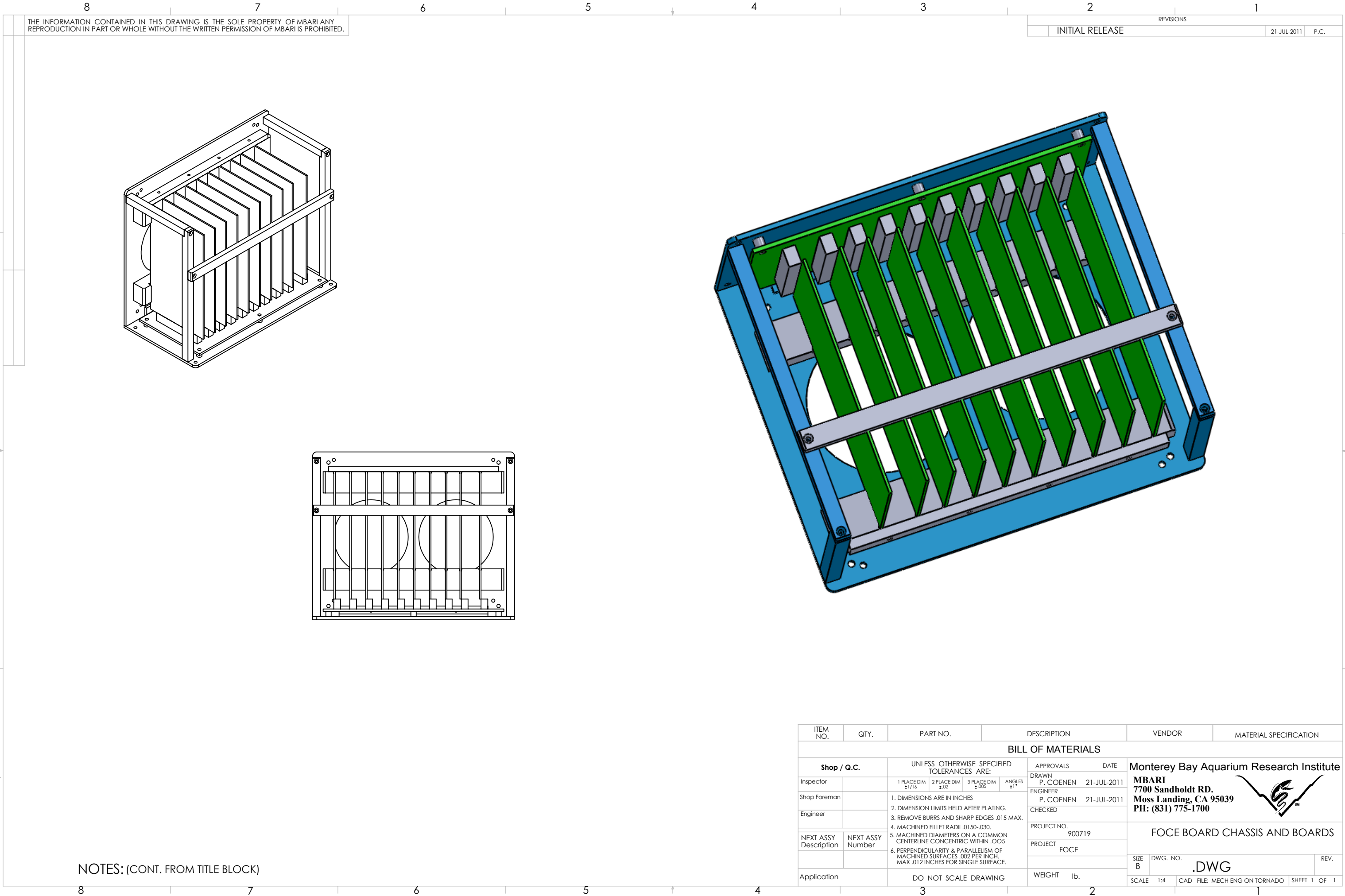




THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MBARI ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF MBARI IS PROHIBITED.

REVISIONS		
INITIAL RELEASE	21-JUL-2011	P.C.

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 $\pm 1/16$	2 PLACE DIM $\pm .02$	3 PLACE DIM $\pm .005$	ANGLES $\pm 1^\circ$
Shop Foreman		1. DIMENSIONS ARE IN INCHES			
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING.			
		3. REMOVE BURRS AND SHARP EDGES .015 MAX.			
		4. MACHINED FILLET RADII .0150-.030.			
NEXT ASSY Description	NEXT ASSY Number	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.			
Application		DO NOT SCALE DRAWING		WEIGHT lb.	
				SIZE B	
				DWG. NO.	
				.DWG	
				REV.	
				SCALE 1:4	
				CAD FILE: MECH ENG ON TORNADO	
				SHEET 1 OF 1	

Monterey Bay Aquarium Research Institute

MBARI

7700 Sandholdt RD.

Moss Landing, CA 95039

PH: (831) 775-1700



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



FOCE BOARD CHASSIS AND BOARDS

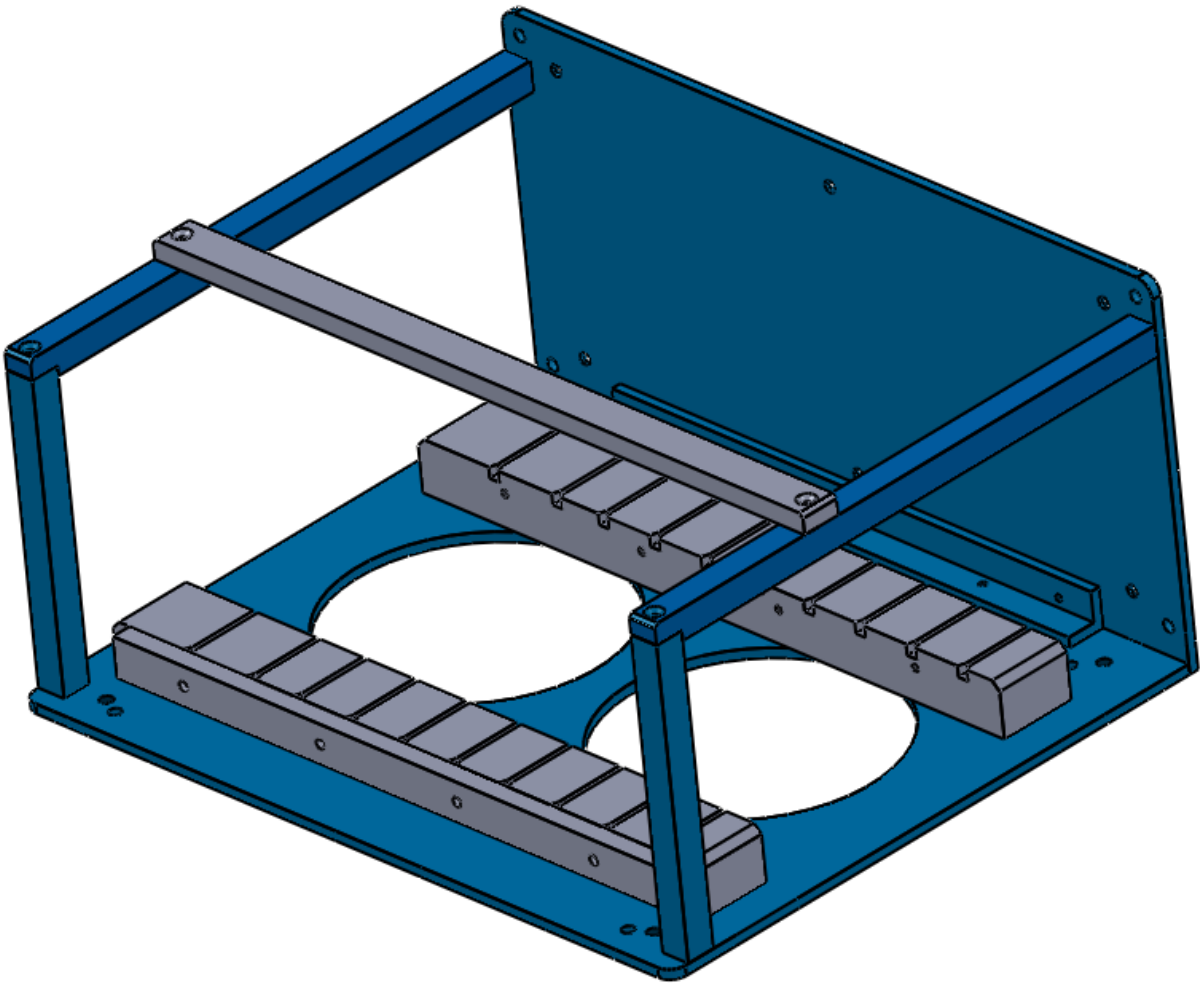
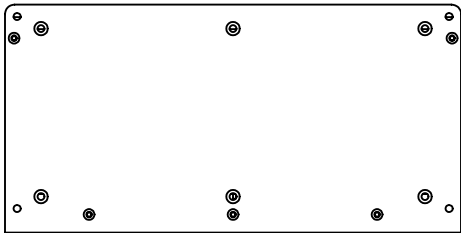
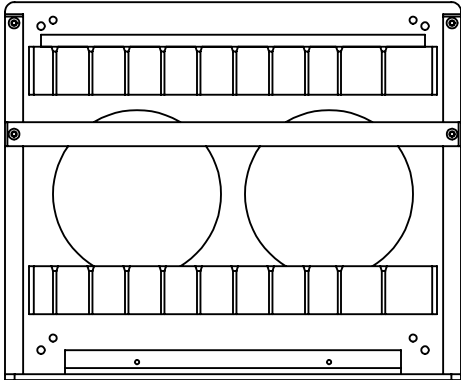
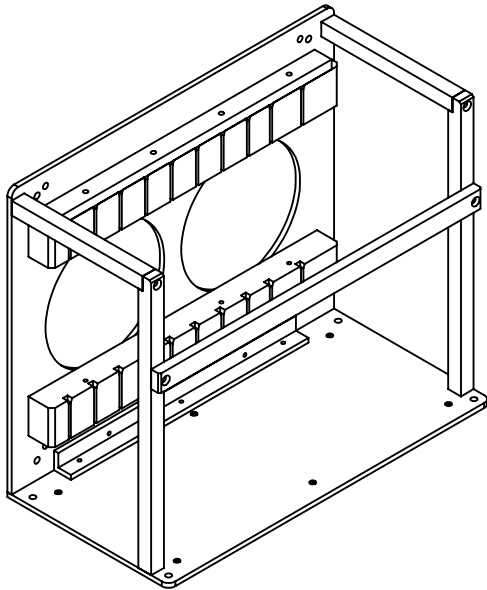
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MBARI ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF MBARI IS PROHIBITED.

REVISIONS

INITIAL RELEASE

21-JUL-2011

P.C.



NOTES: (CONT. FROM TITLE BLOCK)

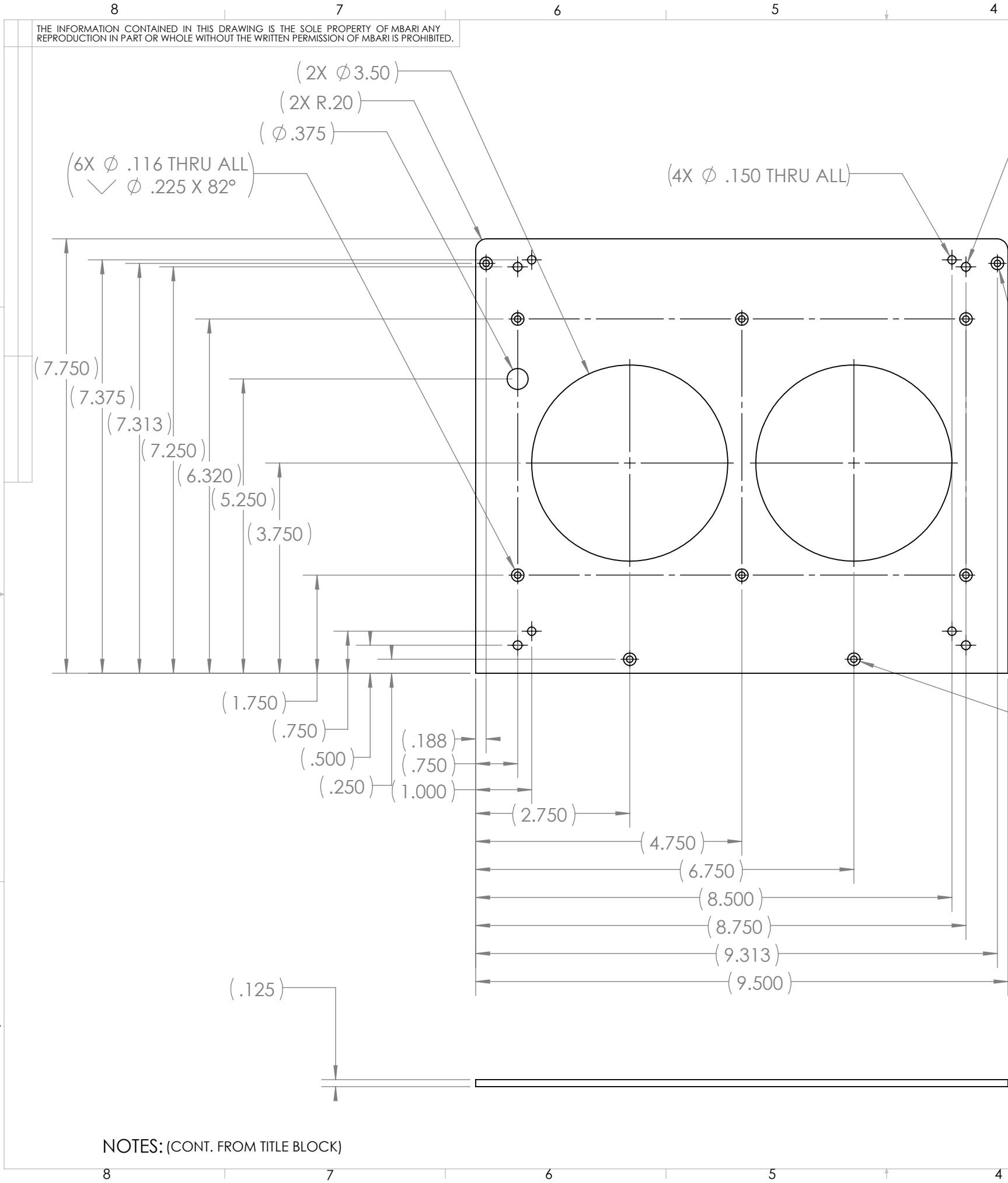
ITEM NO.	QTY.	PART NO.	DESCRIPTION		VENDOR	MATERIAL SPECIFICATION			
BILL OF MATERIALS									
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:			APPROVALS	DATE	Monterey Bay Aquarium Research Institute MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700  FOCE BOARD CHASSIS		
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	DRAWN P. COENEN 21-JUL-2011			
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 P. COENEN 21-JUL-2011				
Engineer					CHECKED				
NEXT ASSY Description	NEXT ASSY Number				PROJECT NO. 900719				
					PROJECT FOCE				
Application		DO NOT SCALE DRAWING			WEIGHT lb.	SIZE B		DWG. NO. .DWG	REV.
						SCALE 1:4		CAD FILE: MECH ENG ON TORNADO	SHEET 1 OF 1

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

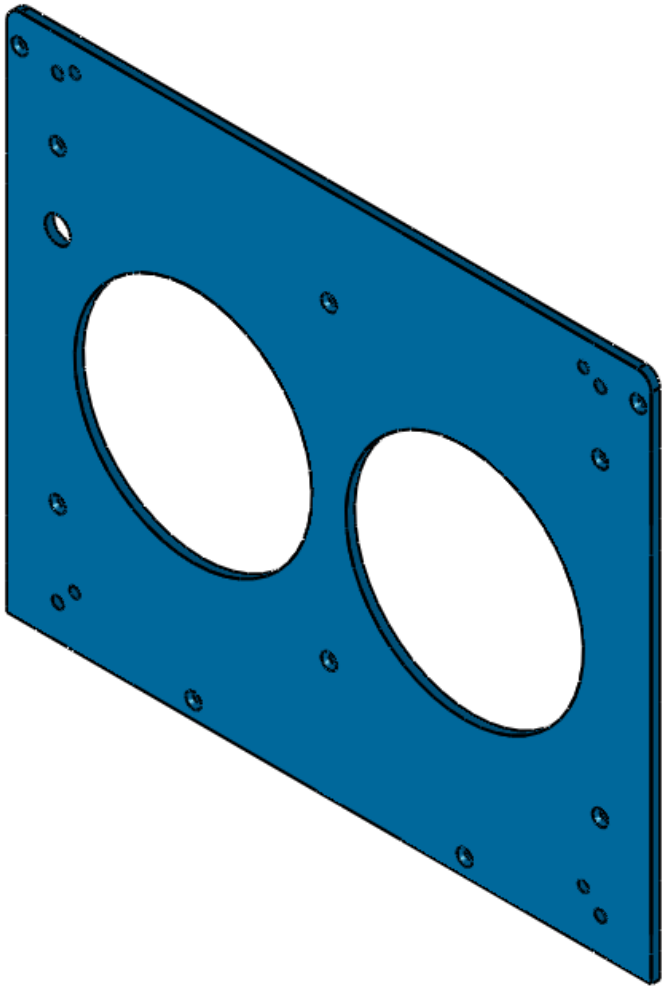


FOCE BOARD CHASSIS

SHEET 1 OF 1



REVISIONS			
0	INITIAL RELEASE	28-JUL-2011	P.C.
1	ADDED 3/8" WIRE PASS-THROUGH HOLE	01-AUG-2011	P.C.



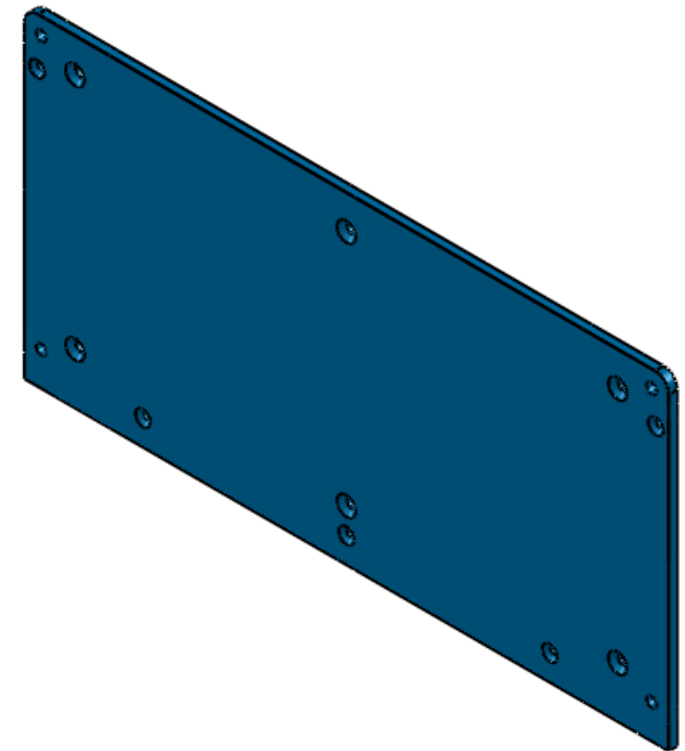
MATERIAL IS 6061 ALUMINUM
PART IS TO BE COLOR ANODIZED BLUE
1 PIECE PER ASSEMBLY

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			
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING.			
		3. REMOVE BURRS AND SHARP EDGES .015 MAX.			
		4. MACHINED FILLET RADII .0150-.030.			
NEXT ASSY Description	NEXT ASSY Number	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.			
Application		DO NOT SCALE DRAWING		WEIGHT	lb.
				Monterey Bay Aquarium Research Institute	
				MBARI	
				7700 Sandholdt RD.	
				Moss Landing, CA 95039	
				PH: (831) 775-1700	
					
				CHASSIS FLOOR	
		SIZE B	DWG. NO.		REV. 1
		10020732			
SCALE 1:2		CAD FILE: MECH ENG ON TORNADO SHEET 1 OF 1			

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

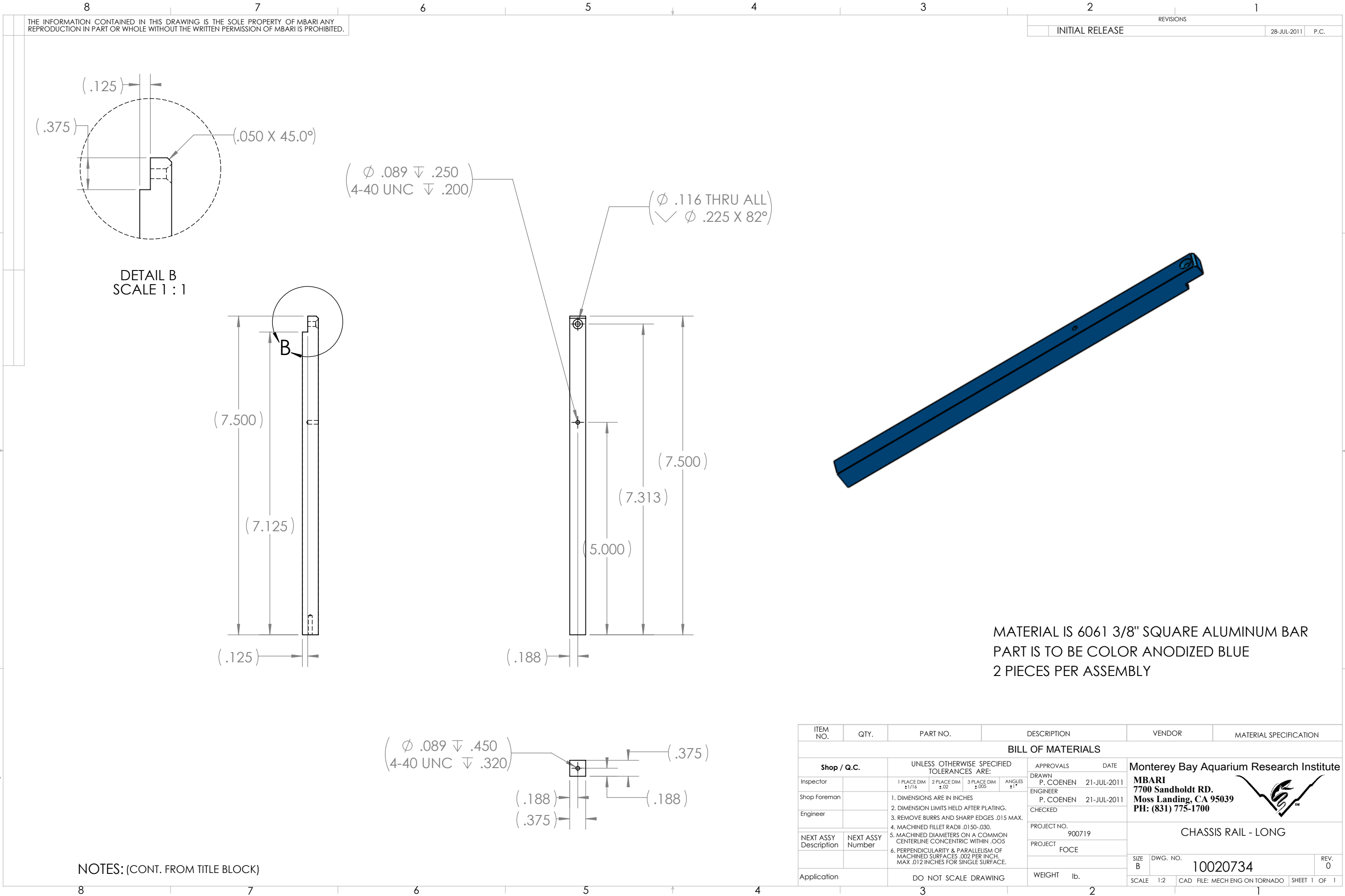


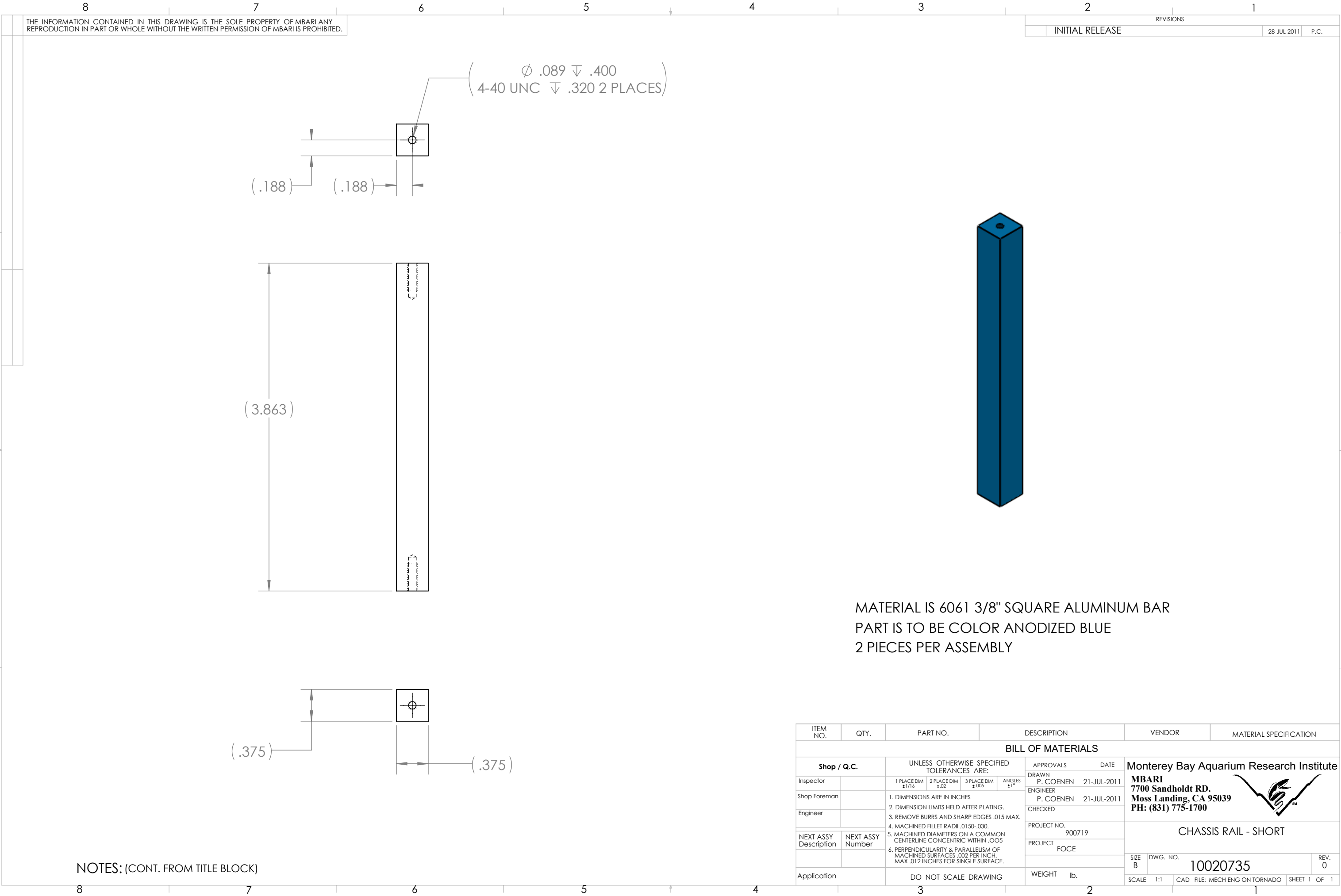
CHASSIS FLOOR



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 DRAWN P. COENEN 21-JUL-2011 ENGINEER P. COENEN 21-JUL-2011 CHECKED PROJECT NO. 900719 PROJECT FOCE WEIGHT lb. 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°
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					
NEXT ASSY Description	NEXT ASSY Number				
Application		DO NOT SCALE DRAWING		SIZE B DWG. NO. 10020733 REV. 0	
				SCALE 1:2	CAD FILE: MECH ENG ON TORNADO
				SHEET 1	OF 1





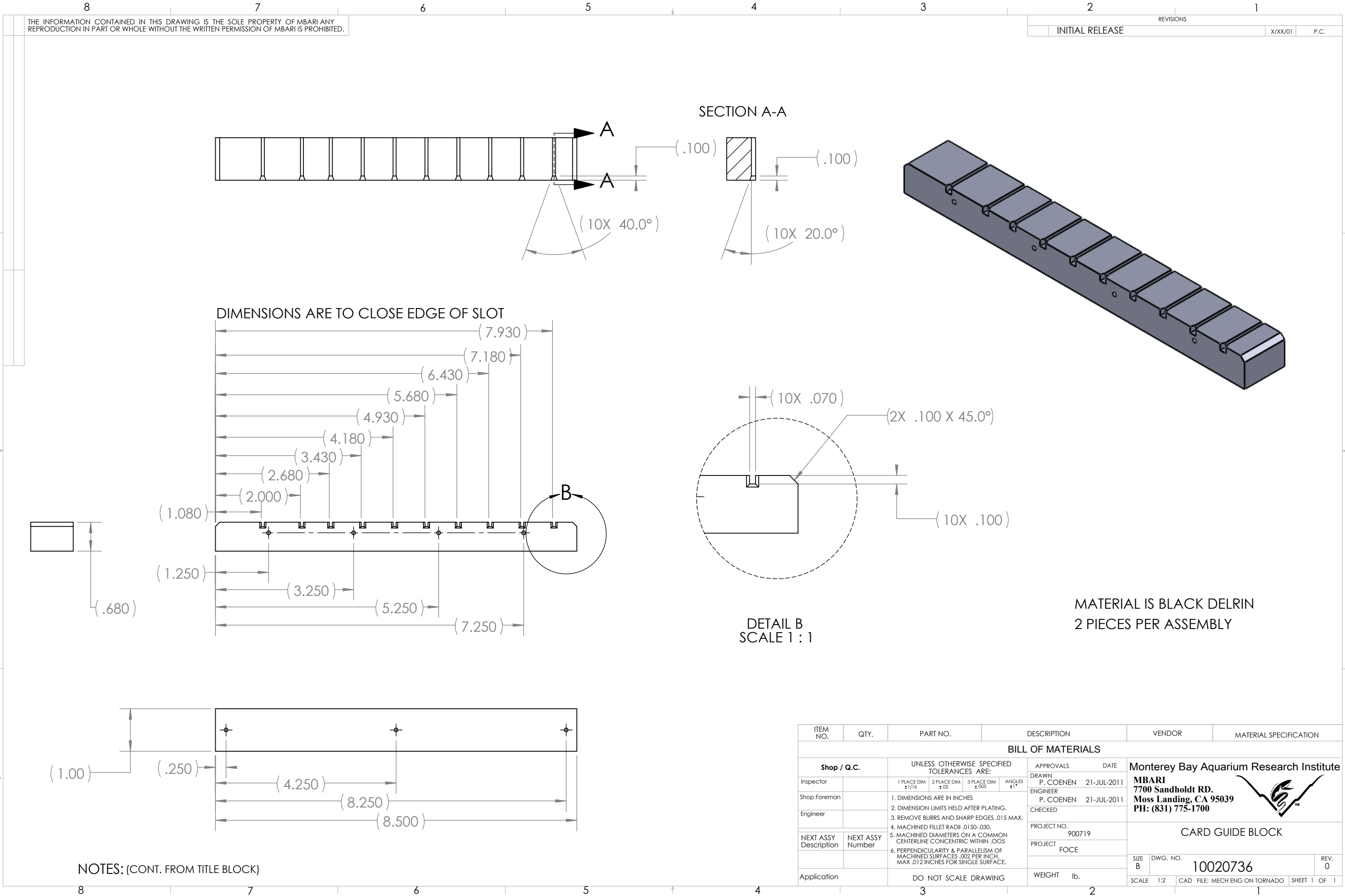
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MBARI ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF MBARI IS PROHIBITED.

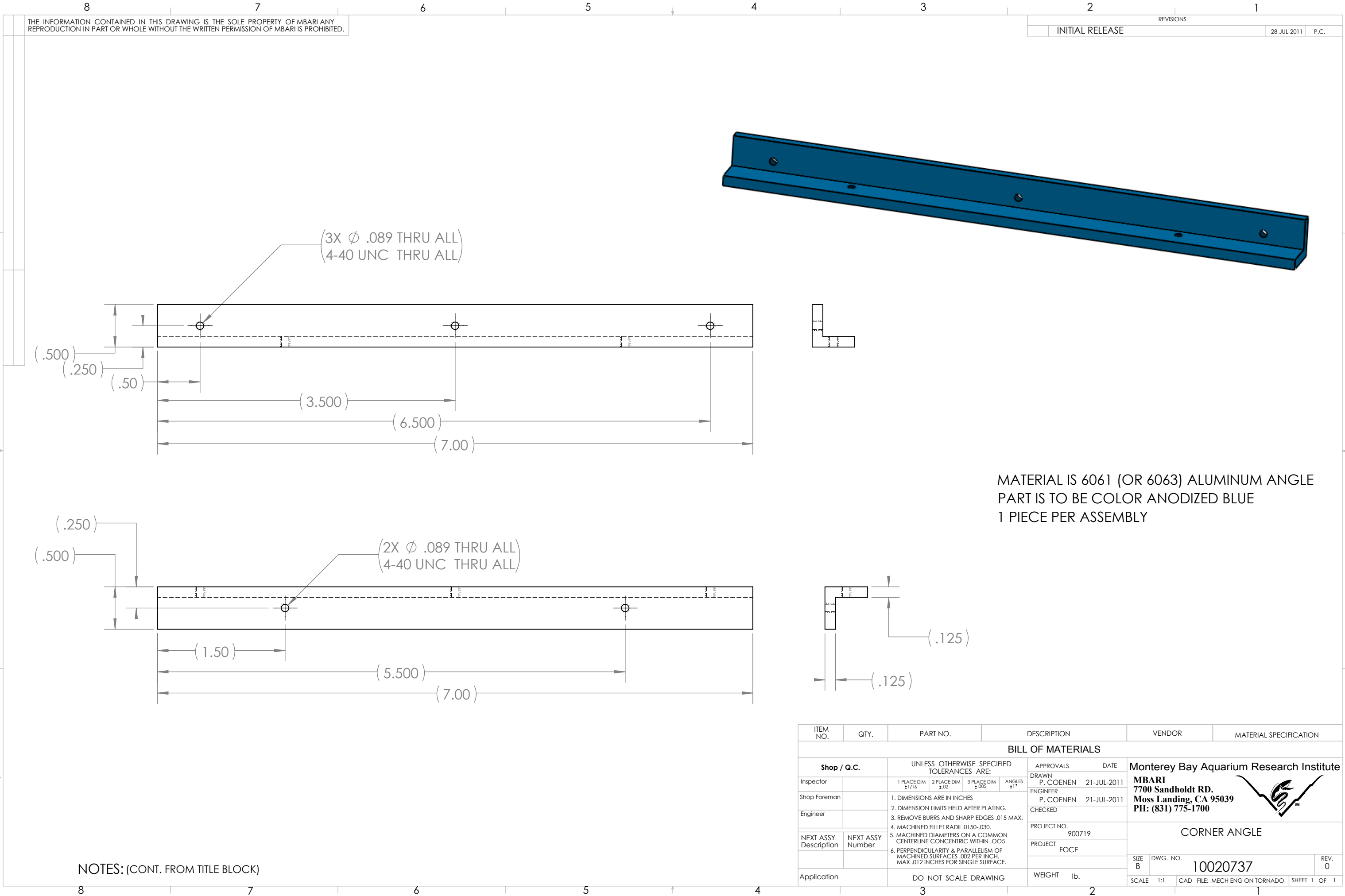
REVISIONS		
INITIAL RELEASE	28-JUL-2011	P.C.

MATERIAL IS 6061 3/8" SQUARE ALUMINUM BAR
PART IS TO BE COLOR ANODIZED BLUE
2 PIECES PER ASSEMBLY

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	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 P. COENEN 21-JUL-2011
Shop Foreman		1. DIMENSIONS ARE IN INCHES			ENGINEER P. COENEN 21-JUL-2011			
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING.			CHECKED			
NEXT ASSY Description		NEXT ASSY Number	3. REMOVE BURRS AND SHARP EDGES .015 MAX.			PROJECT NO.		
			4. MACHINED FILLET RADII .0150-.030.			900719		
			5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005			PROJECT		
			6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.			FOCE		
Application		DO NOT SCALE DRAWING			WEIGHT	lb.	CHASSIS RAIL - SHORT	
					SIZE B	DWG. NO.	REV.	
						10020735	0	
					SCALE 1:1	CAD FILE: MECH ENG ON TORNADO	SHEET 1 OF 1	





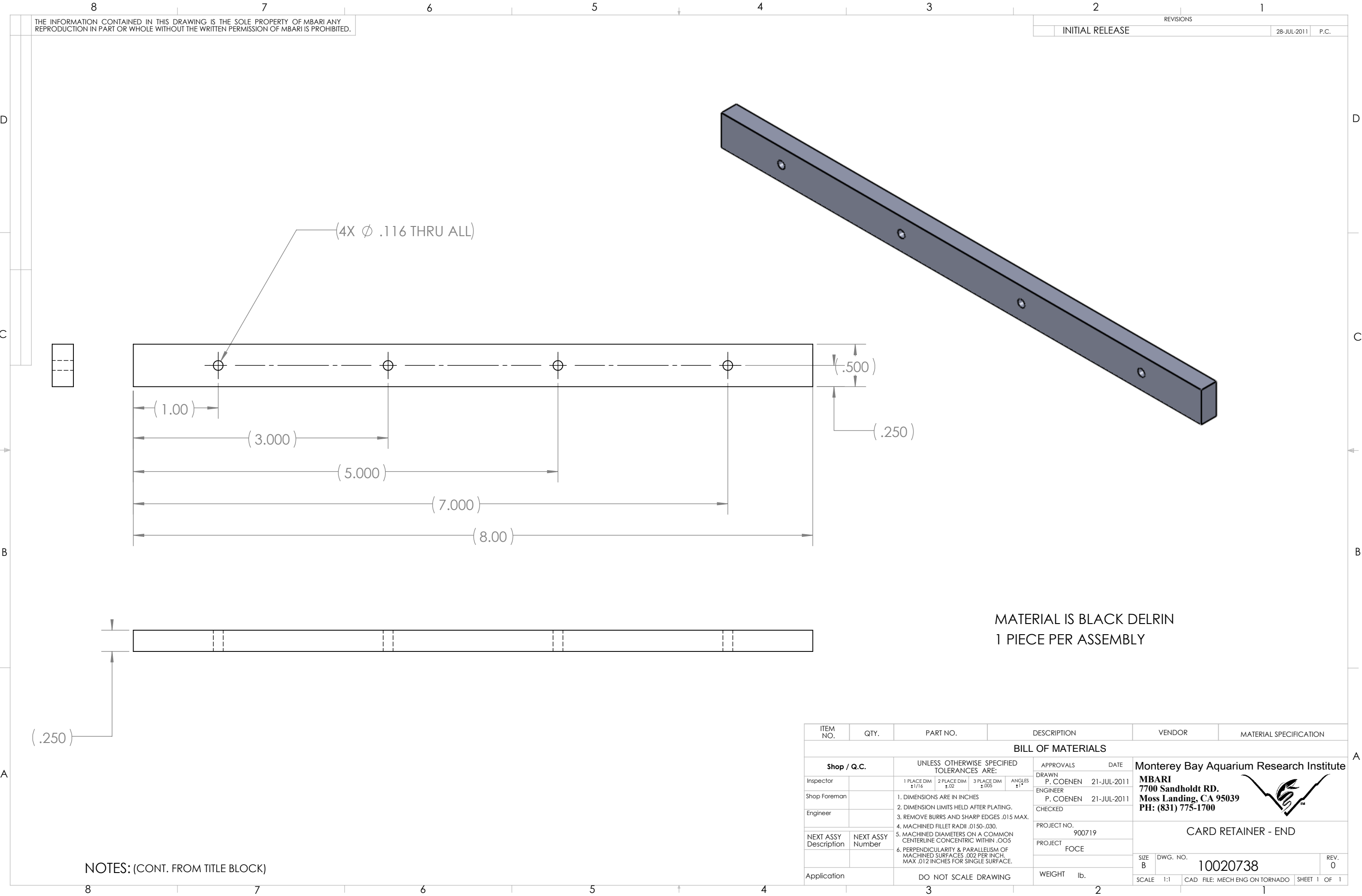
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MBARI ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF MBARI IS PROHIBITED.

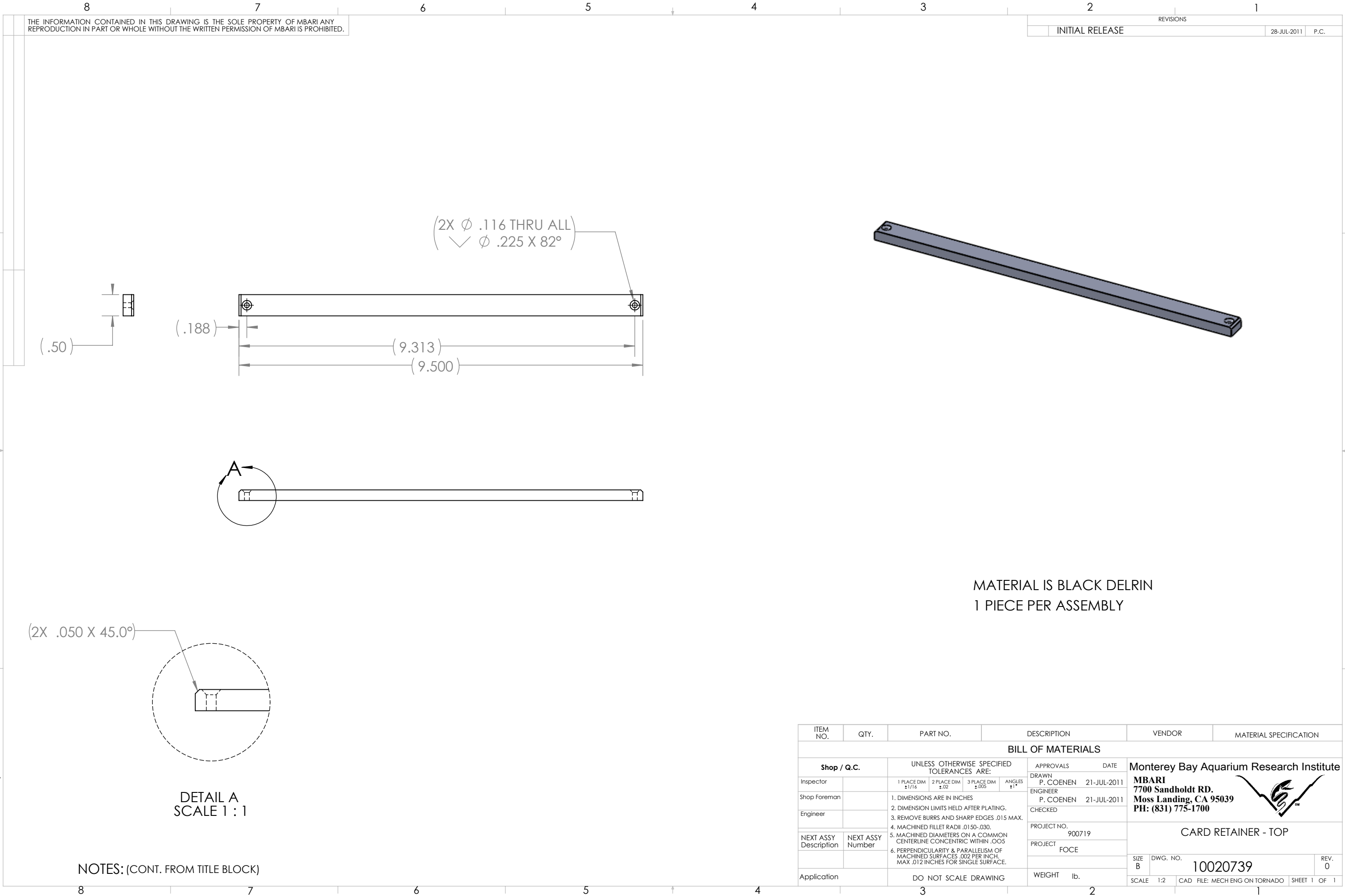
REVISIONS		
INITIAL RELEASE	28-JUL-2011	P.C.

MATERIAL IS 6061 (OR 6063) ALUMINUM ANGLE
PART IS TO BE COLOR ANODIZED BLUE
1 PIECE PER ASSEMBLY

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 $\pm 1/16$	2 PLACE DIM $\pm .02$	3 PLACE DIM $\pm .005$	ANGLES $\pm 1^\circ$
Shop Foreman		1. DIMENSIONS ARE IN INCHES		DRAWN P. COENEN	21-JUL-2011
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING.		ENGINEER P. COENEN	21-JUL-2011
NEXT ASSY Description		3. REMOVE BURRS AND SHARP EDGES .015 MAX.		CHECKED	
NEXT ASSY Number		4. MACHINED FILLET RADII .0150-.030.		PROJECT NO. 900719	
Application		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005		PROJECT FOCE	
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.		WEIGHT lb.	
		DO NOT SCALE DRAWING		SIZE B DWG. NO. 10020737 REV. 0	
				SCALE 1:1 CAD FILE: MECH ENG ON TORNADO SHEET 1 OF 1	

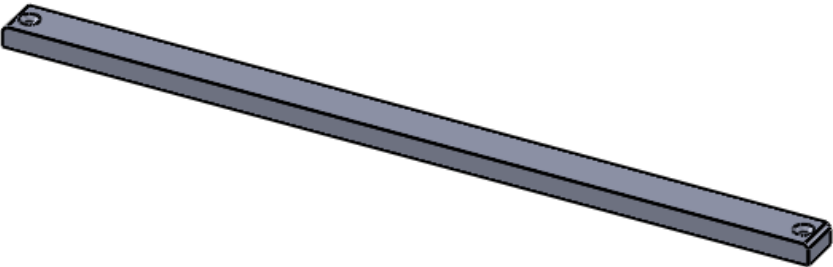




THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MBARI ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF MBARI IS PROHIBITED.

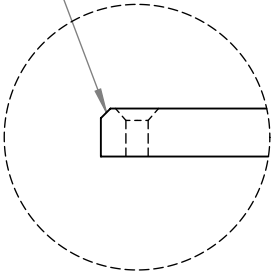
REVISIONS		
INITIAL RELEASE	28-JUL-2011	P.C.

(2X ϕ .116 THRU ALL)
($\surd$ ϕ .225 X 82°)



MATERIAL IS BLACK DELRIN
1 PIECE PER ASSEMBLY

(2X .050 X 45.0°)



DETAIL A
SCALE 1 : 1

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			
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING.			
		3. REMOVE BURRS AND SHARP EDGES .015 MAX.			
		4. MACHINED FILLET RADII .0150-.030.			
NEXT ASSY Description	NEXT ASSY Number	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.			
Application		DO NOT SCALE DRAWING		WEIGHT lb.	
				SIZE B	DWG. NO. 10020739
				SCALE 1:2	REV. 0
				CAD FILE: MECH ENG ON TORNADO	SHEET 1 OF 1

Monterey Bay Aquarium Research Institute

MBARI

7700 Sandholdt RD.

Moss Landing, CA 95039

PH: (831) 775-1700

CARD RETAINER - TOP

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



CARD RETAINER - TOP