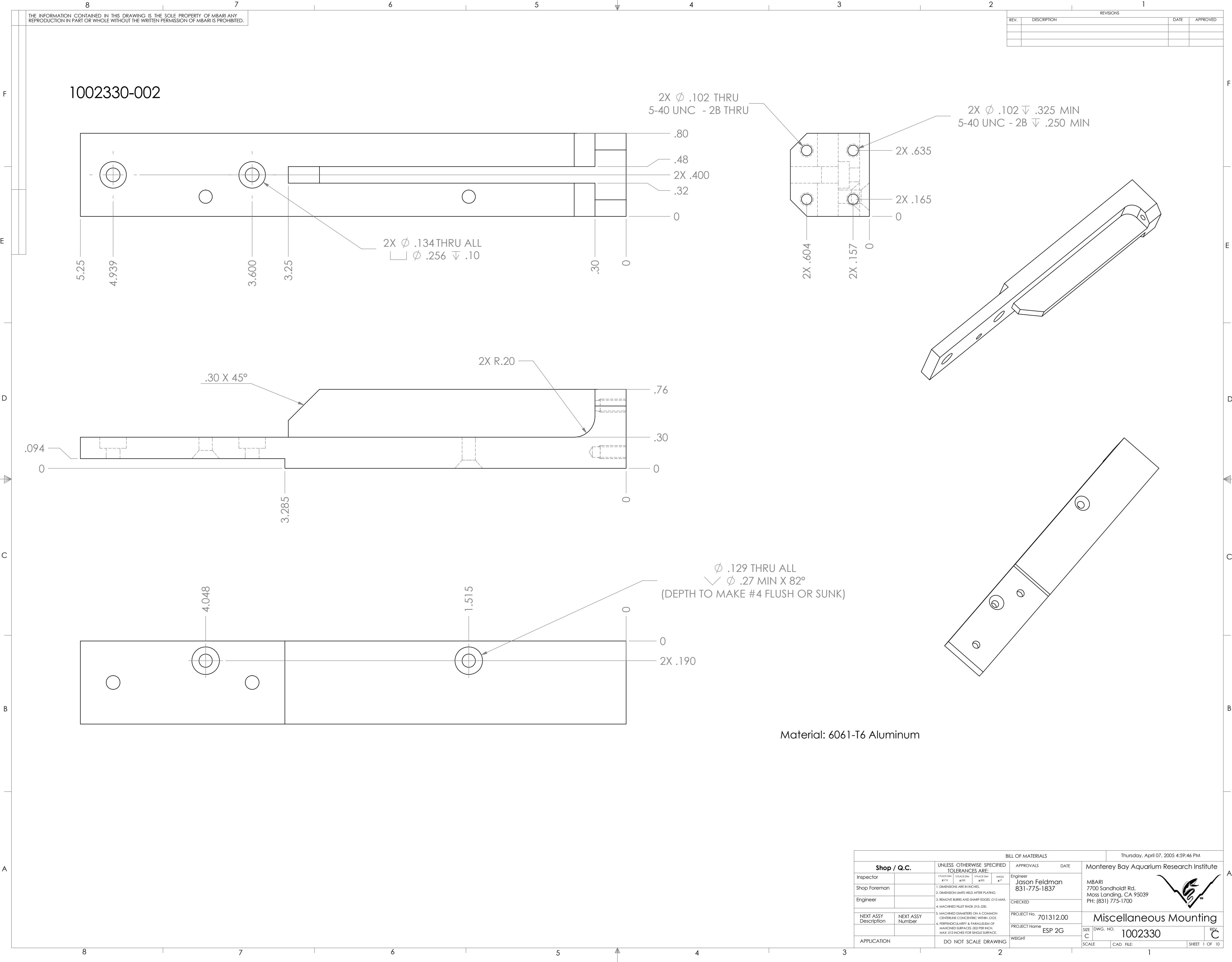




THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MBARI. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF MBARI IS PROHIBITED.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

BILL OF MATERIALS				Thursday, April 07, 2005 4:59:46 PM	
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS	
Inspector		1 PLACE DIM ±.125	2 PLACE DIM ±.050	DATE	
Shop Foreman		3 PLACE DIM ±.005	ANGLE ±1°	Engineer	
Engineer		1. DIMENSIONS ARE IN INCHES.		Jason Feldman	
		2. DIMENSION LINES HELD AFTER PLATING.		831-775-1837	
		3. REMOVE BURRS AND SHARP EDGES .015 MAX.		CHECKED	
		4. MACHINED FILLET RADIUS .015-.030.		PROJECT No.	701312.00
NEXT ASSY Description	NEXT ASSY Number	5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005		PROJECT Name	ESP 2G
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH; MAX .012 INCHES FOR SINGLE SURFACE.		SCALE	DWG. NO. 1002330
APPLICATION		DO NOT SCALE DRAWING		CAD FILE:	

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

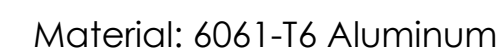
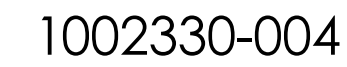


Miscellaneous Mounting

REV. C

SHEET 1 OF 10

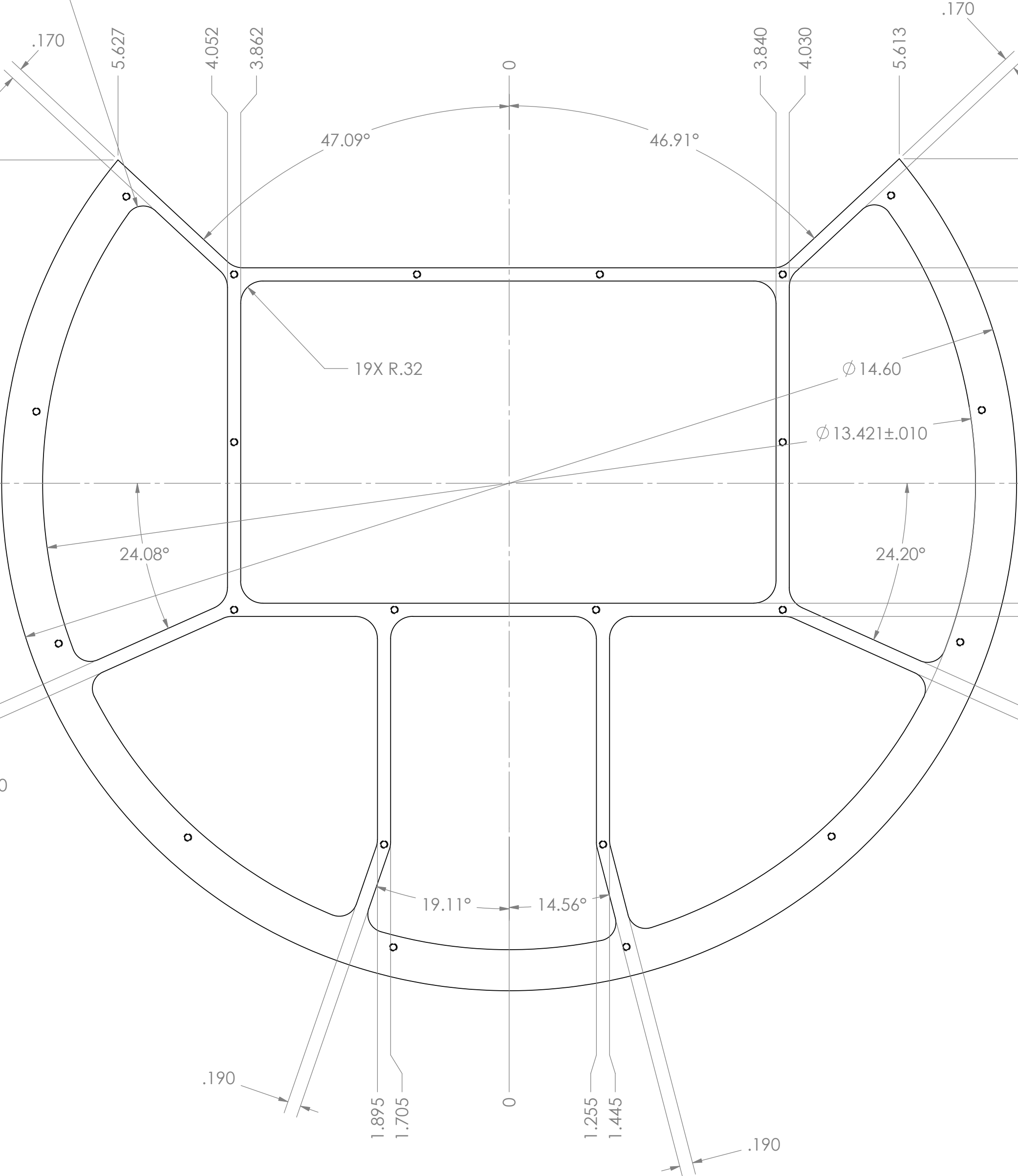
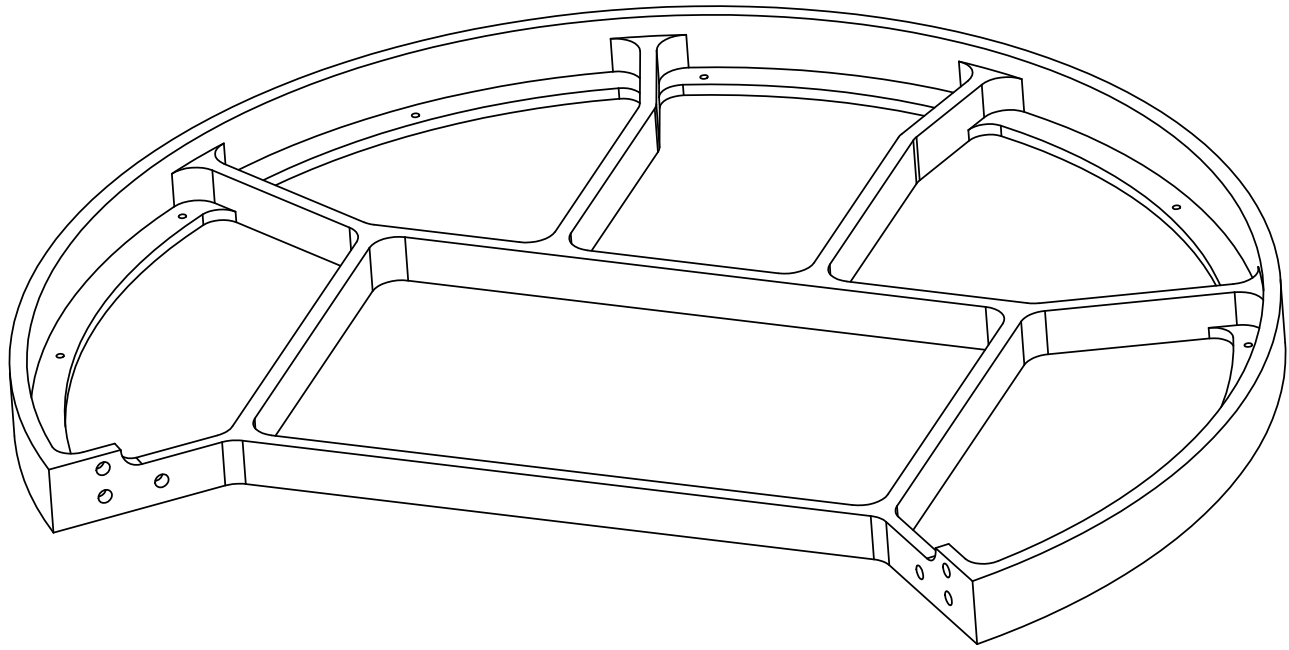
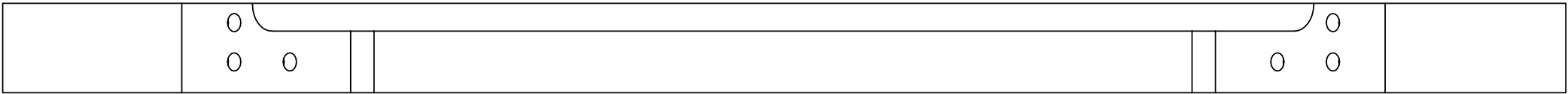
1002330-003



BILL OF MATERIALS				last updated on: Friday, August 05, 2005 8:36:54 AM	
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS DATE	
Inspector		2 PLACE DIM ±.01	3 PLACE DIM ±.005	4 PLACE DIM ±.0005	ANGLES ±1°
Shop Foreman		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING 3. REMOVE BURRS & SHARP EDGES .010 MAX 4. MACHINED FILLET RADII .000 TO .025 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005			
Engineer		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH. MAX .003 INCHES FOR SINGLE SURFACE.			
NEXT ASSY Description	NEXT ASSY Number	7. SURFACE FINISH TO BE 63 MICRON UNLESS OTHERWISE SPECIFIED			
DO NOT SCALE DRAWING		ENGINEER Jason Feldman 831-775-1837		CHECKED PROJECT NUMBER 701312.00 PROJECT ESP 2G	
		CAD FILE: X:\701312 ESP 2G\SolidWorks files\1002468 (lab stand)		Monterey Bay Aquarium Research Institute  7700 Sandholdt Road Moss Landing, CA 95039 miscellaneous mounting	
		SIZE C		DWG. NO. 1002330	
		REV. C		SHEET 2 OF 10	

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

1002330-006
WEB



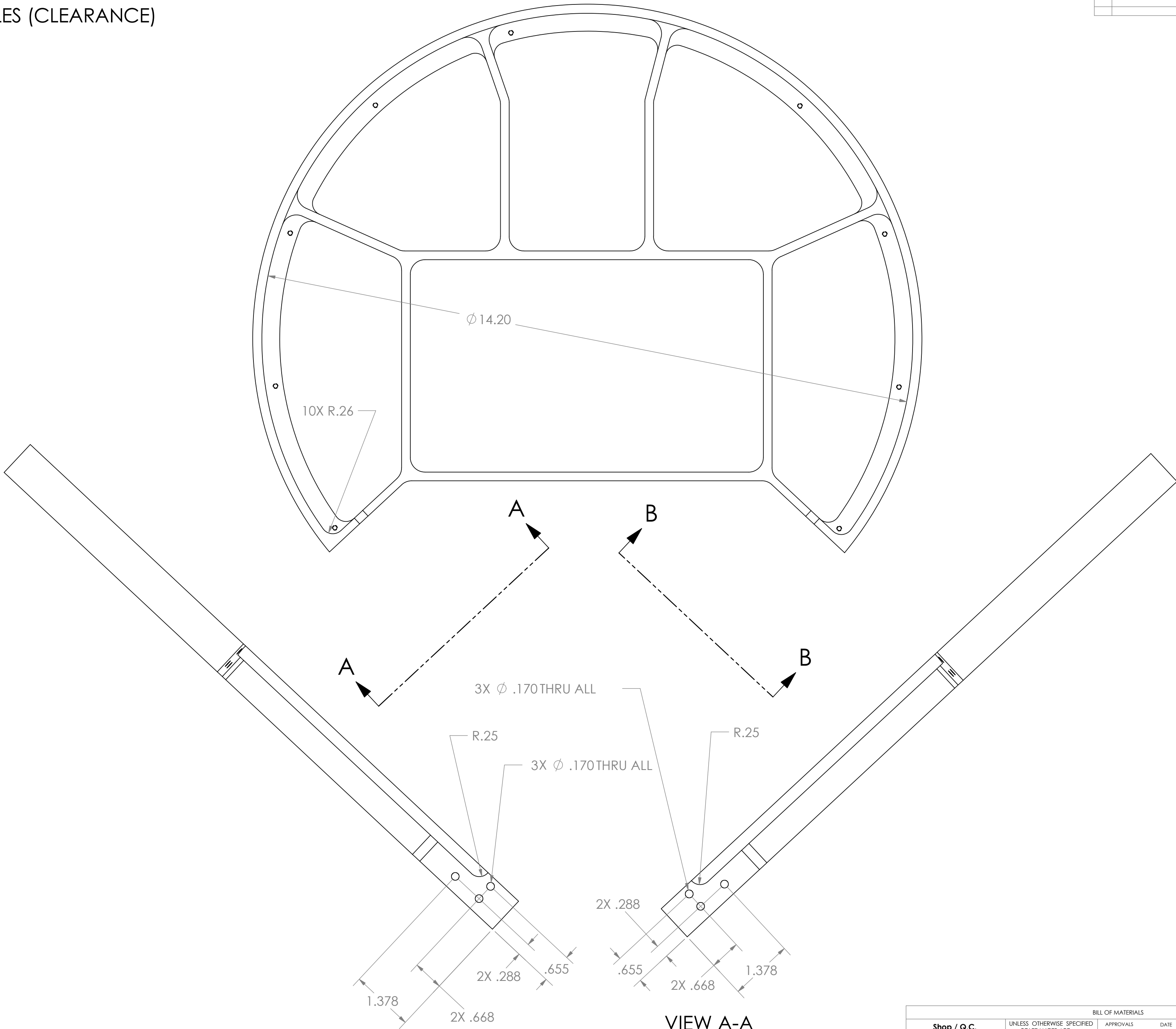
Material: 6061-T6 Aluminum

BILL OF MATERIALS					last updated on: Friday, August 05, 2005 8:36:54 AM				
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:			APPROVALS	DATE	Monterey Bay Aquarium Research Institute		
Inspector		2 PLACE DIM ±.01	3 PLACE DIM ±.005	4 PLACE DIM ±.0005	ANGLES ±1°	ENGINEER Jason Feldman 831-775-1837	7700 Sandholdt Road Moss Landing, CA 95039		
Shop Foreman		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING 3. REMOVE BURRS & SHARP EDGES .010 MAX 4. MACHINED FILLET RADII .000 TO .025				CHECKED			
Engineer		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005				PROJECT NUMBER 701312.00			
NEXT ASSY Description	NEXT ASSY Number	6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH. MAX .003 INCHES FOR SINGLE SURFACE.				PROJECT ESP 2G	SIZE C	DWG. NO. 1002330	REV. C
DO NOT SCALE DRAWING		7. SURFACE FINISH TO BE 63 MICRON UNLESS OTHERWISE SPECIFIED				CAD FILE: X:\701312 ESP 2G\SolidWorks files\1002468 (lab stand)		SHEET 4 OF 10	

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.

THRU HOLES (CLEARANCE)

REV.		DESCRIPTION	REVISIONS		DATE	APPROVED



Material: 6061-T6 Aluminum

VIEW B-B

VIEW A-A

BILL OF MATERIALS			
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED	APPROVALS DATE
Inspector		TOLERANCES ARE:	
Shop Foreman		1. PLACE DIM. ±.015	ENGINEER
Engineer		2. DIMENSIONS ARE IN INCHES.	Jason Feldman
		3. DIMENSIONS ARE HELD AFTER PLATING.	831-775-1837
		4. REMOVE BURRS AND SHARP EDGES .015 MAX.	CHECKED
		5. MACHINED FILLET RADIUS .015 .030.	
NEXT ASSY Description	NEXT ASSY Number	6. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005	PROJECT No. 701212.00
		7. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH, MAX .012 INCHES FOR SINGLE SURFACE.	PROJECT Name ESP 2G
APPLICATION		DO NOT SCALE DRAWING	WEIGHT
			SCALE DWG. NO. 1002330 REV. C
			CAD FILE: SHEET 5 OF 10

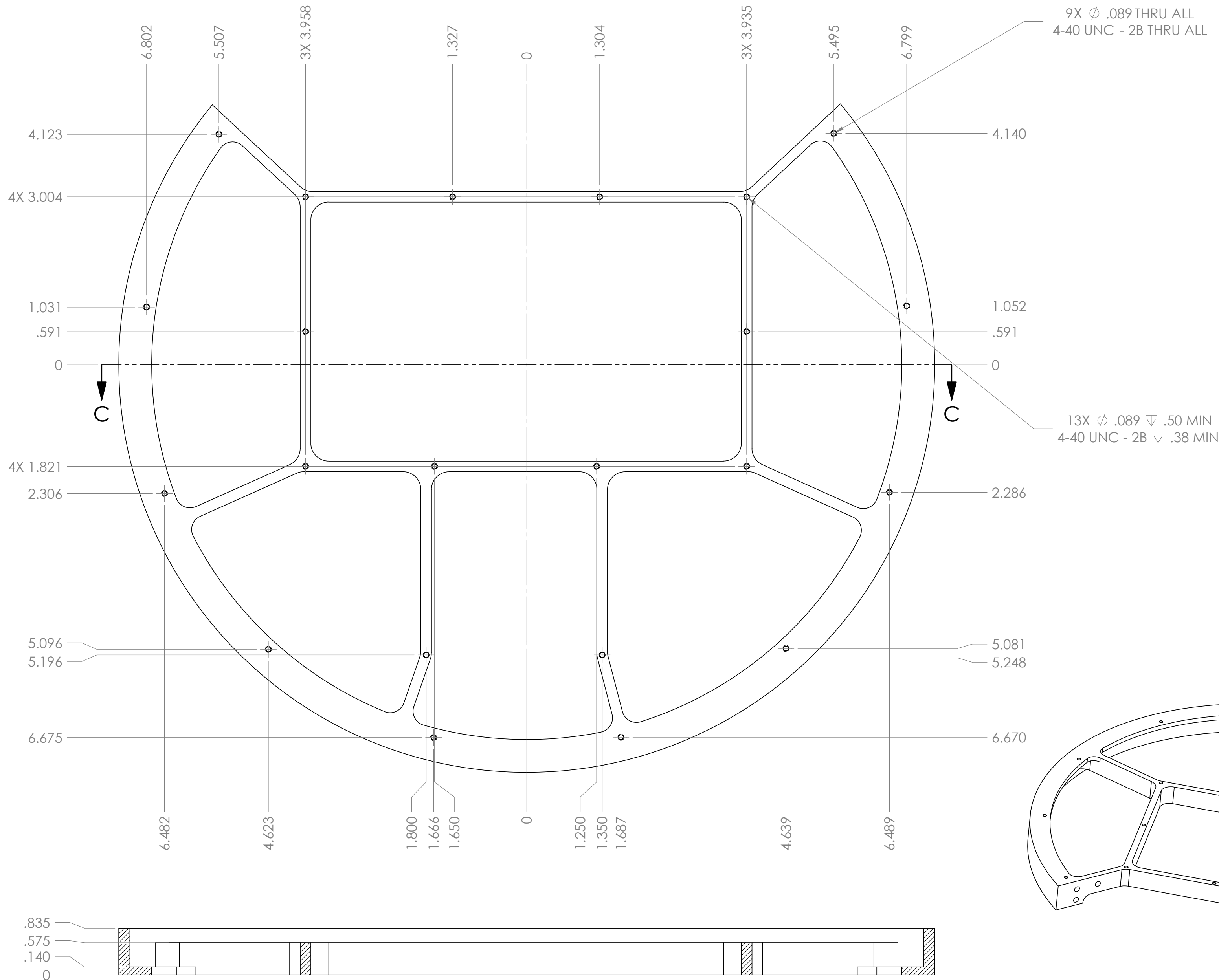
Miscellaneous Mounting



Monterey Bay Aquarium Research Institute
7700 Sandholdt Rd.
Monterey, CA 95039
PH: (831) 775-1700

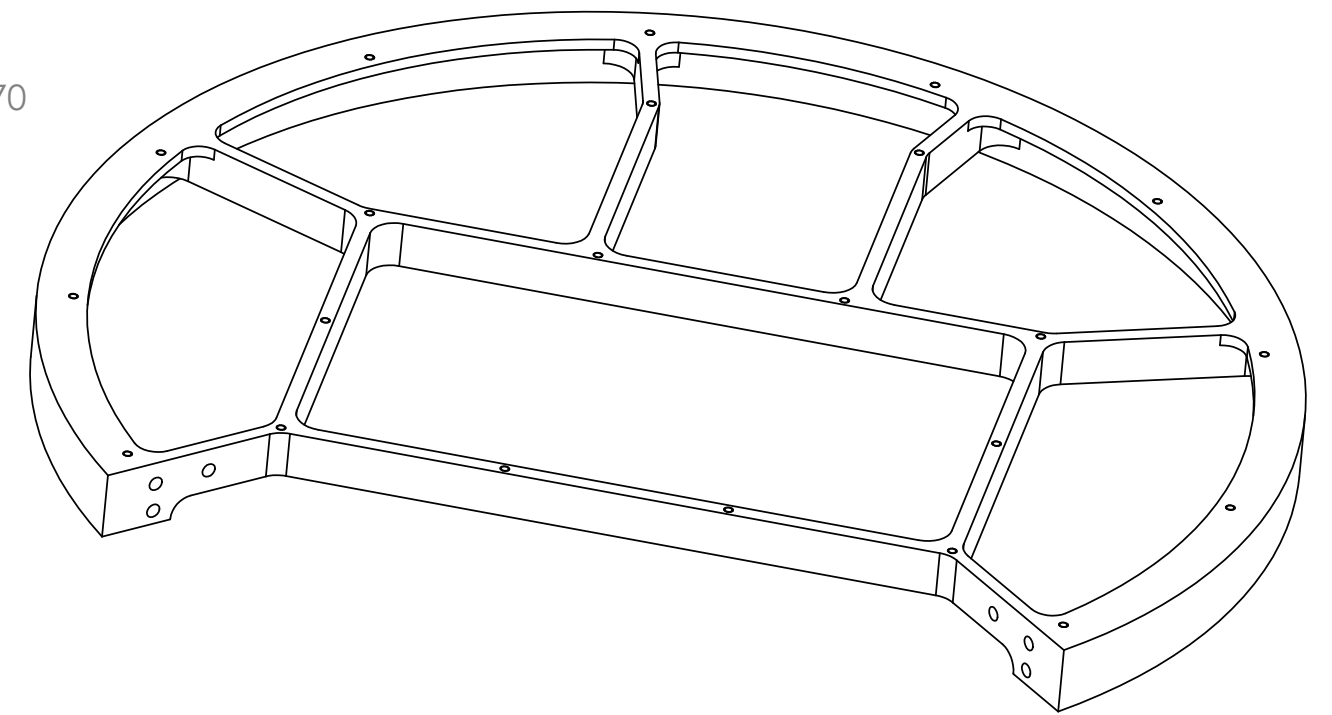
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MBARI. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF MBARI IS PROHIBITED.

TAPPED HOLES (THRU & BLIND)



SECTION C-C

Material: 6061-T6 Aluminum



BILL OF MATERIALS				last updated on: Friday, August 05, 2005 8:36:54 AM	
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS	DATE
Inspector		2 PLACE DIM ±.01	3 PLACE DIM ±.005	ENGINEER Jason Feldman 831-775-1837	Monterey Bay Aquarium Research Institute 7700 Sandholdt Road Moss Landing, CA 95039 
Shop Foreman				CHECKED	
Engineer					
NEXT ASSY Description	NEXT ASSY Number	1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING 3. REMOVE BURRS & SHARP EDGES .010 MAX 4. MACHINED FILLET RADII .000 TO .025 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005		PROJECT NUMBER 701312.00	miscellaneous mounting
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH. MAX .003 INCHES FOR SINGLE SURFACE.		PROJECT ESP 2G	
DO NOT SCALE DRAWING		7. SURFACE FINISH TO BE 63 MICRON UNLESS OTHERWISE SPECIFIED		CAD FILE: X:\701312 ESP 2G\SolidWorks files\1002468 (lab stand)	SIZE C
					DWG. NO. 1002330
					REV. C
				SHEET 6 OF 10	

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

1002330-009
main strut (#1)

F

E

D

C

B

A

F

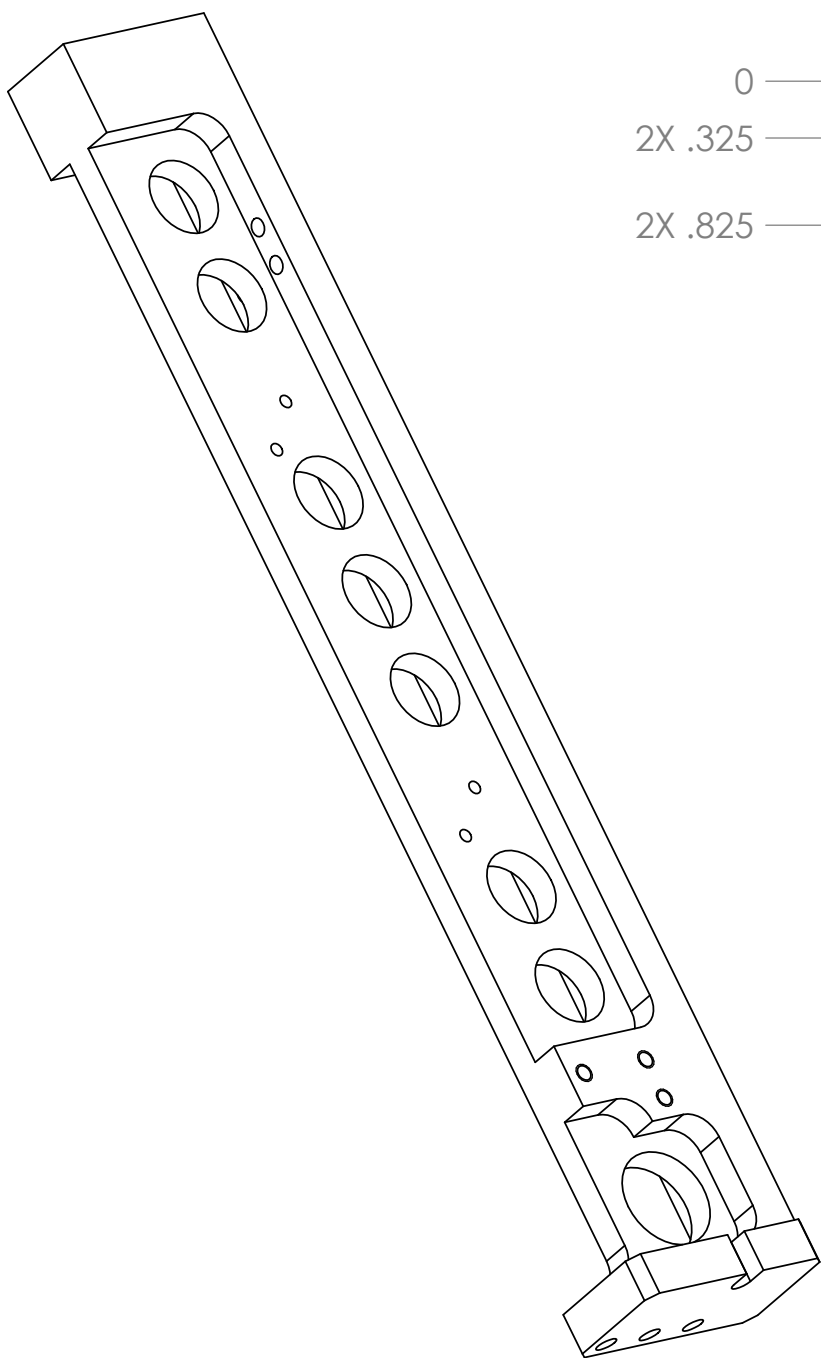
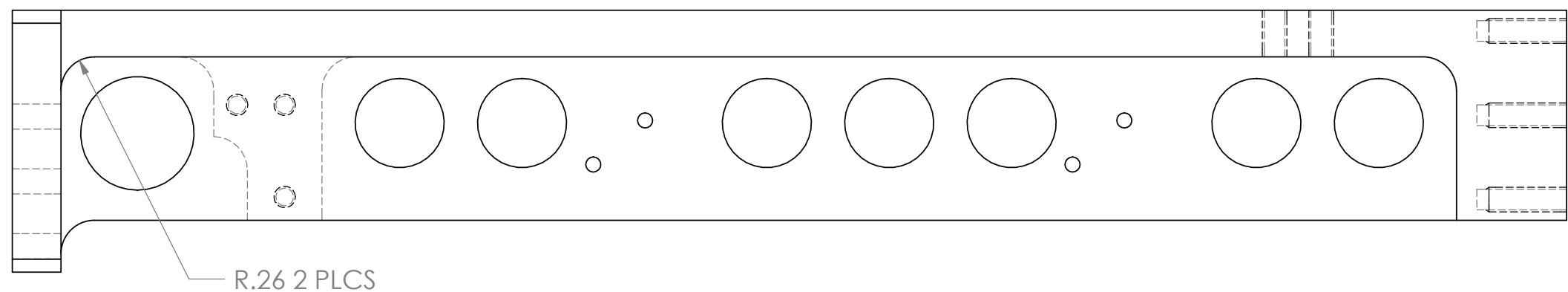
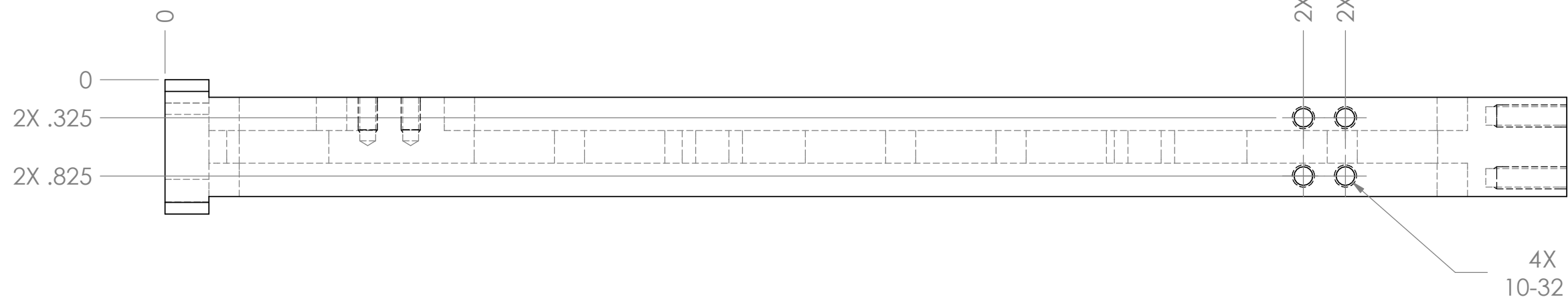
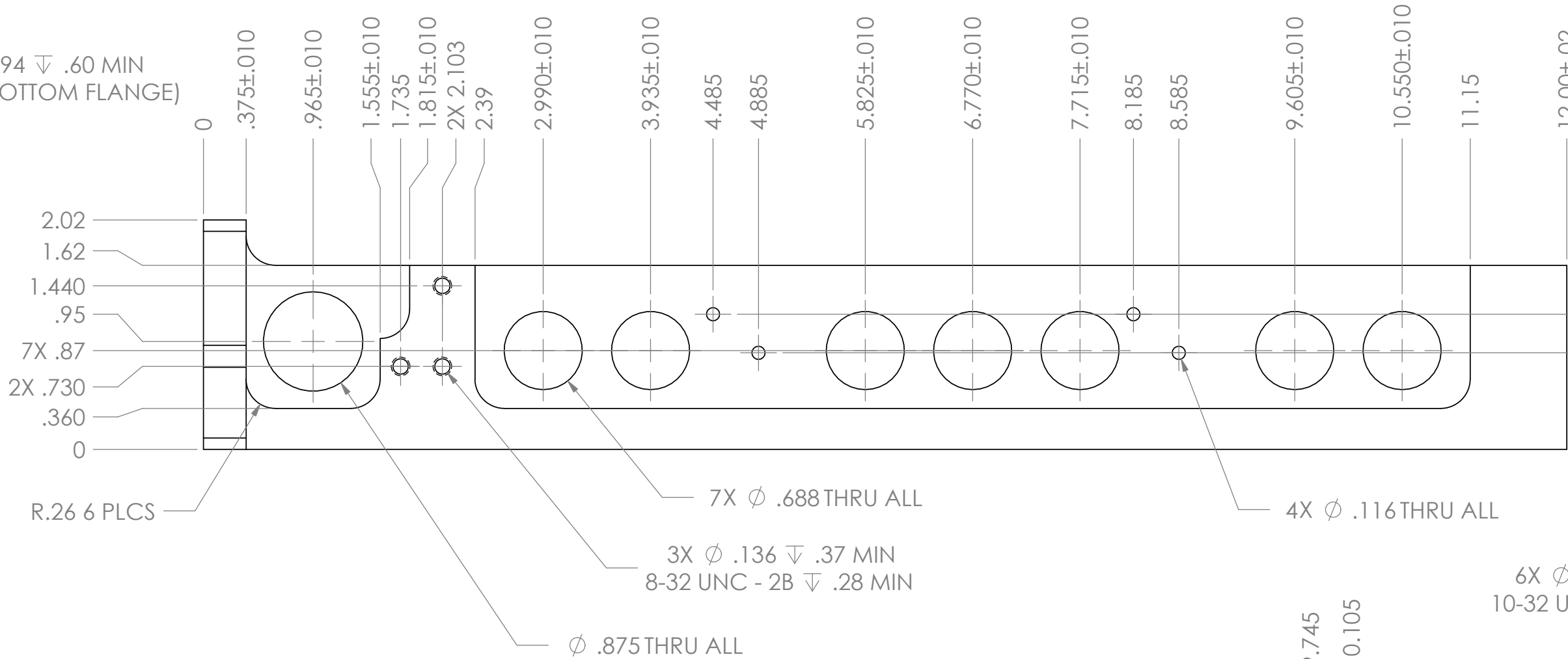
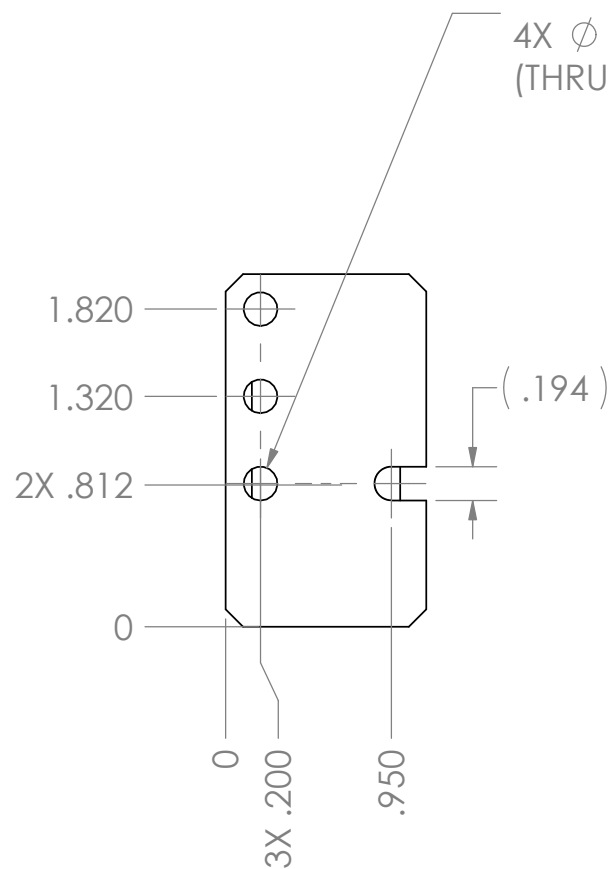
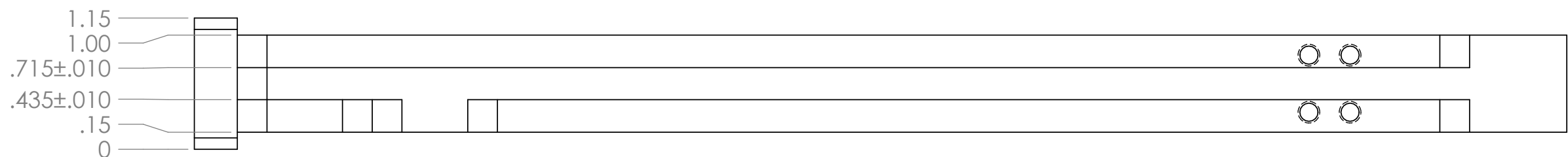
E

D

C

B

A



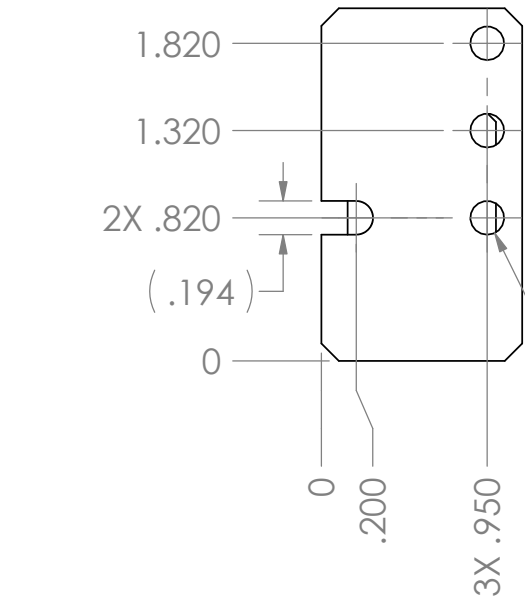
ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
9	1002330-009	Main strut # 1	6061-T6 Aluminum	1

BILL OF MATERIALS			
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:	
Inspector		2 PLACE DIM ±.01	3 PLACE DIM ±.005
Shop Foreman		4 PLACE DIM ±.0005	ANGLES ±1°
Engineer		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING 3. REMOVE BURRS & SHARP EDGES .010 MAX 4. MACHINED FILLET RADII .000 TO .025 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH. MAX. .003 INCHES FOR SINGLE SURFACE. 7. SURFACE FINISH TO BE 63 MICRON UNLESS OTHERWISE SPECIFIED	
NEXT ASSY Description	NEXT ASSY Number	APPROVALS DATE	
		ENGINEER Jason Feldman 831-775-1837	
		CHECKED	
		PROJECT NUMBER 701312.00	
		PROJECT ESP 2G	
DO NOT SCALE DRAWING		CAD FILE: X:\701312 ESP 2G\SolidWorks files\1002468 (lab stand)	

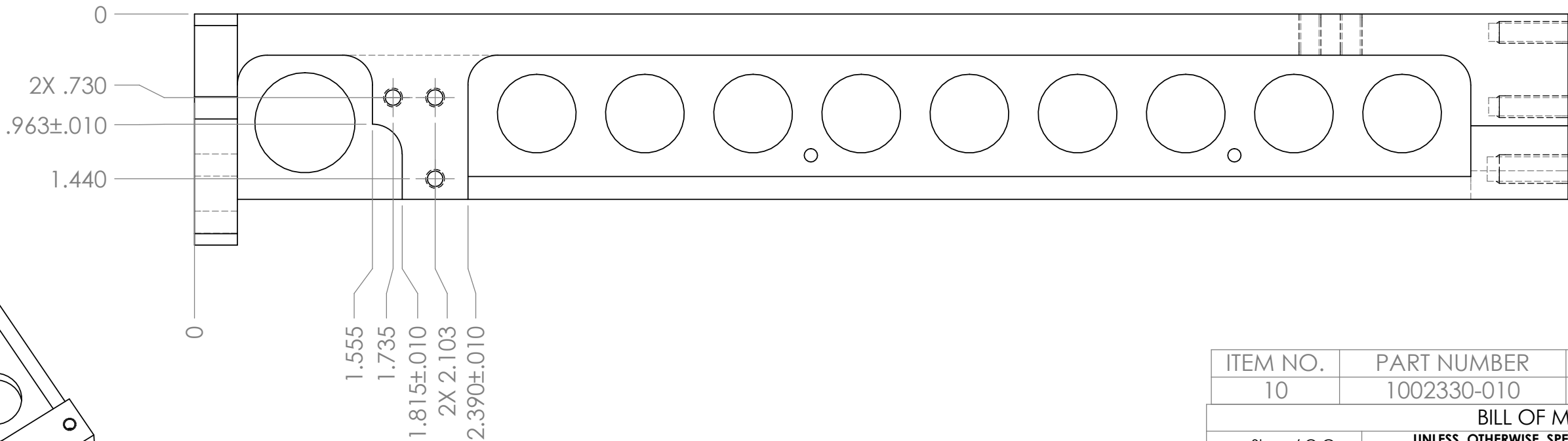
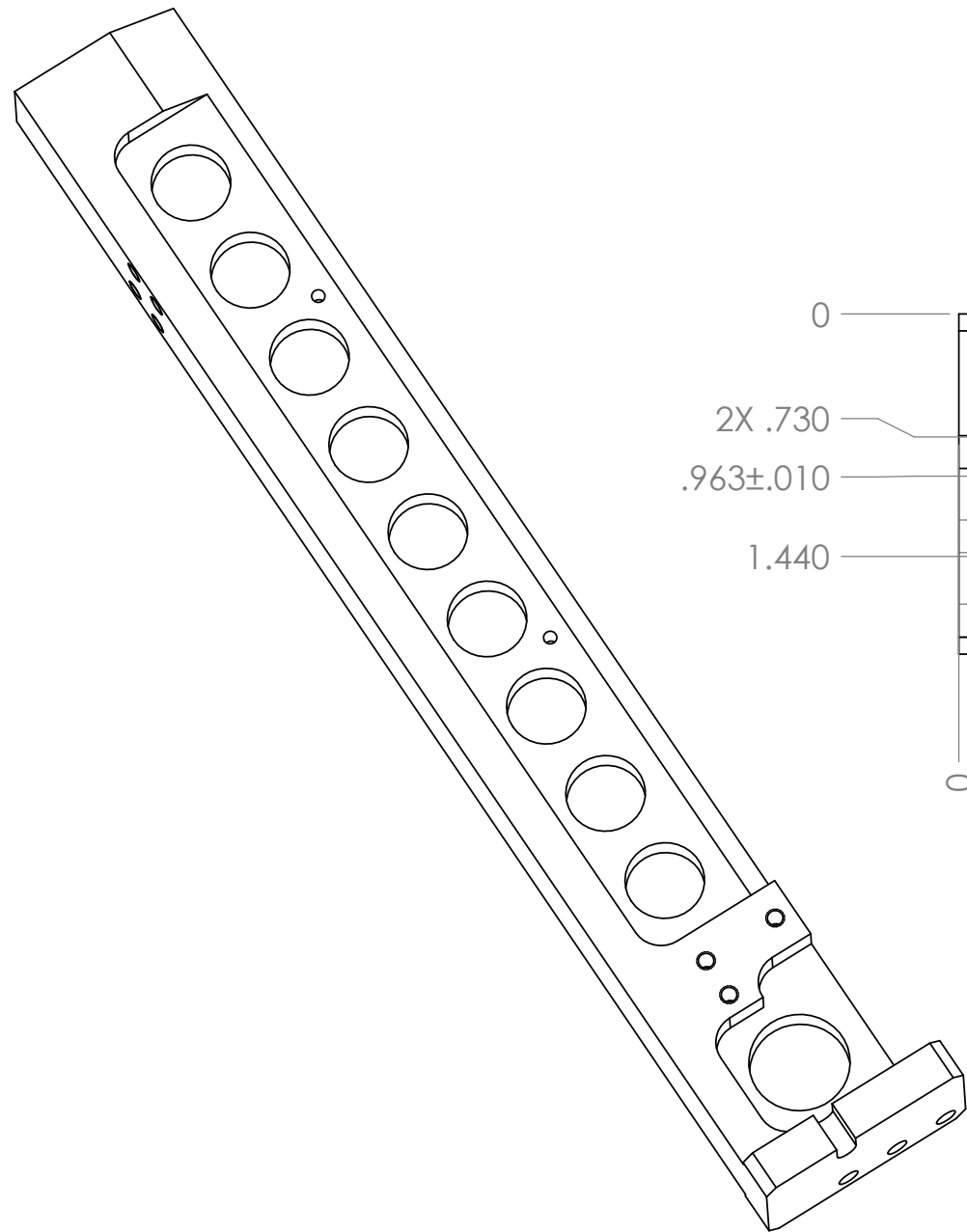
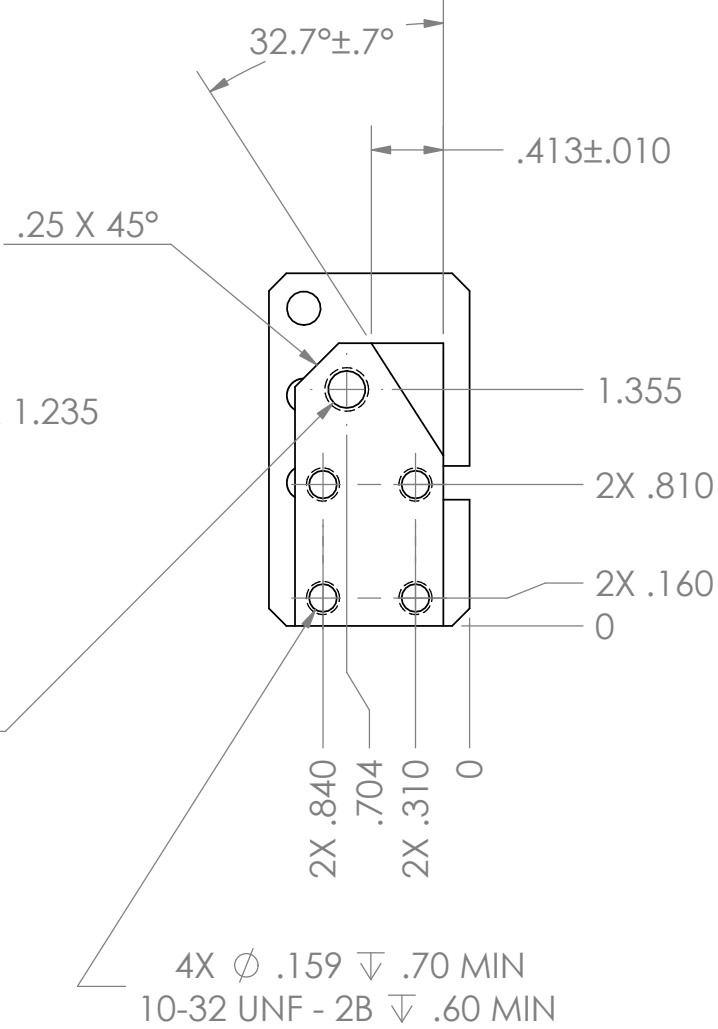
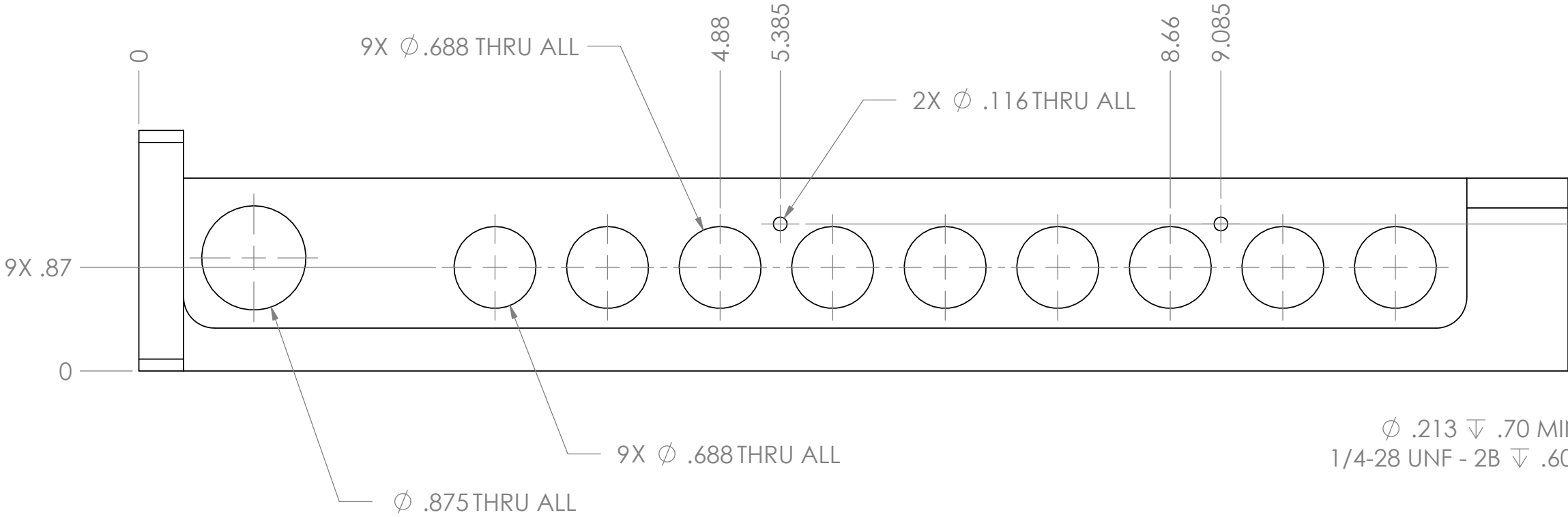
Monterey Bay Aquarium Research Institute	
7700 Sandholdt Road Moss Landing, CA 95039	
miscellaneous mounting	
SIZE C	DWG. NO. 1002330
REV. C	
SHEET 7 OF 10	

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

1002330-010
main strut (#2)



4X ϕ .194 ∇ .60 MIN
(THRU BOTTOM FLANGE)

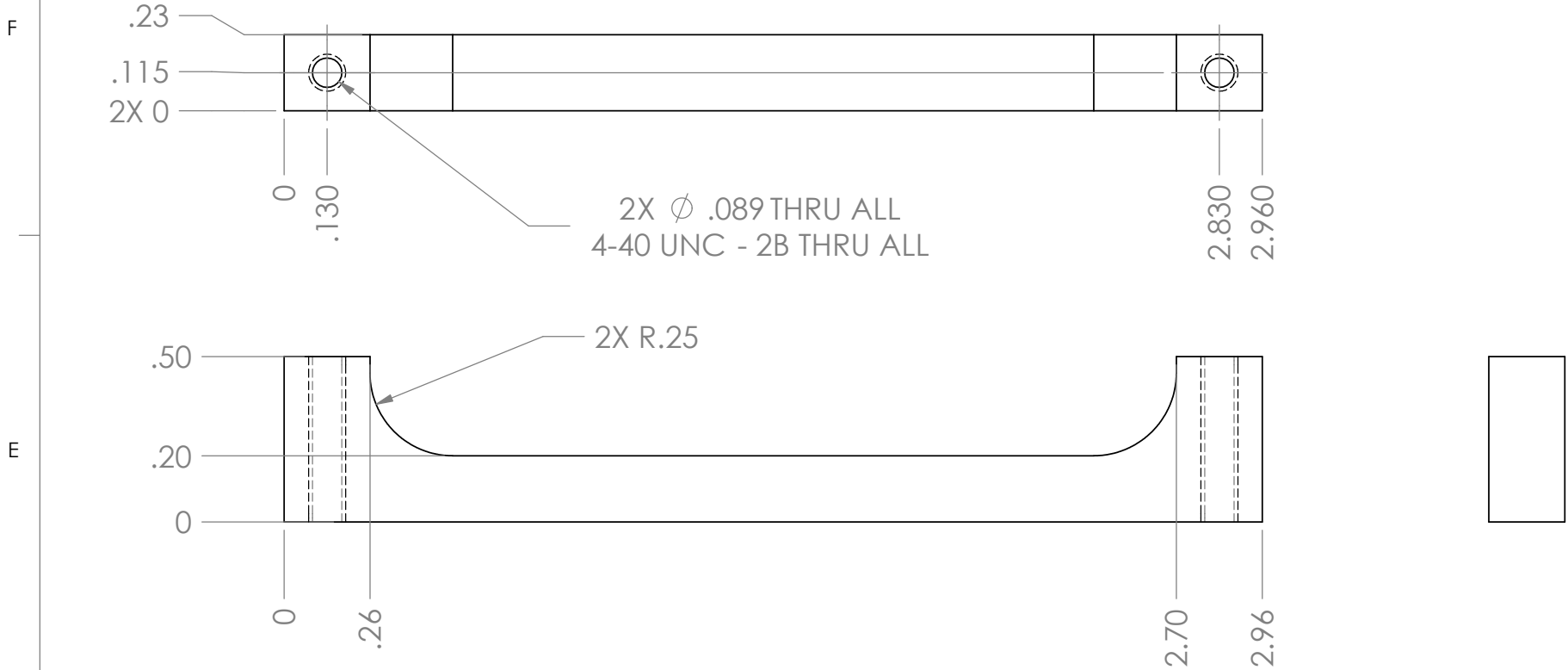


ALL OTHER DIMENSIONS TO FOLLOW
PART #1002330-009 (sheet 7)

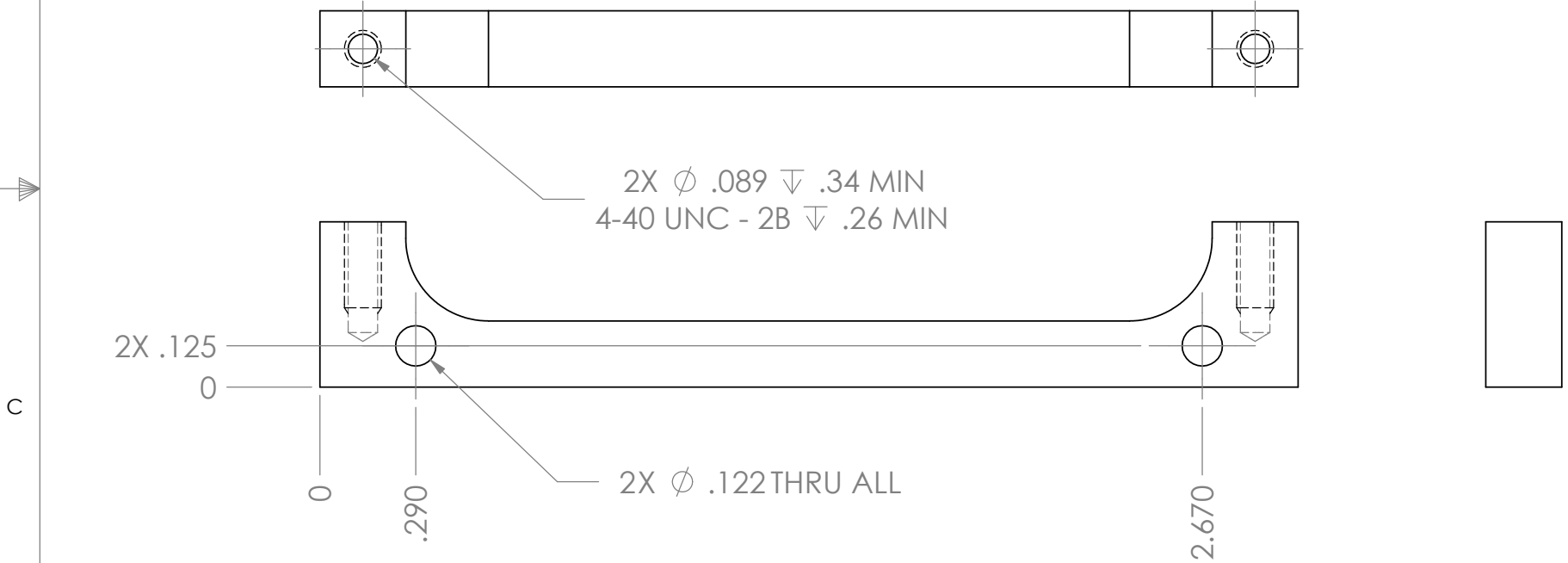
ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
10	1002330-010	Main strut #2	6061-T6 Aluminum	1
BILL OF MATERIALS			last updated on: Friday, August 05, 2005 8:36:54 AM	
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		
Inspector		2 PLACE DIM ±.01	3 PLACE DIM ±.005	4 PLACE DIM ±.0005
Shop Foreman		ANGLES ±1°	APPROVALS DATE	
Engineer		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING 3. REMOVE BURRS & SHARP EDGES .010 MAX 4. MACHINED FILLET RADII .000 TO .025 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005		Monterey Bay Aquarium Research Institute 7700 Sandholdt Road Moss Landing, CA 95039
NEXT ASSY Description	NEXT ASSY Number	6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH. MAX .003 INCHES FOR SINGLE SURFACE. 7. SURFACE FINISH TO BE 63 MICRON UNLESS OTHERWISE SPECIFIED		miscellaneous mounting SIZE DWG. NO. REV.
DO NOT SCALE DRAWING		PROJECT 701312.00 ESP 2G		
		CAD FILE: X:\701312 ESP 2G\SolidWorks files\1002468 (lab stand)		
		SHEET 8 OF 10		

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

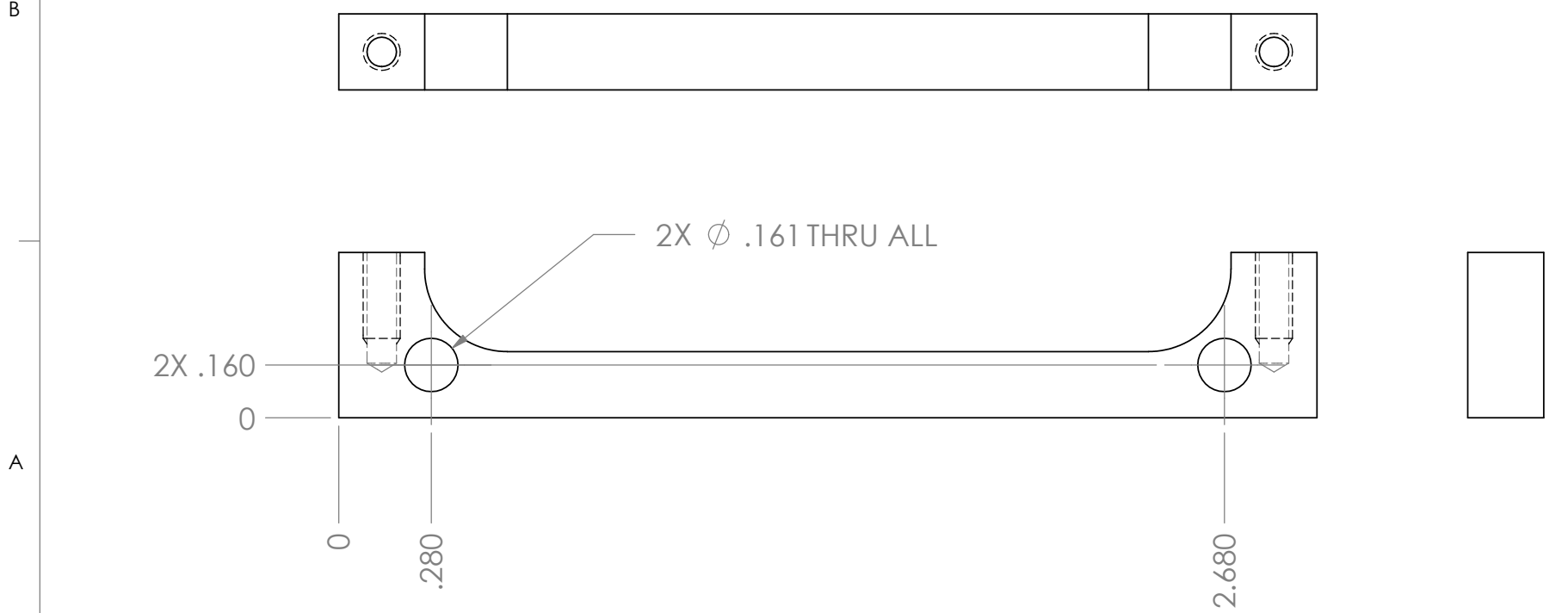
1002330-011
bracket-processing



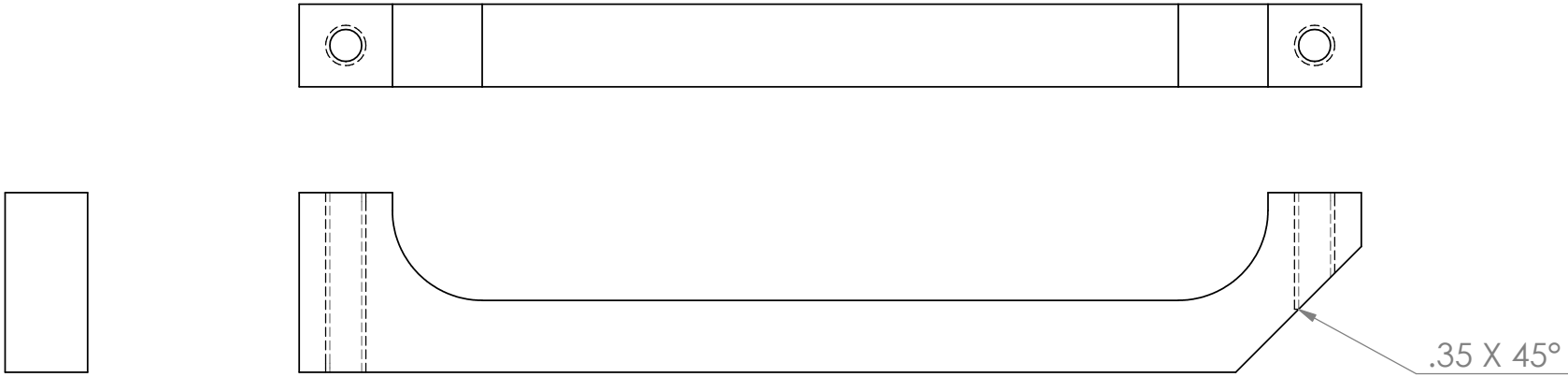
1002330-013
bracket-collection



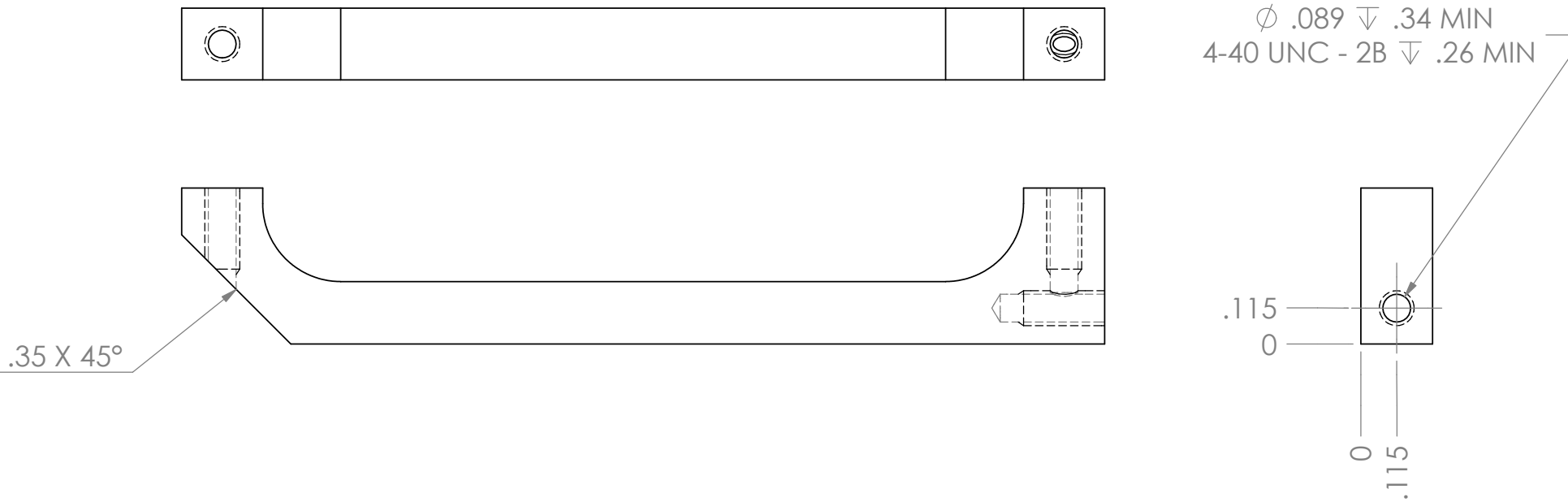
1002330-015
bracket-manipulator (clearance)



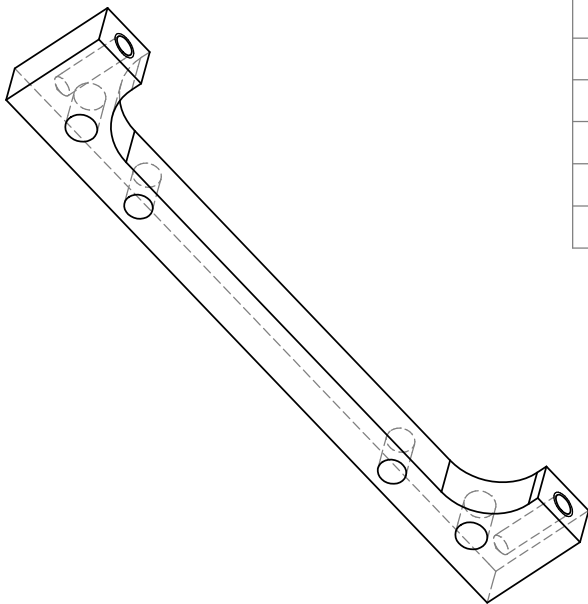
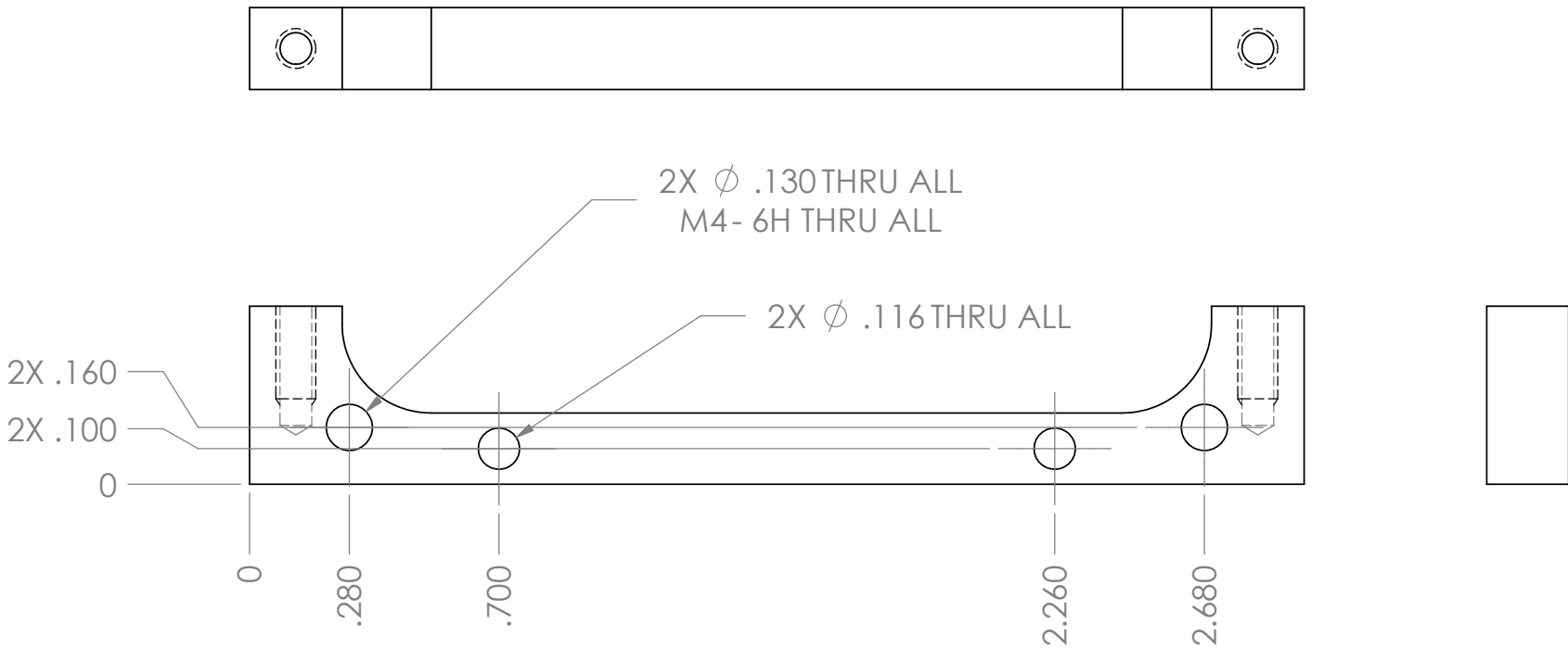
1002330-012
bracket-carousel & elevator



1002330-014
bracket-sample syringe



1002330-016
bracket-manipulator



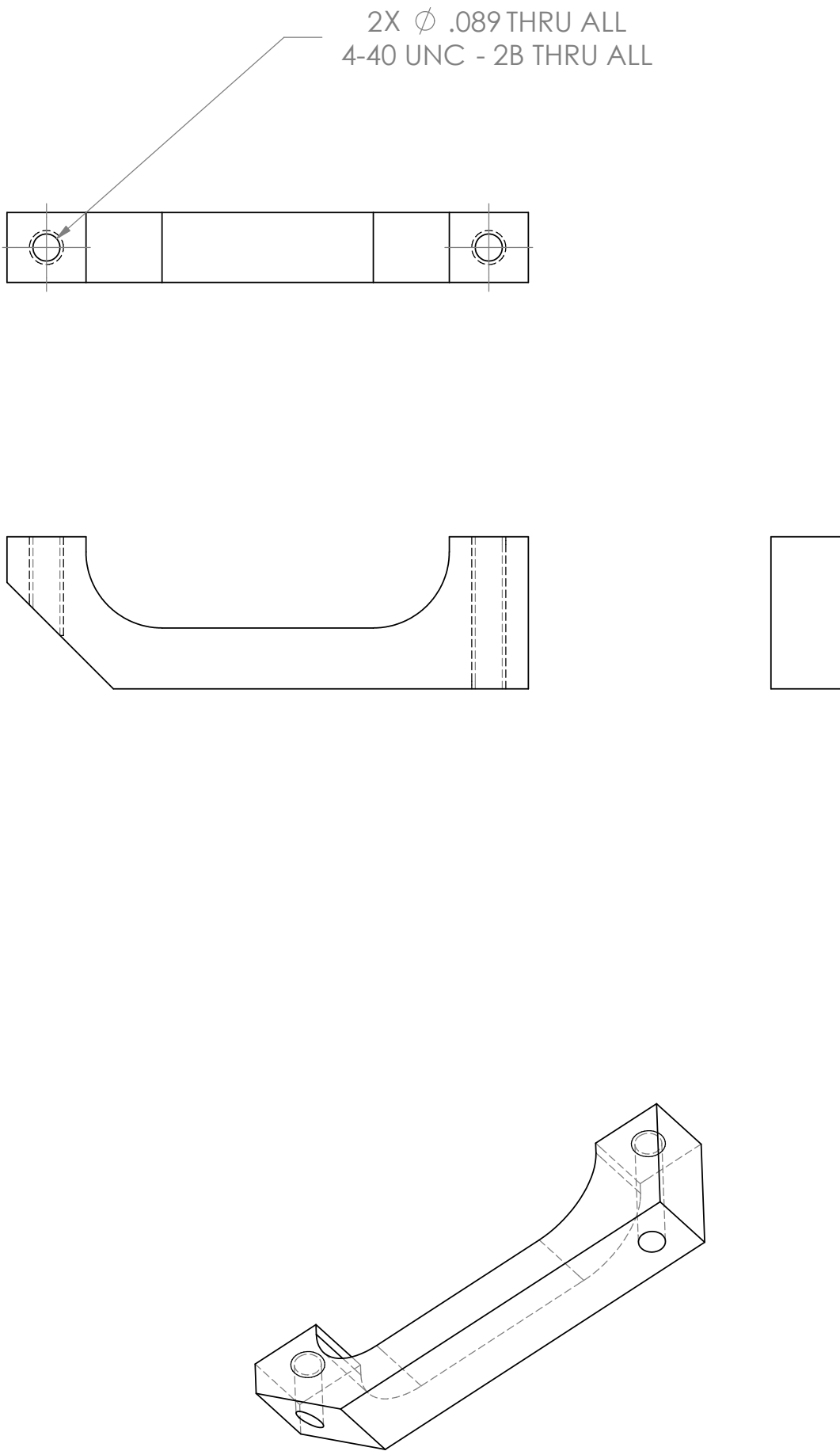
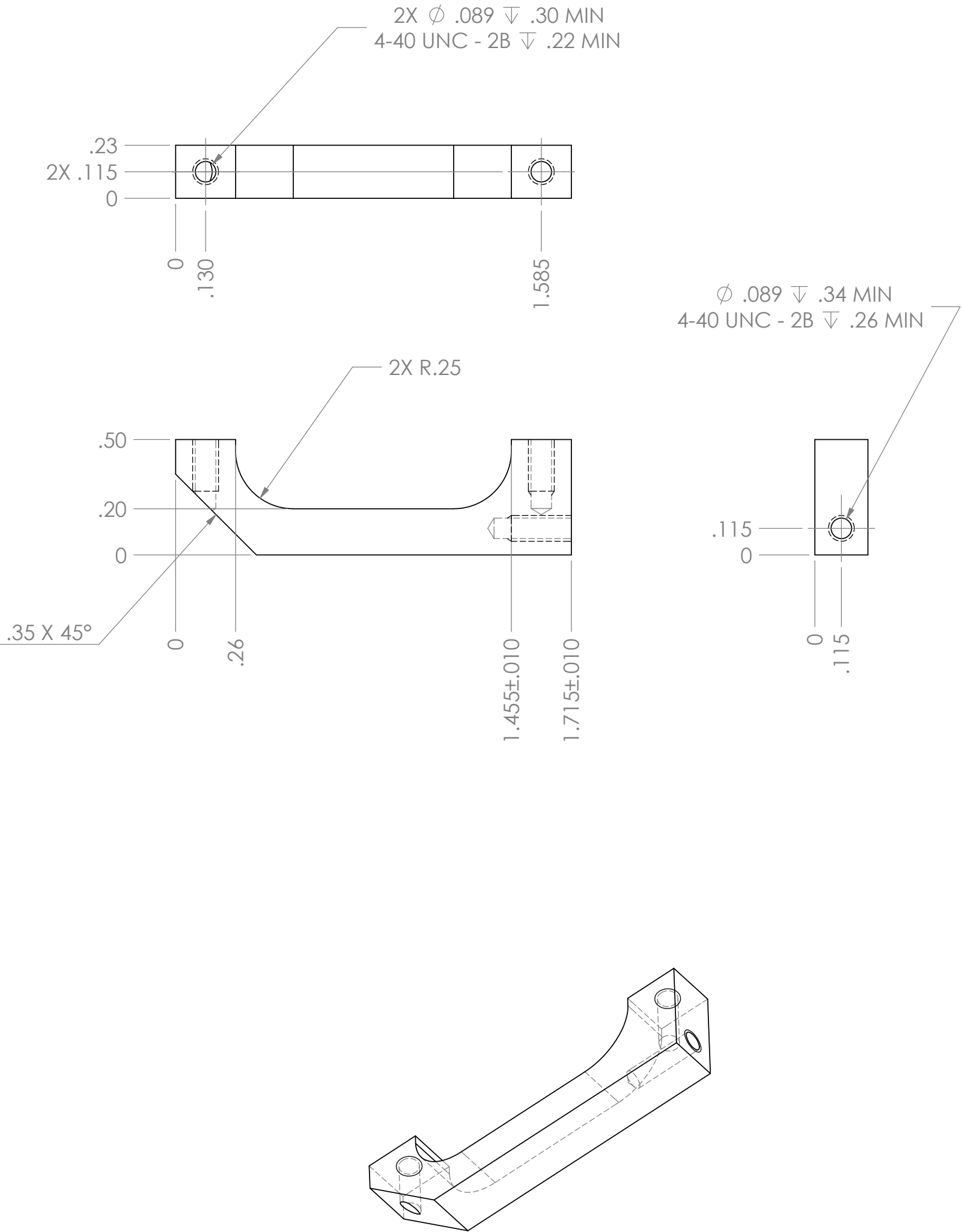
ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
11	1002330-011	processing	6061-T6 Aluminum	2
12	1002330-012	carousel & elevator	6061-T6 Aluminum	2
13	1002330-013	collection	6061-T6 Aluminum	2
14	1002330-014	sample syringe	6061-T6 Aluminum	2
15	1002330-015	manipulator (clearance)	6061-T6 Aluminum	1
16	1002330-016	manipulator	6061-T6 Aluminum	1

BILL OF MATERIALS					last updated on: Friday, August 05, 2005 8:36:54 AM			
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:			APPROVALS	DATE		
Inspector		2 PLACE DIM ±.01	3 PLACE DIM ±.005	4 PLACE DIM ±.0005	ENGINEER Jason Feldman 831-775-1837	Monterey Bay Aquarium Research Institute M B A R I 		
Shop Foreman		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING 3. REMOVE BURRS & SHARP EDGES .010 MAX 4. MACHINED FILLET RADII .000 TO .025 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH. MAX. .003 INCHES FOR SINGLE SURFACE. 7. SURFACE FINISH TO BE 63 MICRON UNLESS OTHERWISE SPECIFIED			CHECKED			
Engineer					ANGLES ±1°			
NEXT ASSY Description	NEXT ASSY Number	PROJECT			701312.00	miscellaneous mounting		
DO NOT SCALE DRAWING		PROJECT			ESP 2G	SIZE C	DWG. NO. 1002330	REV. C
CAD FILE: X:\701312 ESP 2G\SolidWorks files\1002468 (lab stand)					SHEET 9 OF 10			

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.

1002330-017
bracket - collection thermal

1002330-018
bracket - procesing thermal



ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
17	1002330-017	bracket - collection thermal	6061-T6 Aluminum	2
18	1002330-018	bracket - procesing thermal	6061-T6 Aluminum	2

Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS		DATE	
Inspector		2 PLACE DIM ±.01	3 PLACE DIM ±.005	4 PLACE DIM ±.0005	ANGLES ±1°	ENGINEER	
Shop Foreman		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING 3. REMOVE BURRS & SHARP EDGES .010 MAX 4. MACHINED FILLET RADII .000 TO .025 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH. MAX .003 INCHES FOR SINGLE SURFACE. 7. SURFACE FINISH TO BE 63 MICRON UNLESS OTHERWISE SPECIFIED				Jason Feldman	
Engineer						CHECKED	
NEXT ASSY Description	NEXT ASSY Number					PROJECT NUMBER	701312.00
		PROJECT	ESP 2G	SIZE	C	DWG. NO.	1002330
DO NOT SCALE DRAWING		CAD FILE: X:\701312 ESP 2G\SolidWorks files\1002468 (lab stand)				SHEET 10 OF 10	