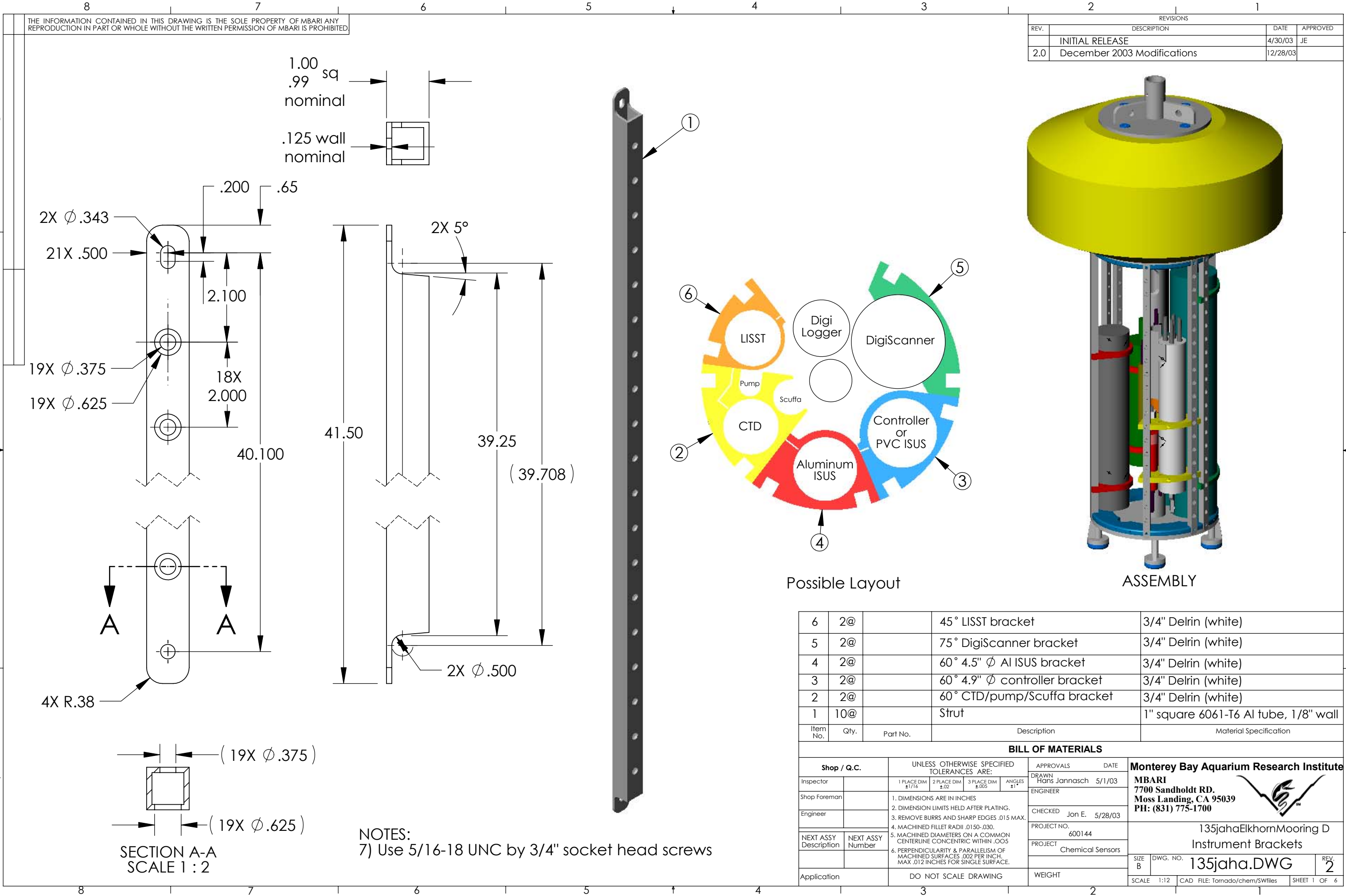
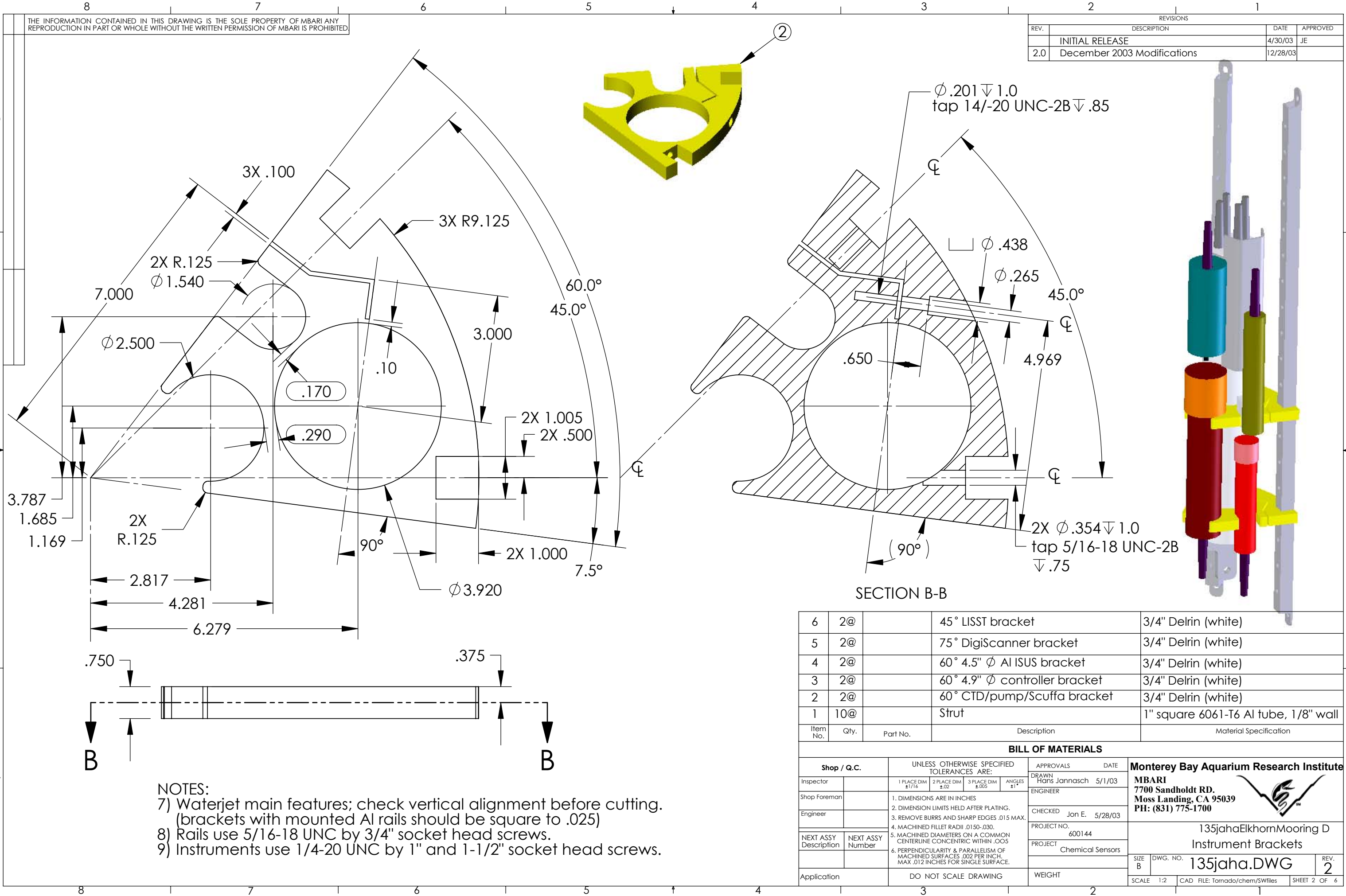






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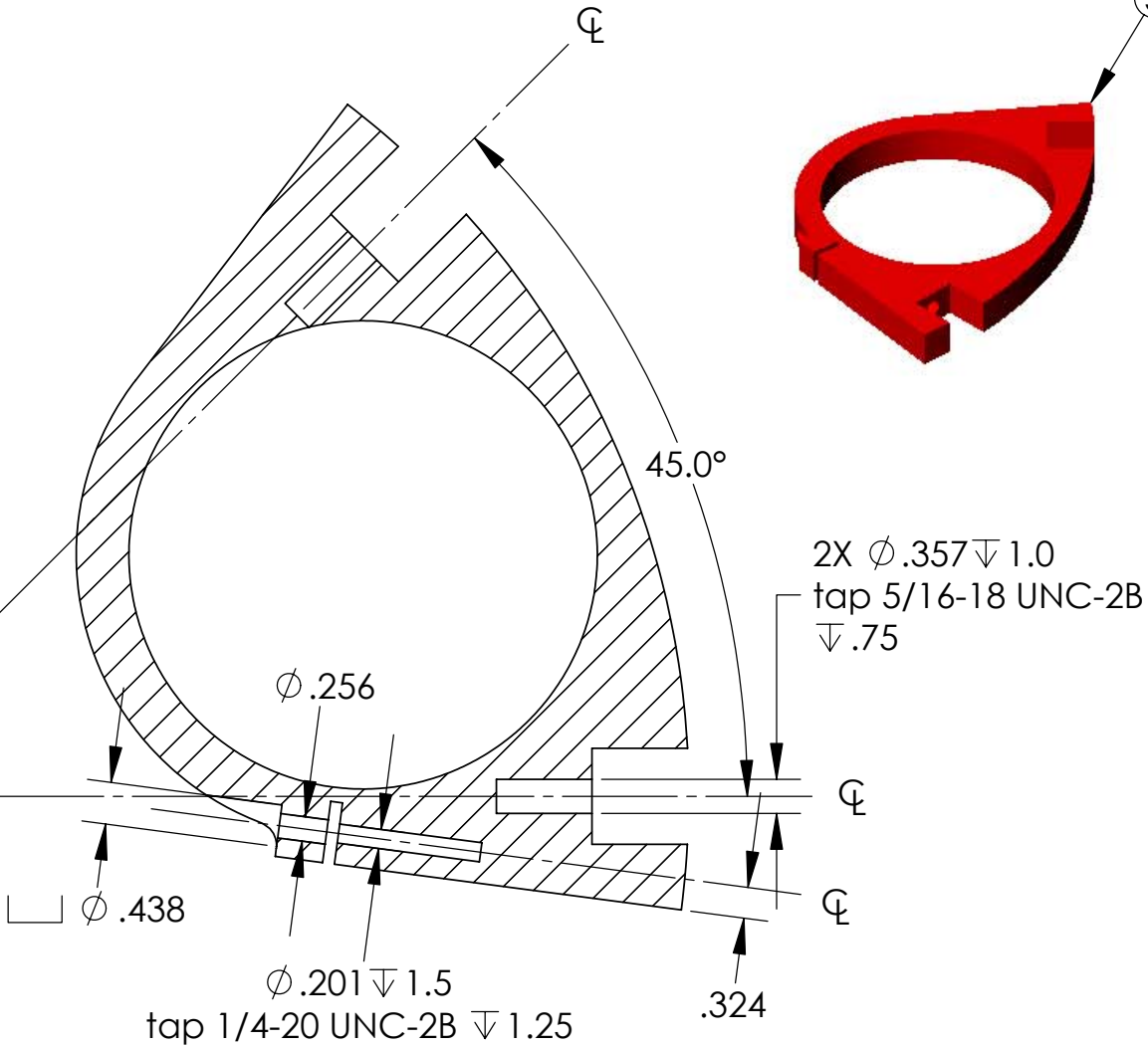
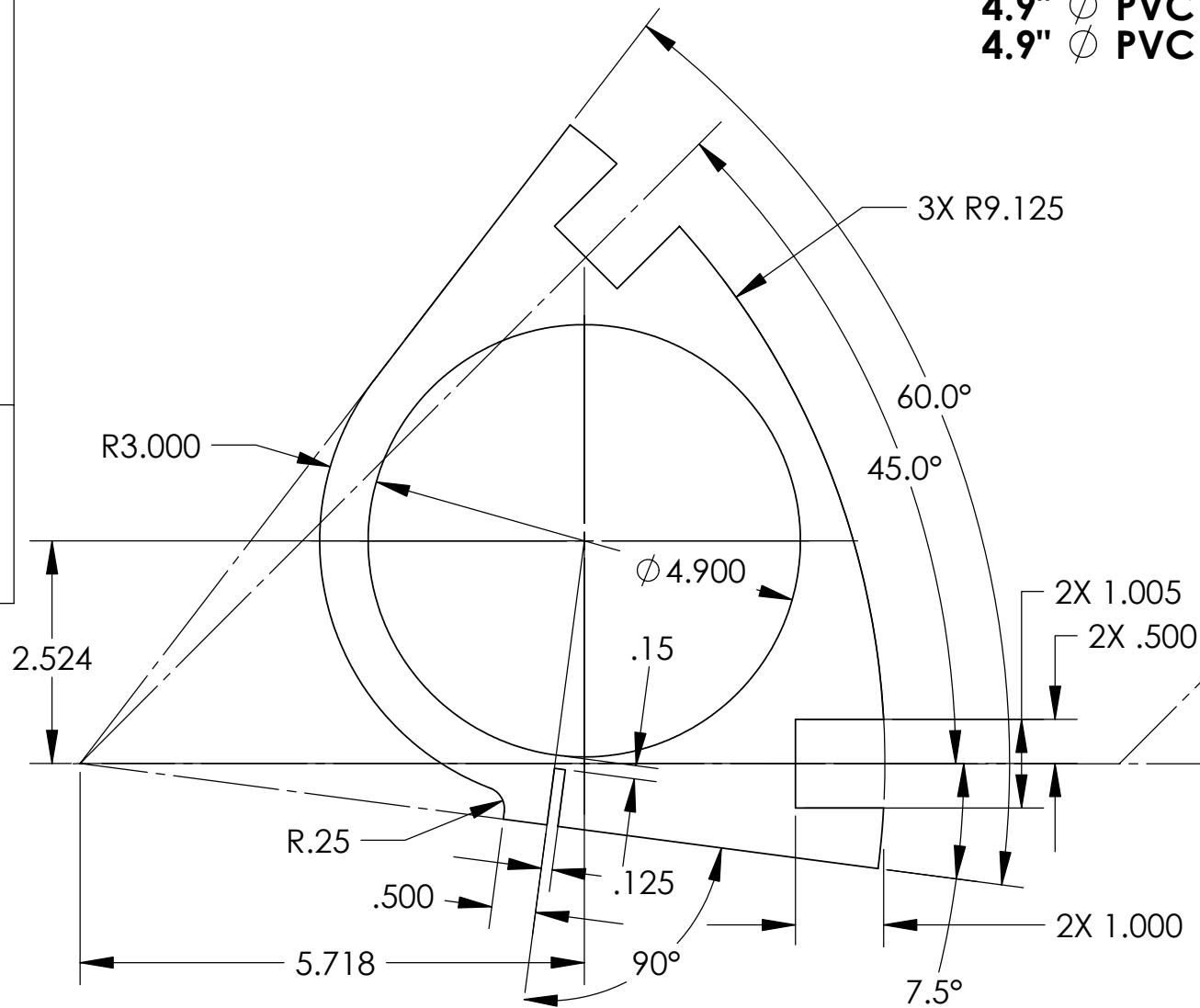
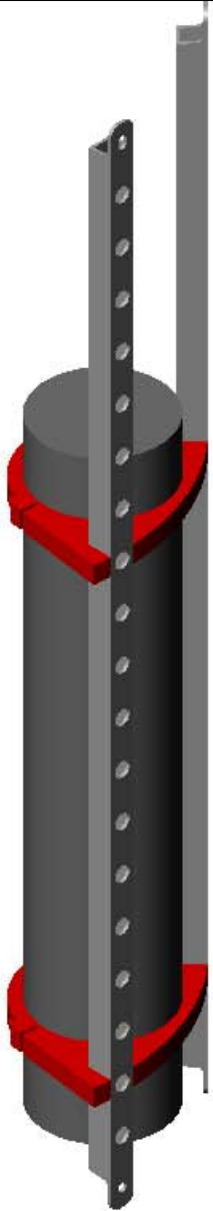
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
INITIAL RELEASE		4/30/03	JE
2.0	December 2003 Modifications	12/28/03	

- NOTES:
- 7) Waterjet main features; check vertical alignment before cutting. (brackets with mounted Al rails should be square to .025)
 - 8) Rails use 5/16-18 UNC by 3/4" socket head screws.
 - 9) Instruments use 1/4-20 UNC by 1" and 1-1/2" socket head screws.

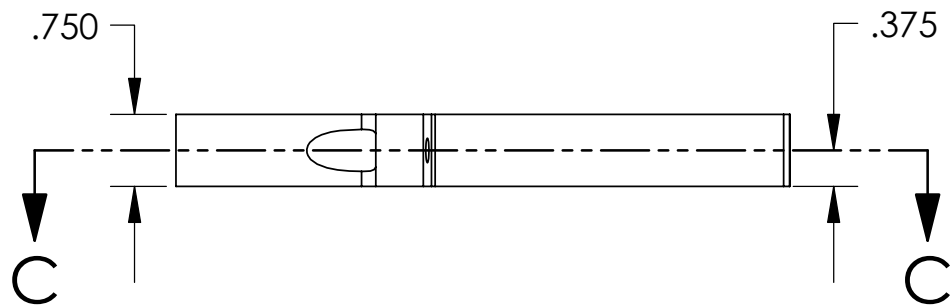
6	2@		45° LISST bracket	3/4" Delrin (white)
5	2@		75° DigiScanner bracket	3/4" Delrin (white)
4	2@		60° 4.5" Ø Al ISUS bracket	3/4" Delrin (white)
3	2@		60° 4.9" Ø controller bracket	3/4" Delrin (white)
2	2@		60° CTD/pump/Scuffa bracket	3/4" Delrin (white)
1	10@		Strut	1" square 6061-T6 Al tube, 1/8" wall
Item No.	Qty.	Part No.	Description	Material Specification

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	5/1/03	MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700			
Shop Foreman		1. DIMENSIONS ARE IN INCHES				Hans Jannasch	5/1/03				
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING.				ENGINEER					
		3. REMOVE BURRS AND SHARP EDGES .015 MAX.				CHECKED	5/28/03				
		4. MACHINED FILLET RADII .0150-.030.				PROJECT NO.	600144	135jahaElkhorn Mooring D Instrument Brackets			
		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005				PROJECT	Chemical Sensors				
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.						SIZE B	DWG. NO.	REV.	
								135jaha.DWG		2	
Application		DO NOT SCALE DRAWING				WEIGHT		SCALE 1:2	CAD FILE: Tornado/chem/SWfiles	SHEET 2 OF 6	



SECTION C-C



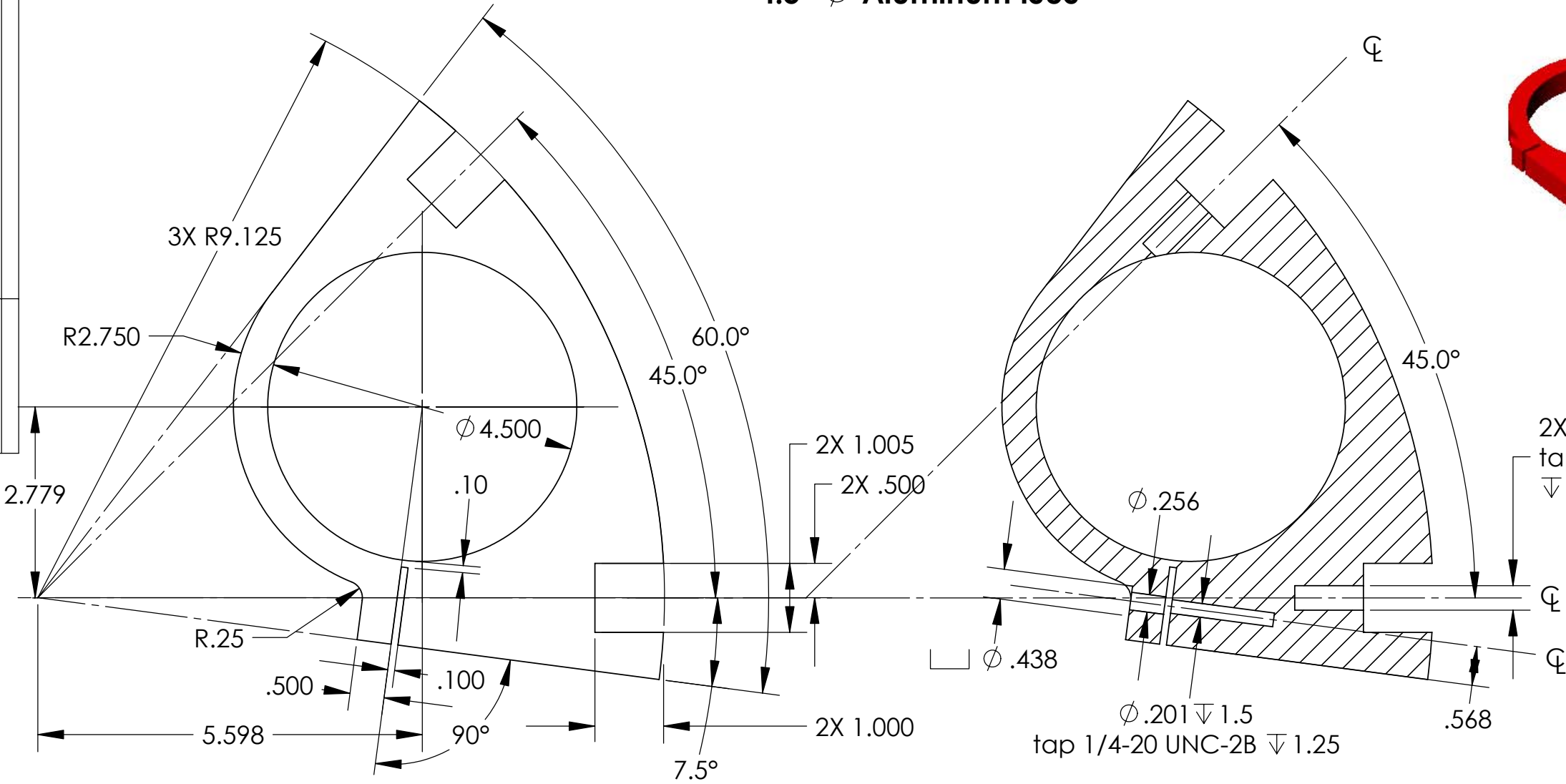
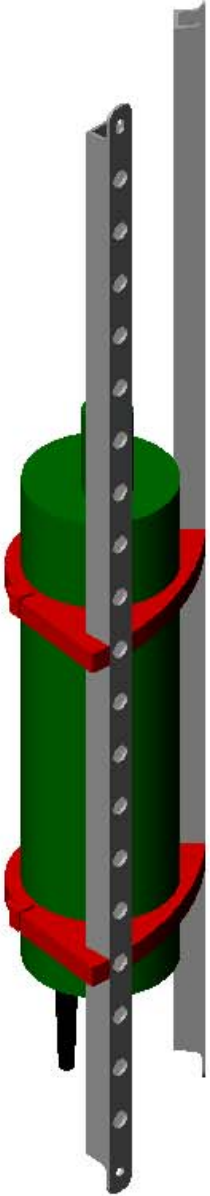
- 7) Waterjet main features; check vertical alignment before cutting.
(brackets with mounted AI rails should be square to .025)
- 8) Rails use 5/16-18 UNC by 3/4" socket head screws.
- 9) Instruments use 1/4-20 UNC by 1-1/2" socket head screws.

6	2@		45° LISST bracket	3/4" Delrin (white)
5	2@		75° DigiScanner bracket	3/4" Delrin (white)
4	2@		60° 4.5" $\varnothing$ AI ISUS bracket	3/4" Delrin (white)
3	2@		60° 4.9" $\varnothing$ controller bracket	3/4" Delrin (white)
2	2@		60° CTD/pump/Scuffa bracket	3/4" Delrin (white)
1	10@		Strut	1" square 6061-T6 Al tube, 1/8" wall
Item No.	Qty.	Part No.	Description	Material Specification

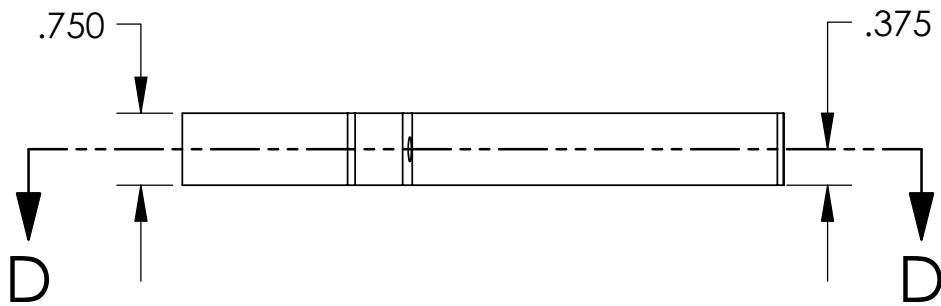
BILL OF MATERIALS

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 Hans Jannasch		5/1/03		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 FILET 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		Jon E. 5/28/03					
NEXT ASSY Description	NEXT ASSY Number					PROJECT NO.		600144					
		PROJECT		Chemical Sensors						135jahaElkhornMooring D Instrument Brackets			
Application		DO NOT SCALE DRAWING				WEIGHT				SIZE B	DWG. NO.	135jaha.DWG	REV. 2
										SCALE 1:2	CAD FILE: Tornado/chem/SWfiles	SHEET 3 OF 6	

Use for:
4.5" $\varnothing$ Aluminum ISUS



SECTION D-D

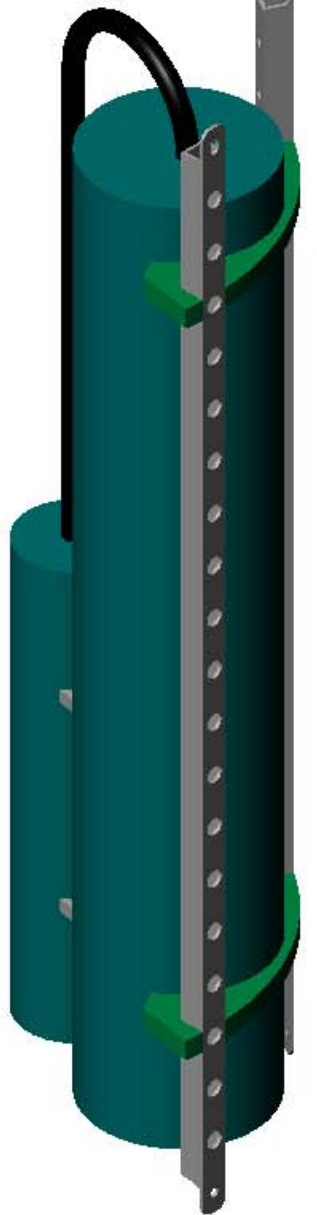
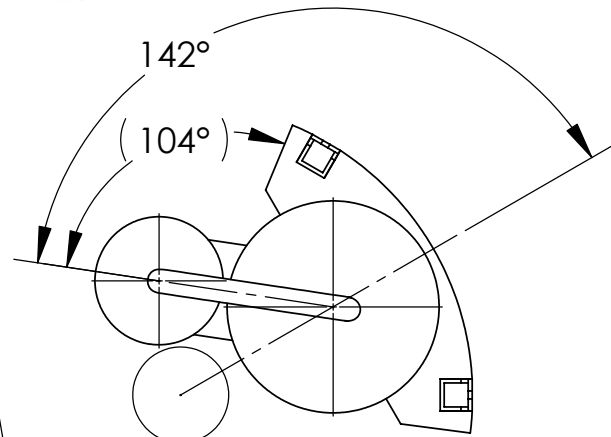
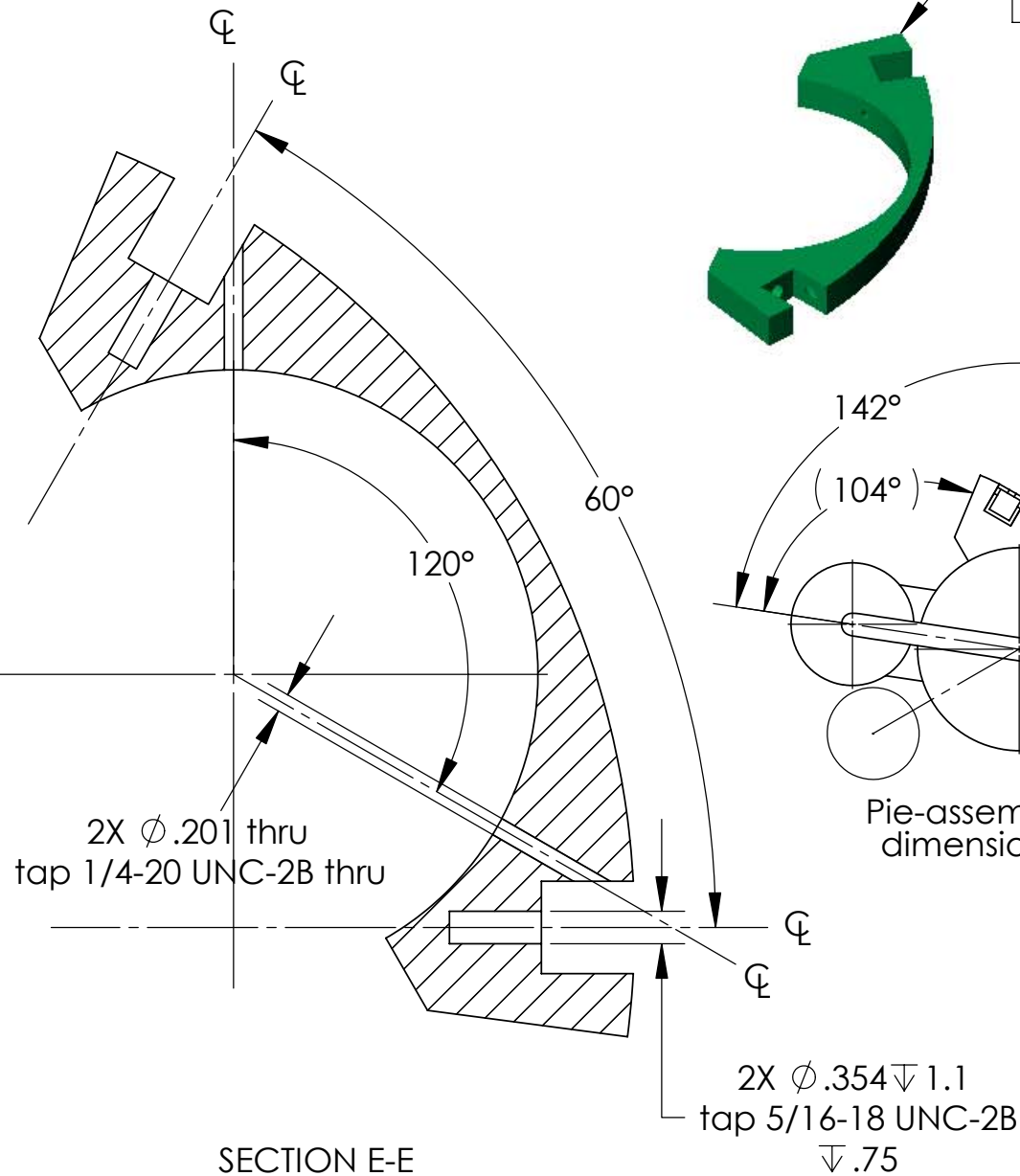


NOTES:

- 7) Waterjet main features; check vertical alignment before cutting.
(brackets with mounted AI rails should be square to .025)
- 8) Rails use 5/16-18 UNC by 3/4" socket head screws.
- 9) Instruments use 1/4-20 UNC by 1-1/2" socket head screws.

6	2@		45° LISST bracket	3/4" Delrin (white)
5	2@		75° DigiScanner bracket	3/4" Delrin (white)
4	2@		60° 4.5" ϕ Al ISUS bracket	3/4" Delrin (white)
3	2@		60° 4.9" ϕ controller bracket	3/4" Delrin (white)
2	2@		60° CTD/pump/Scuffa bracket	3/4" Delrin (white)
1	10@		Strut	1" square 6061-T6 Al tube, 1/8" wall
Item No.	Qty.	Part No.	Description	Material Specification

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 Hans Jannasch	5/1/03	ENGINEER				
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.				CHECKED	Jon E.	5/28/03	135jahaElkhornMooring D Instrument Brackets			
Engineer						PROJECT NO.	600144					
NEXT ASSY Description	NEXT ASSY Number					PROJECT	Chemical Sensors		135jaha.DWG			
Application		DO NOT SCALE DRAWING				WEIGHT		SIZE B	DWG. NO.	REV. 2		
								SCALE 1:2	CAD FILE: Tornado/chem/SWfiles	SHEET 4 OF 6		



SECTION E-E
SCALE 1 : 2

6	2@		45° LISST bracket	3/4" Delrin (white)
5	2@		75° DigiScanner bracket	3/4" Delrin (white)
4	2@		60° 4.5" $\varnothing$ Al ISUS bracket	3/4" Delrin (white)
3	2@		60° 4.9" $\varnothing$ controller bracket	3/4" Delrin (white)
2	2@		60° CTD/pump/Scuffa bracket	3/4" Delrin (white)
1	10@		Strut	1" square 6061-T6 Al tube, 1/8" wall
Item No.	Qty.	Part No.	Description	Material Specification

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 Hans Jannasch	5/1/03						
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			135jahaElkhornMooring D Instrument Brackets				
Engineer						CHECKED	Jon E. 5/28/03						
						PROJECT NO.	600144						
NEXT ASSY Description	NEXT ASSY Number					PROJECT	Chemical Sensors		135jaha.DWG				
Application		DO NOT SCALE DRAWING				WEIGHT				SIZE B	DWG. NO.	REV. 2	
										SCALE 1:4	CAD FILE: Tornado/chem/SWfiles	SHEET 5 OF 6	

NOTES:

- 7) Waterjet main features; check vertical alignment before cutting.
(brackets with mounted AI rails should be square to .025)
- 8) Rails use 5/16-18 UNC by 3/4" socket head screws.
- 9) Instruments use 1/4-20 UNC by 1" flat head screws.

