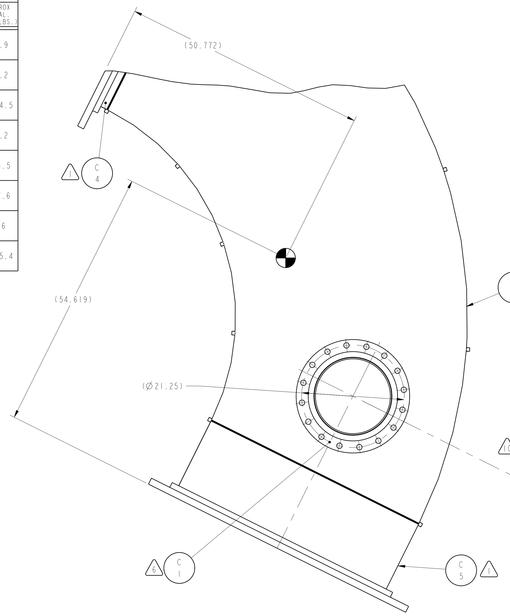
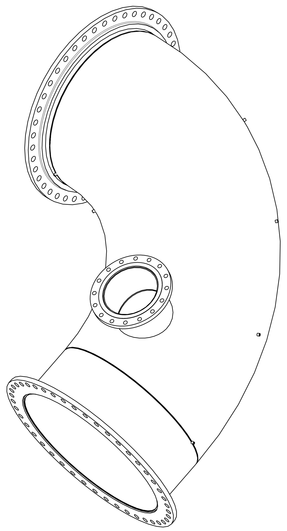
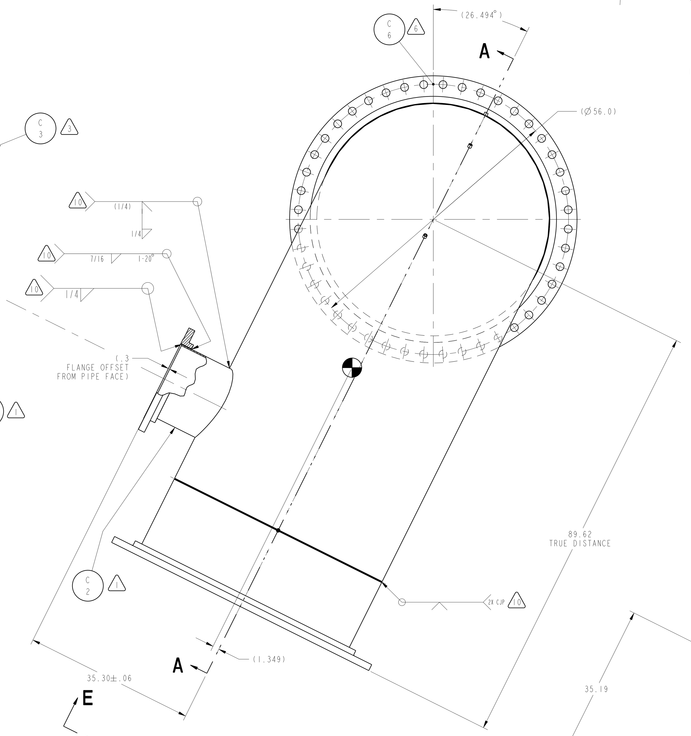
COMMERCIAL PARTS LIST

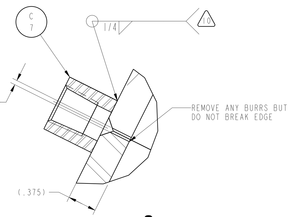
BALLOON NO	DESCRIPTION	QTY/ ASSY	APPROX TOTAL WT. (LBS.)
1	FLANGE, Ø16" 150 LB, SLIP-ON PER ASME B16.5.	1	98.9
2	SPOOL-PIECE, Ø16 X .250 WALL	1	41.2
3	ELBOW, Ø48" X .375" WALL, LONG RADIUS	1	1774.5
4	SPOOL-PIECE, Ø48" X .375" WALL X 3.7" LONG.	1	58.2
5	SPOOL-PIECE, Ø48" X .375" WALL X 17.32" LONG.	1	274.5
6	FLANGE, SLIP-ON, Ø48" 125 LB, LIGHT WEIGHT, PER AWWA CLASS D	2	807.6
7	HALF-COUPLING, Ø1/4" NPT, 3000 LB.	10	0.6
	TOTAL WEIGHT		3055.4



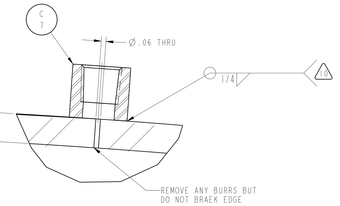




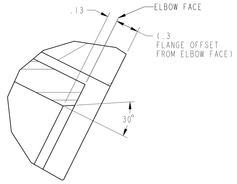
PARTIAL VIEW **E-E**



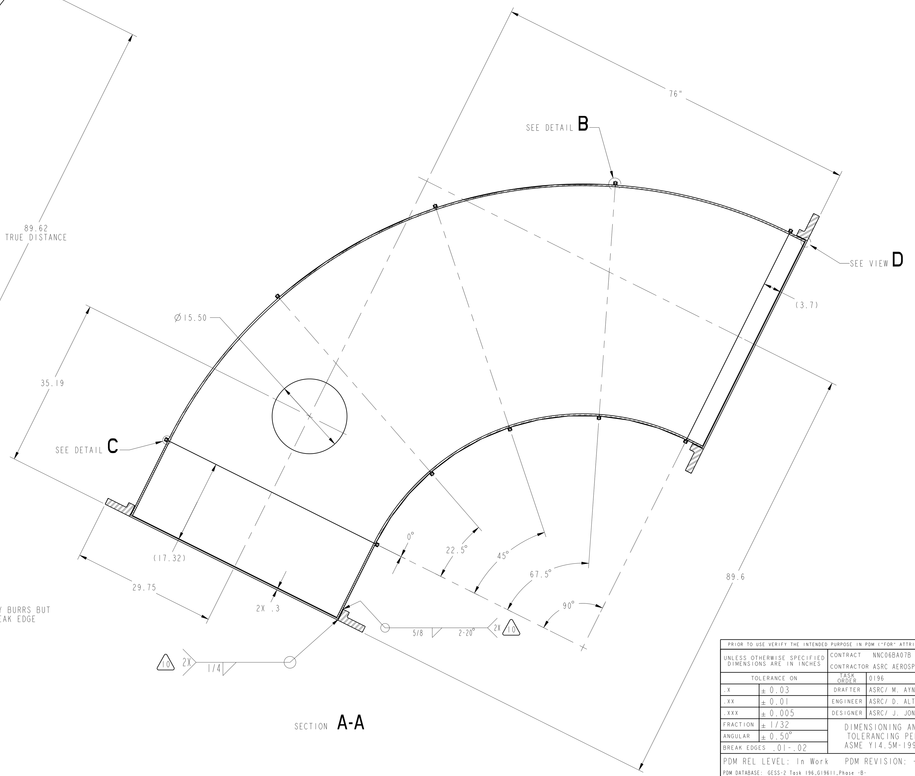
HALF-COUPLING DETAIL **C**
AT WELD SEAM
2X 2 PLACES
SCALE 2/1



HALF-COUPLING DETAIL **B**
ON ELBOW
3X 2 PLACES
SCALE 2/1



ELBOW CHAMFER DETAIL **D**
BOTH ENDS
SCALE 2/1



SECTION **A-A**

13. THE CONTRACTOR SHALL FURNISH ALL TEMPORARY SUPPORTING AND MISCELLANEOUS HARDWARE ITEMS SUCH AS BOLTS, NUT, WASHERS, BRACKETS, CLAMPS, AND OTHER SMALL PARTS REQUIRED FOR THE FABRICATION OF AND ASSEMBLY OF ITEMS HERIN.

14. ALL GASKETS SHALL BE GARLOCK BLUE-GARD STYLE 3000.

15. PRIOR TO PAINTING ALL RUST, SCALE, OIL, DIRT, AND OTHER FOREIGN MATERIAL MUST BE REMOVED FROM INTERIOR AND EXTERIOR SURFACE.

16. PAINT ALL EXTERIOR SURFACES EXCEPT SEALING SURFACES WITH RUSTOLEUM DAMP PROOF PRIMER COLOR RED PER MANUFACTURER'S INSTRUCTIONS.

17. PAINT ALL INTERIOR SURFACES WITH DEVOE 235 EPOXY COLOR WHITE PER MANUFACTURER'S INSTRUCTIONS.

18. APPOXIMATE WEIGHT: 3055.4 LBS

19. QUANTITY PER ASSEMBLY: ONE

1. PIPE SHALL BE MANUFACTURED FROM EITHER ASTM A134 (USING EITHER ASTM A285 GRADE A OR ASTM A36 MATERIAL), ASTM A671 OR A672 (USING ASTM A516 GRADE 70 MATERIAL) A106 GRADE A, OR API 5L GRADE A25. PROVIDE MATERIAL CERTIFICATIONS.

2. PIPE MANUFACTURED PER ASTM A134, A671, OR A672 MAY HAVE ALL LONGITUDINAL SEAMS 100% RADIOGRAPHED PER ASME B31.3 PARAGRAPH 344.5 IN LIEU OF THE TYPICAL INSPECTION. IF RADIOGRAPHY IS PERFORMED A REPORT SHALL BE PROVIDED AFTER COMPLETION OF THE INSPECTION. OTHER WISE INSPECTION PER THE SPECIFICATION SELECTED MUST BE PERFORMED AND REPORTED.

3. ELBOWS SHALL BE MANUFACTURED FROM ASTM A234 MATERIAL PER ASME B16.9 PROVIDE MATERIAL CERTIFICATIONS.

4. 48" DIA CLASS 125 LIGHT WEIGHT FLAT FACE SLIP ON FLANGES SHALL BE MANUFACTURED FROM ASTM A234 PER AWWA CLASS D. PROVIDE MATERIAL CERTIFICATIONS.

5. 16" DIA CLASS 150 SLIP ON FLANGES SHALL BE MANUFACTURED FROM ASTM A234 PER ASME B16.5 PROVIDE MATERIAL CERTIFICATIONS.

6. BOLT HOLES SHALL STRADDLE CENTERLINES.

7. LOCATING DIMENSION RELATIVE TO EXISTING STRUCTURES ARE APPROXIMATE AND SHOULD BE VERIFIED IN THE FIELD.

8. OPERATING PRESSURE: 50 PSIG MAXIMUM
OPERATING TEMPERATURE RANGE: -20 TO 120 DEG F.

9. THE CONTRACTOR SHALL PREPARE AND SUBMIT WELDING PROCEURE SPECIFICATIONS (WPS),PROCEDURE QUALIFICATION RECORDS (PQR),AND WELDER PERFORMANCE QUALIFICATIONS (WPQ)IN ACCORDANCE WITH SECTION IX OF THE ASME B&PV CODE. THE QUALIFICATION DOCUMENTATION SHALL BE SUBMITTED PRIOR TO THE START OF FABRICATION.

10. ALL NEW PIPING WELDS SHALL BE VISUALLY EXAMINED IN ACCORDANCE WITH ASME B31.3 PARAGRAPH 341.4.A. A REPORT SHALL BE PROVIDED AFTER COMPLETION OF THE INSPECTION.

11. NO LESS THAN 5% OF CIRCUMFERENTIAL WELDS SHALL BE FULLY RADIOGRAPHED IN ACCORDANCE WITH ASME B31.3 PARAGRAPH 344.5. A REPORT SHALL BE PROVIDED AFTER COMPLETION OF THE INSPECTION.

12. HYDROSTATICALLY PRESSURE TEST TO 75 PSIG PER ASME B31.3 SECTION 345. A REPORT SHALL BE PROVIDED AFTER COMPLETION OF THE TEST.

CHG	ZONE	DESCRIPTION	APP/DATE

REVISIONS

PRIOR TO USE, VERIFY THE INTENDED PURPOSE IN PDM (-TOR- ATTRIBUTE)

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

TOLERANCE ON	
.X	± 0.03
.XX	± 0.01
.XXX	± 0.005
FRACTION	± 1/32
ANGULAR	± 0.50°
BREAK EDGES	.01-.02

CONTRACT	NNC06BA07B
CONTRACTOR	ASRC AEROSPACE
TASK ORDER	0196
DRAFTER	ASRC/ M. AYNIX
ENGINEER	ASRC/ D. ALTHAUSEN
DESIGNER	ASRC/ J. JONES

DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994

PDM REL LEVEL: In Work PDM REVISION: -
PDM DATABASE: GCSS-2 Task 196,GI9611,Phase -B-
MODEL NAME: GI9607MRA710_ABDIA_LR_ELBOW.MS
CHECK FOR ANY OUTSTANDING ECO'S PRIOR TO USE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
JOHN H. GLENN RESEARCH CENTER
LEWIS FIELD
CLEVELAND, OHIO

W7 FACILITY PIPING UPGRADE

GI9607MRA750

A710 Ø48" LONG RADIUS ELBOW WELDMENT (UPPER)

SIZE	DRAWING NUMBER	REV	BLDG	AREA
R	GI9607MRA710	-	23	W3

SCALE	INITIAL REL DATE	SHEET	UNITS - INCH
1/8	06/02/2011	1 OF 1	DISCIPLINE MECHANICAL

PROVE VERSION: Wildfire 3.0

REV - | SHT 1 | DRAWING NUMBER GI9607MRA710

DRAWING NUMBER GI9607MRA710 | REV - | SHT 1

MACHINE: CMRCSVSMAN01/PTC_GEN_LR_ELBOW_M SATISDate=1131133