

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MBARI. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF MBARI IS PROHIBITED.

REV.		DESCRIPTION	DATE	APPROVED
INITIAL RELEASE				

NOTES:

1. MATERIAL IS GR 5 AS CAST TITANIUM, MIN YIELD 120 KSI
2. BREAK ALL SHARP EDGES
3. APPLICABLE STANDARDS/SPECIFICATIONS:
ANSI Y14.5M-1994, DIMENSIONS AND TOLERANCES
MIL-STD-12, ABBREVIATIONS.
4. PART IS SYMMETRIC ABOUT CENTERLINE
5. DEPTH RATING OF ASSEMBLY: 6000M
6. WEIGHT: 47.6 LBS DRY

SAE #4 PORT $\phi .391$ THRU ALL
7/16-20 UNF - 2B THRU ALL

$\oplus \phi .028 (M) C B$

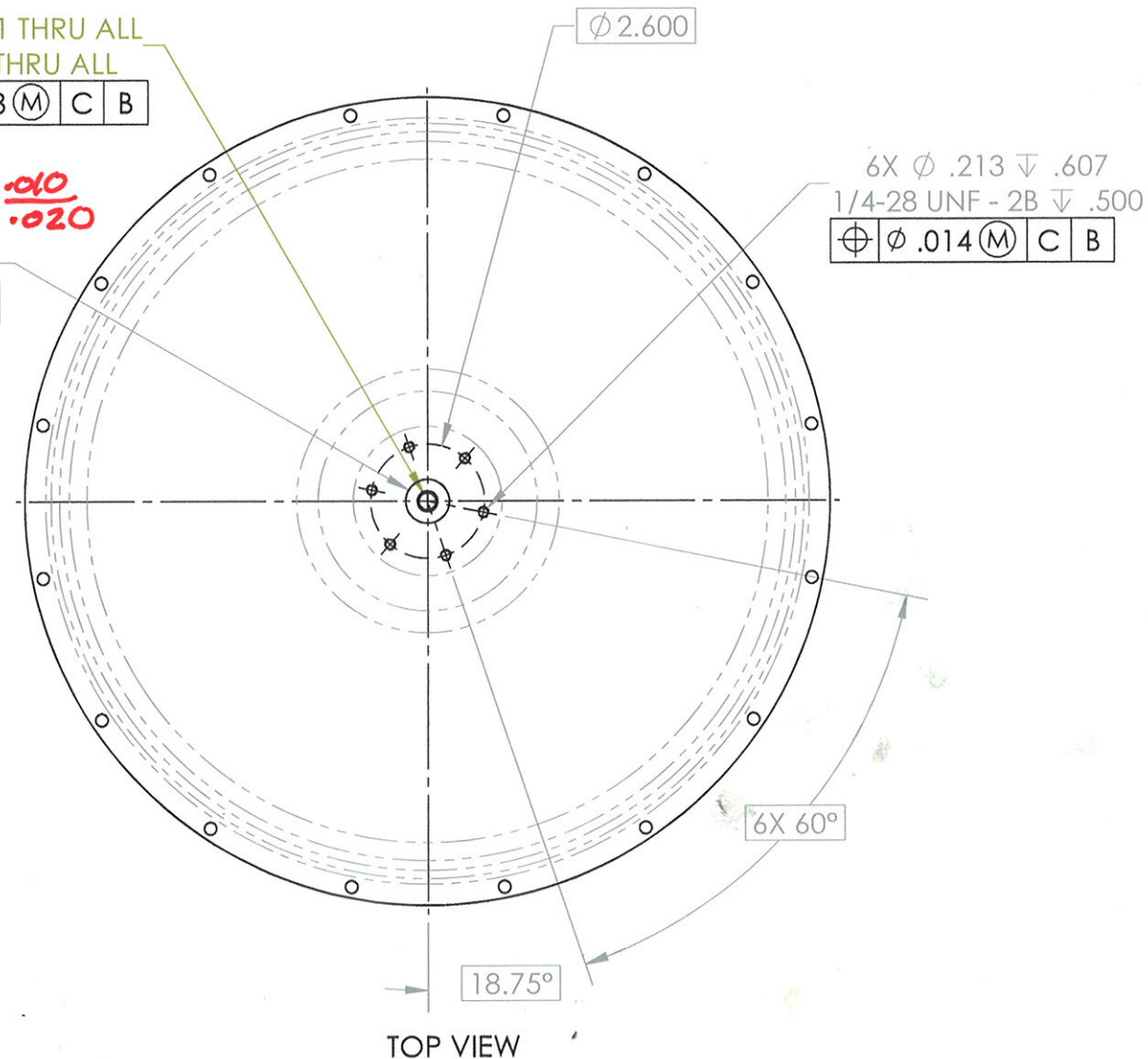
$\phi .875 \downarrow \frac{.010}{.020}$

$\phi 1.000 \downarrow .040$

$\oplus \phi .028 (M) C B$

USE DIA.
OF SAE
PORT TOOL

6X $\phi .213 \downarrow .607$
1/4-28 UNF - 2B $\downarrow .500$
 $\oplus \phi .014 (M) C B$



TOP VIEW

DATE: 7JAN12

BILL OF MATERIALS

Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS		DATE		Monterey Bay Aquarium Research Institute	
Inspector		1 PLACE DIM $\pm .1/16$	2 PLACE DIM $\pm .02$	3 PLACE DIM $\pm .005$	ANGLES $\pm 1^\circ$	DRAWN	M. GREISE	11/30/11	MBARI
Shop Foreman		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING. 3. REMOVE BURRS AND SHARP EDGES .015 MAX AFTER MACHINING. 4. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 UNLESS SPECIFIED OTHER. 5. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH, MAX .012 IN. FOR SINGLE SURFACE UNLESS SPECIFIED OTHER.				ENGINEER	M. GREISE	11/30/11	7700 Sandholdt RD.
Engineer						CHECKED			Moss Landing, CA 95039
NEXT ASSY Description	NEXT ASSY Number					PROJECT NO.			PH: (831) 775-1700
Application						PROJECT	6K SPHERE		
		DO NOT SCALE DRAWING		WEIGHT		SIZE DWG. NO.		1001102DWG	
						SCALE 1:5		CAD FILE: MECH ENG ON TORNADO SHEET 1 OF 2	

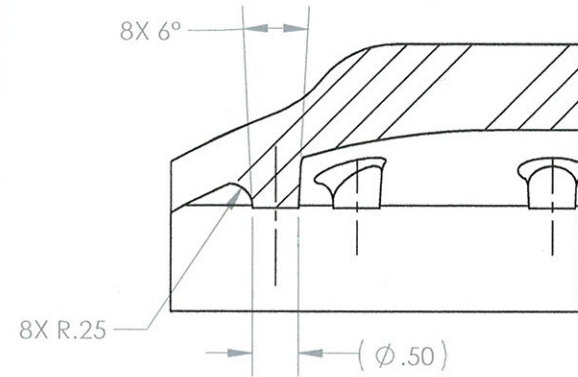
TOP HEMISPHERE,
6K SPHERICAL HOUSING

REV. 1

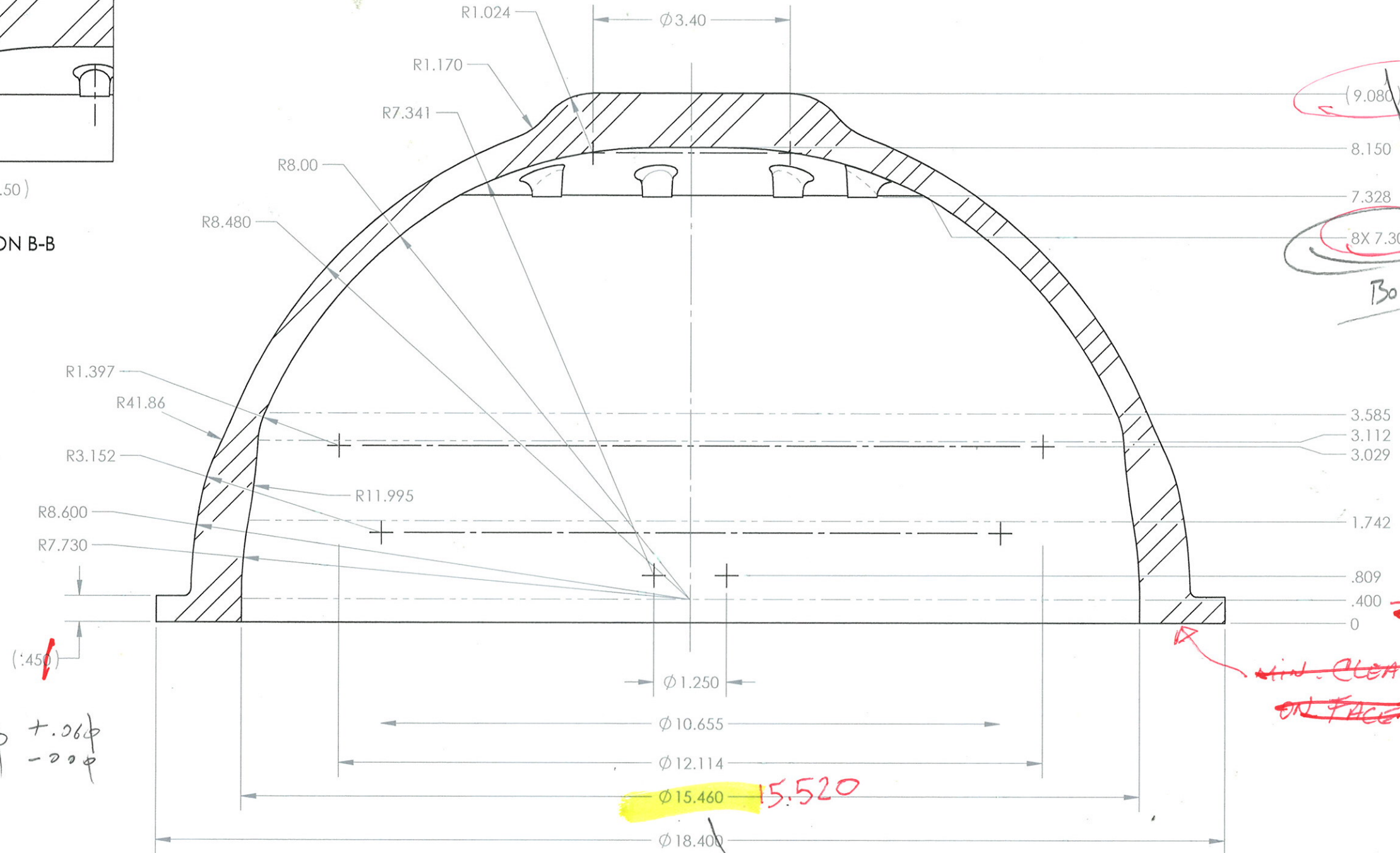
8 7 6 5 4 3 2 1

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REV.	REVISIONS		DATE	APPROVED
	DESCRIPTION			
	INITIAL RELEASE			



SECTION B-B



SECTION A-A

(9.080)

8.150

7.328

8X 7.301

Bosses

~~1.630 / 1.650~~

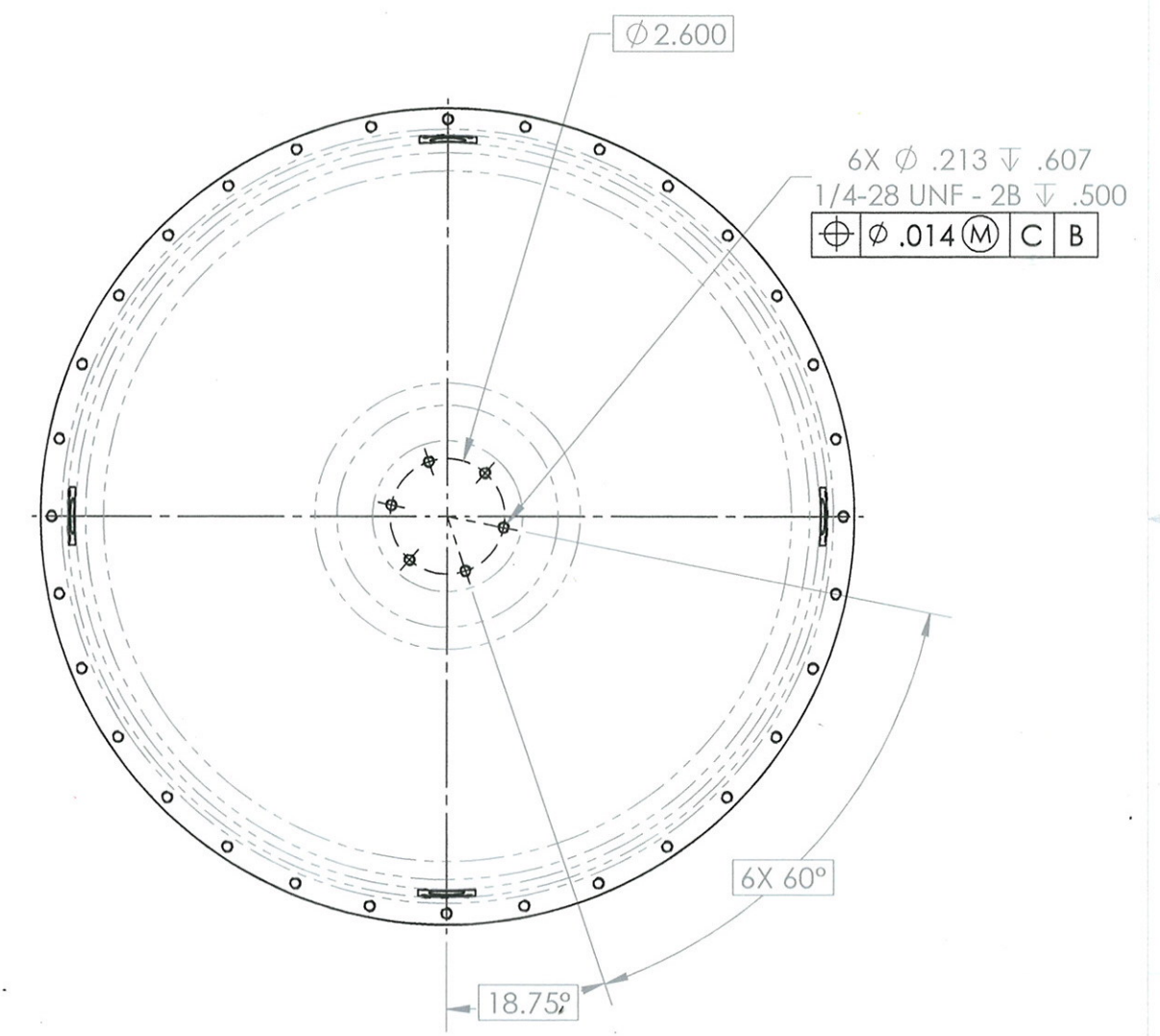
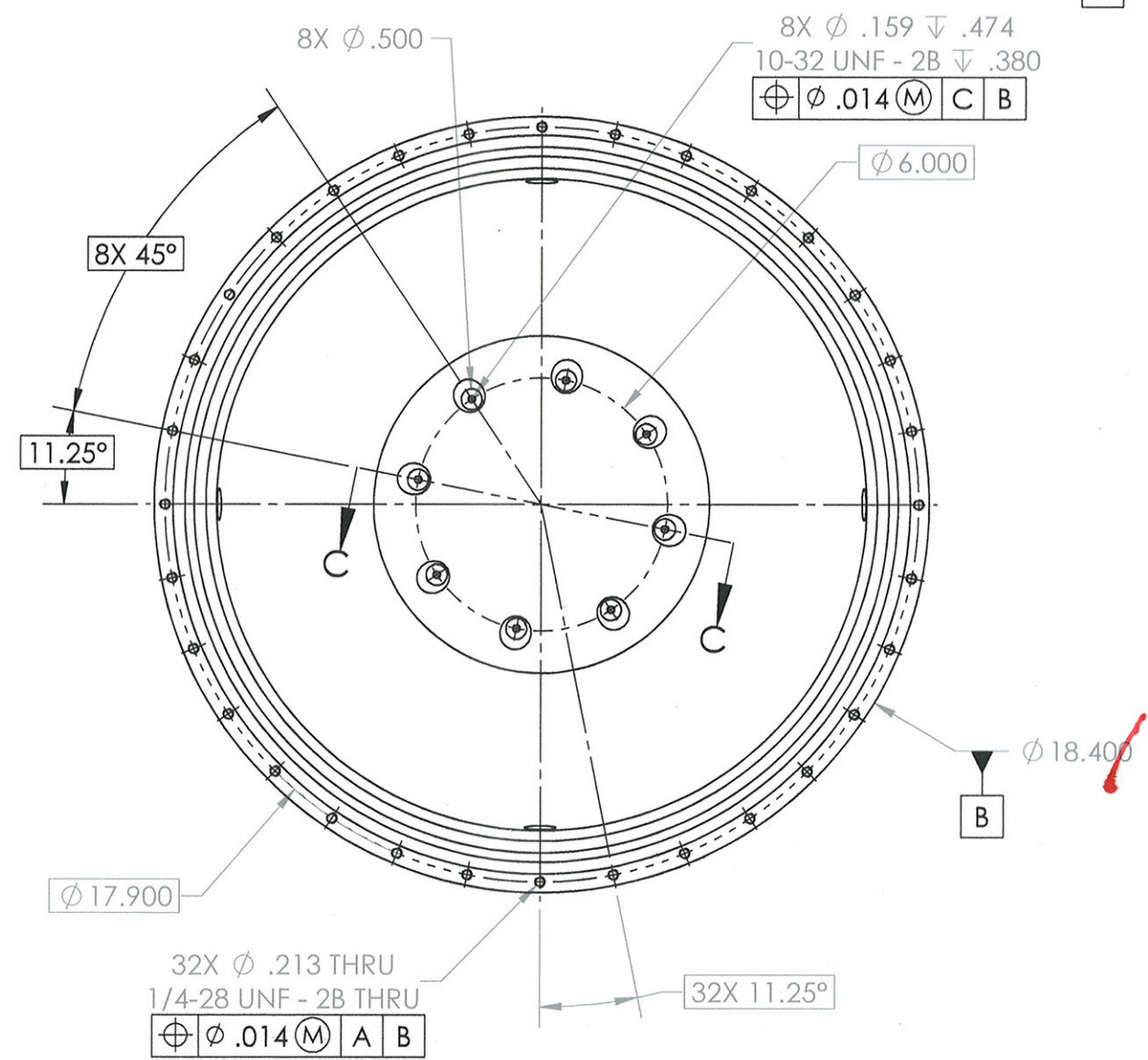
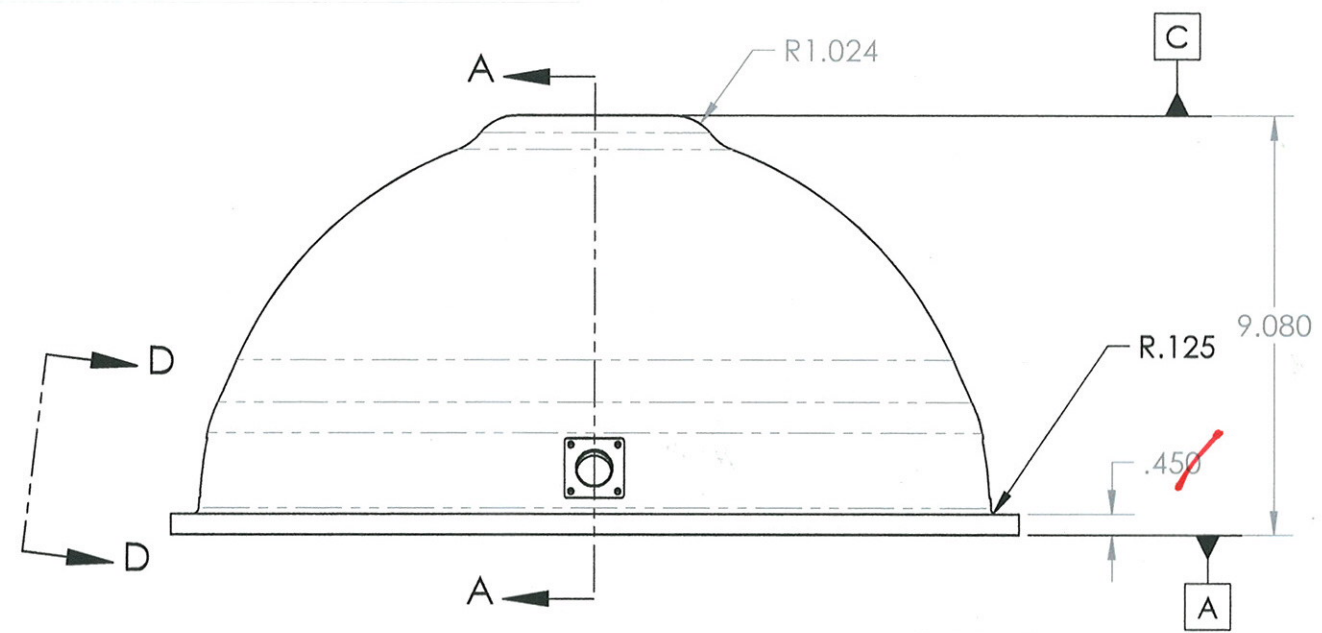
and CLEAN UP ON FACE

Shop / Q.C.				UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				APPROVALS		DATE	Monterey Bay Aquarium Research Institute						
Inspector				1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	DRAWN	M. GREISE	11/30/11	MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700 						
Shop Foreman				1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING. 3. REMOVE BURRS AND SHARP EDGES .015 MAX. 4. MACHINED FILLET RADII .0150-.030. 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.				ENGINEER	M. GREISE	11/30/11							
Engineer								CHECKED									
NEXT ASSY Description	NEXT ASSY Number							PROJECT NO.									
								PROJECT	4K SPHERE								
Application				DO NOT SCALE DRAWING				WEIGHT				HEMISPHERE CASTING 6K HOUSING					
												SIZE B		DWG. NO. 1001103WG		REV.	
												SCALE 1:2		CAD FILE: MECH ENG ON TORNADO		SHEET 2 OF 2	

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	INITIAL RELEASE		

- NOTES:
1. MATERIAL IS GR 5 AS CAST TITANIUM, MIN YIELD 120 KSI
 2. APPLICABLE STANDARDS/SPECIFICATIONS: ANSI Y14.5M-1994, DIMENSIONS AND TOLERANCES MIL-STD-12, ABBREVIATIONS.
 3. GROOVE FOR O-RING 2-385
 4. GROOVE FOR O-RING 2-386
 5. BOSS AND PENETRATION FOR SEACON MINK-FCR RECEPTACLE
 6. PART IS SYMMETRIC ABOUT CENTERLINE
 7. DEPTH RATING OF ASSEMBLY: 6000M
 8. WEIGHT: 46.6 LBS DRY



TOP VIEW

DATE: 7JAN12

BILL OF MATERIALS			
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:	APPROVALS DATE
Inspector		1 PLACE DIM ±.1/16 2 PLACE DIM ±.02 3 PLACE DIM ±.005 ANGLES ±1°	DRAWN M. GREISE 11/30/11
Shop Foreman		1. DIMENSIONS ARE IN INCHES	ENGINEER M. GREISE 11/30/11
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING.	CHECKED
NEXT ASSY Description	NEXT ASSY Number	3. REMOVE BURRS AND SHARP EDGES .015 MAX AFTER MACHINING.	PROJECT NO.
Application		4. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 UNLESS SPECIFIED OTHER.	PROJECT 6K SPHERE
		5. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 IN FOR SINGLE SURFACE UNLESS SPECIFIED OTHER.	WEIGHT
DO NOT SCALE DRAWING			

Monterey Bay Aquarium Research Institute

MBARI
7700 Sandholdt RD.
Moss Landing, CA 95039
PH: (831) 775-1700

BOTTOM HEMISPHERE,
6K SPHERICAL HOUSING

SIZE B DWG. NO. 1001101DWG REV.

SCALE 1:4 CAD FILE: MECH ENG ON TORNADO SHEET 1 OF 2

SECTION A-A

DATE: 7JAN12

BILL OF MATERIALS											
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				APPROVALS		DATE		Monterey Bay Aquarium Research Institute  MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700	
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	DRAWN	M. GREISE	11/30/11			
Shop Foreman		1. DIMENSIONS ARE IN INCHES				ENGINEER	M.GREISE	11/30/11			
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING. 3. REMOVE BURRS AND SHARP EDGES .015 MAX. 4. MACHINED FILLET RADII .0150-.030.				CHECKED					
NEXT ASSY Description	NEXT ASSY Number	5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005				PROJECT NO.				BOTTOM HEMISPHERE 6K HOUSING	
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX. .012 INCHES FOR SINGLE SURFACE.				PROJECT		4K SPHERE			
Application		DO NOT SCALE DRAWING				WEIGHT				SIZE B	
								DWG. NO.		REV.	
								1001101DWG			
								SCALE 1:2		CAD FILE: MECH ENG ON TORNADO	
										SHEET 2 OF 2	