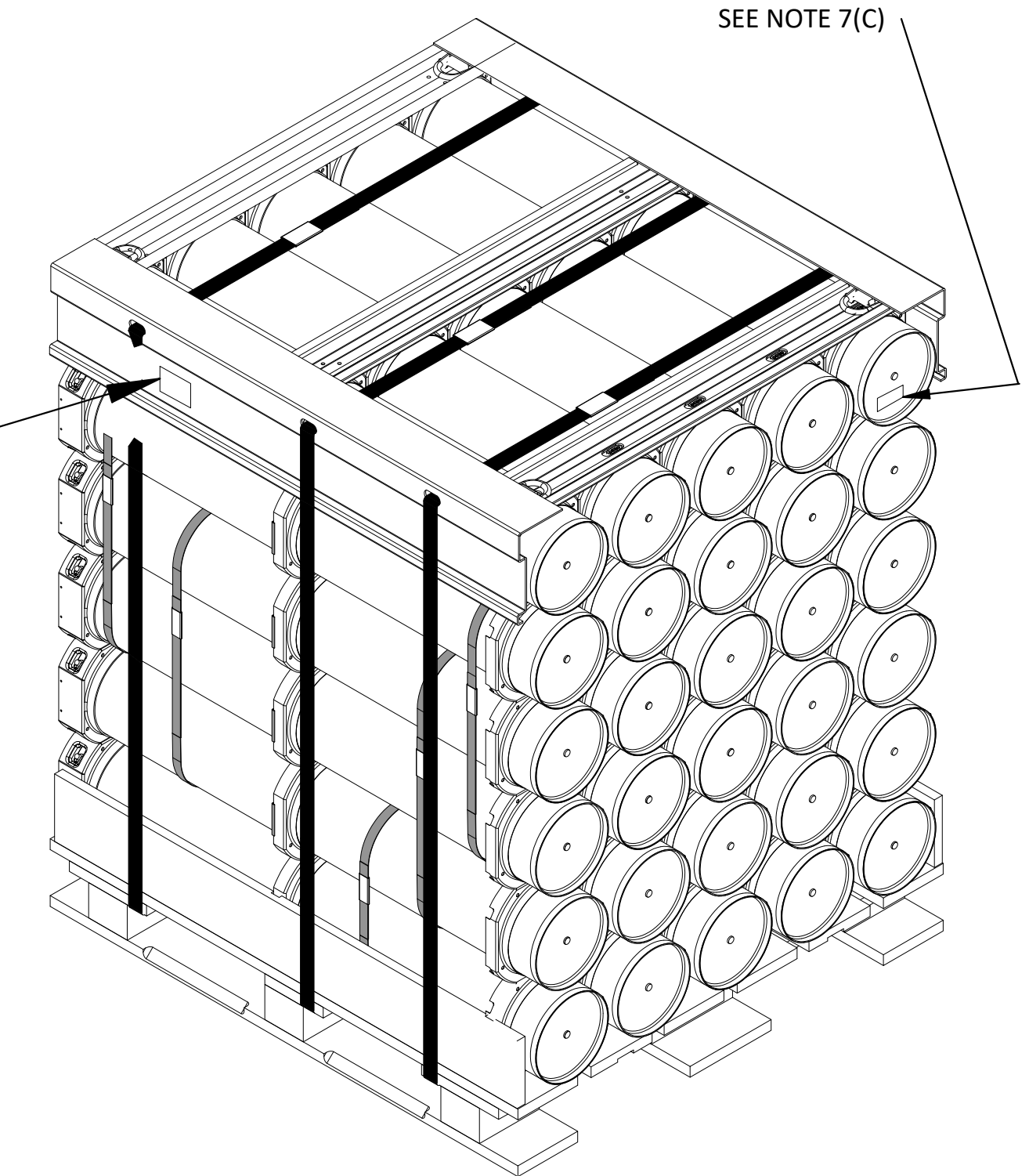


FIGURE 2

DATE 97-06-05	PROJECT ENGINEER Schultz	DESIGN ACTIVITY U.S. ARMY COMBINED ARMS SUPPORT COMMAND DEFENSE AMMUNITION CENTER (DAC) MCALESTER, OKLAHOMA 74501-9053	
TEST REPORT NA	TEST ENGINEER Jerry Krohn	UNIT LOAD MARKING FOR SHIPMENT AND STORAGE, AMMUNITION AND EXPLOSIVES	
SUBMITTED Thomas J. Michels CHIEF, EXPLOSIVES SAFETY ENGINEERING DIVISION			
DEPUTY DIRECTOR FOR EXPLOSIVE SAFETY APPROVED BY ORDER OF COMMANDING GENERAL U.S. ARMY MATERIAL COMMAND Arthur J. Podsiadlo		SIZE D 28620	DRAWING NO. ACV00561
SCALE NONE		UNIT WT	REV. H
SHEET		2 OF 2	