STORAGE IN APPROVED MAGAZINES OF BULK EXPLOSIVES OR BULK PROPELLANTS PACKED IN FIBERBOARD OR METAL DRUMS ON 4-WAY ENTRY PALLETS

INDEX

<u>ITEM</u>	<u>P</u> #	GE (S)
GENERAL NOTES AND MATERIAL SPECIFICATIONS DETAILS			2
STORAGE PROCEDURES (EARTH COVERED MAGAZINES):			3
81'-0'', 60'-8'' AND 40'-4'' L X 26'-6'' W X 12'-9" H IGLOO MAGAZINES		A	5
81'-2" L X 26'-6" W X 12'-1-3/4" H ARCH TYPE MAGAZINE (IGLOO)	(<u>،</u>	7
80' (" AND 40'-0" L X 25'-0" W X 12'-1-3/4" H ARCH TYPE MAGAZINES (IGLOO)	'	Q	0
RC-C' AND 40'-0' L X 25'-0' W X 1)'-0' H ARCH TYPE MAGAZINES (IGLOO)	1	กัา	1
80'-0' AND 40'-0' L X 25'-0' W X 10'-0" H ARCH TYPE MAGAZINES (IGLOO)	1	2. 1	3
80'-0" L X 25'-0" W X 14'-0" H STRADLEY AND 89'-0" L X 24'-10" W X 14'-4" H OVAL ARCH MAGAZINES],	4, 1	5
52'-0" DIA AND 44'-7" DIA CORBETTA MAGAZINES	1	6, 1	7
10°-8" L X 50'-0" W RECTANGULAR MAGAZINE	1	8, 1	9
IGLOO AND ARCH TYPE MAGAZINES	_		_
STRADLEY AND OVAL ARCH TYPE MAGAZINES	21	0, 2	!1
CORBETTA MAGAZINE	2		
RECTANGULAR MAGAZINE	·- 2	4, 2	
		2	26

	REVIS	ions		m 28	WRF			
			GRG/	M4	Cont. C			
			CONTINUES, M.S. ARMY ARBAMENT, MUNITIONS AND CHEMICAL					
			MIT Doved a Pukout					
1			MATERIEL .	ORDER OF COM	MANDING GENERAL,	U.S. ARMY		
			WILLIAM BEFENSE AMMUNITION CENTER AND SCHOOL					
			U.S.	ARMY	AMC DE	RAWING		
		_	JUNE 1988					
1			CLASS	DIVISION	DRAWING	FILE		
			19	48	4228	1-3-4-14 22PN 1001		

O NOT SCALE

GENERAL NOTES

- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1, AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- B. THE STORAGE PROCEDURES SPECIFIED IN THIS DRAWING ARE APPLICABLE TO BULK EXPLOSIVES, OR BULK PROPELLANTS PACKED IN FIBERBOARD, OR METAL DRUMS, AND UNITIZED ON 35" BY 45-1/2" WOODEN PALLET.
- C. FOR DETAIL OF THE PALLET UNIT SEE PAGE 3. FOR UNITIZATION PROCEDURES, SEE U.S. ARMY AMC (DARCOM) DRAWING 19-48-4172-20PN 1007.

PALLET UNIT: (FIBERBCARD DRUM)

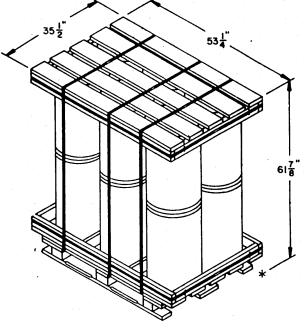
PALLET UNIT: (METAL DRUM)

- D. THE SICRAGE PROCEDURES DEPICTED WITHIN THIS DOCUMENT ARE APPLICABLE FOR STORAGE IN VARIOUS TYPES AND SIZES OF MAGAZINES. THE STORAGE PROCEDURES DEPICTED FOR THE SPECIFIC TYPES OF MAGAZINES MAY ALSO BE UTILIZED TO STORE PALLET UNITS IN COTHER TYPES OF APPROVED MAGAZINES, MINOR ADJUSTMENTS MAY BE MADE TO FACILITATE STORAGE IN OTHER TYPES OF MAGAZINES, HOWEVER, THE BASIC PRINCIPLES AS DEPICTED HEREIN WILL BE FOLLOWED.
- E. CAUTION: THE ALLOWABLE "EXPLOSIVE LIMIT" ESTABLISHED FOR A MAGAZINE IS NOT TO BE EXCEEDED. THIS LIMITATION MAY REQUIRE A QUANTITY REDUCTION FROM THE STORAGE AS SHOWN.
- F. STORED PALLET UNITS MUST NOT CONTACT THE WALLS OF A MAGAZINE. TO PROVIDE FOR THIS MANDATORY CLEARANCE REQUIREMENT, UNITS MAY BE ELIMINATED FROM THE DEPICTED STORAGE PATTERN AS NECESSARY.
- G. AISLE DIMENSIONS SHOWN FOR STORAGE PROCEDURES IN MAGAZINES MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS, VARIATIONS IN PALLET UNIT DIMENSIONS, AND/OR AVAILABLE MATERIALS HANDLING EQUIPMENT.
- H. THE MAXIMUM FLOOR LOAD FOR A MAGAZINE AS PRESCRIBED BY LOCAL STANDARDS WILL NOT BE EXCEEDED.
- J. IF AVAILABLE MHE PERMITS, ADDITIONAL PALLETIZED UNITS MAY BE STORED WITHIN THE MHE AREA AND/OR CITHER AVAILABLE AREA OF THE MAGAZINE.
- K. IF THE QUANTITY OF PALLET UNITS FOR A MAGAZINE IS TO BE REDUCED FROM WHAT IS SHOWN HEREIN DUE TO THE PERMITTED "EXPLOSIVE LIMIT" OR FOR ANY OTHER REASON, SUCH AS A LIMITED QUANTITY TO BE STORED—THE DELINEATED PROCEDURES ARE TO BE ADJUSTED BY OMITTING STACKS RATHER THAN BY OMITTING LAYERS.
- L. THE HEIGHT OF THE PACKAGE GUARD ON SOME FORKLIFT TRUCKS MAY NOT PERMIT PLACEMENT OF SOME FOP LAYER UNITS IN THE STACKS SHOWN IN THE STORAGE VIEWS HEREIN, UNLESS TWO UPPER PALLET UNITS ARE HANDLED AS ONE LIFT OR THE PACKAGE GUARD IS REMOVED (TINE CARRIAGE WILL IN MOST INSTANCES PROVIDE ADEQUATE PACKAGE GUARD PROTECTION). ONLY A FORKLIFT TRUCK OF A DEQUATE CAPACITY WILL JE USED WHEN LIFTING TWO PALLET UNITS AS ONE LIFT.
- M. STORAGE OF MULTIPLE LOTS IN A MAGAZINE WILL REQUIRE CAREFUL PREPLAN-NING SC AS TO INSURE MHE ACCESSIBILITY TO ANY LOT IN ACCORDANCE WITH REQUIREMENTS SET FORTH IN THE APPLICABLE "SPECIAL NO TES" SECTIONS OF THE MULTIPLE-LOT STORAGE PROCEDURES TYPICALLY SHOWN ON PAGES 20 THRIL 26
- N. ALTHCUGH SPECIFIC PROCEDURES ARE INCLUDED IN THIS DRAWING FOR STORING MULTIPLE LOTS WITHIN ONE STRUCTURE, THE BASIC STORAGE PATTERNS AS SHOWN ON PAGES 4 THRU 19 CAN ALSO BE ADAPTED FOR THE STORING OF MORE THAN C NE LOT. HOWEVER, THE USE OF A STAGGERED-LAYER STORAGE PATTERN AS SHOWN IS PROHIBITED, MULTIPLE LOTS OF PALLET UNITS WHEN STORED IN ACCO RDANCE WITH THE BASIC STORAGE PATTERN MAY BE STORED WITH ONE OR MORE STACKS USED FOR EACH LOT. LOTS WILL NOT BE MIXED, EXCEPT TO THE EXTENT THAT UNITS OF ONE LOT WILL NOT BE STACKED ON TOP OF PALLET UNITS FROM ANOTHER LOT. MULTIPLE-LOTS OF PALLET UNITS MAY BE STORED WITH ONE OR MORE ROWS USED FOR EACH LOT. (A ROW RUNS FROM THE REAR OF THE MAGAZINE TO THE FRONT). EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR REMOVAL AND INSPECTION/INVENTORY IN ACCORDANCE WITH C THER CRITERIA SPECIFIED IN THESE GENERAL NOTES; AND IN THE SPECIAL NOTES ON PAGES 20 THRU 26.

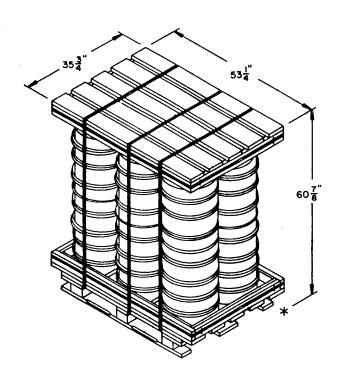
(GENERAL NO TES CONTINUED)

- C. ANY "LIGHT" PALLETIZED UNIT THAT DOES NOT CONTAIN A FULL QUANTITY OF DRUMS WILL NOT BE BURIED IN STORAGE. IT MUST BE POSITIONED ADJACENT TO AN AISLE, PREFERABLY IN FRONT OF THE LOT.
- P. A PRODUCTION OR STORAGE FACILITY IS AUTHORIZED TO HAVE ONE INCOMPLETE, UN-BANDED PARTIAL UNIT LOAD PER LOT IN A STORAGE STRUCTURE.
 PRICE TO SHIPMENT OF A PARTIAL UNIT, A LAYER MUST BE COMPLETED, IF APPLICABLE, BY THE POSITIONING OF ONE OR MORE FILLERS AS DELINEATED BY DRAWING 19-48-4172-20PN 1007. THE UNIT MUST THEN BE RE-BANDED WITH THE SAME SIZE AND QUANTITY OF STRAPS AS THE ORIGINAL UNIT.
- Q. PORTIONS OF THE MAGAZINES, SUCH AS SIDEWALLS, END WALLS, AND ROOFS, HAVE NOT BEEN SHOWN IN THE STORAGE VIEWS FOR CLARITY PURPOSES.
- R. CONVERSION TO METRIC EQUIVALENTS: DIMENSIONS WITHIN THIS DOCUMENT ARE EXPRESSED IN INCHES, AND WEIGHTS ARE EXPRESSED IN POUNDS. WHEN NECESSARY, THE METRIC EQUIVALENTS MAY BE COMPUTED ON THE \$ASIS OF ONE INCH EQUALS 2,44MM, AND ONE POUND EQUALS 2,454KG.
- S. WHEN LOCAL STORAGE CONDITIONS ARE SUCH THAT AN AMMUNITION STORAGE MAGAZINE NET EXPLOSIVE WEIGHT LIMIT WILL BE REACHED BEFORE ALL AVAILABLE STORAGE SPACE WILL BE UTILIZED, A COMBINATION OF THE VARIOUS STORAGE PATTERNS DELINEATED HEREIN MAY BE USED IN LIEU OF BLOCK STORAGE PATTERN TO FACILITATE INVENTORY, INSPECTION, THE USE OF MATERIALS HANDLING EQUIPMENT, SURVEILLANCE, ETC., OF THE AMMUNITION TO BE STORED WITHIN THE MAGAZINE.

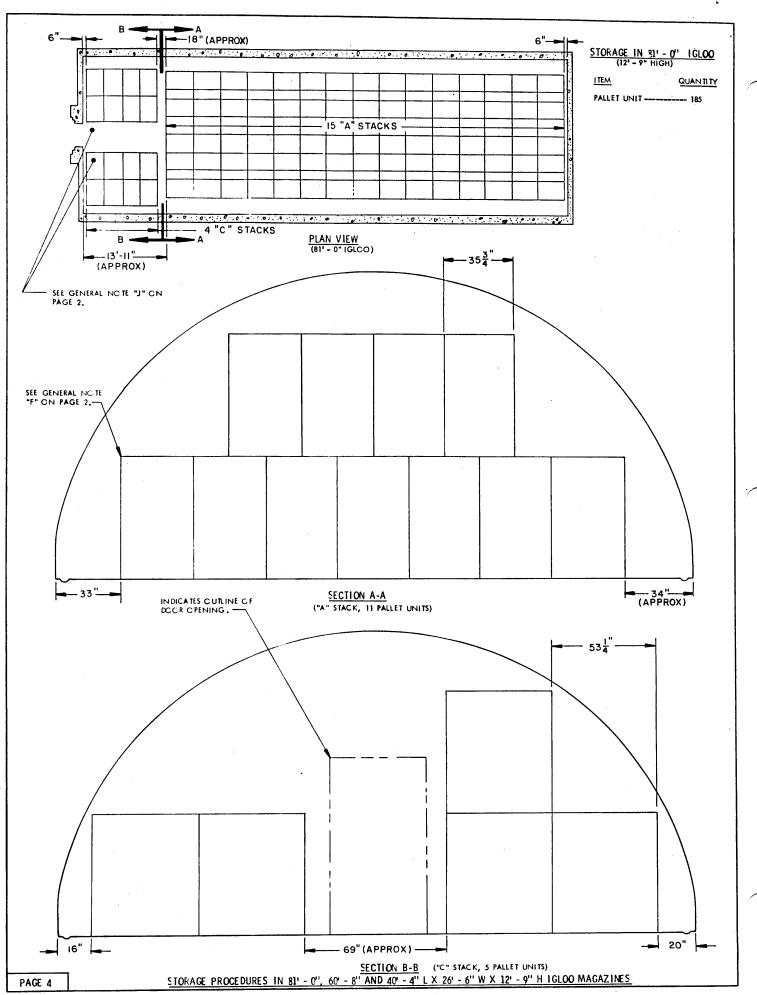


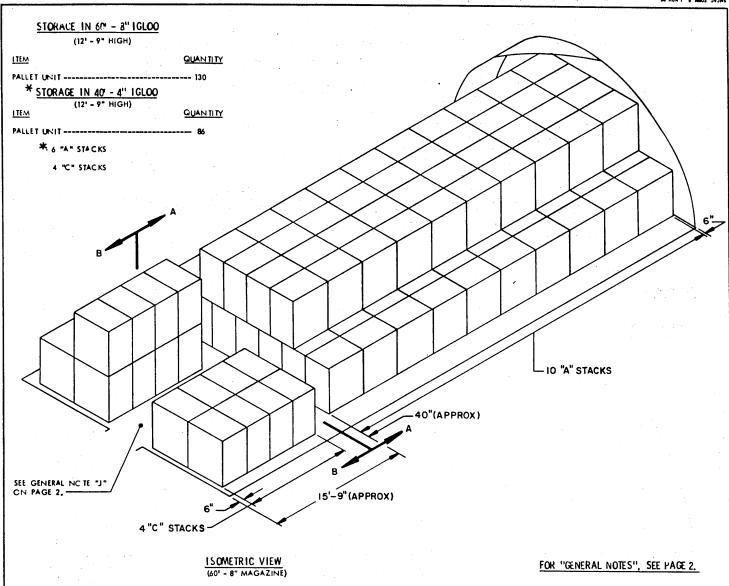


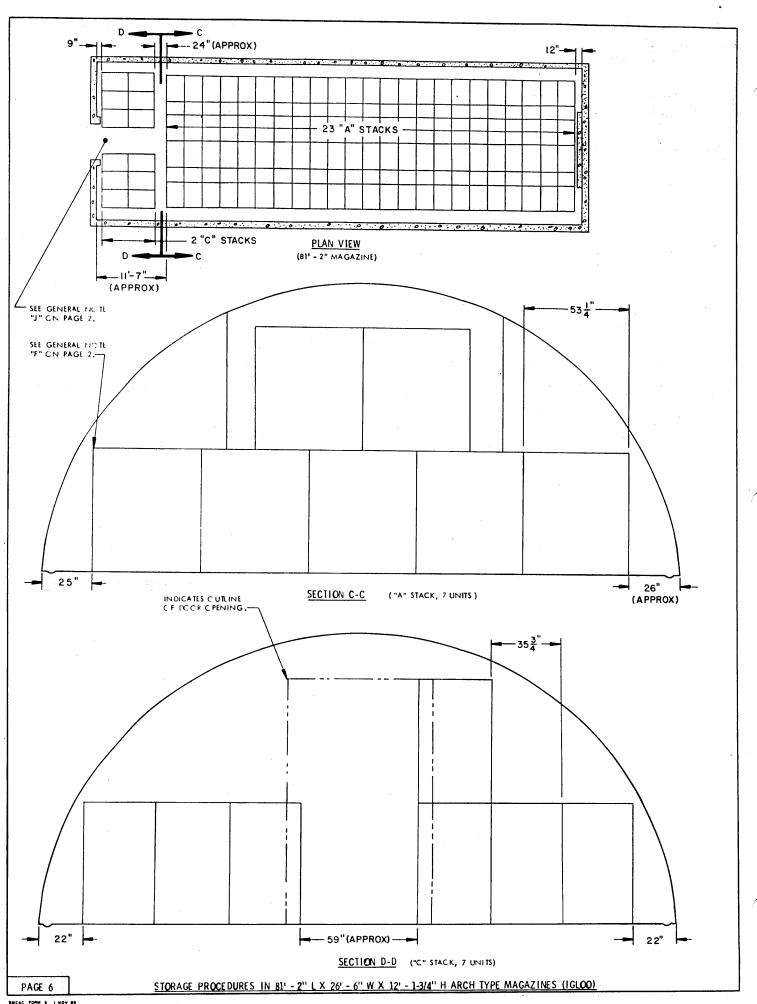
FIBERBOARD DRUM PALLET UNIT



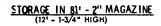
METAL DRUM PALLET UNIT







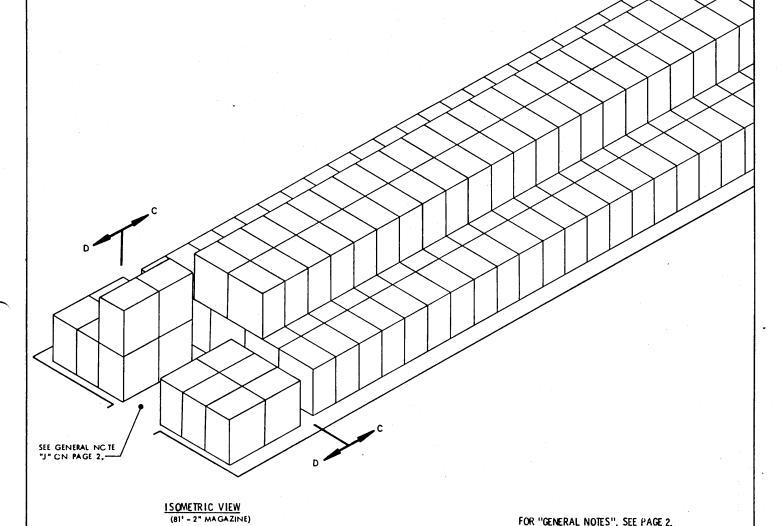




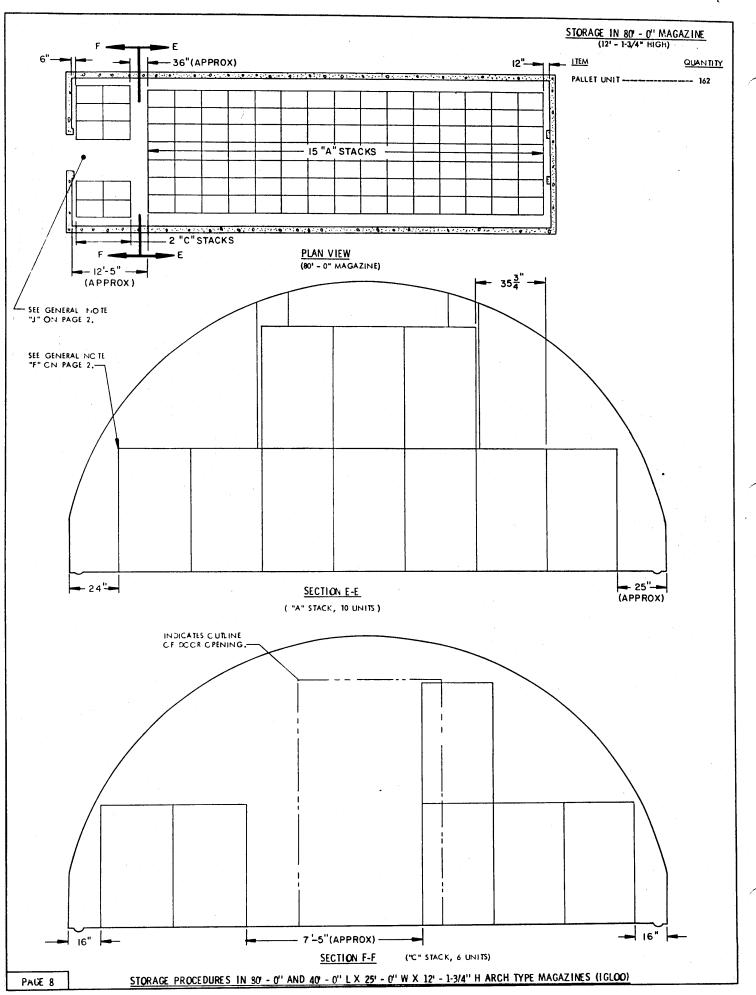
ITEM

QUANTITY

PALLET UNIT ----- 175



STORAGE PROCEDURES IN 81' - 2" L X 26' - 6" W X 12' - 1-3/4" H ARCH TYPE MAGAZINE (IGLOO)

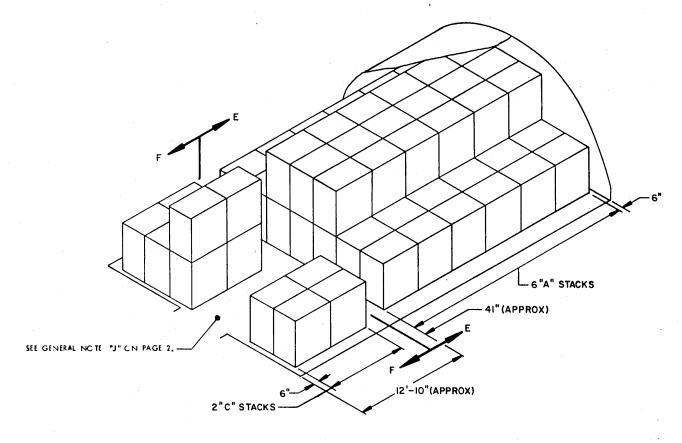


STORAGE IN 40 - 0' MAGAZINE (12' - 1-3/4" HIGH)

ITEM

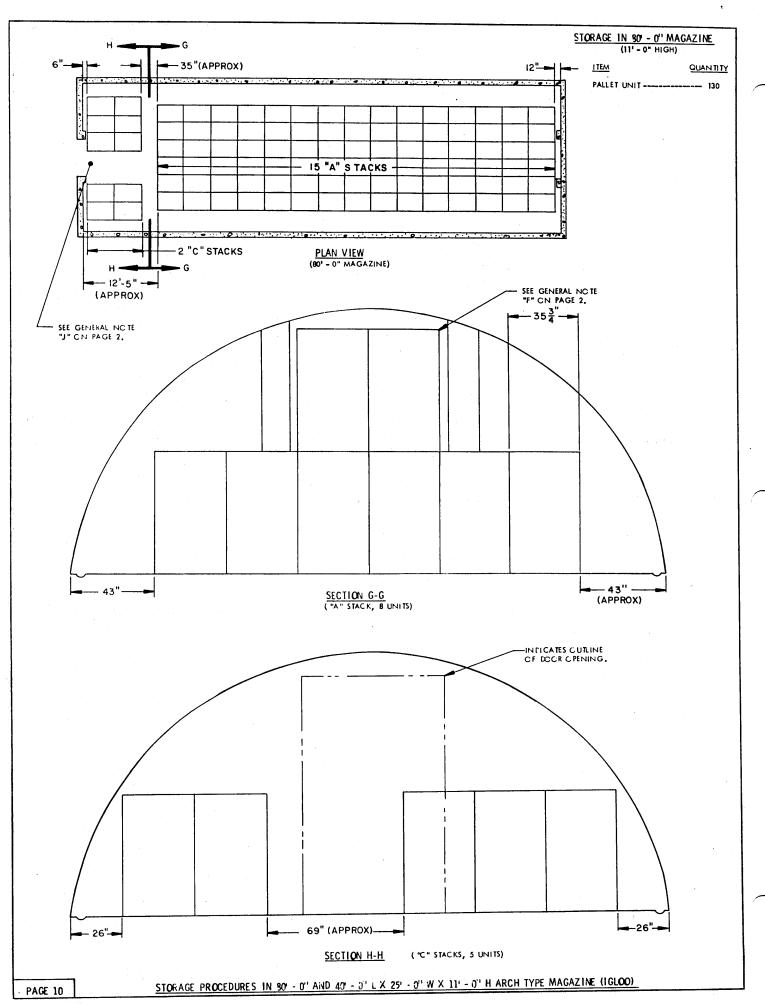
QUANTITY

PALLET UNIT ----- 72



ISOMETRIC VIEW

(40'-0" MAGAZINE)

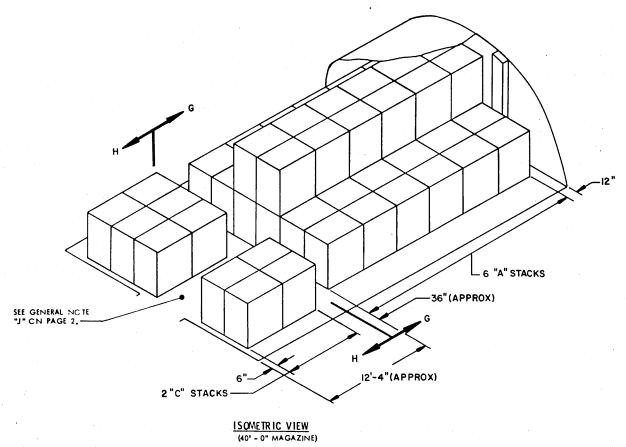


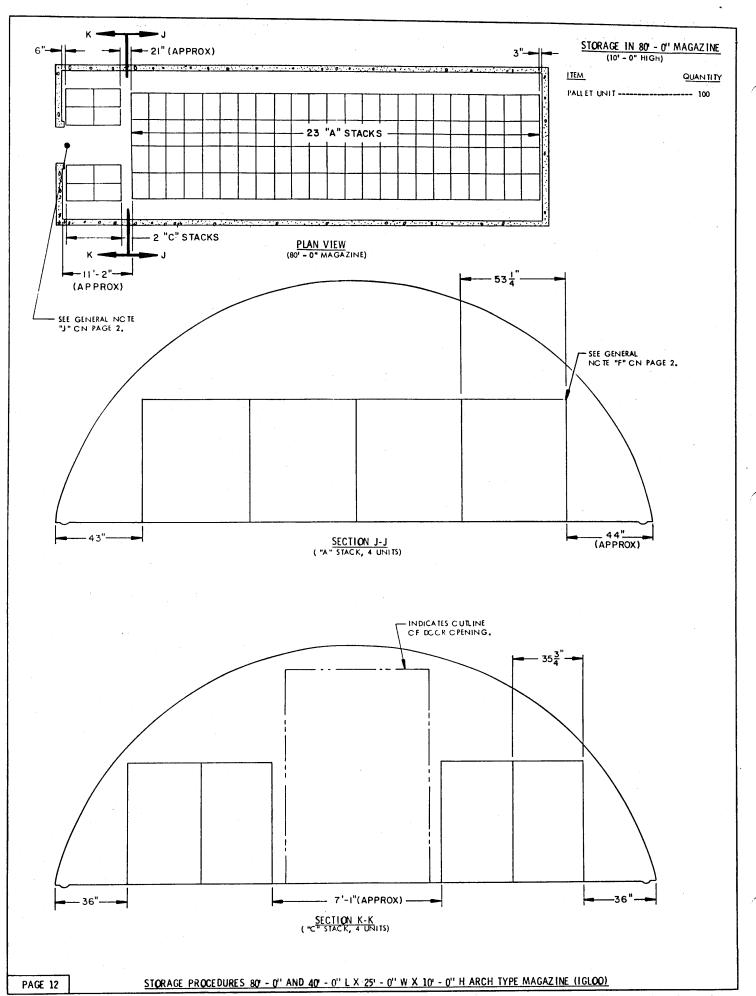
STORAGE IN 40' - 0" MAGAZINE

ITEM

QUANTITY

PALLET UNIT ----- 58





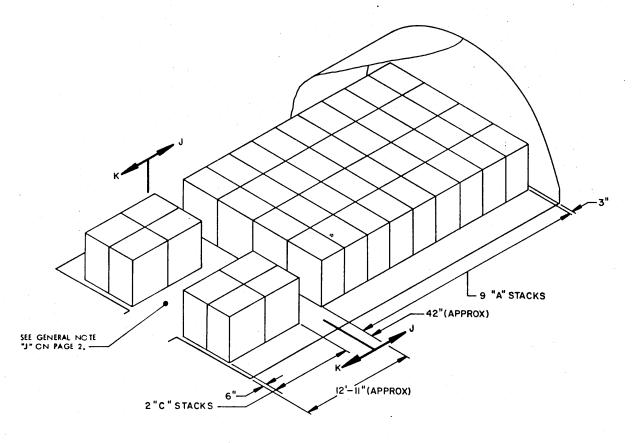
STORAGE IN 40' - 0" MAGAZINE

(10" - 0" HIGH)

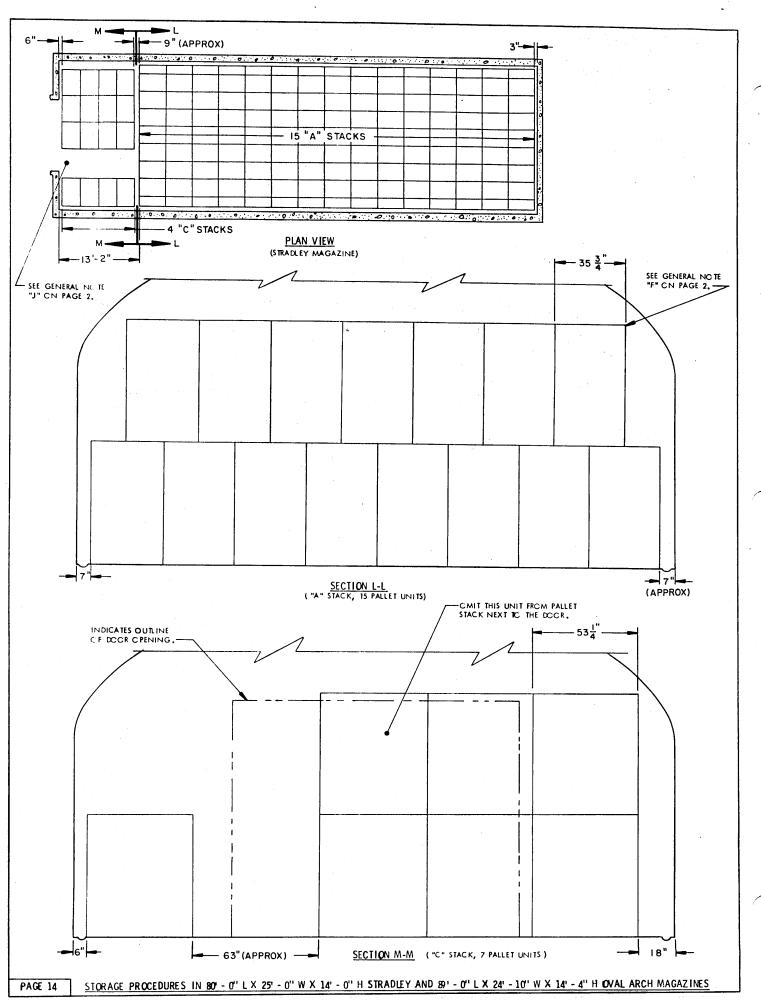
ITEM

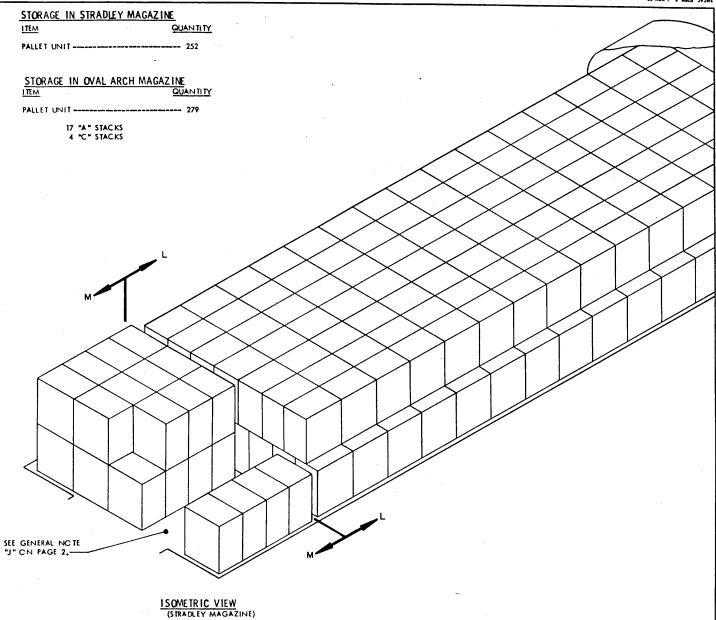
QUANTITY

PALLET UNIT ----- 44



ISOMETRIC VIEW
(40' - 0" MAGAZINE)



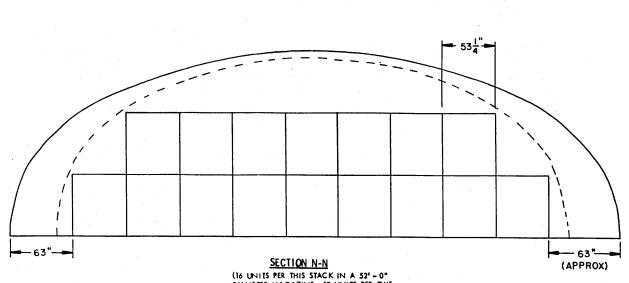


FOR "GENERAL NOTES", SEE PAGE 2.

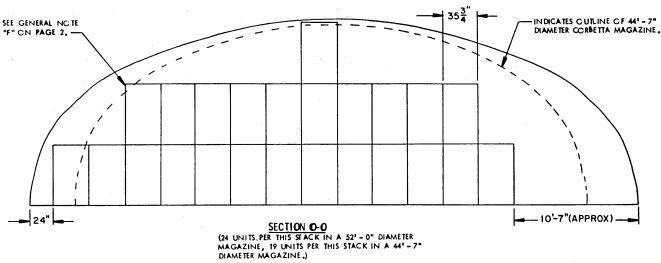
SPECIAL NO TE:

1. DUE TO THE RELATIVELY NARROW DOOR OPENING IN OVAL ARCH MAGAZINES, THE ONE (1) ROW OF PALLET UNITS ADJACENT TO THE OPERATING AISLE AS SHOWN IN "SECTION MMM" MAY HAVE TO BE OMITTED; THEN FOUR (4) PALLET UNITS CAN BE ADDED ON THE OPPOSITE SIDE OF THE OPERATING AISLE. THIS WILL DECREASE THE "C" STACKS TO 24 UNITS.

STORAGE IN 44' - 7" DIA CORBETTA STORAGE IN 52' DIA CORBETTA ITEM QUANTITY ITEM QUANTITY PALLET UNIT ----PALLET UNIT ----N -16 " -16" (APPROX) INDICATES DIRECTION OF STORAGE 24" INDICATES OUTLINE OF 44" - 7"
DIAMETER MAGAZINE. 1 ① 1 (1) 2 ① 2 (1) 24 1 2 2 2 2 2 ② 2 (2) ① 1 (1) 2 ① 2 ① 2 ② 2 (2) ① 2 2 2 2 2 (2) 2 2 2 2 2 (2) 2 (2) ① 2 2 ① 2 2 2 2 ١ 2 ② 2 (2) l ① ① 2 2 2 @ 2 2 2 2 2 2 3 2 3 ② 2 2 2 2 T 53 4" 1 ① 1 2 (2) (1) 2 2 2 ⑴ 2 2 ② 2 (2) 2 2 1 2 2 2 2 2 2 ı t 2 (2) ① 2 ② ① 2 2 2 2 2 2 1 (1) 2 2 2 2 2 ② 2 (2) 2 2 2 2 2 2 2 (1) 2 ① ① (1) 2 2 2 2 ① ① 1 ① 1 ı UNCIRCLED NUMBERS INDICATE CIRCLED NUMBERS INDICATE THE THE LAYERS HIGH THAT PALLET UNITS ARE STACKED IN A 52' - 0" LAYERS HIGH THAT PALLET UNITS ARE STACKED IN A 44' - 7" DIAMETER CCRBETTA MAGAZINE. DIAMETER CORBETTA MAGAZINE. 11'- 7" (APPROX) -MHE AISLE - SEE GENERAL NOTE "J" ON PAGE 2. PLAN VIEW STORAGE PROCEDURES IN 52' - 0" AND 44' - 7" DIA CORBETTA MAGAZINES PAGE 16 \$MCAC FORM 6 1 MOV 65



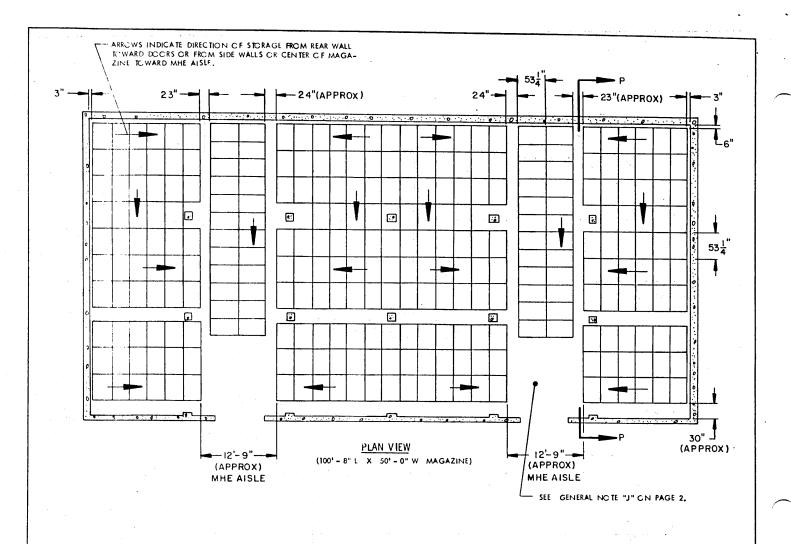
(16 UNITS PER THIS STACK IN A 52'-0" DIAMETER MAGAZINE, 12 UNITS PER THIS STACK IN A 44'-7" DIAMETER MAGAZINE).

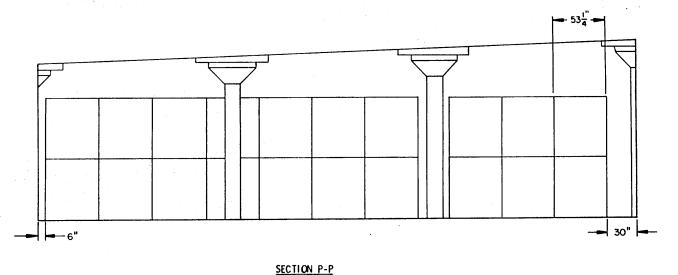


FOR "GENERAL NOTES", SEE PAGE 2.

SPECIAL NO TE:

THE PRINCIPLES OF STORAGE IN 52' - 0" DIAMETER CORBETTA MAGAZINES CAN ALSO BE APPLIED FOR STORAGE IN 44' - 7" DIAMETER OR OTHER DIAMETER CORBETTA MAGAZINES. SOME PALLET STACKS MUST BE OMITTED AND PALLET UNITS MAY NEED TO BE OMITTED FROM SOME PALLET STACKS TO PROVIDE THE NECESSARY CLEARANCE FROM THE MAGAZINE WALL.



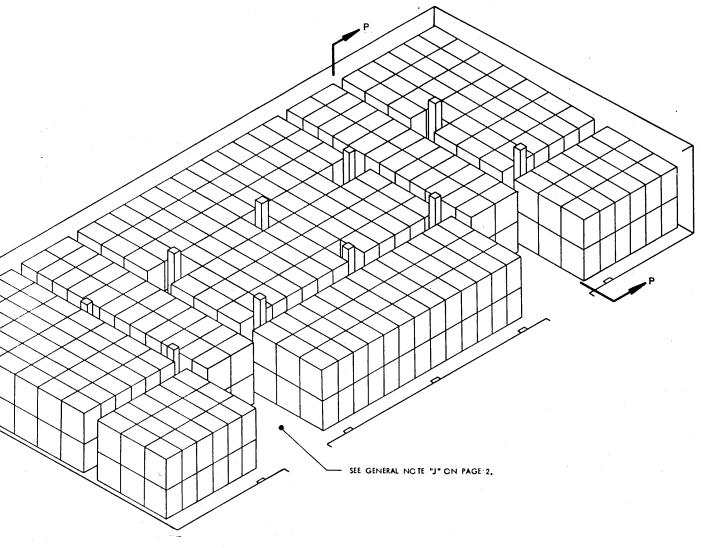




STORAGE IN 100' - 8" L X 50' - 0" W MAGAZINE

ITEM QUANTITY

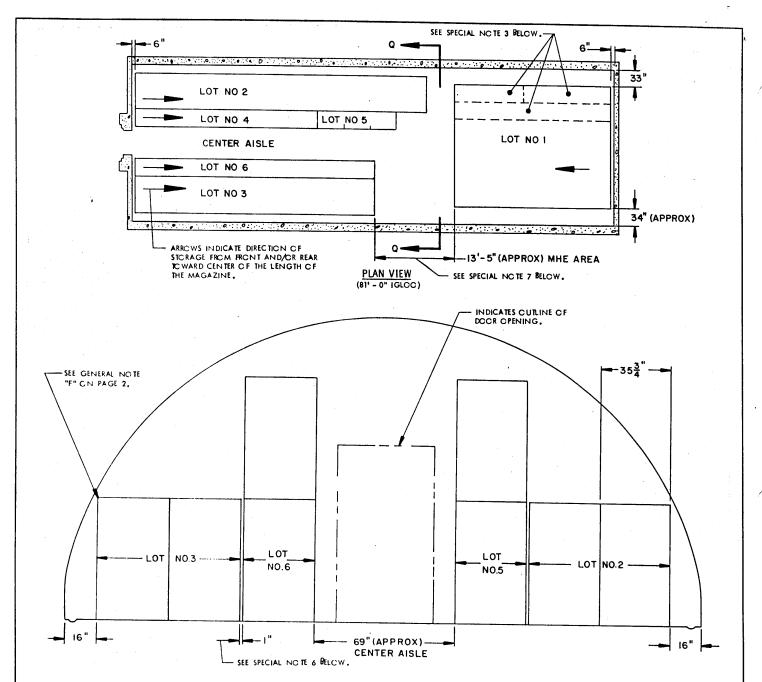
PALLET UNIT ----- 582



1SOMETRIC VIEW (100" - 8" L X 50" - 0" W MAGAZINE)

FOR "GENERAL NOTES", SEE PAGE 2.

PAGE 19



SPECIAL NO TES:

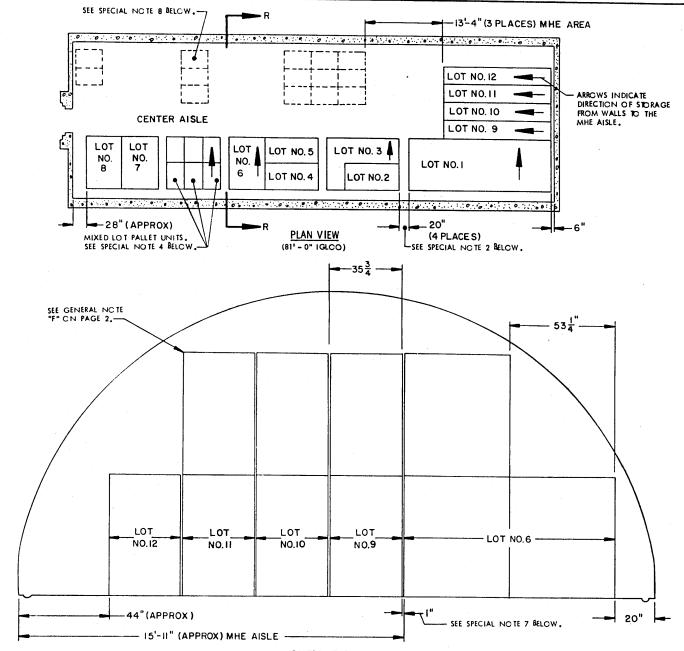
- THE STORAGE PLANS AND CONFIGURATIONS SHOWN ON THIS PAGE ARE TYPICAL ONLY, AND APPLY TO RELATIVELY LARGE LOTS. ADAPTIONS MAY BE MADE AS NUMBER AND SIZES OF LOTS TO BE STORED IN MAGAZINE REQUIRE.
- 2. AN INSPECTION/INVENTORY AISLE MUST BE PROVIDED AT ONE SIDE OR END OF EACH LOT.
- 3. GENERALLY, THE LARGEST LCT SHOULD BE STORED IN THE REAR OF THE MAGAZINE, HOWEVER, THE REAR AREA MAY BE USED TO STORE MORE THAN ONE LCT BY ERECTING ROWS SIMILAR TO THOSE SHOWN IN THE FRONTAL AREA. AN MHE AISLE WILL BE REQUIRED ON ONE SIDE OF THE MAGAZINE, AND EACH LCT MUST BE ACCESSIBLE FOR REMOVAL AND INSPECTION/INVENTORY IN ACCORDANCE WITH OTHER CRITERIA SPECIFIED IN THESE SPECIAL NOTES AND IN THE GENERAL NOTES ON PAGE 2.
- 4. EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE.
 A SINGLE-LOT OF PALLET UNITS IS CONSIDERED "ACCESSIBLE" IF NO MORE THAN
 TWELVE (12) "LIFTS" OF ANOTHER LOT OR LOTS HAVE TO BE MADE TO GAIN
 ACCESS TO THAT LOT. A LIFT WILL CONSIST OF ONE (1) PALLET UNIT.

(CONTINUED AT RIGHT)

(SPECIAL NO TES CONTINUED)

- 5. FOR STORAGE OF MULTIPLE LOTS, THE DISTANCE FROM THE SIDEWALL WILL SE BASED ON THE OVERHEAD CLEARANCE REQUIRED FOR MHE.
- 6. WHEN TWO LOTS ARE STORED ADJACENT TO EACH OTHER, THEY SHOULD BE SEPARATED BY AT LEAST 1" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.
- 7. A 13' 5" MHE OPERATING AREA HAS BEEN SHOWN. THE MHE OPERATING AREA CAN BE ENLARGED AS REQUIRED TO SUIT AVAILABLE FORKLIFT TRUCK, AND SHOULD BE MADE SMALLER IF AVAILABLE MHE PERMITS. A "CENTER AISLE" (SPACE BETWEEN STORAGE ON EACH SIDE OF MAGAZINE) IS TO BE AT LEAST AB INCHES WIDE. AN AISLE SLIGHTLY WIDER THAN 48 INCHES WILL ENHANCE FOR KLIFT TRUCK MOVEMENT WITHIN A MAGAZINE; HOWEVER, THIS AISLE SHOULD NOT BE MADE WIDER IF A LOSS OF STORAGE RESULTS.

TYPICAL MULTIPLE-LOT STORAGE IN IGLOO AND ARCH TYPE MAGAZINES



SPECIAL NOTES

SECTION R-R

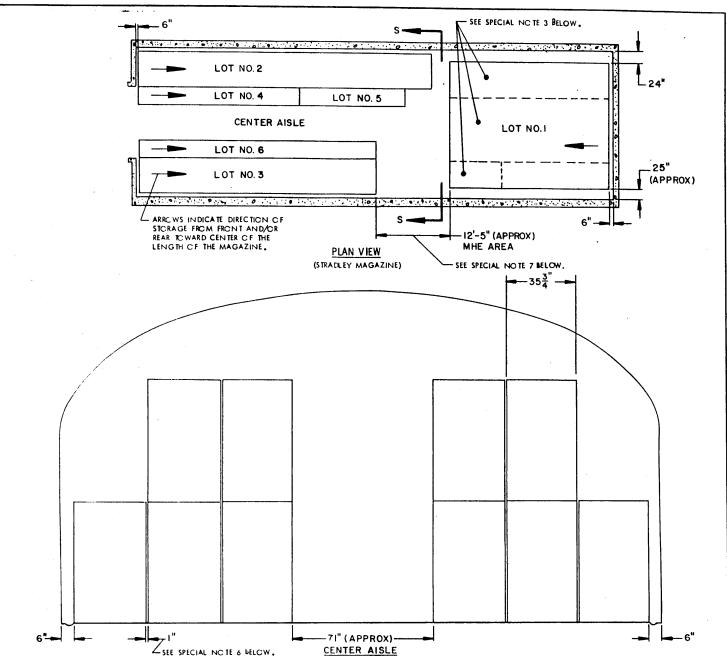
- THE STURAGE PLANS AND CONFIGURATIONS SHOWN ON THIS PAGE ARE TYPICAL ONLY, AND APPLY TO STORAGE OF NUMEROUS SMALL LOTS. ADAPTIONS MAY BE MADE AS NUMBER AND SIZES OF LOTS TO BE STORED IN MAGAZINE REQUIRE.
- 2. AN INSPECTION/INVENTORY AISLE NOT LESS THAN 18" WIDE MUST BE PROVIDED AT ONE SIDE OF EACH "BURIED" LOT.
- 3. GENERALLY, THE LARGEST LCT SHOULD BE STORED IN THE REAR OF THE MAGAZINE, HOWEVER, THE REAR AREA MAY BE USED TO STORE MORE THAN ONE LCT BY ERECTING STACKS SIMILAR TO THOSE SHOWN IN THE FRONTAL AREA. AN MHE AISLE WILL BE REQUIRED ON ONE SIDE OF THE MAGAZINE, AND EACH LCT MUST BE ACCESSIBLE FOR REMOVAL AND INSPECTION/INVENTORY IN ACCORDANCE WITH OTHER CRITERIA SPECIFIED IN THESE SPECIAL NOTES AND IN THE GENERAL NOTES ON PAGE 2.
- 4. A MIXED-LCT PALLET UNIT MAY HAVE FROM TWO LCTS PER PALLET UNIT UPWARDS TO AS MANY DIFFERENT LCTS AS DRUMS WITHIN THAT UNIT, HOWEVER, ALL LCTS WITHIN THE PALLET UNIT MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.
- 5. EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE, PALLET UNITS OF A SINGLE-LOT OR MIXED-LOT PALLET UNITS ARE CONSIDERED "ACCESSIBLE" IF NO MORE THAN TWELVE (12) "LITE" OF ANOTHER LOT OR LOTS HAVE TO BE MADE TO GAIN ACCESS TO THE SINGLE-LOT OR MIXED-LOT UNITS. A "LIFT" WILL CONSIST OF ONE (1) PALLET UNIT.

(CONTINUED AT RIGHT)

(SPECIAL NO TES CONTINUED)

- 6. FOR STORAGE OF MULTIPLE LOTS, THE DISTANCE FROM THE SIDEWALL WILL BE BASED ON THE OVERHEAD CLEARANCE REQUIRED FOR MHE.
- WHEN TWO LOTS ARE STORED ADJACENT TO EACH OTHER, THEY SHOULD BE SEPARATED BY AT LEAST 1" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.
 - AREAS INCLOSED BY DOTTED LINES INDICATE LOCATIONS WHERE ADDITIONAL LOTS MAY BE STORED OR WHERE ADDITIONAL ITEMS MAY BE STORED OR WHERE ADDITIONAL ITEMS MAY BE STORED, THAT ARE FROM THE LOT OR LOTS WHICH ARE DIRECTLY OR ALMOST DIRECTLY ACROSS THE CENTER AISLE ON THE OTHER SIDE OF THE MAGAZINE. COMPLIANCE WITH ALL OF THE MULTIPLE LOT CRITERIA AS SET FORTH ON THIS PAGE MUST BE OBSERVED. THE SIZE OF THE LOTS BEING STORED AND THE CRITERIA OF SPECIAL NOTE 5, RELATIVE TO "12 LIFTS", WILL BE MAJOR FACTORS IMPACTING ON THE NUMBER OF UNIT LOADS THAT CAN BE STORED IN AN "ADDITIONAL STORAGE LOCATION". MORE OR FEWER STACKS THAN SHOWN MAY BE STORED AT ANY ONE OF THE ADDITIONAL STORAGE LOCATIONS. A 13'-4" MHE OPERATING AREA HAS BEEN SPECIFIED FOR ACCESS TO EACH "ADDITIONAL LOCATION" BY FORKLIFIT TRUCK, THIS OPERATING AREA IS BASED ON REQUIREMENTS OF FORKLIFT TRUCKS, COMMONLY USED IN STORAGE MAGAZINES. THE MHE OPERATING AREA CAN BE ENLARGED AS REQUIRED TO SUIT AVAILABLE FORKLIFT TRUCKS, AND SHOULD BE MADE SMALLER IF AVAILABLE MHE PERMITS. A "CENTER AISLE" (SPACE BETWEEN STORAGE ON ONE SIDE OF A MAGAZINE AND AN "ADDITIONAL STORAGE LOCATION") IS TO BE AT LEAST AB INCHES WIDE. AN AISLE SLIGHTLY WIDER THAN 48 INCHES WILL ENHANCE FORKLIFT TRUCK MOVEMENT WITHIN A MAGAZINE: HOWEVER, THIS ASSLE SHOULD NOT BE MADE WIDER IF A LOSS IN STORAGE RESULTS.

TYPICAL MULTIPLE-LOT STORAGE IN IGLOO AND ARCH TYPE MAGAZINES



SPECIAL NO TES:

- . THE STORAGE PLANS AND CONFIGURATION SHOWN ON THIS PAGE ARE TYPICAL ONLY, AND APPLY TO RELATIVELY LARGE LOTS. ADAPTATIONS MAY BE MADE AS NUMBER AND SIZES OF LOTS TO BE STORED IN MAGAZINE REQUIRE.
- 2. AN INSPECTION/INVENTORY AISLE MUST DE PROVIDED AT ONE SIDE OR END OF EACH LOT.
- 3. GENERALLY, THE LARGEST LOT SHOULD BE STORED IN THE REAR OF THE MAGAZINE, HOWEVER, THE REAR AREA MAY BE USED TO STORE MORE THAN ONE LOT BY ERECTING ROWS SIMILAR TO THOSE SHOWN IN THE FRONTAL AREA. A CENTER AISLE WILL NOT BE REQUIRED IN THE REAR AREA AS LONG AS EACH LOT IS ACCESSIBLE FOR REMOVAL AND INSPECTION/INVENTORY IN ACCORDANCE WITH OTHER CRITERIA SPECIFIED IN THESE SPECIAL NOTES AND IN THE GENERAL NOTES ON PAGE 2.
- 4. EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE.
 A SINGLE-LOT OF PALLET UNITS IS CONSIDERED "ACCESSIBLE" IF NOT MORE THAN
 TWELVE (12) "LIFTS" OF ANOTHER LOT OR LOTS HAVE TO BE MADE TO GAIN
 ACCESS TO THAT LOT. A "LIFT" WILL CONSITS OF ONE (1) PALLET UNIT.

(CONTINUED AT RIGHT)

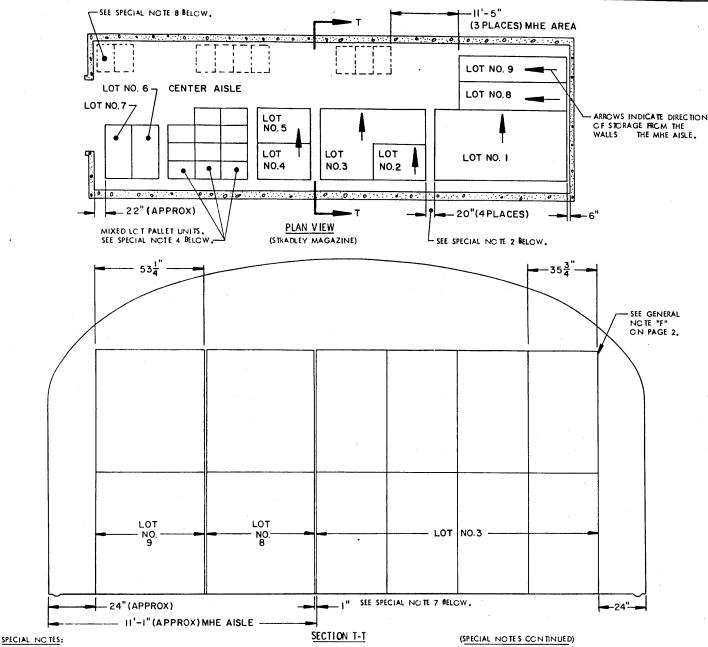
(SPECIAL NOTES CONTINUED)

- 5. FOR STORAGE OF MULTIPLE LOTS, THE DISTANCE FROM THE SIDEWALL WILL BE BASED ON THE OVERHEAD CLEARANCE REQUIRED FOR MHE.
- S. WHEN TWO LOTS ARE STORED ADJACENT TO EACH OTHER, THEY SHOULD BE SEPARATED BY AT LEAST 1" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.
- 7. A 12' 5" MHE OPERATING AREA HAS BEEN SHOWN. THE MHE OPERATING AREA CAN BE ENLARGED AS REQUIRED TO SUIT AVAILABLE FORKLIFT TRUCK, AND SHOULD BE MADE SMALLER IF AVAILABLE MHE PERMITS. A "CENTER AISLE" (SPACE BETWEEN STORAGE ON EACH SIDE OF MAGAZINE) IS TO BE AT LEAST 48 INCHES WIFE. AN AISLE SLIGHTLY WIDER THAN 48 INCHES WILL ENHANCE FORKLIFT TRUCK MOVEMENT WITHIN A MAGAZINE, HOWEVER, THIS AISLE SHOULD NOT BE MADE WIDER IF A LOSS OF STORAGE RESULTS.

PAGE 22

TYPICAL MULTIPLE-LOT STORAGE IN STRADLEY AND OVAL ARCH TYPE MAGAZINES

SECTION S-S



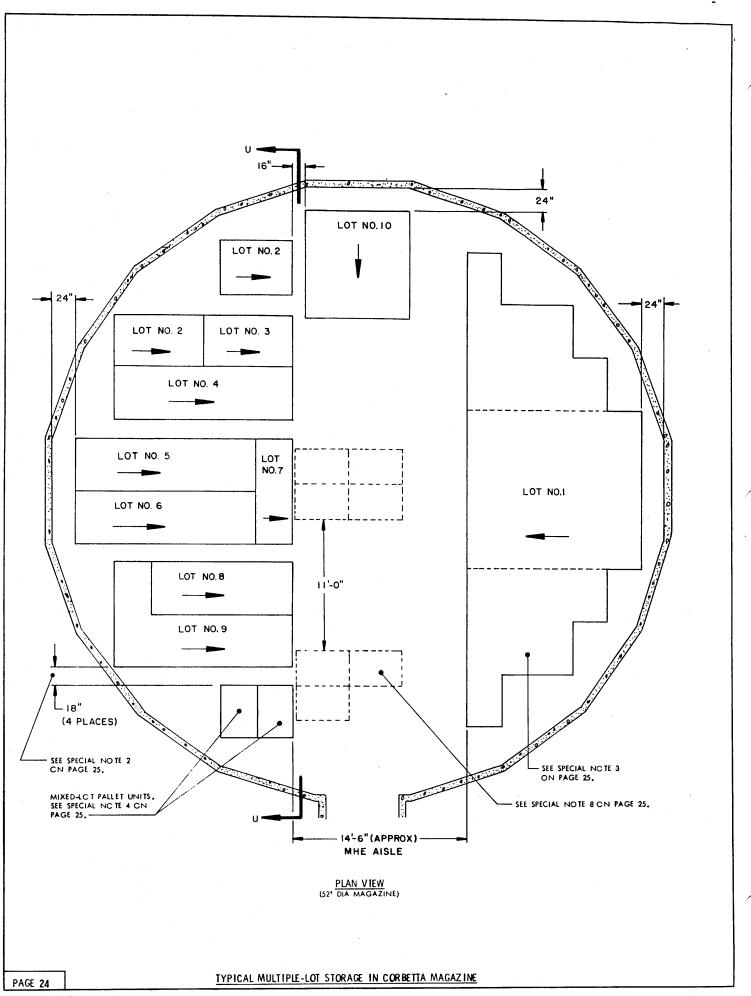
- THE STORAGE PLANS AND CONFIGURATIONS SHOWN ON THIS PAGE ARE TYPICAL CNLY AND APPLY TO STORAGE OF NUMEROUS SMALL LOTS. ADAPTATIONS MAY BE MADE AS NUMBER AND SIZES OF LOTS TO BE STORED IN MAGAZINE REQUIRE.
- 2. AN INSPECTION/INVENTORY AISLE NOT LESS THAN 18" WIDE MUST BE PROVIDED AT ONE SIDE OF EACH "BURIED" LOT.
- 3. GENERALLY, THE LARGEST LCT SHOULD BE STORED IN THE REAR OF THE MAGAZINE, HOWEVER, THE REAR AREA MAY BE USED TO STORE MORE THAN ONE LCT BY ERECTING STACKS SIMILAR TO THOSE SHOWN IN THE FRONTAL AREA. AN MHE AISLE WILL BE REQUIRED ON ONE SIDE OF THE MAGAZINE, AND EACH LOT MUST BE ACCESSIBLE FOR REMOVAL AND INSPECTION/INVENTORY IN ACCORDANCE WITH C THER CRITERIA SPECIFIED IN THESE SPECIAL NOTES AND IN THE GENERAL NOTE ON PAGE 2
- 4. A MIXED-LOT PALLET UNIT MAY HAVE FROM TWO LOTS PER PALLET UNIT UPWARD TO AS MANY DIFFERENT LOTS AS DRUMS WITHIN THAT UNIT, HOWEVER, ALL DRUMS AND LOTS WITHIN THE PALLET UNIT MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.
- 5. EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE. PALLET UNITS OF A SINGLE-LOTOR MIXED-LOT PALLET UNITS ARE CONSIDERED "ACCESSIBLE" IF NO MORE THAN TWELVE (12) "LIFTS" OF ANOTHER LOTOR LOTS HAVE TO BE MADE TO GAIN ACCESS TO THE SINGLE-LOTOR MIXED-LOT UNITS. A "LIFT" WILL CONSIST OF CHO (1) PALLET UNIT.

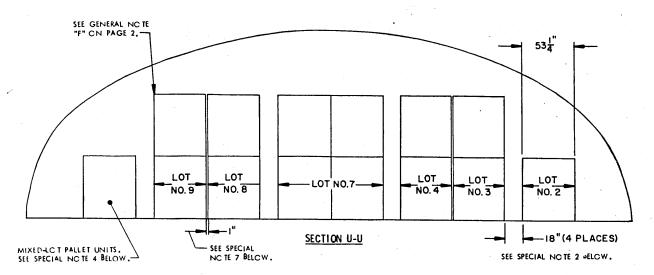
(CONTINUED AT RIGHT)

- 6. FOR STORAGE OF MULTIPLE LOTS, THE DISTANCE FROM THE SIDEWALL WILL BE BASED ON THE OVERHEAD CLEARANCE REQUIRED FOR MHE.
- WHEN TWO LC IS ARE STORED, ADJACENT TO EACH OTHER, THEY
 SHOULD BE SEPARATED BY AT LEAST 1" TO PROVIDE CLEARANCE FOR
 REMOVAL OF EITHER LOT.
- AREAS INCLOSED BY DOTTED LINES INDICATE LOCATIONS WHERE ADDITIONAL LOTS MAY BE STORED OR WHERE ADDITIONAL ITEMS MAY BE STORED OR WHERE ADDITIONAL ITEMS MAY BE STORED, THAT ARE FROM THE LOT OR LOTS WHICH ARE DIRECTLY OR ALMOST DIRECTLY ACROSS THE CENTER AISLE ON THE OTHER SIDE OF THE MAGAZINE. COMPLIANCE WITH ALL OF THE MULTIPLE LOT CRITERIA AS SET FORTH ON THIS PAGE MUST BE OBSERVED. THE SIZE OF THE LOTS BEING STORED AND THE CRITERIA OF SPECIAL NOTE 5, RELATIVE TO "12 LIFTS", WILL BE MAJOR FACTORS IMPACTING ON THE NUMBER OF UNIT LOADS THAT CAN BE STORED IN AN "ADDITIONAL STORAGE LOCATION". MORE OR FEWER STACKS THAN SHOWN MAY BE STORED AT ANY ONE OF THE ADDITIONAL STORAGE LOCATIONS. AN 111-5" MHE OPERATING AREA HAS BEEN SPECIFIED FOR ACCESS TO EACH "ACDITIONAL LOCATION" BY FORMLIFT TRUCK. THIS OPERATING AREA IS BASED ON REQUIREMENTS OF FORMLIFT TRUCKS COMMONLY USED IN STORAGE MAGAZINES. THE MHE OPERATING AREA CAN BE ENLARGED AS REQUIRED TO SUIT AVAILABLE FORMLIFT TRUCKS, AND SHOULD BE MADE SMALLER IF AVAILABLE MHE PERMITS. A "CENTER AISLE" (SPACE DETWEEN STORAGE CON ONE SIDE OF A MAGAZINE AND AN "ADDITIONAL STORAGE LOCATION") IS TO BE AT LEAST 57 INCHES WIDE. AN AISLE SLIGHTLY WIDER THAN 57 INCHES WILL ENHANCE FORMLIFT TRUCK MOVEMENT WITHIN A MAGAZINE; HOWEVER, THIS AISLE SHOULD NOT BE MADE WIDER IF A LOSS IN STORAGE RESULTS.

TYPICAL MULTIPLE-LOT STORAGE IN STRADLEY AND OVAL ARCH TYPE MAGAZINES

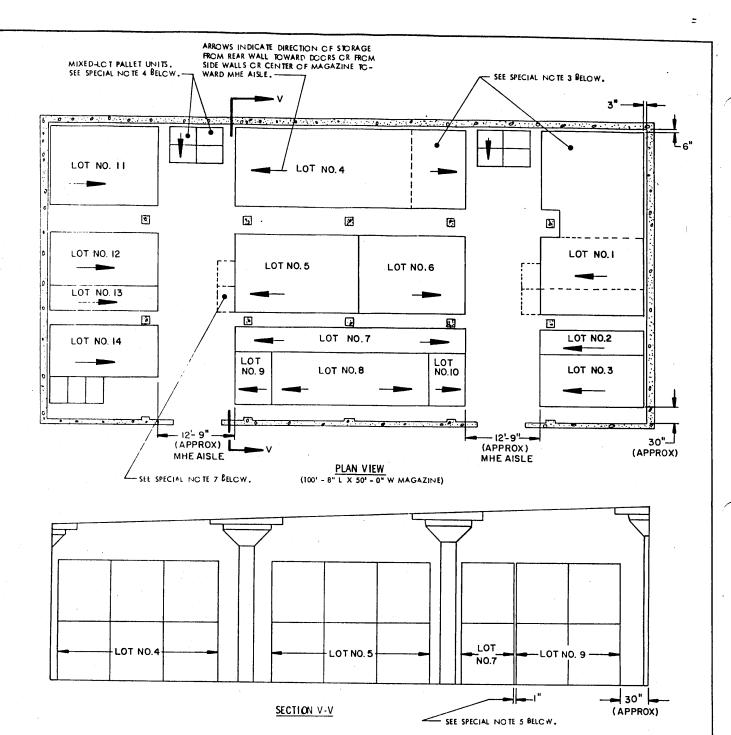
PAGE 23





SPECIAL NOTES:

- THE STC RAGE PLANS AND CONFIGURATIONS SHOWN ON THIS PAGE AND ON PAGE 24 ARE TYPICAL ONLY. ADAPTATIONS MAY BE MADE AS NUMBER AND SIZES OF LOTS TO BE STORED IN MAGAZINE REQUIRE.
- 2. AN INSPECTION/INVENTORY AISLE NOT LESS THAN 18" WIDE MUST LE PRO-VIDED AT ONE SIDE OF EACH "BURIED" LCT.
- 3. GENERALLY, THE LARGEST LCT SHOULD BE STORED ON ONE SIDE OF THE MAGAZINE. HOWEVER, BOTH SIDES MAY BE USED TO STORE MORE THAN ONE LOT BY ERECTING ROWS SIMILAR TO THOSE SHOWN ON THE LEFT SIDE. EACH ADDITIONAL LCT MUST BE ACCESSIBLE FOR REMOVAL AND INSPECTION/INVENTORY IN ACCORDANCE WITH OTHER CRITERIA SPECIFIED IN THESE SPECIAL NOTES AND IN THE GENERAL NOTES ON PAGE 2.
- 4. A MIXED-LCT PALLET UNIT MAY HAVE FROM TWO LCTS PER PALLET UNIT UP-WARDS TO AS MANY DIFFERENT LCTS AS DRUMS WITHIN THAT UNIT. HOWEVER, ALL LCTS WITHIN THE PALLET UNIT MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.
- 5. EACH LCT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE.
 PALLET UNITS OF A SINGLE-LCT OR MIXED-LCT PALLET UNITS ARE CONSIDERED
 "ACCESSIBLE" IF NO MORE THAN TWELVE (12) "LIFTS" OF ANOTHER LCT OR
 LOTS HAVE TO BE MADE TO GAIN ACCESS TO THE SINGLE-LCT OR MIXED-LCT
 UNITS. A "LIFT" WILL CONSIST OF ONE (1) PALLET UNIT.
- 6. FOR STORAGE OF MULTIPLE LOTS, THE DISTANCE FROM THE WALL WILL BE BASED ON THE OVERHEAD CLEARANCE REQUIRED FOR MHE.
- 7. WHEN TWO LOTS ARE STORED ADJACENT TO EACH OTHER, THEY SHOULD BE SEPARATED BY AT LEAST 1" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.
- 8. AREAS INCLC SED BY DO TTED LINES INDICATE LOCATIONS WHERE ADDITIONAL LOTS MAY BE STORET OR WHERE ADDITIONAL LOTS MAY BE STORET OR WHERE ADDITIONAL LOTS MAY BE STORET OR WHERE ADDITIONAL LITEMS MAY BE STORED, THAT ARE FROM A LOT OR LOTS ADJACENT TO THE MHE AISLE. COMPLIANCE WITH ALL OF THE MULTIPLE-LOT CRITERIA AS SET FORTH ON THIS PAGE MUST BE OBSERVED. THE SIZE OF THE LOTS BEING STORED AND THE CRITERIA OF SPECIAL NOTES, RELATIVE TO "12 LIFTS", WILL BE MAJOR FACTORS IMPACTING ON THE NUMBER OF PALLET UNITS THAT CAN BE STORED IN AN "ADDITIONAL STORAGE LOCATION". MORE OR FEWER STACKS THAN SHOWN MAY BE STORED AT ANY ONE OF THE ADDITIONAL STORAGE LOCATIONS. AN 11"-0" MHE OPERATING AREA HAS BEEN SPECIFIED FOR ACCESS TO EACH "ADDITIONAL LOCATION" BY FORKLIFT TRUCK. THIS OPERATING AREA IS BASED ON REQUIREMENTS OF FORKLIFT TRUCKS. COMMONLY USED IN STORAGE MAGAZINES. THE MHE OPERATING AREA CAN BE ENLARGED AS REQUIRED TO SUIT AVAILABLE FORKLIFT TRUCKS, AND SHOULD BE MADE SMALER IF AVAILABLE MHE PERMITS. A "CENTER AISLE" (SPACE BEWEEN STORAGE ON ONE SIDE OF A MAGAZINE AND AN "ADDITIONAL STORAGE LOCATION") IS TO BE AT LEAST SB INCHES WIDE. AN AISLE SLIGHTLY WIDER THAN SB INCHES WILL ENHANCE FORKLIFT TRUCK MOVEMENT WITHIN A MAGAZINE; HOWEVER, THIS AISLE SHOULD NOT BE MADE WIDER IF A LOSS IN. STORAGE RESULTS.



SPECIAL NO TES:

- THE STORAGE PLANS AND CONFIGURATIONS SHOWN ON THIS PAGE ARE TYPICAL ONLY. ADAPTATIONS MAY BE MADE AS NUMBER AND SIZE OF LOTS TO BE STORED IN MAGAZINE REQUIRE.
- AN INSPECTION/INVENTORY AISLE NOT LESS THAN 18" WIDE MUST BE PRO-VIDED AT ONE SIDE OF EACH "BURIED" LOT.
- 3. GENERALLY, THE LARGEST LOT SHOULD BE STORED IN THE REAR OR ON ONE SIDE CIFT THE MAGAZINE. HOWEVER, THESE AREAS MAY BE USED TO STORE MORE THAN ONE LOT BY ERECTING ROWS SIMILAR TO THOSE SHOWN IN THE SMALLER SIZED LOTS, OR AS TYPICALLY SHOWN BY DOTTED LINES. EACH ADDITIONAL LOT MUST BE ACCESSIBLE FOR REMOVAL AND INSPECTION/INVENTORY IN ACCORDANCE WITH OTHER CRITERIA SPECIFIED IN THESE SPECIAL NOTES AND IN THE GENERAL NOTES ON PAGE 2.
- 4. A MIXED-LCT PALLET UNIT MAY HAVE FROM TWO LCTS PER PALLET UNIT UP-WARDS TO AS MANY DIFFERENT LCTS AS DRUMS WITHIN THAT UNIT. HO WEVER, ALL LOTS WITHIN THE PALLET UNIT MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.

(CONTINUED AT RIGHT)

(SPECIAL NOTES CONTINUED)

- 5. WHEN TWO LOTS ARE STORED ADJACENT TO EACH OTHER, THEY SHOULD BE SEPARATED BY AT LEAST 1" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.
- 6. EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MCYEMENT BY MHE. PALLET UNITS OF A SINGLE-LOT ARE CONSIDERED "ACCESSIBLE" IF NO MCRE THAN TWENTY-FOUR (24) "LIFTS" OF ANOTHER LOT OR LOTS HAVE TO BE MADE TO GAIN ACCESS TO THE SINGLE-LOT. A "LIFT" WILL CONSIST OF ONE (1) PALLET UNIT.
- 7. THE MHE AISLE MAY BE USED TO STORE ADDITIONAL LOTS, OR ADDITIONAL ITEMS THAT ARE FROM A LOT OR LOTS ADJACENT TO THE MHE AISLE AS SHOWN IN THE AREAS INCLOSED BY DOTTED LINES. ADEQUATE SPACE FOR MHE OPERATION MUST BE AVAILABLE FOR THE ADDITIONAL STORAGE. ALSO, COMPLIANCE WITH ALL OF THE MULTIPLE-LOT CRITERIA AS SET FORTH ON THIS PAGE MUST BE OBSERVED.

TYPICAL MULTPLE-LOT STORAGE IN RECTANGULAR MAGAZINE