STORAGE IN APPROVED MAGAZINES OF ROCKET MOTOR, MK17 OR SR116, FOR THE SIDEWINDER MISSILE, PACKED 4 PER CNU-302/E CONTAINER

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19 13	RAGE PROCEDURES 81'-0', 60'-8' AND 40'-4" L X 26'-6" W X 12'-9' H IGLOO MAGAZINES 81'-2" L X 26'-6" W X 12 ¹ 1-3/4" H ARCH TYPE MAGAZINE (IGLOO)	2 3 4, 5 4, 5 6, 7 6, 7 6, 7 8, 9 8, 9

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	JANUARY 1982			
	CLASS	DIVISION	DRAWING	FILE
	19	48	7059/ 3A	SP 1-3-4 14-22J10

DO NOT SCALE

GENERAL NOTES

- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1 AND AUGMENTS 1M 743-200-1 (CHAPTER 5).
- B. THE STORAGE PROCEDURES SPECIFIED IN THIS DRAWING ARE APPLICABLE TO THE ROCKET MOTOR, MK17 OR SR116, FOR THE SIDEWINDER MISSILE, PACKED ONE (1) PER CNU-302/E METAL SHIPPING AND STORAGE CONTAINER. SUBSEQUENT REFERENCE TO CONTAINER MEANS THE CNU-302/E CONTAINER WITH CONTENTS.
- C. FOR DETAILS OF THE CNU-302/E SHIPPING AND STORAGE CONTAINER, SEE "CONTAINER DETAIL" ON PAGE 3.
 - CONTAINER DIMENSIONS-----85-1/2" LONG BY 18-1/2" WIDE BY 23-1/8" HIGH, GROSS WEIGHT -------565 POUNDS (APPROX).
- D. FOR QUANTITY DISTANCE AND COMPATIBILITY GROUP OF THIS ITEM, SEE TO 11A-1-46.

 CAUTION: THIS ITEM IS IN A "PROPULSIVE STATE" AND MUST BE STORED WITH THE
 FORWARD END FACING TOWARD ONE SIDE WALL AND/OR THE REAR WALL AS INDICATED BY THE DIRECTIONAL ARROWS ON THE STORAGE VIEWS. ADDITIONALLY,
 CONTAINERS MUST NOT BE STACKED MORE THAN SIX (6) CONTAINERS HIGH.
- E. THE STORAGE 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 CONTAINERS IN OTHER 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.
- F. AISLE DIMENSIONS AS SHOWN HEREIN MAY BE ADJUSTED TO SUIT LOCAL CON-DITIONS AND/OR AVAILABLE MATERIAL HANDLING EQUIPMENT (MHE), HOWEVER, AN 18" MINIMUM INSPECTION AISLE MUST BE MAINTAINED AT THE AFT END OF THE CONTAINER. IT MAY BE NECESSARY TO OMIT A ROW OF LENGTHWISE STORED STACKS FOR SUFFICIENT WIDTH TO ACCOMPLISH STACKING OPERATIONS. IF A ROW IS OMITTED, THE LENGTH OF THE WEDGE MUST BE ADJUSTED.
- G. <u>CAUTION</u>: 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.
- H. WEDGES ARE REQUIRED TO PERMIT LEVEL STACKING OF THE CONTAINERS IN IGLOO, ARCH TYPE AND STRADLEY MAGAZINES, WHICH HAVE FLOORS THAT SLOPE TOWARD THE SIDEWALL OF THE MAGAZINE. IN OVAL ARCH, CORBETTA, AND RECTANGULAR MAGAZINES, STACK-STABLIZING DUNNAGE IN THE FORM OF "SHIMS" PROBABLY WILL BE REQUIRED TO ACHIEVE SOUND AND ACCEPTABLE STABLE STACKS. SHIM MATERIAL OF VARYING THICKNESS WILL BE USED AS REQUIRED TO GAIN LEVEL OR NEARLY LEVEL STACKS AND SOLID BEARING WITHIN A STACK FROM THE FLOOR OF A MAGAZINE TO THE TOP OF THE STACK.
- J. IF AVAILABLE MHE PERMITS, ADDITIONAL CONTAINERS MAY BE STORED WITHIN THE FRONTAL AREA AND/OR OTHER AVAILABLE AREA OF THE MAGAZINE.
- K. STORED CONTAINERS MUST NOT CONTACT THE WALLS OF A MAGAZINE. TO PROVIDE FOR THIS MANDATORY CLEARANCE REQUIREMENT, CONTAINERS MAY BE ELIMINATED FROM THE DEPICTED STORAGE PATTERN AS NECESSARY.
- L. OTHER COMPATIBLE ITEMS MAY BE STORED IN A MAGAZINE WHICH IS PARTIALLY FILLED WITH THE DESIGNATED ITEM.
- M. THE HEIGHT OF THE PACKAGE GUARD ON SOME FORKLIFT TRUCKS MAY NOT PERMIT PLACEMENT OF SOME TOP LAYER CONTAINERS IN THE STACKS SHOWN IN THE STORAGE VIEWS HEREIN, UNLESS TWO UPPER CONTAINERS 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 ADEQUATE CAPACITY WILL BE USED WHEN LIFTING TWO CONTAINERS AS ONE LIFT.
- N. STACKS STABILIZING STRAPS, 3/4" X .028" OR THICKER X 10"-0" STEEL STRAPPING WILL BE INSTALLED AROUND THE FOURTH LAYER CONTAINERS OF TWO ADJACENT CONTAINER STACKS IF EITHER STACK IS FIVE OR MORE CONTAINERS HIGH; TWO (2) STRAPS ARE REQUIRED FOR EACH DOUBLE STACK AS SHOWN. <u>CAUTION</u>: A SINGLE STACK MUST NOT BE STACKED MORE THAN FOUR (4) CONTAINERS HIGH WITHOUT BEING STRAPPED TO AN ADJACENT STACK. POSITION ANTI-CHAFING MATERIAL UNDER STEEL STRAPPING AT ALL POINTS OF STRAP/CONTAINER CONTACT. SEAL THE LAP JOINT OF THE STRAPPING WITH ONE (1) STRAP SEAL LOCATED SO AS NOT TO BE IN CONTACT WITH THE CONTAINER.

(CONTINUED AT RIGHT)

MATERIAL SPECIFICATIONS

LUMBER-----: SEE TM 743-200-1, DUNNAGE LUMBER, FED SPEC MM-L-751.

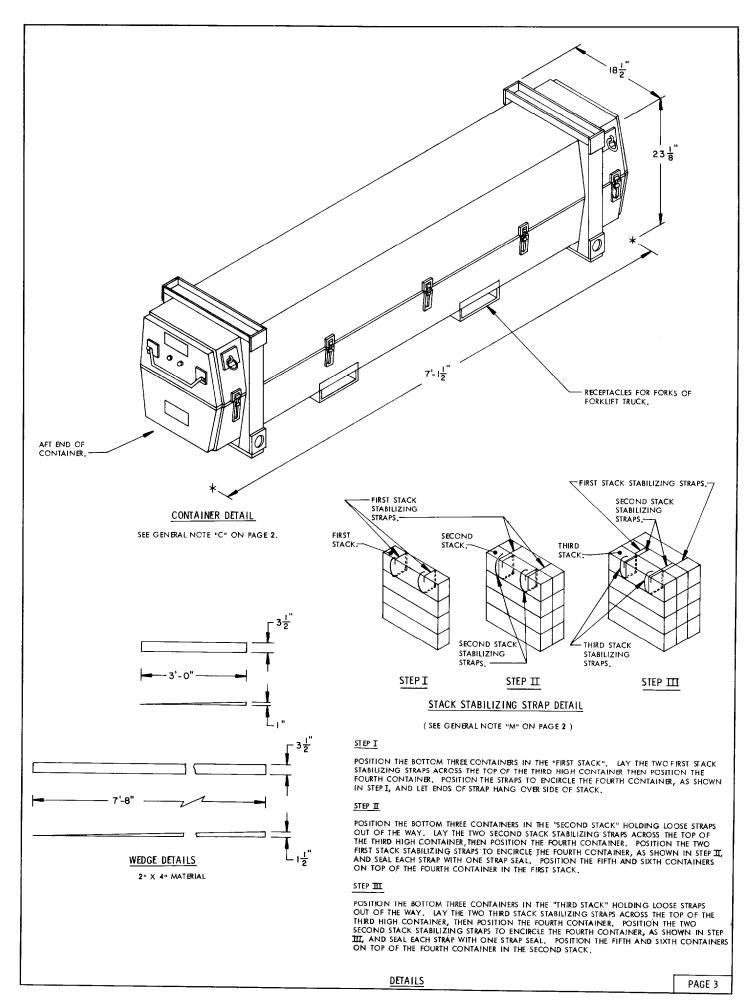
STRAPPING, STEEL-: FED SPEC QQ-S-781; CLASS I, TYPE I OR IV, HEAVY DUTY FINISH B (GRADE 2).

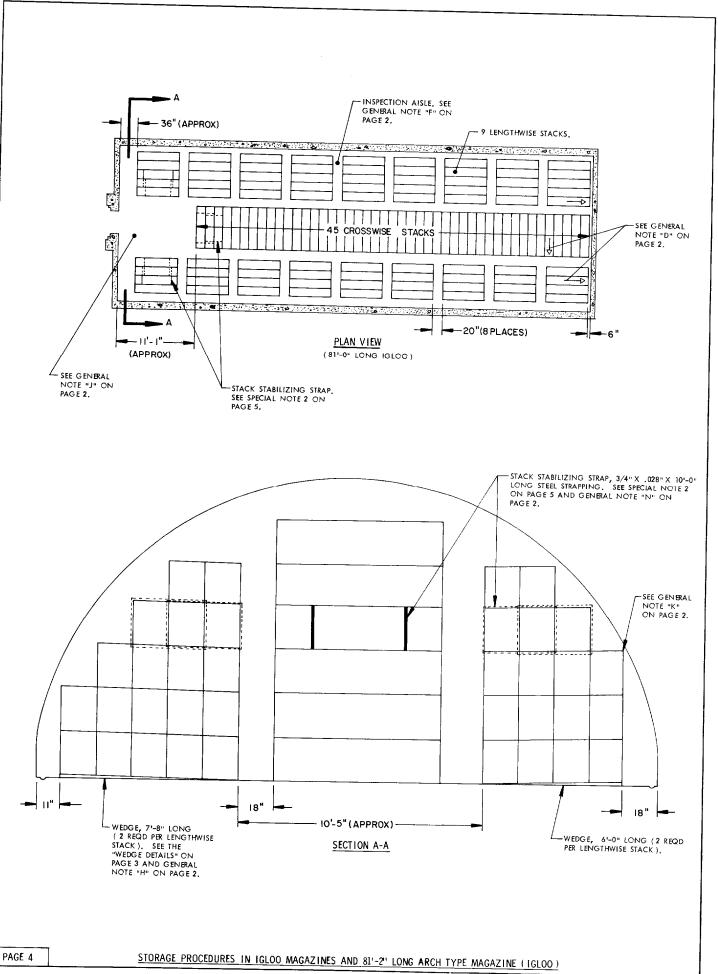
SEAL, STRAP-----: FED SPEC QQ-S-781; TYPE D, STYLE I, II, OR IV, CLASS H, FINISH B (GRADE 2).

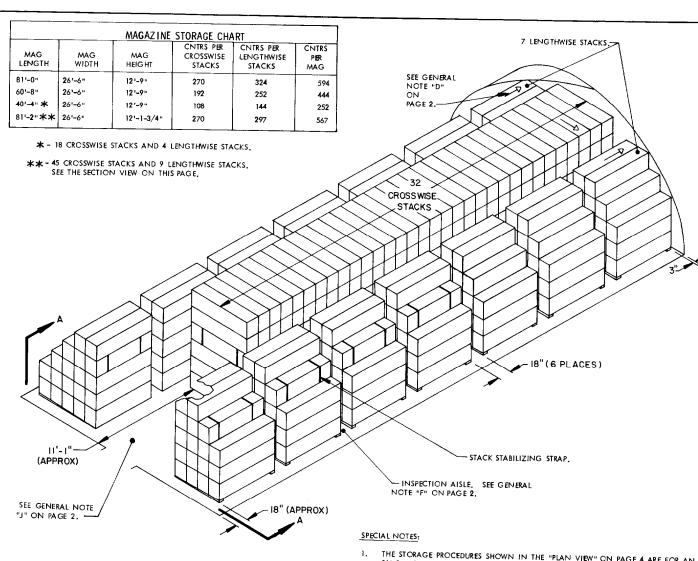
ANTI-CHAFING <u>Material</u>-----: Neutral Barrier Material, Mil-B-121 (Or Equal).

(GENERAL NOTES CONTINUED)

- C. IF THE QUANTITY OF CONTAINERS 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 DELINFATED PROCEDURES ARE TO BE ADJUSTED BY OMITTING STACKS RATHER THAN BY OMITTING LAYERS.
- P. DUNNAGE LUMBER SPECIFIED THROUGHOUT THIS PROCEDURAL DRAWING IS OF NOMINAL SIZE. FOR EXAMPLE, 2" X 4" MATERIAL IS ACTUALLY 1-1/2 THICK BY 3-1/2" WIDE.
- Q. PORTIONS OF THE MAGAZINES, SUCH AS SIDEWALLS, END WALLS, AND ROOFS, HAVE NOT BEEN SHOWN IN THE STORAGE VIEWS FOR CLARITY PURPOSES
- R. CONTAINERS PRESENTLY STORED IN ACCORDANCE WITH A PRIOR APPROVED DRAWING NEED NOT BE RE-STORED SOLELY TO CONFORM TO THE PROCEDURES SPECIFIED IN THIS DOCUMENT.
- S. FOR ADDITIONAL GUIDANCE, ATTENTION IS DIRECTED TO THE "SPECIAL NOTES" SECTIONS WHICH ARE IMMEDIATELY ADJACENT TO THE DEPICTED STORAGE METHODS.



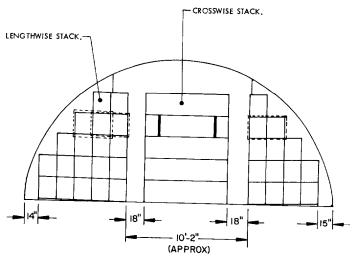




ISOMETRIC VIEW
(60'-8" LONG IGLOO)

- 1. THE STORAGE PROCEDURES SHOWN IN THE "PLAN VIEW" ON PAGE 4 ARE FOR AN 81'-0" LONG IGLOO. THE STORAGE PROCEDURES SHOWN IN THE "ISOMETRIC VIEW" ON THIS PAGE ARE FOR A 60'-8" LONG IGLOO. FOR STORAGE IN A 40'-4" LONG IGLOO, SEE THE "MAGAZINE STORAGE CHART" ON THIS PAGE. FOR STORAGE IN 81'-2" LONG ARCH TYPE MAGAZINE, SEE THE "MAGAZINE STORAGE CHART" AND THE "SECTION VIEW" ON THIS PAGE.
- 2. STACK STABILIZING STRAPS MUST BE PRE-POSTIONED. SEE "STACK STABILIZING STRAP DETAIL", ON PAGE 3. INSTALL TO ENCIRCLE TWO ADJACENT CONTAINERS IN THE FOURTH LAYER OF THE STACKS AS SHOWN. THESE STRAPS ARE ONLY REQUIRED IN THE STACKS OF A ROW WHEN THE STACK IS FIVE CONTAINERS OR MORE IN HEIGHT. SEE GENERAL NOTE "N" ON PAGE 2. ALTHOUGH REQUIRED, ALL STACK IS TABILIZING STRAPS HAVE NOT BEEN SHOWN IN SOME VIEWS FOR CLARITY PURPOSES.

FOR "GENERAL NOTES" AND "MATERIAL SPECIFI-CATIONS", SEE PAGE 2.

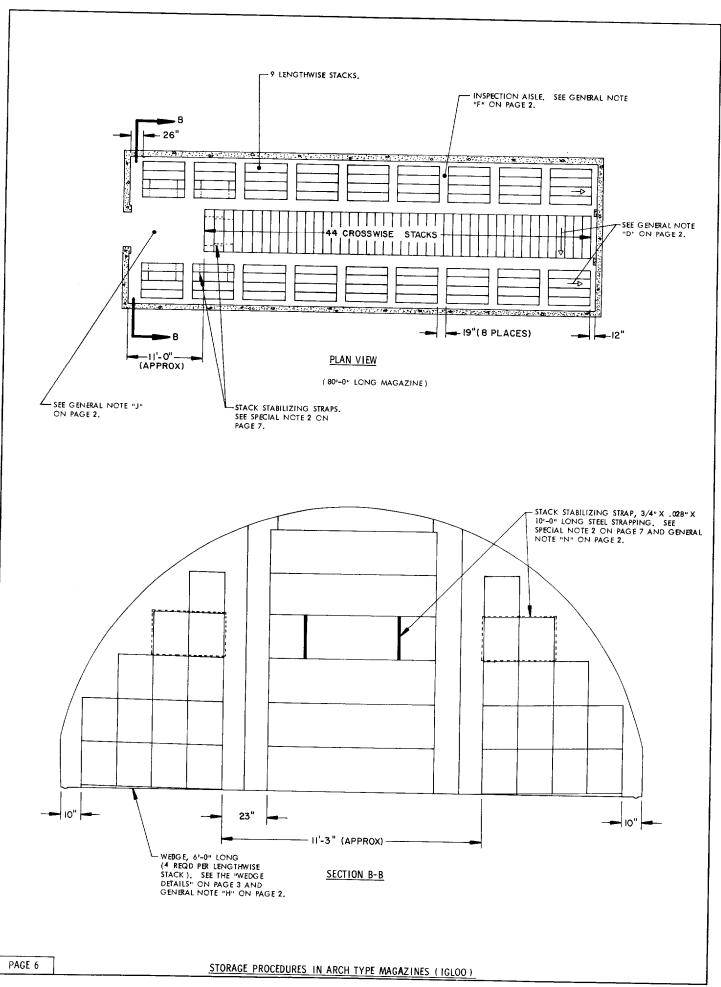


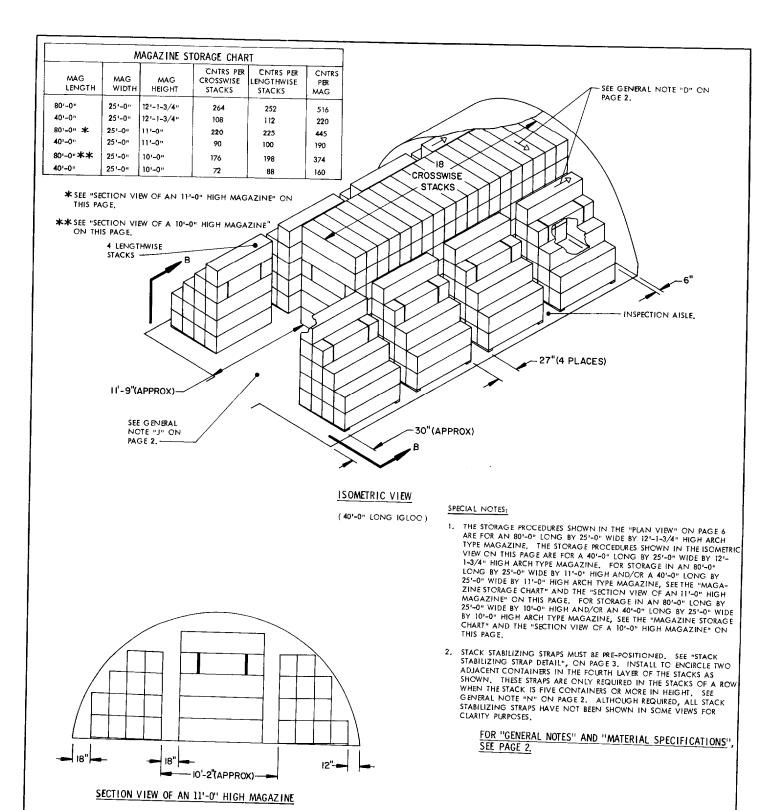
SECTION VIEW OF AN 81'-2" LONG X 26'-6" WIDE X 12'-1-3/4" HIGH MAGAZINE

SEE SPECIAL NOTE 1 ON THIS PAGE

STORAGE PROCEDURES IN IGLOO MAGAZINES AND 81'-2" LONG ARCH TYPE MAGAZINE (IGLOO)

PAGE 5





27"

STORAGE PROCEDURES IN AN ARCH TYPE MAGAZINE (IGLOO)

18"

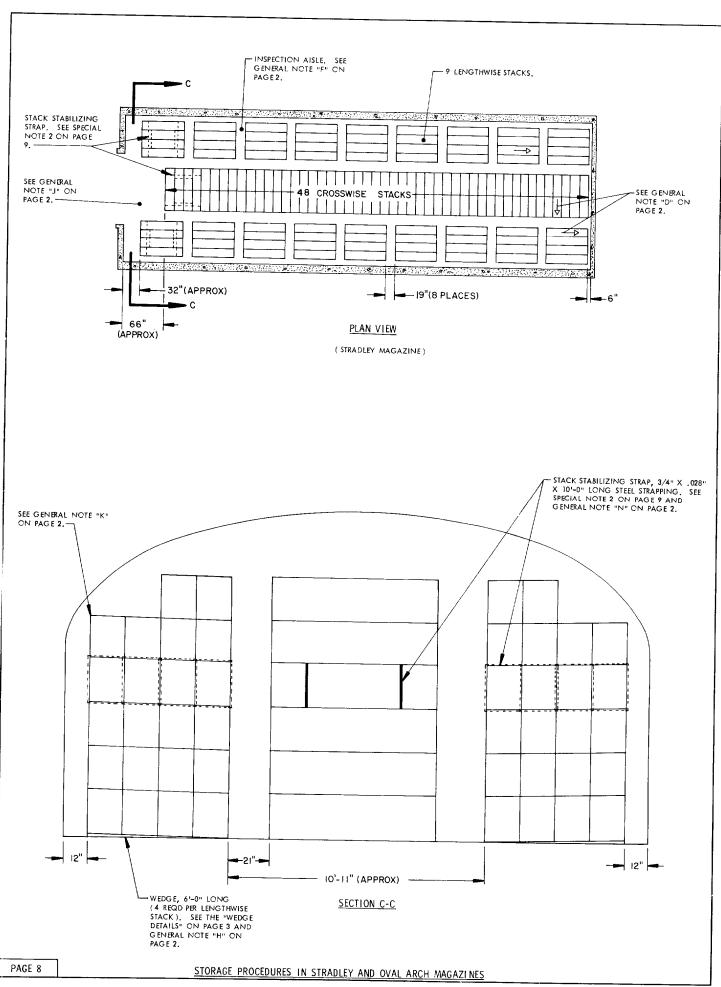
SECTION VIEW OF A 10'-0' HIGH MAGAZINE

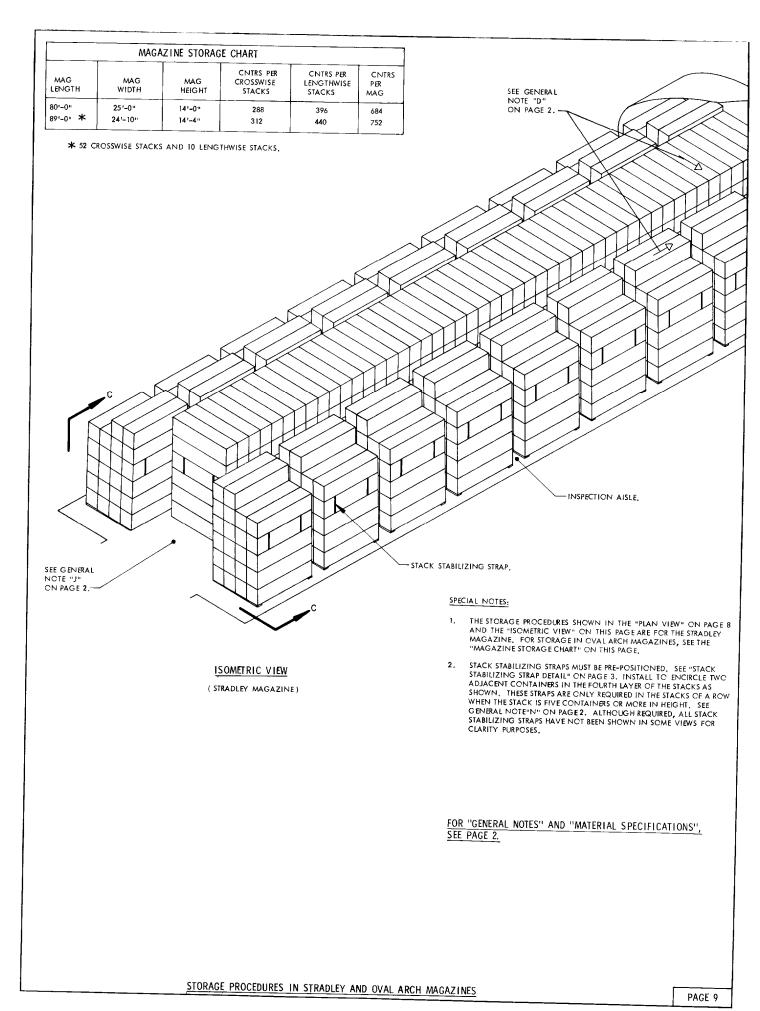
BILL OF MATERIAL (PER LENGTHWISE STACK)

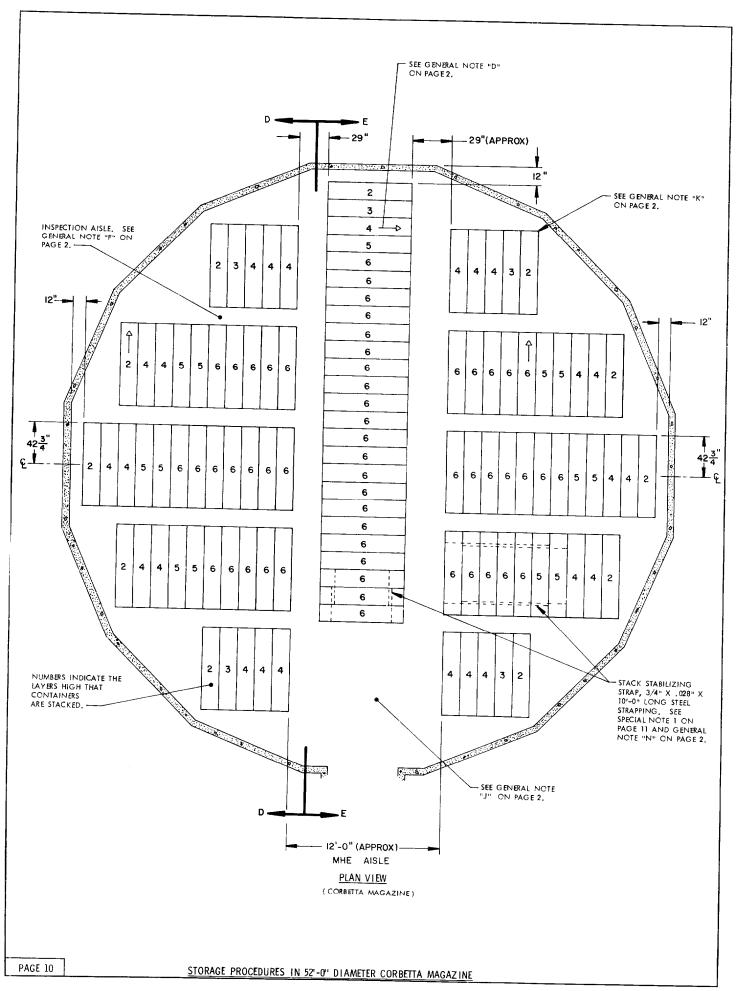
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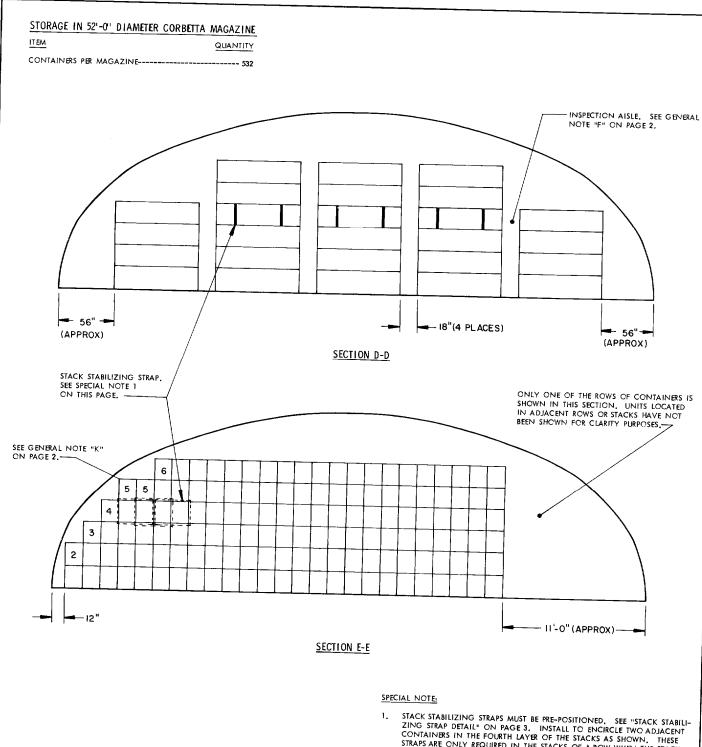
PAGE 7

WEDGE, 6'-0" LONG-----







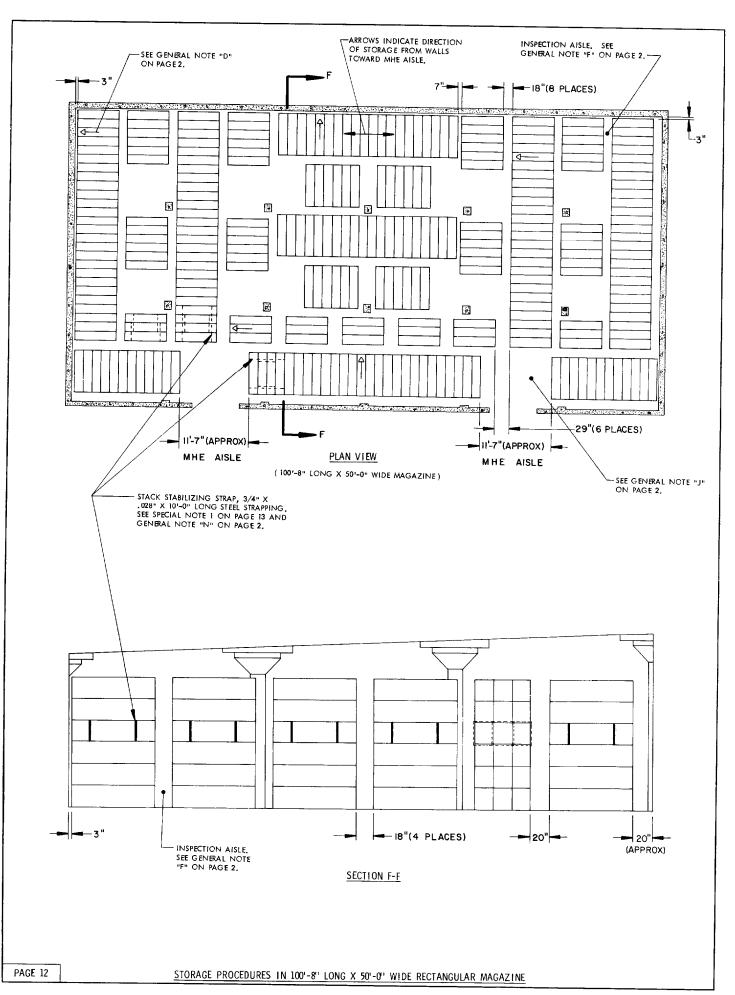


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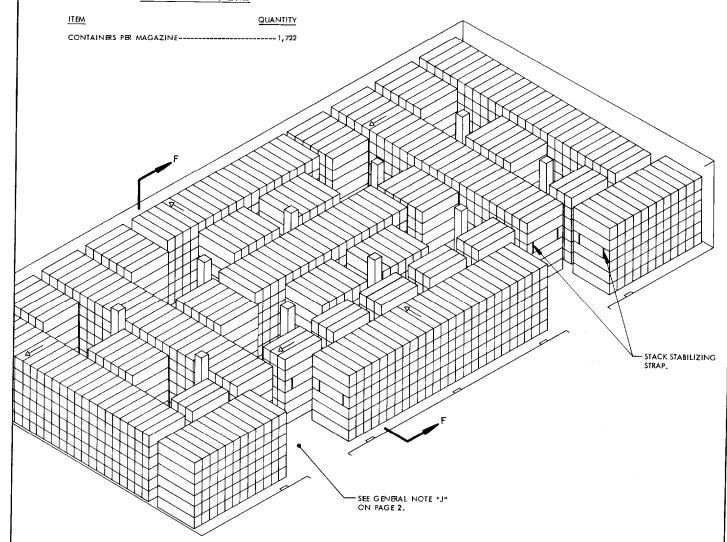
FOR "GENERAL NOTES" AND "MATERIAL SPECIFI-CATIONS", SEE PAGE 2.

STORAGE PROCEDURES IN 52'-0" DIAMETER CORBETTA MAGAZINE

PAGE 11



STORAGE IN A 100'-8" LONG BY 50"-0" WIDE RECTANGULAR MAGAZINE



ISOMETRIC VIEW

(100'-8" LONG X 50'-0" WIDE MAGAZINE)

SPECIAL NOTE:

1. STACK STABILIZING STRAPS MUST BE PRE-POSITIONED, SEE
"STACK STABILIZING STRAP DETAIL" ON PAGE 3. INSTALL
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CLARITY PURPOSES.

FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS", SEE PAGE 2.

STORAGE PROCEDURES IN 100'-8" LONG X 50'-0" WIDE RECTANGULAR MAGAZINE

PAGE 13