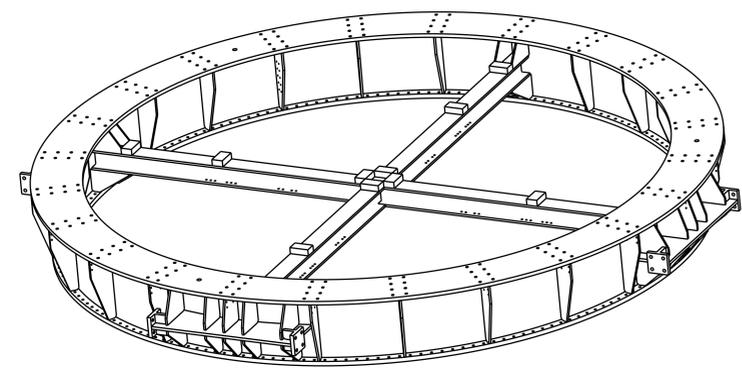
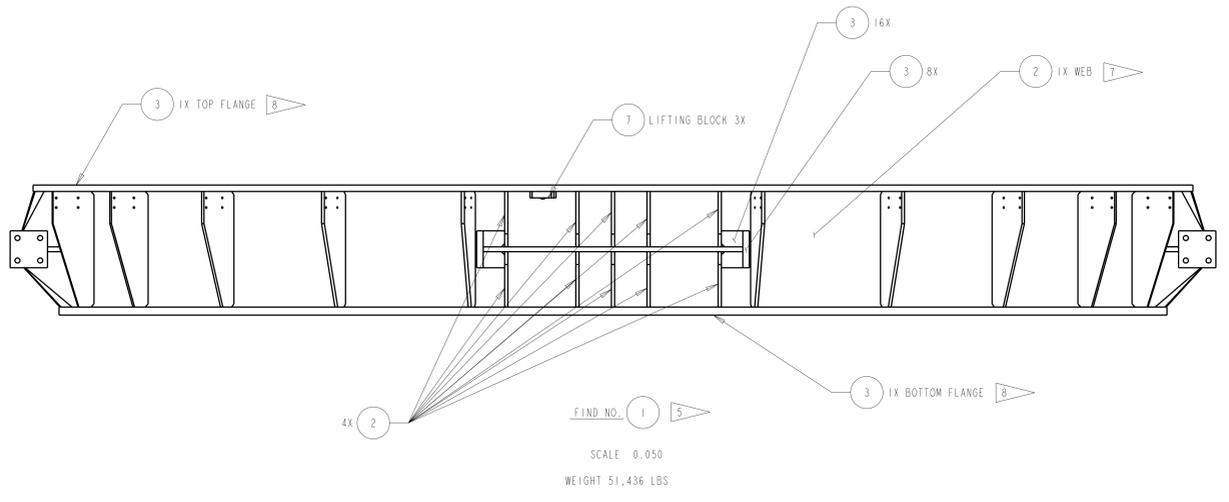
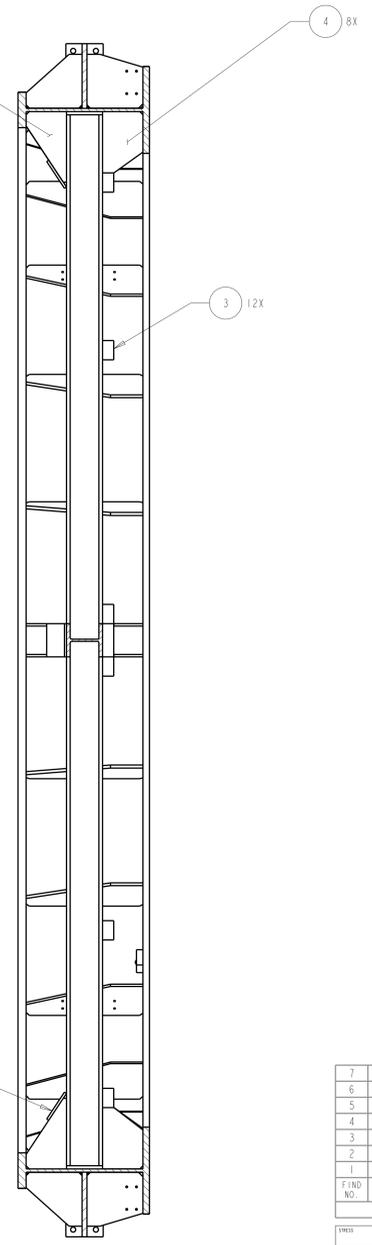
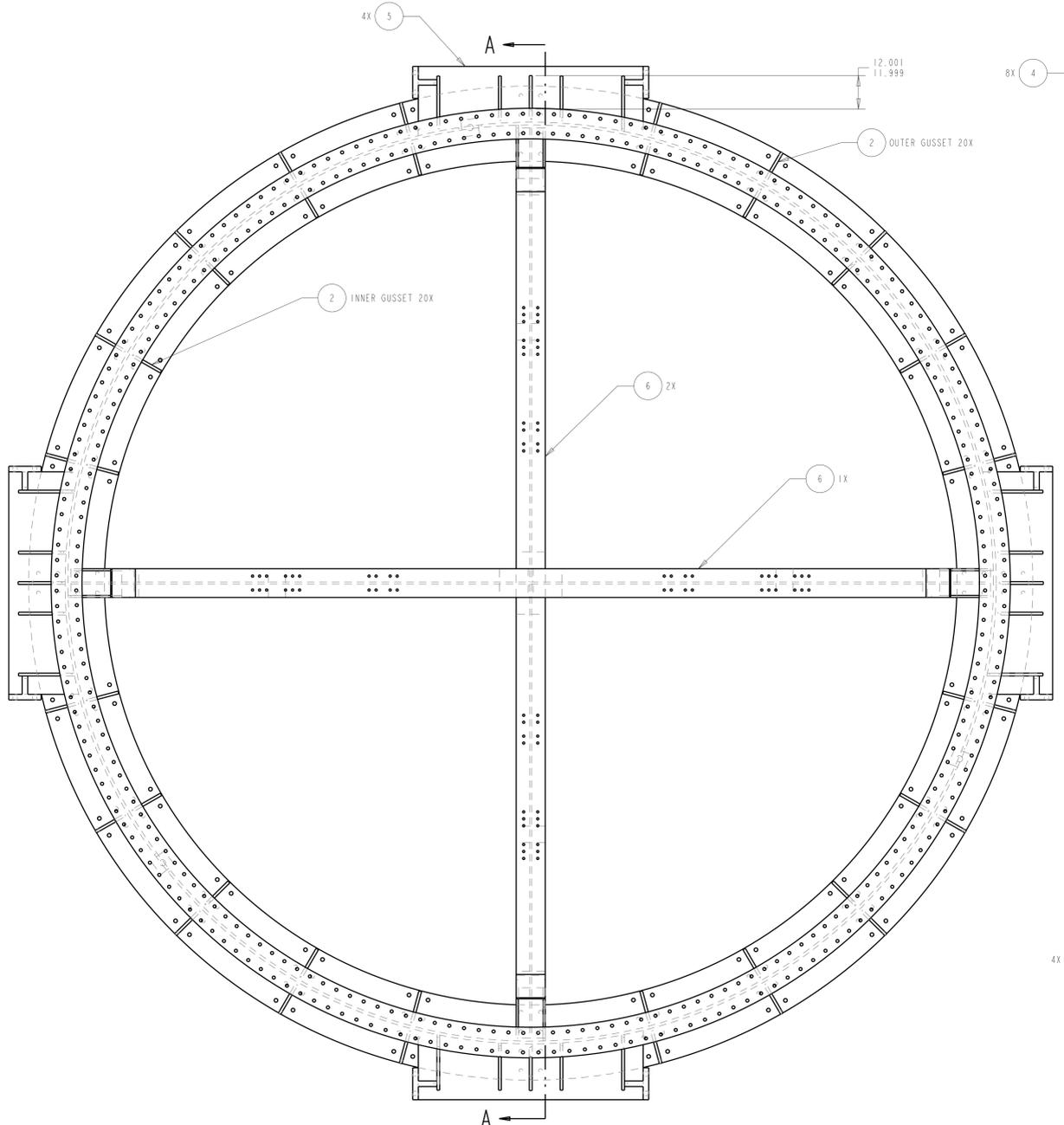


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- UNLESS OTHERWISE SPECIFIED:
- REMOVE ALL BURRS AND BREAK ALL SHARP EDGES.
  - 125/500 ALL MACHINED SURFACES/ ALL EDGES OF CUT PLATES AND ENDS OF AISC SHAPES.
  - DIMENSIONING AND TOLERANCING IN ACCORDANCE WITH ASME Y14.5-1994.
  - STENCIL PART NUMBER IN THE APPROXIMATE LOCATION SHOWN USING A CONTRASTING COLOR AND 2" TALL LETTERS.
  - PAINT ALL EXPOSED SURFACES USING EITHER OF THE FOLLOWING TWO FINISHES:
    - 1) MIL-STD-171F. PREPARE SURFACES PER 4.1 OR 4.4 AS NECESSARY; FINISH PER 5.2 AND 24.17.
    - 2) PREPARE SURFACES, ABRASIVE CLEANING WHERE NECESSARY, THEN POLYURETHANE PRIME AND TOP COAT USING SHERWIN WILLIAMS POLANE F63 (OR AN EQUIVALENT PRODUCT).
 FINISH COLOR BLUE NO. 15102 OR SIMILAR SHADE PER FED-STD-595C.
  - DO NOT PAINT MACHINED OR OTHER INDICATED SURFACES. DO NOT PAINT HOLES OR THREADS. AREAS DAMAGED DURING ASSEMBLY OR INSTALLATION SHALL BE TOUCHED UP AFTER DELIVERY USING BRUSH OR ROLLER ONLY. PROTECT UNPAINTED SURFACES WITH TRI-FLOW OR A SIMILAR PRODUCT DESIGNED TO PREVENT CORROSION.
  - SPOTFACE FAR SIDE OF INDICATED HOLES AS REQ'D TO ENSURE A REMAINING MATERIAL THICKNESS OF 2.50 +.03/- .00. SPOTFACE DIAMETER TO BE 2.000 +/- .030.
  - CLOCK WEB WELD SEAMS OFF OF TOP AND BOTTOM FLANGE WELD SEAMS TO ENSURE NON-ALIGNMENT. NO WEB WELD SEAM IS TO BE LOCATED BEHIND THE FOUR HORIZONTAL LOAD INPUT STRUCTURES THAT PROTRUDE OUTBOARD OF THE MAIN STRUCTURE. WEB WILL BE CONSTRUCTED WITH ANY NUMBER OF PANELS DEEMED NECESSARY BY MANUFACTURER.
  - TOP AND BOTTOM FLANGE WELD SEAMS TO BE APPROX. ALIGNED WITH A GUSSET LOCATION IN ORDER TO MISS THE HOLE PATTERNS. FLANGES WILL BE CONSTRUCTED WITH ANY NUMBER OF ARC SECTIONS DEEMED NECESSARY BY MANUFACTURER.
  - APPLIES ONLY TO OUTLINED SURFACE.
  - AFTER WELDING AND PRIOR TO FINAL MACHINING, STRESS RELIEVE PER AWS D1.1, "STRUCTURAL WELDING CODE, STEEL", AND CURRENT AS OF THE RELEASE DATE OF THIS DRAWING.
  - STEEL WELDING DESIGN, PROCEDURES, AND NON-DESTRUCTIVE EVALUATION SHALL BE PER ANSI/AWS D1.1/D1.1M "STRUCTURAL WELDING CODE-STEEL" AND CURRENT AS OF THE RELEASE DATE OF THIS DRAWING. UTILIZE WELDING PRACTICES AND TECHNIQUES TO MINIMIZE DISTORTION. UNLESS OTHERWISE SPECIFIED, WELDS SHALL BE 100% VISUALLY INSPECTED.
  - TAKE 8 DIAMETRICAL MEASUREMENTS OF THE WEB'S INNER DIAMETER AT 3 DIFFERENT ELEVATIONS EVERY 22.5 DEGREES ABOUT THE WEB'S CENTER AXIS TO DETERMINE THE AVERAGE DIAMETER OF THE WEB AT EACH ELEVATION. THE FIRST DIAMETRICAL MEASUREMENT WILL BE THE STARTING POINT FOR THE SERIES OF 8 MEASUREMENTS AT EACH OF THE 3 ELEVATIONS. ONE ELEVATION WILL BE WITHIN .5" FROM THE TOP EDGE OF THE WEB, ANOTHER WILL BE WITHIN .5" FROM THE BOTTOM EDGE OF THE WEB, AND THE THIRD WILL BE WITHIN ±.5" OF THE WEB'S HORIZONTAL CENTER PLANE. THE AVERAGE DIAMETER OF THE 8 MEASUREMENTS AT EACH ELEVATION MUST FALL WITHIN THE SPECIFIED DRAWING LIMIT AND THE ASSOCIATED CIRCULARITY TOLERANCE.
  - ALL STRUCTURAL STEEL SHAPES SHALL CONFORM TO THE DESIGNATIONS AND DIMENSIONS OF THE AISC "STEEL CONSTRUCTION MANUAL", 14TH EDITION.
  - COPED JOINTS AND WELD ACCESS HOLES SHALL BE PER THE EDITION OF ANSI/AWS D1.1/D1.1M "STRUCTURAL WELDING CODE-STEEL" THAT IS CURRENT AT THE RELEASE DATE OF THIS DRAWING. NOTE THAT REQUIRED WELD ACCESS HOLES HAVE NOT BEEN SHOWN AT THE DETAIL LEVEL IN THIS DRAWING.
  - DATUM "C" ESTABLISHES THE ASSEMBLY'S DEFAULT CENTERLINES AND IS USED TO ESTABLISH CLOCKING OF WELDMENT FEATURES AND COMPONENTS. IT MUST BE CUT INTO THE BOTTOM FLANGE AS SHOWN AFTER THE TOP AND BOTTOM FLANGES ARE WELDED TO THE WEB AND PRIOR TO LOCATING ANY OF THE REMAINING FEATURES OR COMPONENTS.



- PRELIMINARY -  
THIS DRAWING HAS NOT COMPLETED THE REVIEW PROCESS AND IS SUBJECT TO CHANGE.  
07-11-14  
DATE

| REV | CALLOUT SHT NO. | DETAIL SHT NO. | TOT REQ'D | PART NO. | DESCRIPTION | QTY  | REMARKS                         |
|-----|-----------------|----------------|-----------|----------|-------------|--|---------------------------------|
| 7   | I               |                | 3         | P        | 90M14367-8  | PLATE, 6 X 6 X 2 THICK                                   | ASTM A572 GRADE 50 CARBON STEEL |
| 6   | I               |                | AR        | P        | 90M14367-6  | W10 X 100  | ASTM A992 CARBON STEEL          |
| 5   | I               |                | AR        | P        | 90M14367-5  | PLATE, 1 1/2" THICK STOCK                                | ASTM A572 GRADE 50 CARBON STEEL |
| 4   | I               |                | AR        | P        | 90M14367-4  | PLATE, 3/4" THICK STOCK                                  | ASTM A572 GRADE 50 CARBON STEEL |
| 3   | I               |                | AR        | P        | 90M14367-3  | PLATE, STOCK THICKNESS AS DEEMED NECESSARY BY FABRICATOR | ASTM A572 GRADE 50 CARBON STEEL |
| 2   | I               |                | AR        | P        | 90M14367-2  | PLATE, 1" THICK STOCK                                    | ASTM A572 GRADE 50 CARBON STEEL |
| 1   |                 |                | A         |          | 90M14367-1  | INTERTANK AFT LOAD RING WELDMENT, SLS INTERTANK TEST     |                                 |

| STRESS                           | DATE | DESIGNER                    | DATE       | UNLESS OTHERWISE SPECIFIED TOLERANCES ARE: | DECIMALS  | FRACTIONS     |
|----------------------------------|------|-----------------------------|------------|--|---|---------------|
| MATERIALS                        | DATE | TEST ENGINEER/REQUESTER     | DATE       |  | .XX ± .06                                       | ± 1/16 ± 1/32 |
| MANUFACTURING                    | DATE | CFR CIVIL SERVICE LEAD      | DATE       |  | .XXX ± .03                                      | ± 1/16 ± 1/32 |
| SAFETY AND WELDER ASSISTANCE     | DATE | CFR CIVIL SERVICE LEAD      | DATE       |  | .XXX ± .010                                     | ± 1/16 ± 1/32 |
| DESIGN TEST CONDUCTOR            | DATE | CHIEF                       | DATE       |  | < .50"  |               |
| PRELIMINARY CERTIFICATION NUMBER | DATE | CFR DESIGNER/TEST CONDUCTOR | DATE       |  | DIMENSIONS ARE IN INCHES, DO NOT SCALE DRAWING! |               |
|                                  |      | BILL HOWARD                 | 09M13948-1 | 11-12-13                                   |   |               |

INTERTANK AFT LOAD RING WELDMENT SLS INTERTANK TEST

SPECIAL TEST EQUIPMENT DESIGN BRANCH - E550  
GEORGE C. MARSHALL SPACE FLIGHT CENTER  
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
Huntsville, Alabama

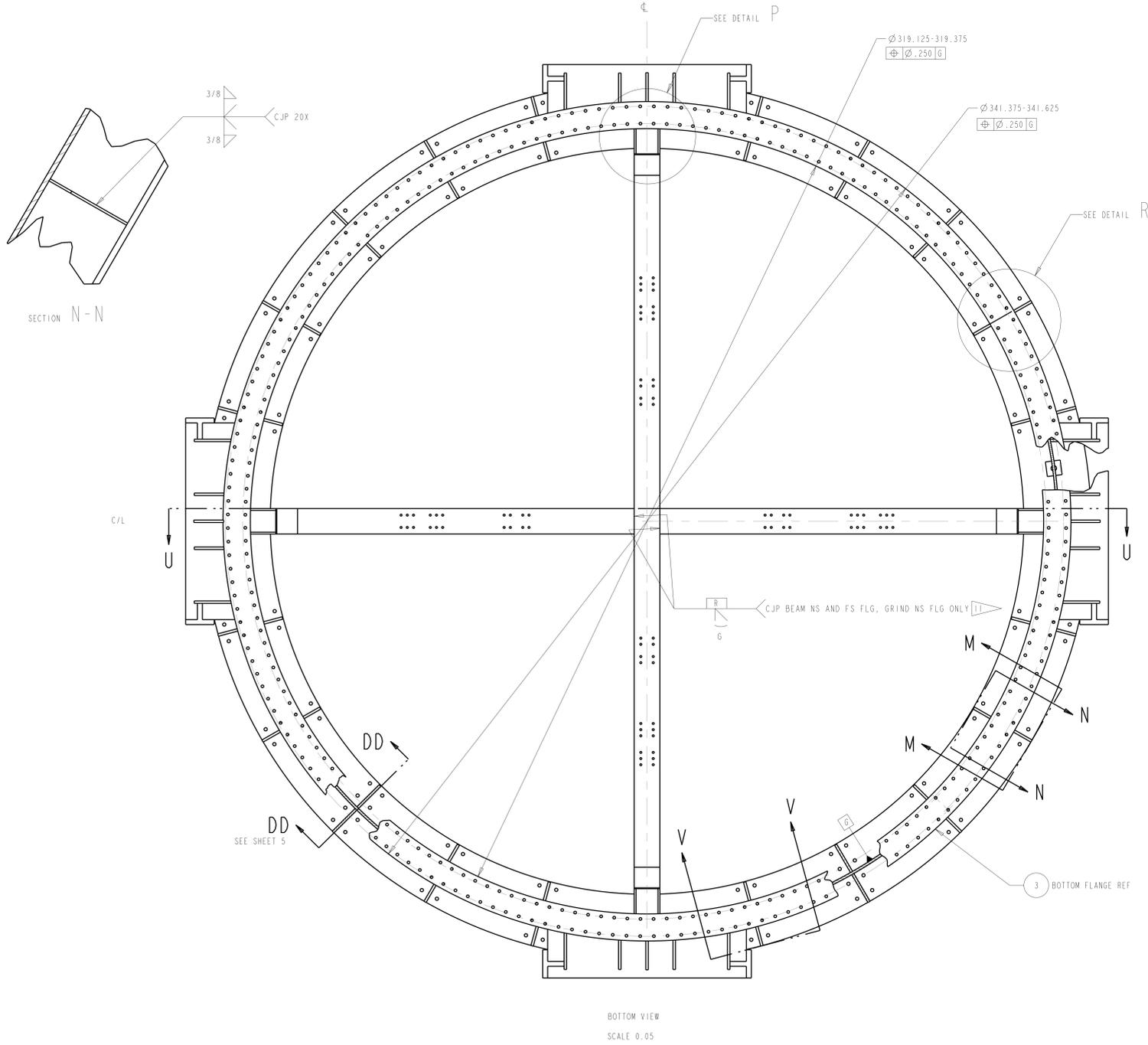
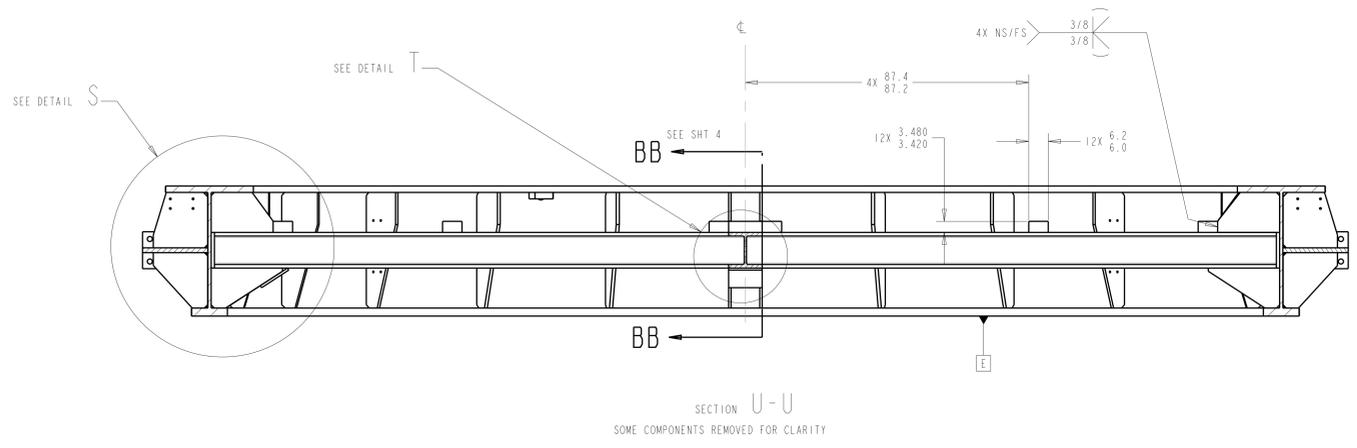
90M14367

REV 1

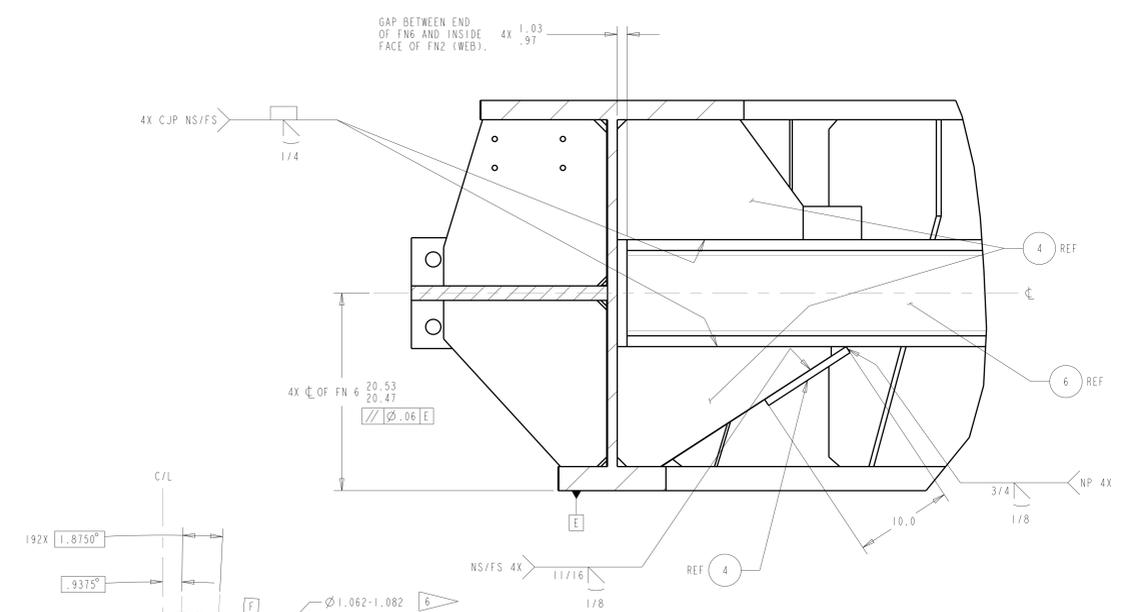


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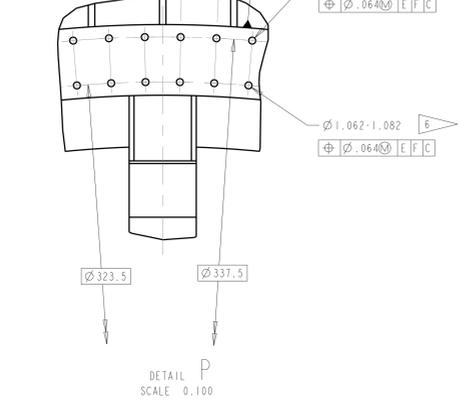
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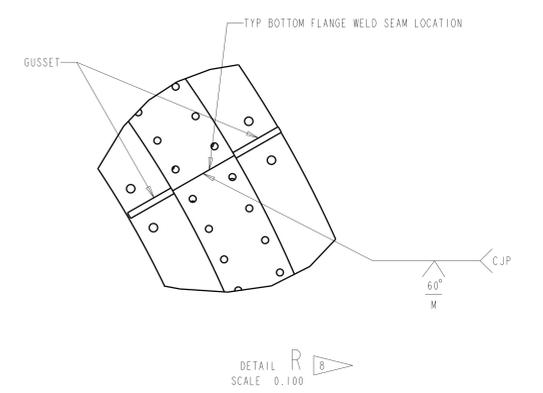
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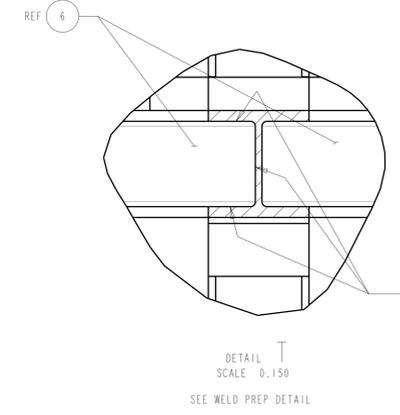
DETAIL S  
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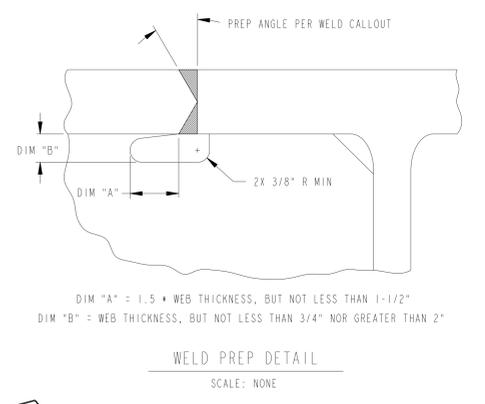
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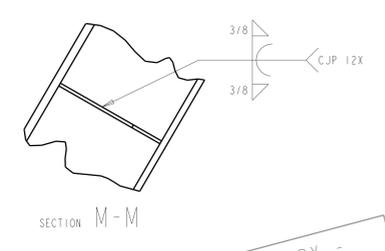
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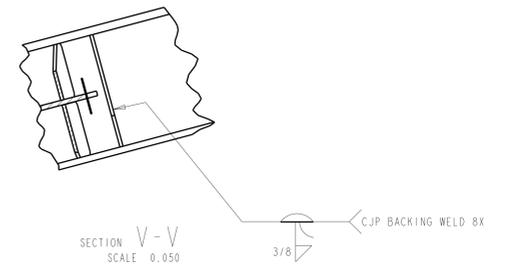
DETAIL T  
SCALE 0.150  
SEE WELD PREP DETAIL



WELD PREP DETAIL  
SCALE: NONE



SECTION M-M



SECTION V-V  
SCALE 0.050

- PRELIMINARY -  
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07-11-14  
DATE

INTERTANK AFT LOAD RING WELDMENT SLS INTERTANK TEST

SPECIAL TEST EQUIPMENT DESIGN BRANCH - ETSO  
GEORGE C. MARSHALL SPACE FLIGHT CENTER  
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
Huntsville, Alabama

90M14367

REVISION 5  
SEE SHT 1



