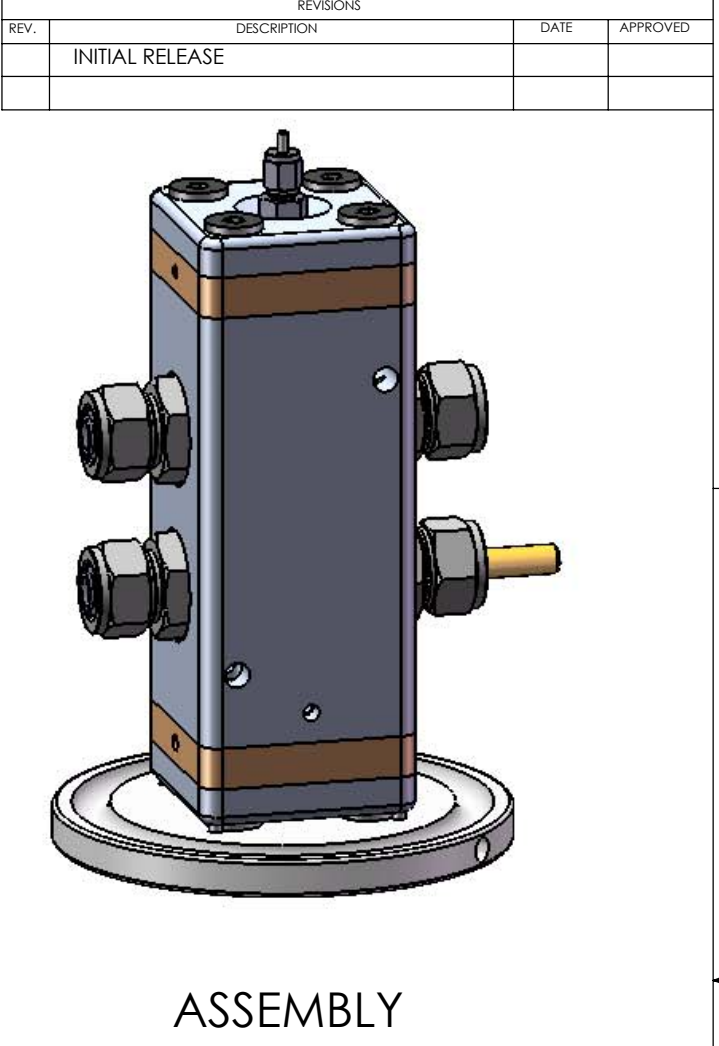
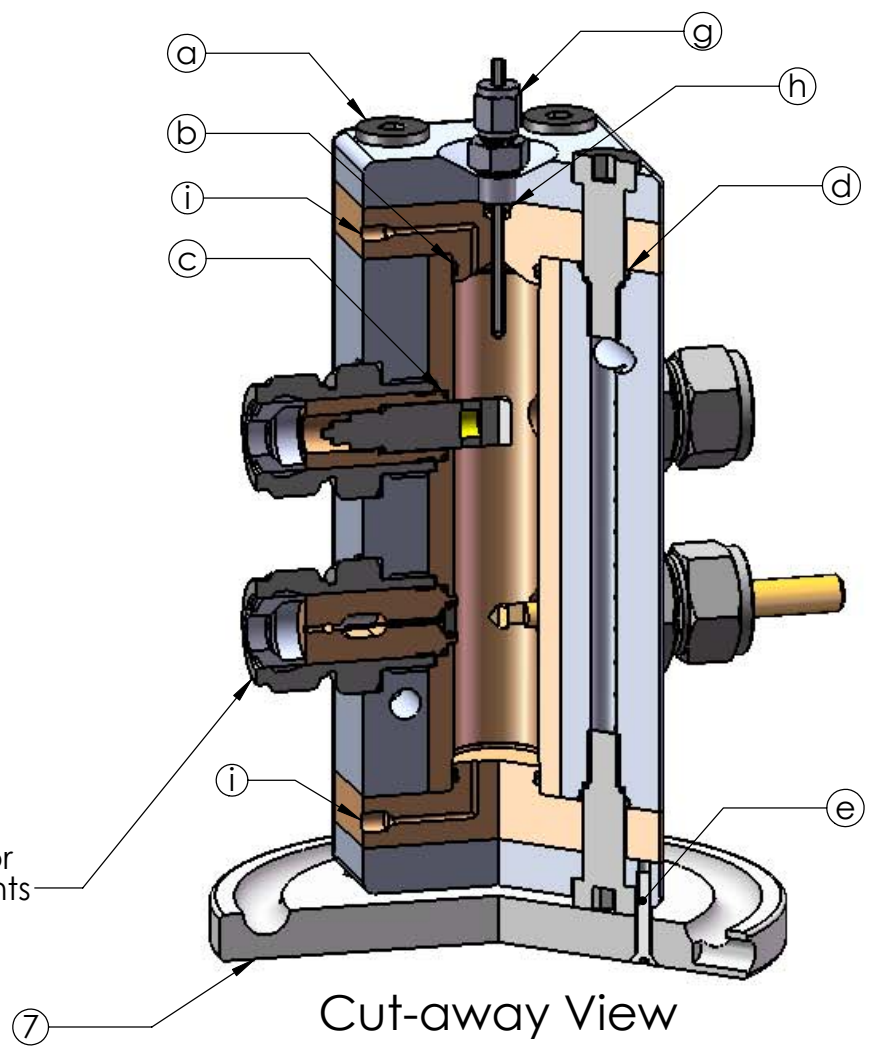
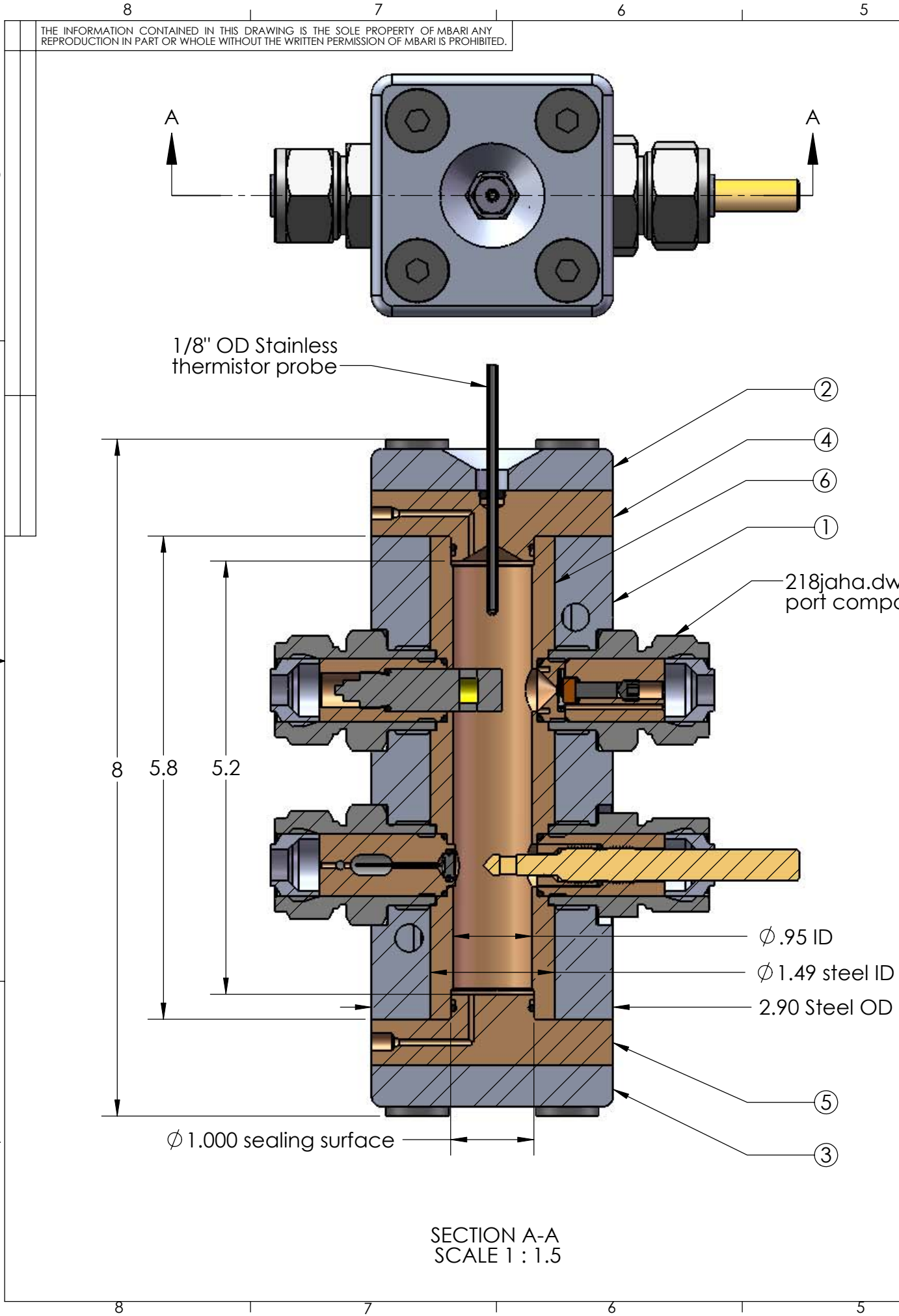
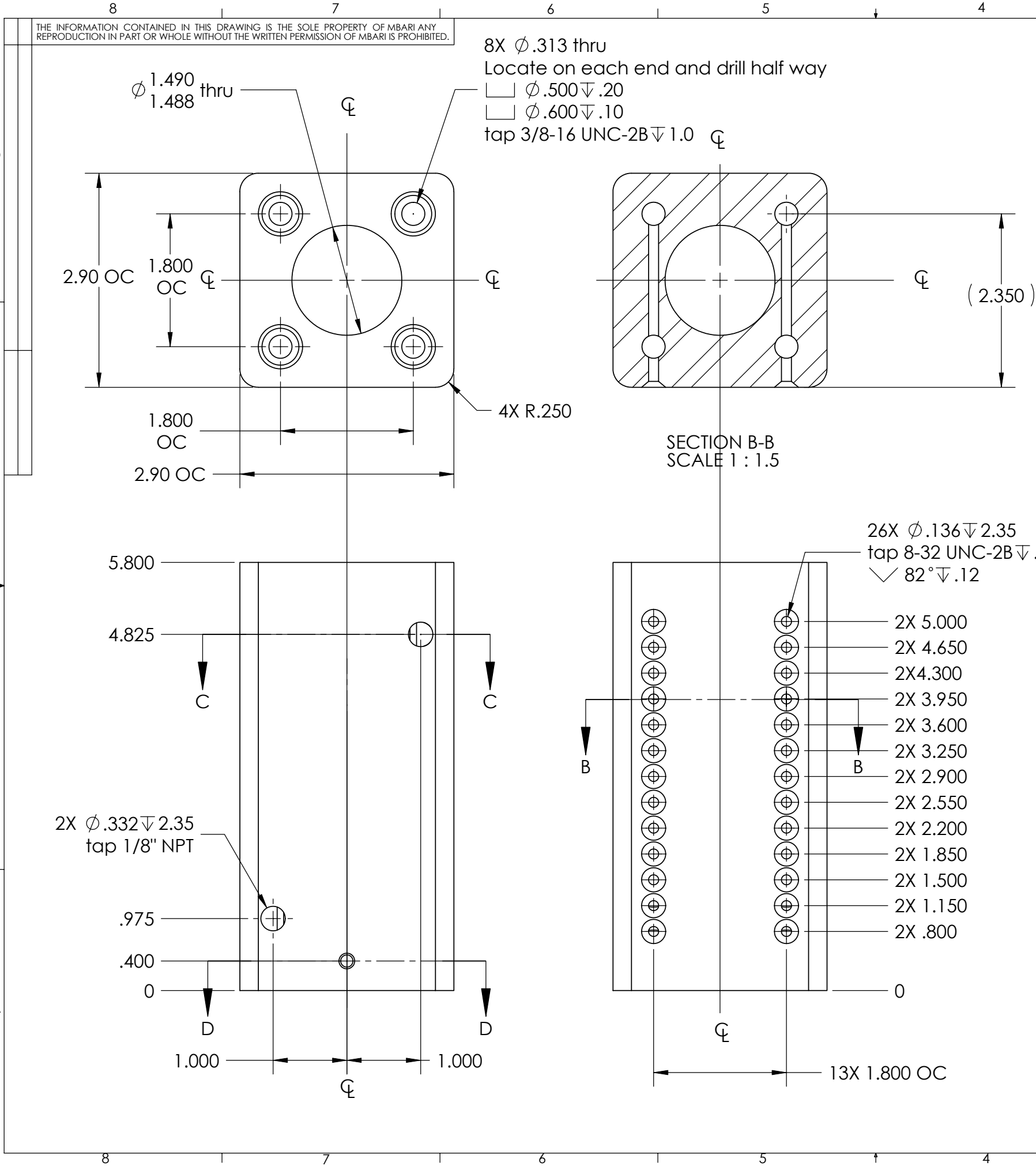


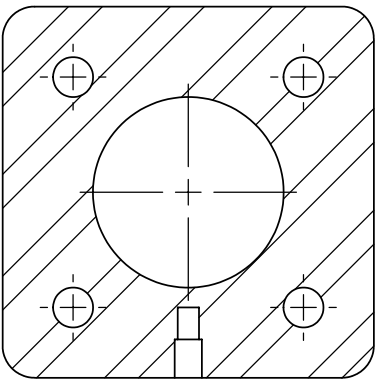
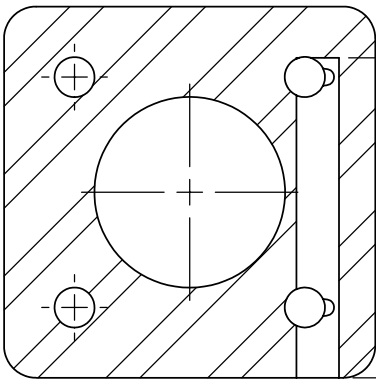
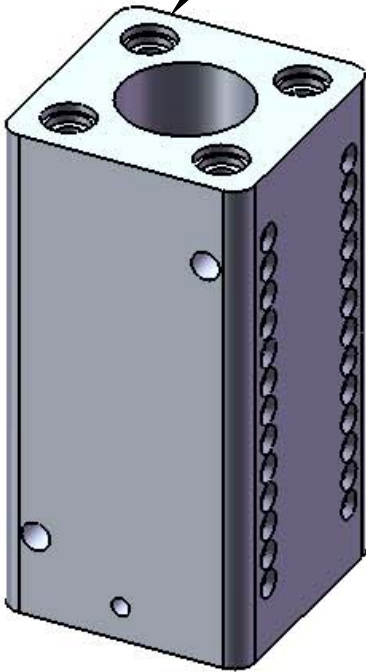
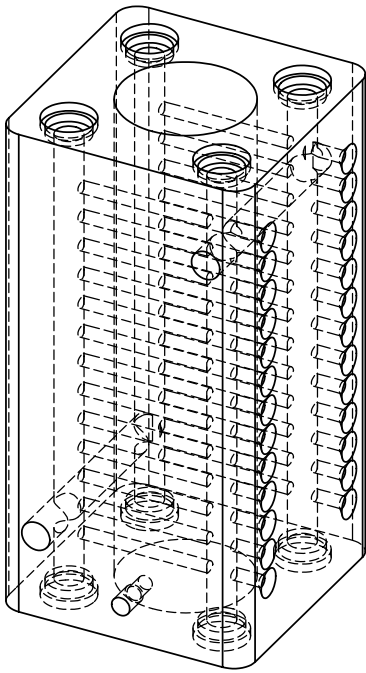


Item No.	Qty	Part No.	Description	Material Specification
1	2 sets		Upchurch fittings for 1/16" PEEK tubing	LT-110 PEEK nut & LT-135 ferrule
h	1		Viton O-ring (D90) w/Parbak	Viton D90 2-104
g	1		Swagelock fitting	SS-200-1-4ST (bored thru)
f	26		SS 8-32x.25 sealing flathead screw	McMaster PN# 98070A310
e	4		SS Flathead screw	SS 8-32 x 1" flathead screw
d	8		O-ring	2-014
c	4		Viton O-ring (D90)	Viton D90 2-016
b	2		Viton O-ring (D90) w/Parbak	Viton D90 2-020
a	8		SS Shoulder Screw	McMaster PN#90298A712
A1	1		Parts #1 and 6 press fit together	
7	1		Stand	PVC
6	1		PEEK Liner	PEEK Rod
5	1		Endcap (Bottom)	PEEK
4	1		Endcap (Top)	PEEK
3	1		Endcap retainer (Bottom)	Ti Alloy Gr. 5 (6AL-4V)
2	1		Endcap retainer (Top)	Ti Alloy Gr. 5 (6AL-4V)
1	1		SS Housing	Ti Alloy Gr. 5 (6AL-4V)

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 Hans Jannasch 4/22/09		Monterey Bay Aquarium Research Institute	
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		 MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700	
Engineer						CHECKED			
						PROJECT NO. 900918			
NEXT ASSY Description	NEXT ASSY Number					PROJECT Novel Sensors		P/T Test Chamber	
								SIZE B DWG. NO. 217jahaPTtestChamber	
Application		DO NOT SCALE DRAWING				WEIGHT		REV.	
								SCALE 1:3 CAD FILE: Tornado/chem/SWfiles SHEET 1 OF 6	



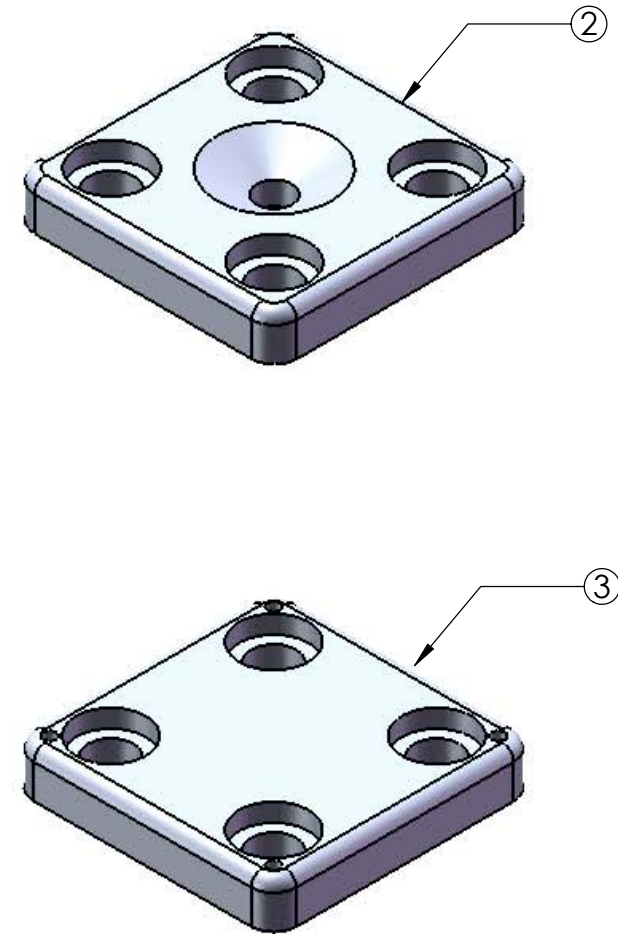
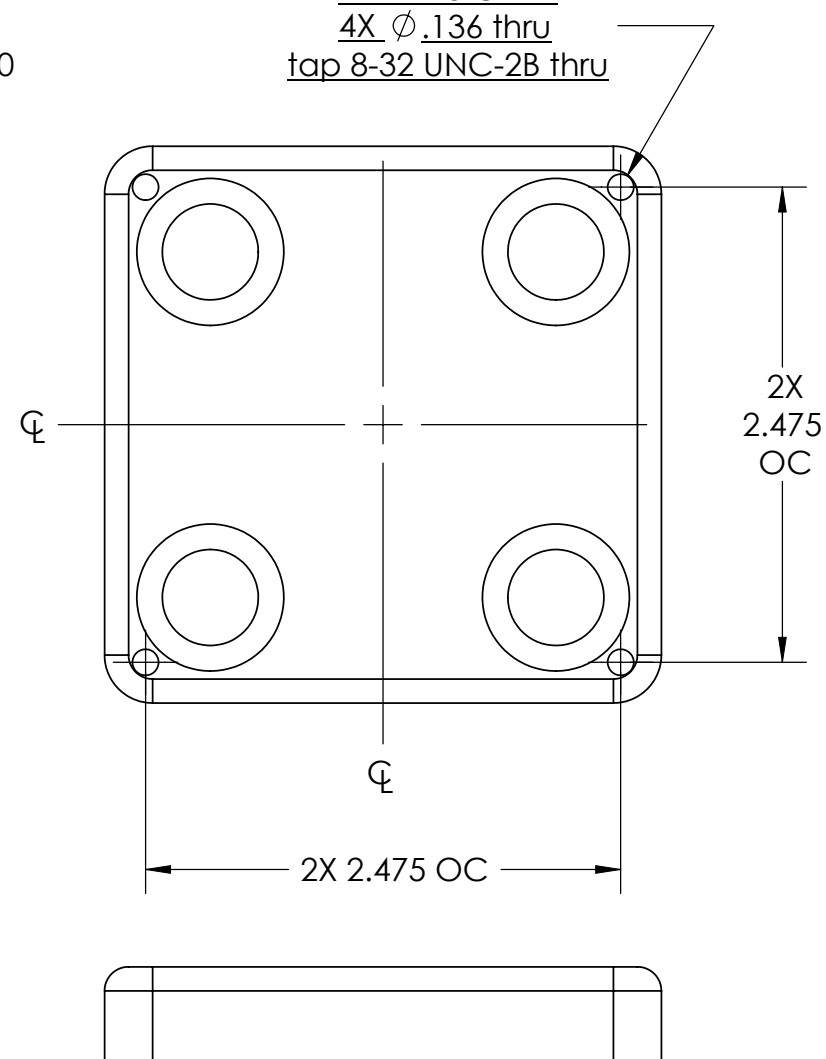
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	INITIAL RELEASE		



1	1		SS Housing	Ti Alloy Gr. 5 (6AL-4V)			
Item No.	Qty	Part No.	Description	Material Specification			
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°	Monterey Bay Aquarium Research Institute MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700 	
Shop Foreman		1. DIMENSIONS ARE IN INCHES					ENGINEER
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING.					
		3. REMOVE BURRS AND SHARP EDGES .015 MAX.					CHECKED
NEXT ASSY Description	NEXT ASSY Number	4. MACHINED FILLET RADII .0150-.030.				PROJECT NO. 900918	P/T Test Chamber
		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005				PROJECT Novel Sensors	
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.					
Application	DO NOT SCALE DRAWING		WEIGHT	SIZE B		DWG. NO. 217jahaPTtestChamber	REV.
				SCALE 1:3	CAD FILE: Tornado/chem/SWfiles	SHEET 2 OF 6	

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	INITIAL RELEASE		

PART #3 ONLY
4X Ø .136 thru
tap 8-32 UNC-2B thru

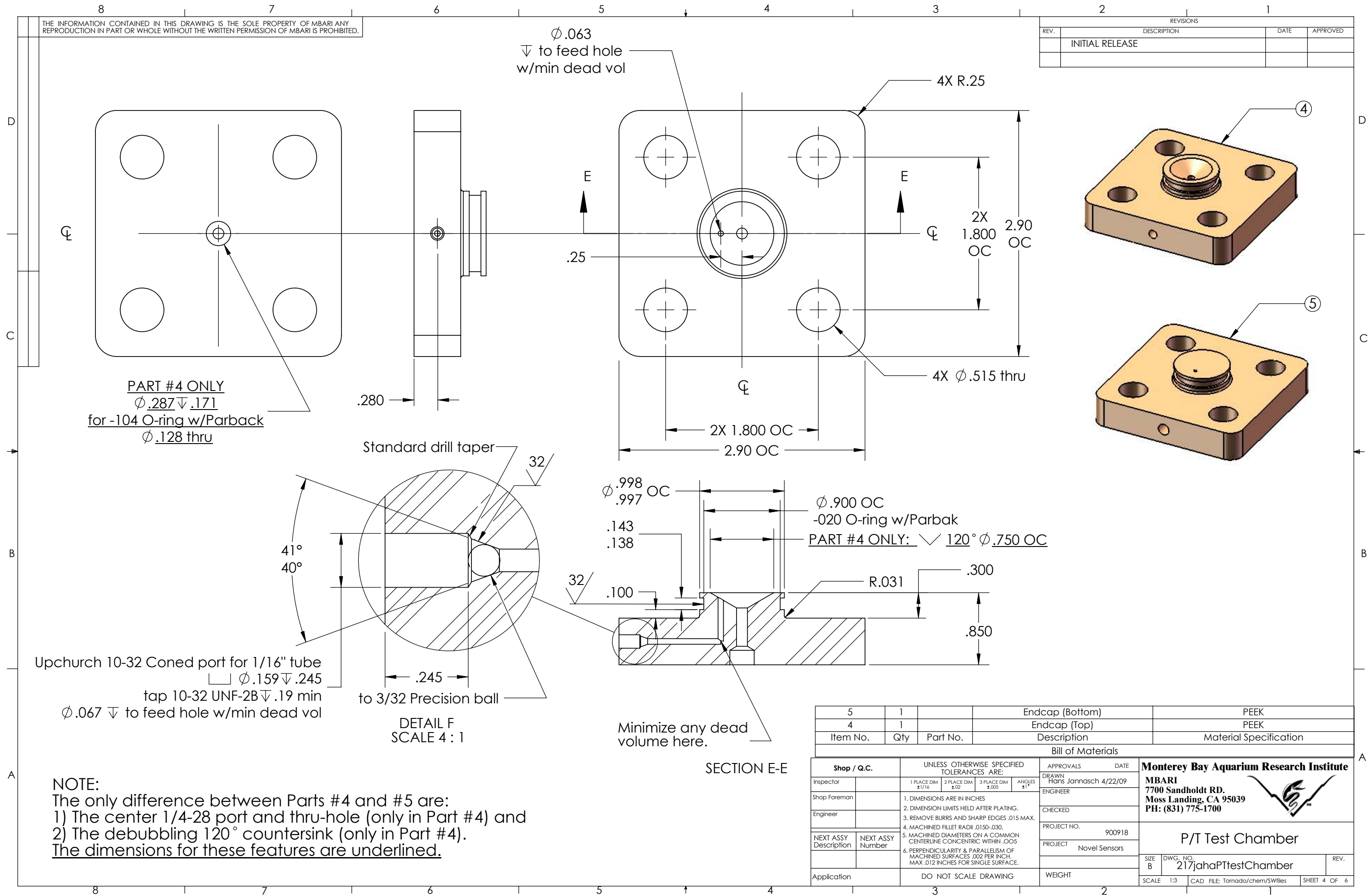


NOTE:
The only difference between Parts #2 and #3 are:
1) The center countersunk thru-hole (only in Part #2) and
2) The 4X #8 mounting holes (only in Part #3).
The dimensions for these features are underlined.

3	1	Endcap retainer (Bottom)		Ti Alloy Gr. 5 (6AL-4V)	
2	1	Endcap retainer (Top)		Ti Alloy Gr. 5 (6AL-4V)	
Item No.	Qty	Part No.	Description	Material Specification	
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°
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.			DRAWN Hans Jannasch 4/22/09
Engineer					ENGINEER
					CHECKED
NEXT ASSY Description	NEXT ASSY Number				PROJECT NO. 900918 PROJECT Novel Sensors
Application		DO NOT SCALE DRAWING		WEIGHT	
				SIZE B DWG. NO. 217jahaPTtestChamber	REV.
		SCALE 1:3	CAD FILE: Tornado/chem/SWfiles	SHEET 3 OF 6	

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	INITIAL RELEASE		



NOTE:
The only difference between Parts #4 and #5 are:
1) The center 1/4-28 port and thru-hole (only in Part #4) and
2) The debubbling 120° countersink (only in Part #4).
The dimensions for these features are underlined.

5	1	Endcap (Bottom)		PEEK
4	1	Endcap (Top)		PEEK
Item No.	Qty	Part No.	Description	Material Specification
Bill of Materials				
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS DATE
Inspector		1 PLACE DIM $\pm 1/16$	2 PLACE DIM $\pm .02$	DRAWN Hans Jannasch 4/22/09
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
Engineer				CHECKED
				PROJECT NO. 900918
NEXT ASSY Description	NEXT ASSY Number			PROJECT Novel Sensors
Application		DO NOT SCALE DRAWING		WEIGHT
				SIZE B DWG. NO. 217 SCALE 1:3 CAD FILE: Tornado/chem/SWfiles SHEET 4 OF 6

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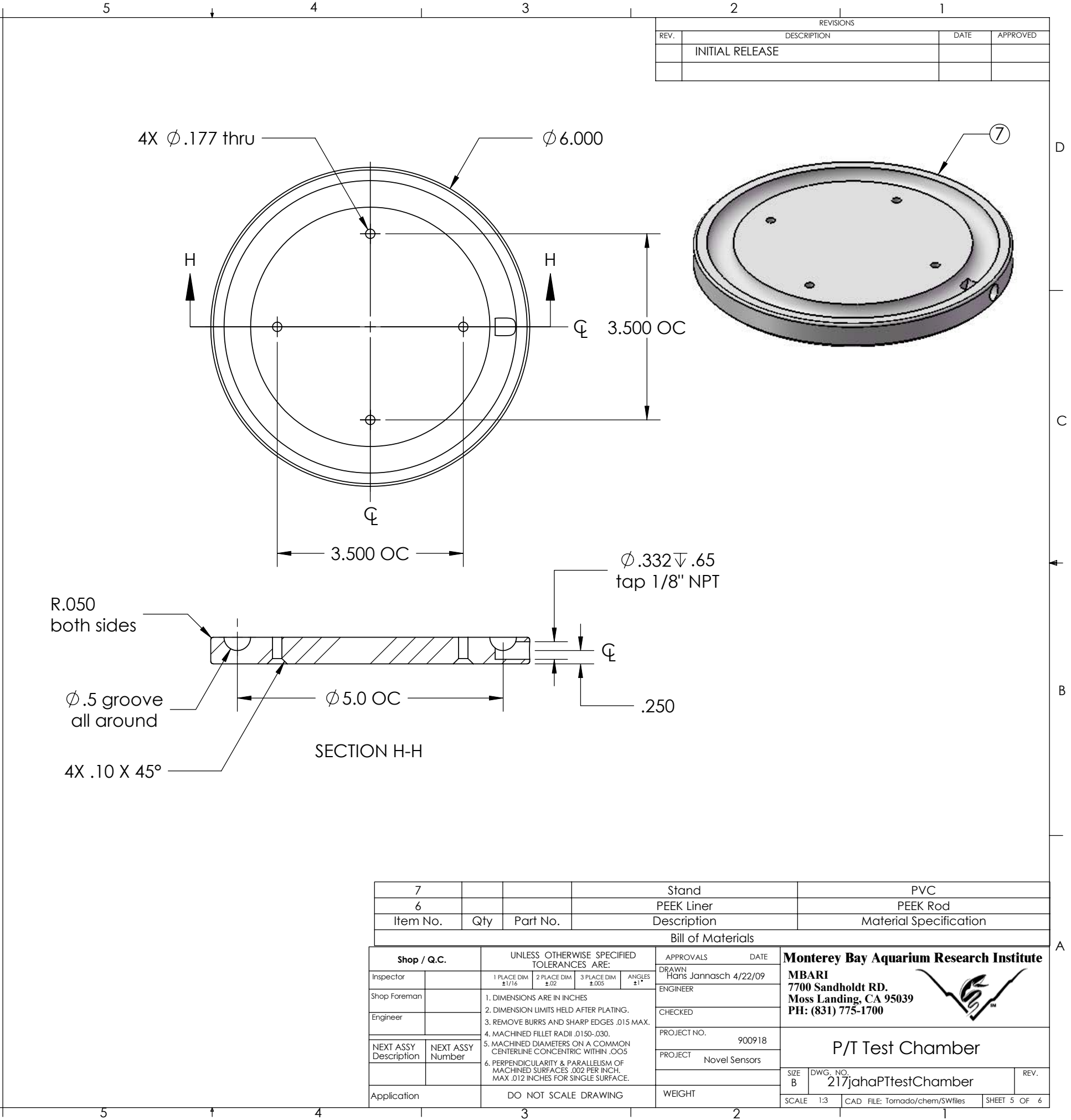
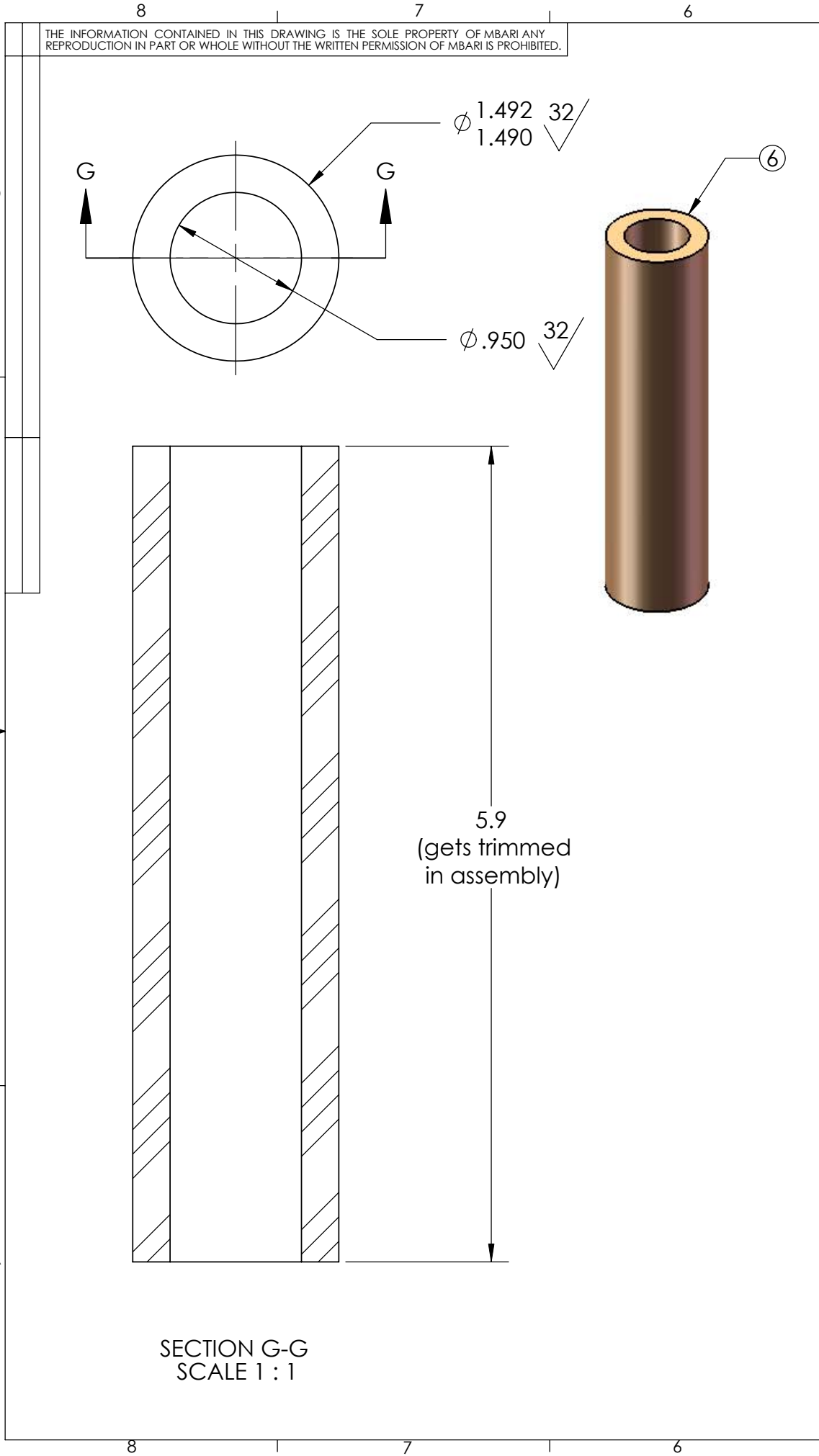
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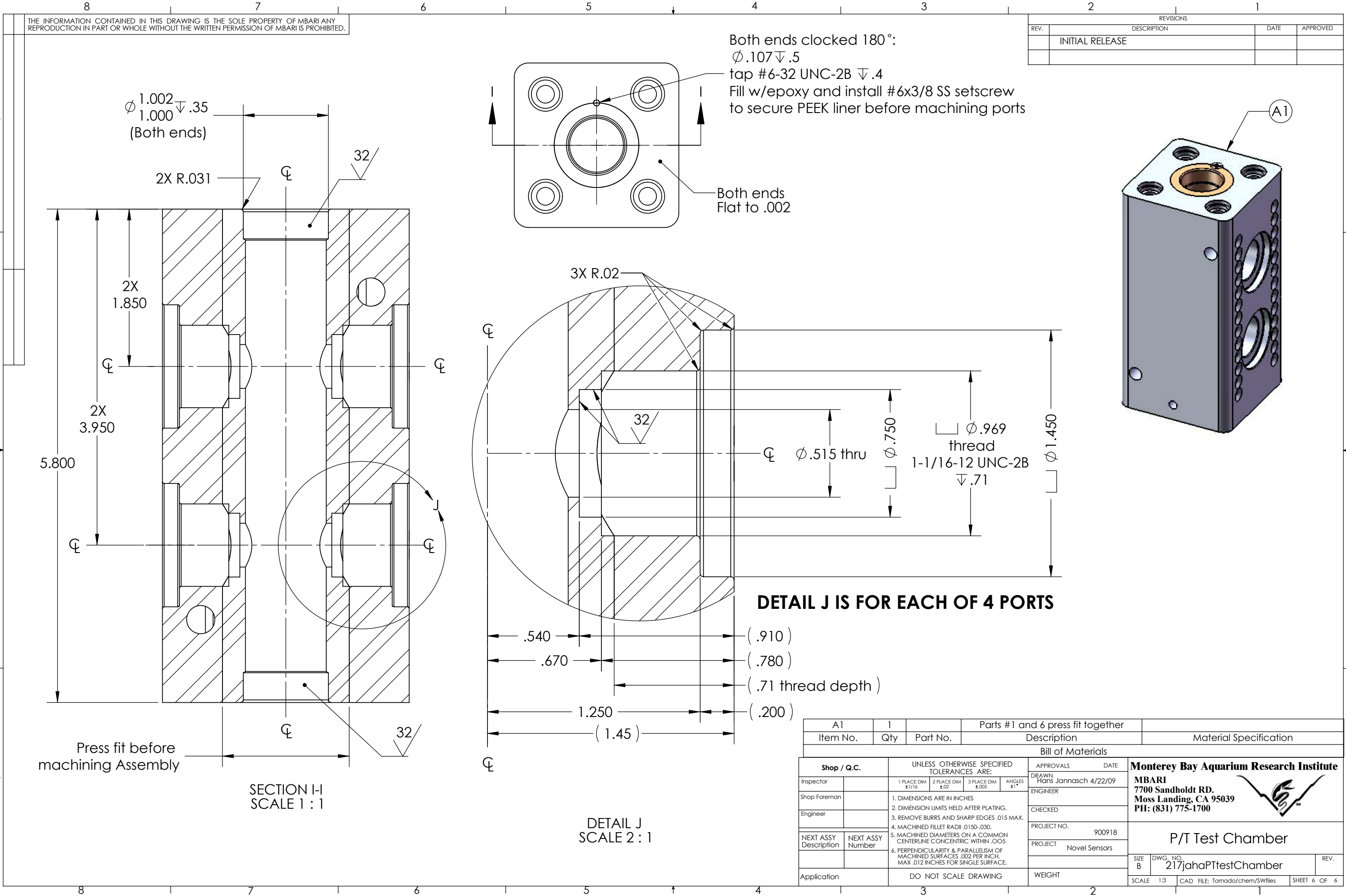
Moss Landing, CA 95039

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P/T Test Chamber





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REV.	DESCRIPTION	DATE	APPROVED
	INITIAL RELEASE		

Both ends clocked 180°:
Ø.107▽.5
tap #6-32 UNC-2B ▽.4
Fill w/epoxy and install #6x3/8 SS setscrew
to secure PEEK liner before machining ports

Both ends
Flat to .002

DETAIL J IS FOR EACH OF 4 PORTS

A1		1			Parts #1 and 6 press fit together			
Item No.		Qty	Part No.	Description			Material Specification	
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 Hans Jannasch 4/22/09	
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	
Engineer							CHECKED	
NEXT ASSY Description		NEXT ASSY Number					PROJECT NO. 900918	
							PROJECT Novel Sensors	
Application			DO NOT SCALE DRAWING			WEIGHT		

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Moss Landing, CA 95039
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P/T Test Chamber

SIZE B DWG. NO. 217jahaPTtestChamber REV.