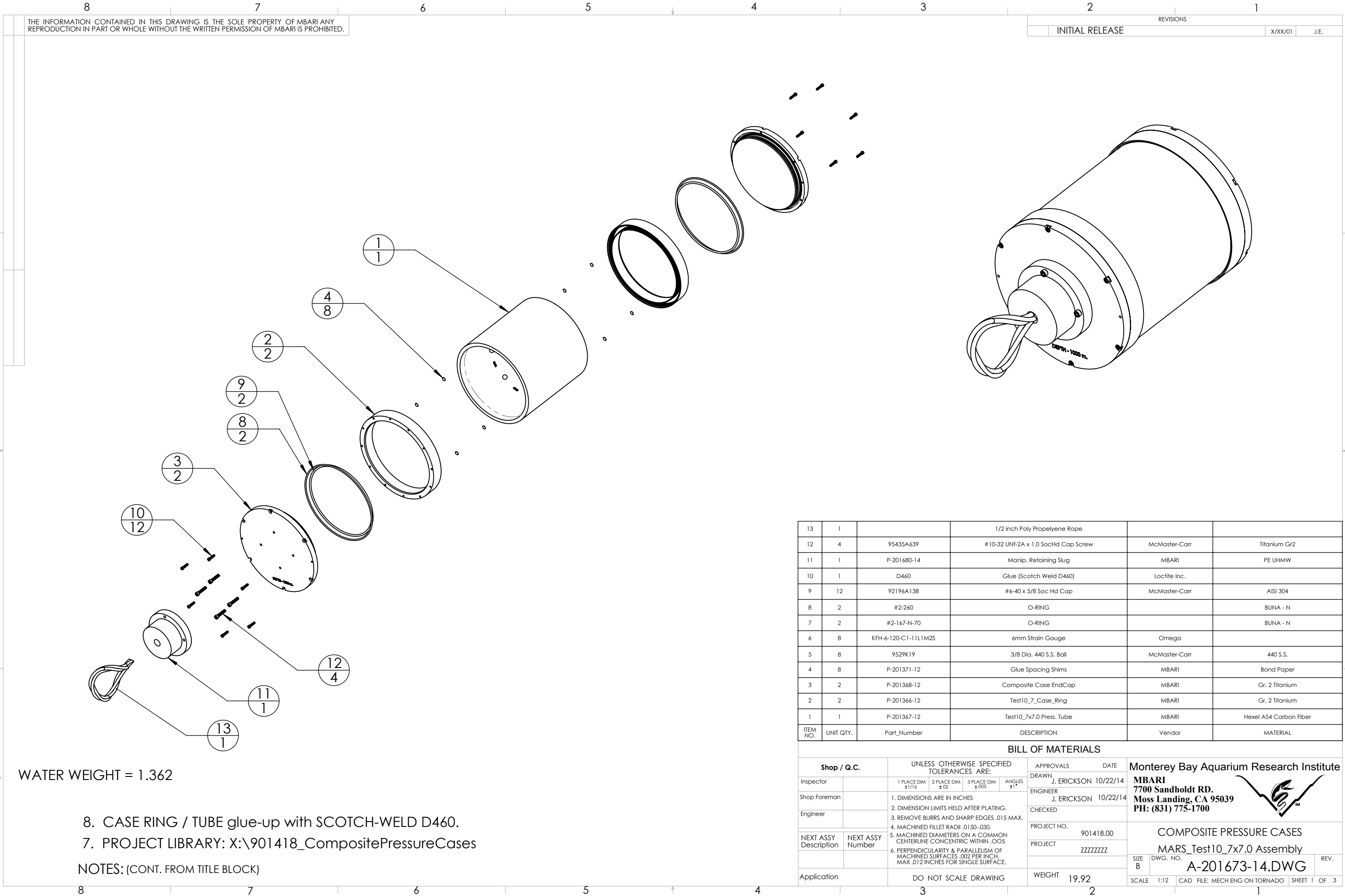




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REVISIONS		
INITIAL RELEASE	X/XX/01	J.E.

13	1		1/2 inch Poly Propylene Rope		
12	4	95435A639	#10-32 UNF-2A x 1.0 SocHd Cap Screw	McMaster-Carr	Titanium Gr2
11	1	P-201680-14	Manip. Retaining Slug	MBARI	PE UHMW
10	1	D460	Glue (Scotch Weld D460)	Loctite Inc.	
9	12	92196A138	#6-40 x 5/8 Soc Hd Cap	McMaster-Carr	AISI 304
8	2	#2-260	O-RING		BUNA - N
7	2	#2-167-N-70	O-RING		BUNA - N
6	8	KFH-6-120-C1-11LIM25	6mm Strain Gauge	Omega	
5	8	9529K19	3/8 Dia. 440 S.S. Ball	McMaster-Carr	440 S.S.
4	8	P-201371-12	Glue Spacing Shims	MBARI	Bond Paper
3	2	P-201368-12	Composite Case EndCap	MBARI	Gr. 2 Titanium
2	2	P-201366-12	Test10_7_Case_Ring	MBARI	Gr. 2 Titanium
1	1	P-201367-12	Test10_7x7.0 Press. Tube	MBARI	Hexel AS4 Carbon Fiber
ITEM NO.	UNIT QTY.	Part_Number	DESCRIPTION	Vendor	MATERIAL

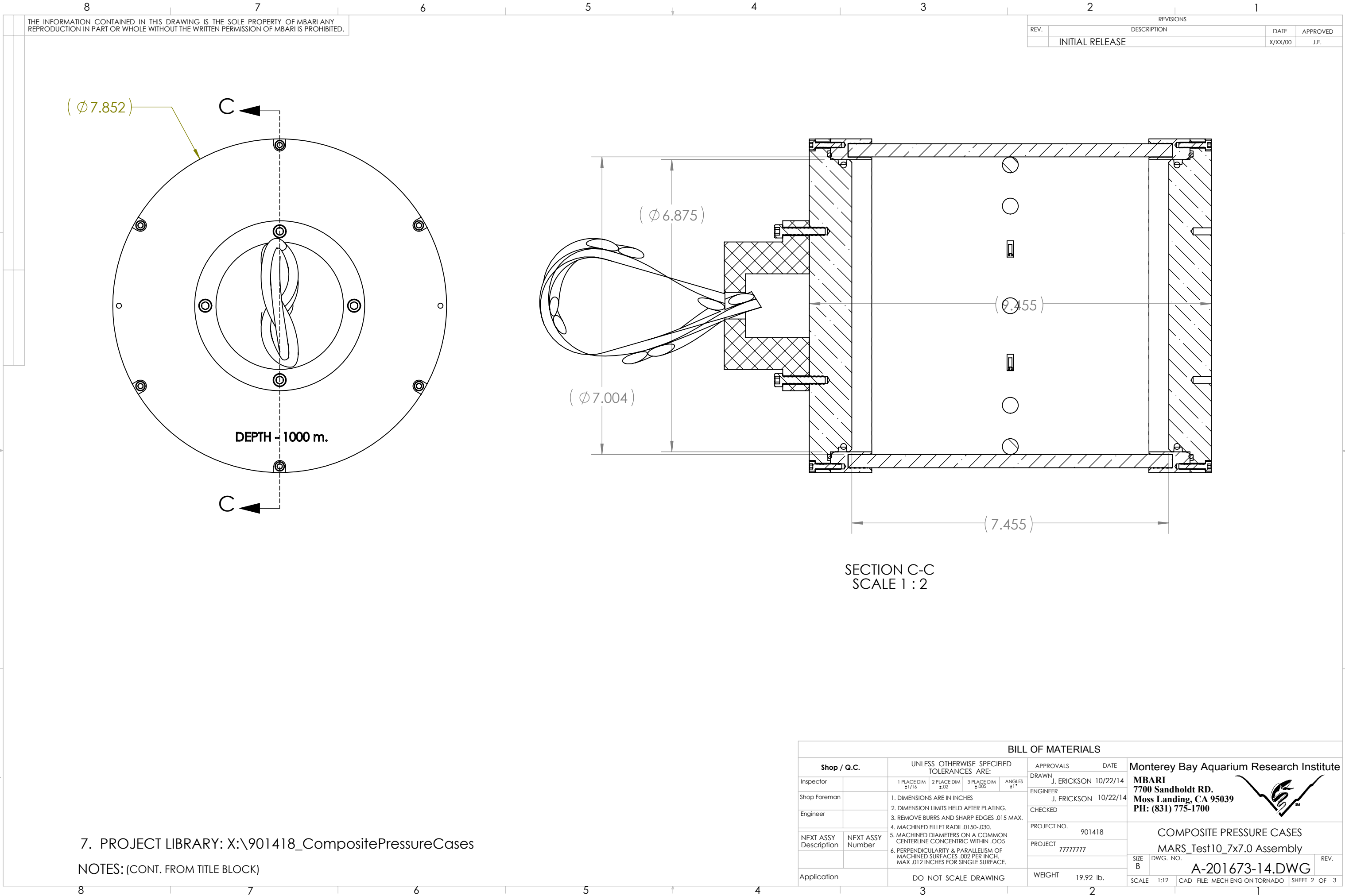
BILL OF MATERIALS

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	J. ERICKSON	10/22/14	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	J. ERICKSON	10/22/14			
Engineer						CHECKED					
NEXT ASSY Description	NEXT ASSY Number					PROJECT NO.	901418.00		COMPOSITE PRESSURE CASES MARS_Test10_7x7.0 Assembly A-201673-14.DWG		
						PROJECT	ZZZZZZZZ				
Application		DO NOT SCALE DRAWING				WEIGHT	19.92		SIZE B	DWG. NO.	REV.
						SCALE	1:12	CAD FILE: MECH ENG ON TORNADO	SHEET 1	OF 3	

WATER WEIGHT = 1.362

8. CASE RING / TUBE glue-up with SCOTCH-WELD D460.
7. PROJECT LIBRARY: X:\901418_CompositePressureCases

NOTES: (CONT. FROM TITLE BLOCK)



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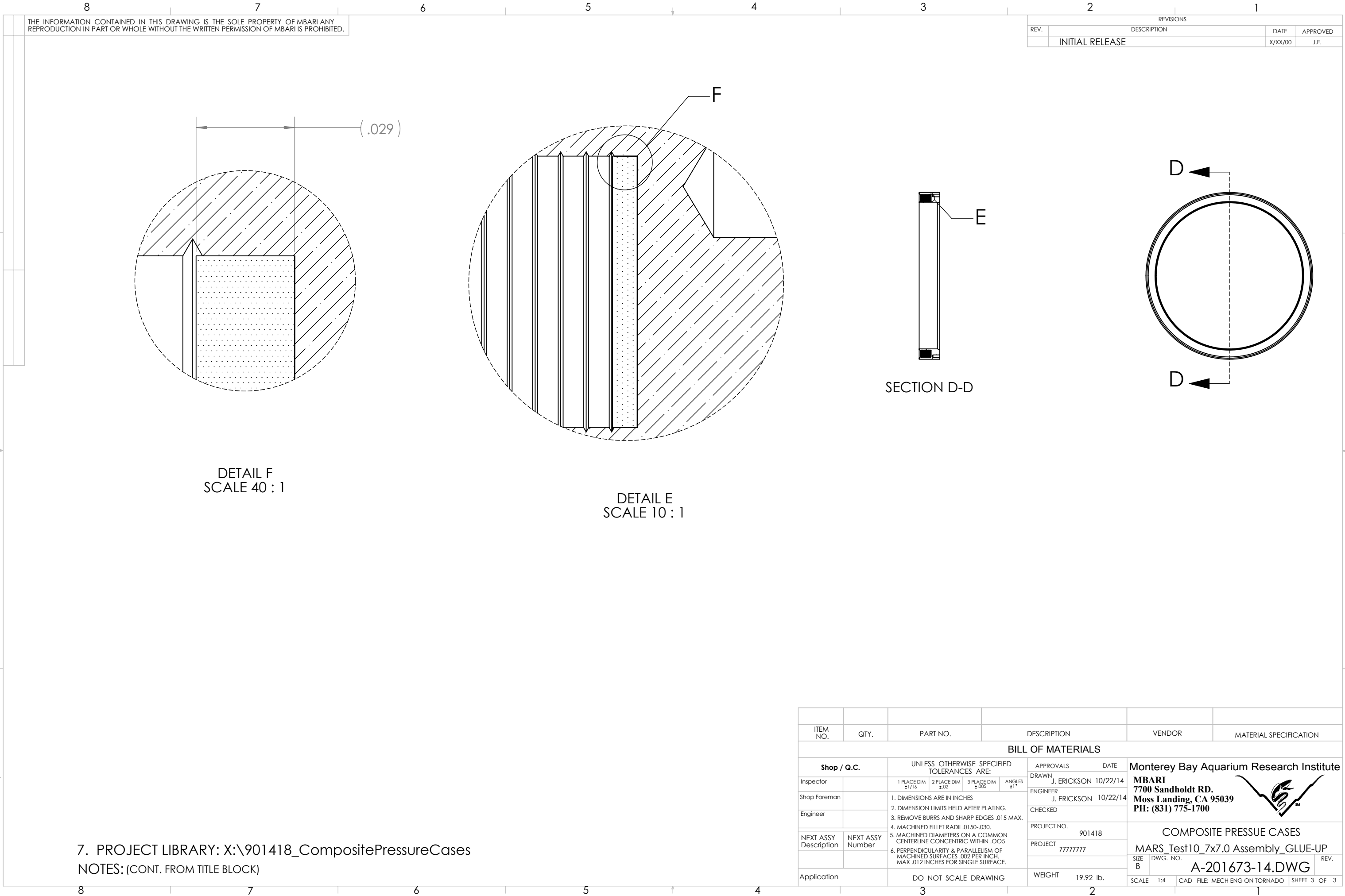
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	INITIAL RELEASE	X/XX/00	J.E.

SECTION C-C
SCALE 1 : 2

7. PROJECT LIBRARY: X:\901418_CompositePressureCases

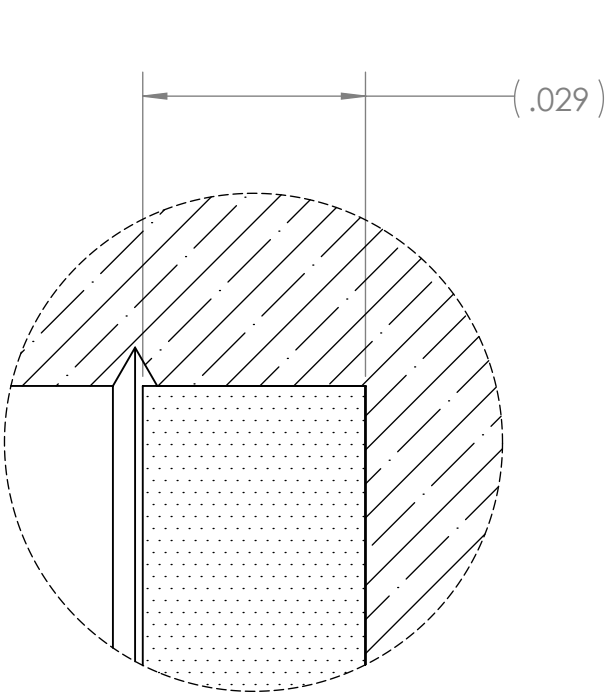
NOTES: (CONT. FROM TITLE BLOCK)

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  COMPOSITE PRESSURE CASES MARS_Test10_7x7.0 Assembly A-201673-14.DWG	
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	DRAWN	J. ERICKSON 10/22/14		
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	J. ERICKSON 10/22/14		
Engineer						CHECKED			
NEXT ASSY Description	NEXT ASSY Number					PROJECT NO.	901418		
						PROJECT	ZZZZZZZZ		
Application		DO NOT SCALE DRAWING				WEIGHT	19.92 lb.	SIZE B	DWG. NO.
								SCALE 1:12	REV.
								CAD FILE: MECH ENG ON TORNADO	SHEET 2 OF 3

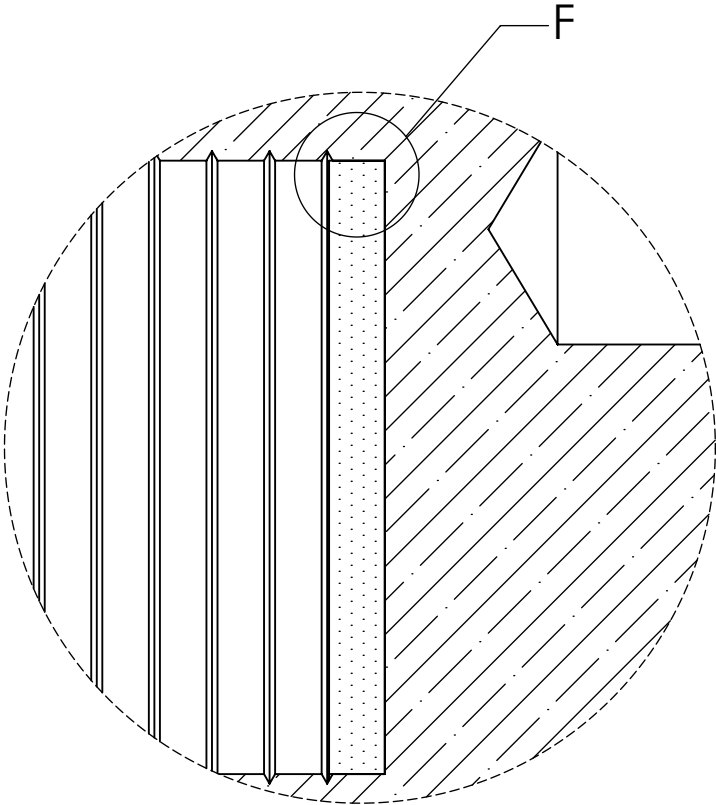


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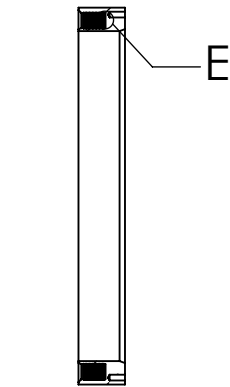
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	INITIAL RELEASE	X/XX/00	J.E.



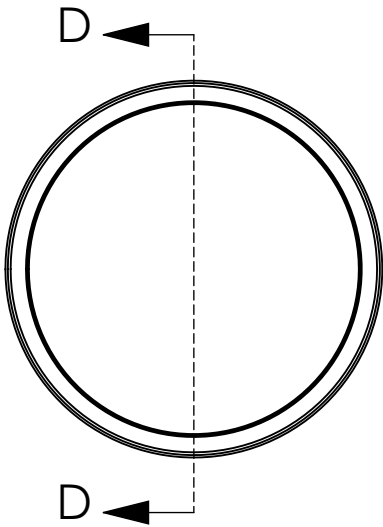
DETAIL F
SCALE 40 : 1



DETAIL E
SCALE 10 : 1



SECTION D-D



7. PROJECT LIBRARY: X:\901418_CompositePressureCases
NOTES: (CONT. FROM TITLE BLOCK)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	VENDOR	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		DRAWN J. ERICKSON 10/22/14	
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING.		ENGINEER J. ERICKSON 10/22/14	
NEXT ASSY Description		3. REMOVE BURRS AND SHARP EDGES .015 MAX.		CHECKED	
NEXT ASSY Number		4. MACHINED FILLET RADII .0150-.030.		PROJECT NO. 901418	
Application		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005		PROJECT ZZZZZZZZ	
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.		WEIGHT 19.92 lb.	
		DO NOT SCALE DRAWING		SCALE 1:4	
				CAD FILE: MECH ENG ON TORNADO	
				SHEET 3 OF 3	

Monterey Bay Aquarium Research Institute
MBARI
7700 Sandholdt RD.
Moss Landing, CA 95039
PH: (831) 775-1700



COMPOSITE PRESSUE CASES
MARS_Test10_7x7.0 Assembly_GLUE-UP
SIZE B DWG. NO. A-201673-14.DWG
REV.