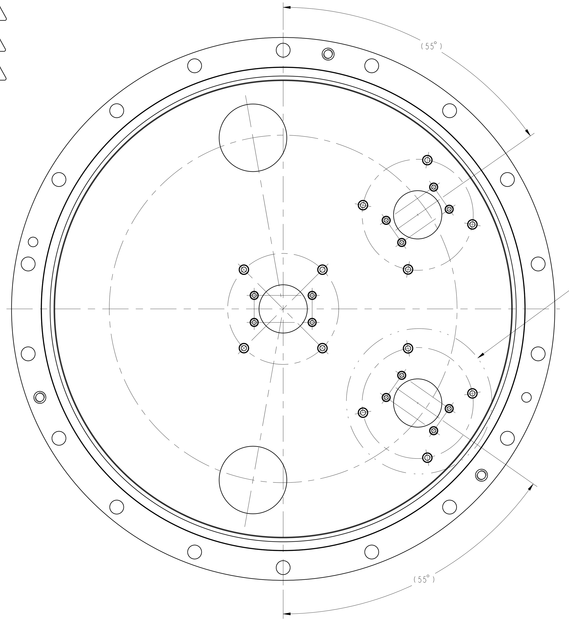
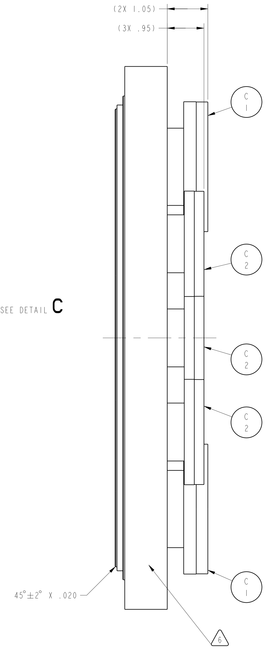
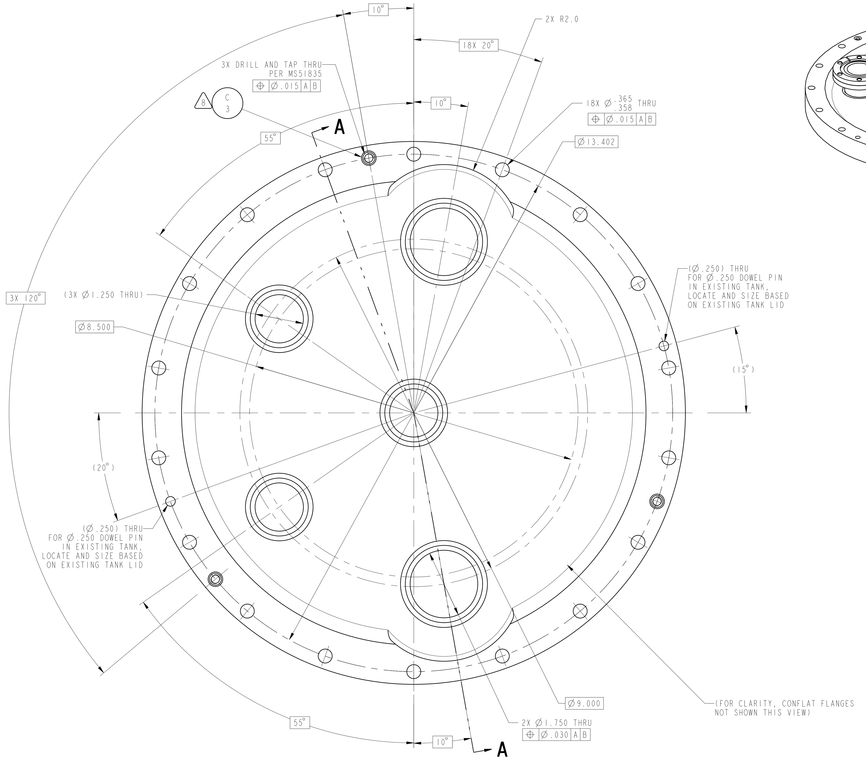
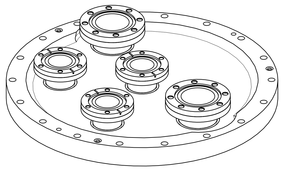
COMMERCIAL PARTS LIST

BALLOON NO	DESCRIPTION	QTY/ ASSY
1	ULTRA HIGH VACUUM BIMETALLIC CONFLAT FLANGE WITH .313-24 TAPPED HOLES, WELD NECK STYLE, 3.38" O.D., 1.750 I.D., 6061-T6 ALUMINUM X TYPE 304 STAINLESS STEEL, ATLAS NO. 3375AL-SS-WNNR-175	2
2	ULTRA HIGH VACUUM BIMETALLIC CONFLAT FLANGE WITH .250-28 TAPPED HOLES, WELD NECK STYLE, 2.75" O.D., 1.250 I.D., 6061-T6 ALUMINUM X TYPE 304 STAINLESS STEEL, ATLAS NO. 275AL-SS-WNNR-125	3
3	INSERT, SCREW THREAD, LOCKING, LIGHTWEIGHT MS51830-202L, KEENSERT NO. KNL428J OR EQUIVALENT (FOR .250-28 FASTENER)	3 △6
4	INSERT, SCREW THREAD, MINIATURE MS51830-104, KEENSERT NO. KNCA0832J OR EQUIVALENT (FOR .164-32 FASTENER)	12 △6
5	INSERT, SCREW THREAD, MINIATURE MS51830-103, KEENSERT NO. KNC0632J OR EQUIVALENT (FOR .138-32 FASTENER)	12 △6









SCALE 1/2

1. EXCEPT FOR COMMERCIAL "CONFLAT" BIMETALLIC FLANGES AND THREADED INSERTS, MATERIAL SHALL BE TYPE 6061-T651 ALUMINUM ALLOY PER ASME SB-209 OR AMS 4027 OR EQUAL, HAVING A MINIMUM YIELD STRENGTH OF 35 KSI AND ELONGATION OF 8%. "CONFLAT" FLANGES SHALL BE A COMBINATION OF TYPE 304 STAINLESS STEEL AND 6061-T6 ALUMINUM. PROVIDE A LEGIBLE MILL CERT WITH CHEMICAL AND TENSILE PROPERTIES FOR ALL 6061 ALUMINUM AND TYPE 304 STAINLESS, WITH THIS DRAWING NUMBER ADDED.

2. 63 Ra ALL MACHINED SURFACES UNLESS OTHERWISE NOTED. PERFORM FINAL MACHINING AFTER WELDING.

3. △1 REFERENCE DIMENSIONS SHOWN ARE FOR A MALE FLANGE, CONOSEAL GROOVE, NO. 50889-120DA. ALL ACTUAL DIMENSIONS ARE TO BE DETERMINED BY INSPECTION OF THE EXISTING TANK LID PROVIDED BY THE GOVERNMENT.

4. THE WELDER AND THE WELD PROCESS SHALL BE QUALIFIED PER THE ASME BOILER AND PRESSURE VESSEL CODE, SECTION IX, OR EQUAL. PROVIDE A QUALIFICATION CERTIFICATE.

5. AFTER COMPLETION OF WELDING, PERFORM A LIQUID PENETRANT EXAMINATION OF ALL WELDS PER THE ASME BOILER AND PRESSURE VESSEL CODE, SECTION VIII, DIVISION 1, APPENDIX 8. NO CRACKS OR RELEVANT DEFECTS ARE ALLOWED. PROVIDE AN EXAMINATION REPORT.

6. △5 METAL STAMP "G44710MRA031" AND "MDP = 50 PSIG" IN 1/4" HIGH CHARACTERS AT THE LOCATION SHOWN.

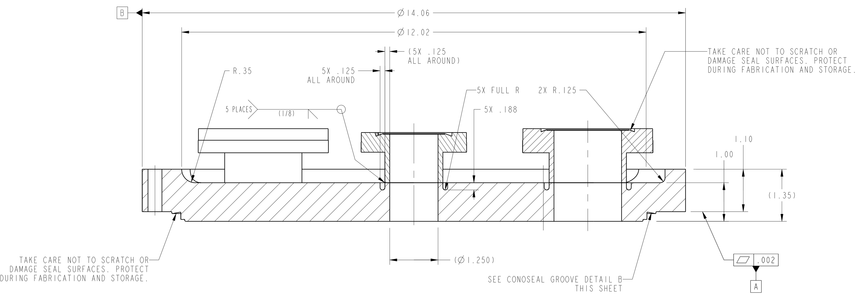
7. BEFORE INSTALLING THREADED INSERTS, MASK CONFLAT FLANGES AND PERFORM IRIDITE SURFACE TREATMENT PER MIL-DTL-5541, CLASS 3.

8. △5 AFTER SURFACE TREATMENT, INSTALL C3 THREADED INSERTS .01-.03" BELOW SURFACE AND C4 AND C5 THREADED INSERTS .005-.015" BELOW SURFACE.

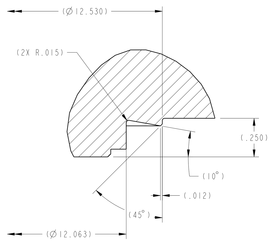
9. CLEAN FINISHED PART SURFACES TO REMOVE ALL DIRT, GREASE OR OTHER CONTAMINANTS. IMMEDIATELY WRAP IN CLEAN POLYETHYLENE SHEET SEALED WITH FIBERGLASS PACKAGING TAPE.

10. THIS PART WAS DESIGNED FOR AN INTERNAL PRESSURE OF 50 PSIG AND BOLT TORQUE OF 154 IN-LB PER THE ASME B & PV CODE, SECTION VIII, DIVISION 1, PARAGRAPH UG-34 AND FIGURE UG-34 (K).

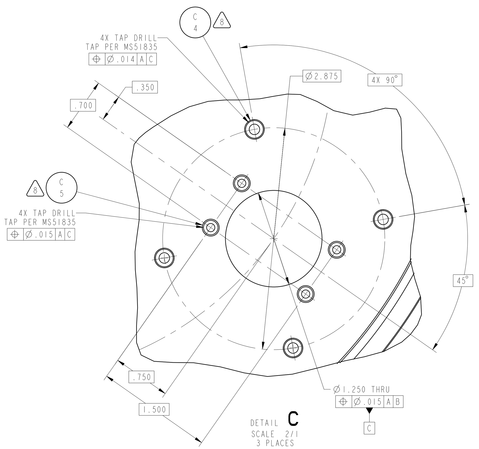
11. CALCULATED PART WEIGHT = 19 LBS.



SECTION **A-A**



△3 DETAIL B
CONOSEAL GROOVE DETAIL



DETAIL **C**
SCALE 2/1
5 PLACES

CHG	ZONE	DESCRIPTION	APP/DATE
B		ADDED 2 - 2.0" RADIUS RELIEF CUTS @ LARGE NOZZLES FOR WELDING ACCESS CHANGED LOCATION AND QUANTITY OF ITEM C-3 INSERTS FROM 6 TO 3 @ 120 DEG. CHANGED 2 - Ø.125 PILOT HOLES TO BE Ø.250 THRU HOLES SIZED AND LOCATED PER EXISTING TANK LID CHANGED DRAWING NOTE 3 TO REFERENCE EXISTING TANK LID FOR ALL DIMENSIONS FOR CONOSEAL SEAL GROOVE	CMG 11/4/2010
A		REVISED DRAWING NOTES TO INDICATE FINAL MACHINING AFTER WELDING REVISED LID MATERIAL TO ALUMINUM ALLOY 6061-T651 REVISED LID O.D. TO Ø14.06 REVISED OVERALL LID THICKNESS TO 1.350" REVISED B.C. DIA. FOR TWO CONFLAT FLANGES ITEM C-1 FROM 8.500" TO 9.000" REVISED CUT LOCATION OF SECTION A-A	CMG 9/24/10

REVISIONS

PRIOR TO USE VERIFY THE INTENDED PURPOSE IN PDM (-"FOR" ATTRIBUTE)

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	CONTRACT	NNC06BA07B	
	CONTRACTOR	ASRC AEROSPACE	
TOLERANCE ON	XASA 00010	G447	
.X ± 0.03	DRAFTER	ASRC/K.SUKEL	
.XX ± 0.01	ENGINEER	ASRC/D.ALTHAUSEN	
.XXX ± 0.005	DESIGNER	ASRC/C.GRIFFITHS	
FRACTION ±	DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994		
ANGULAR ± 0.25°			
BREAK EDGES .01-.03			

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

RFMG TEST TANK ASSEMBLY

G44710MRA020

PDM REL LEVEL: Released PDM REVISION: -

PDM DATABASE:
MODEL NAME: G44710MRA031_TANK_LID_ASSY
CHECK FOR ANY OUTSTANDING ECO'S PRIOR TO USE

A031 RFMG TANK LID

SIZE	DRAWING NUMBER	REV	BLOCK	AREA
R	G44710MRA031	B	.402	EMI/RF

SCALE	INITIAL REL. DATE	SHEET	DISCIPLINE
1/1 & NOTED	9/27/2010	1 OF 1	MECHANICAL

UNITS: INCH

PROVE VERSION: Wildfire 2.0

DRAWING NUMBER	REV	SHT
G44710MRA031	-	1

R G44710MRA031 B

NAME/LOCATION: OBJECT/CAD/TANKARD_TANK_LID_ASSY DATE/Name=19 10:20:07