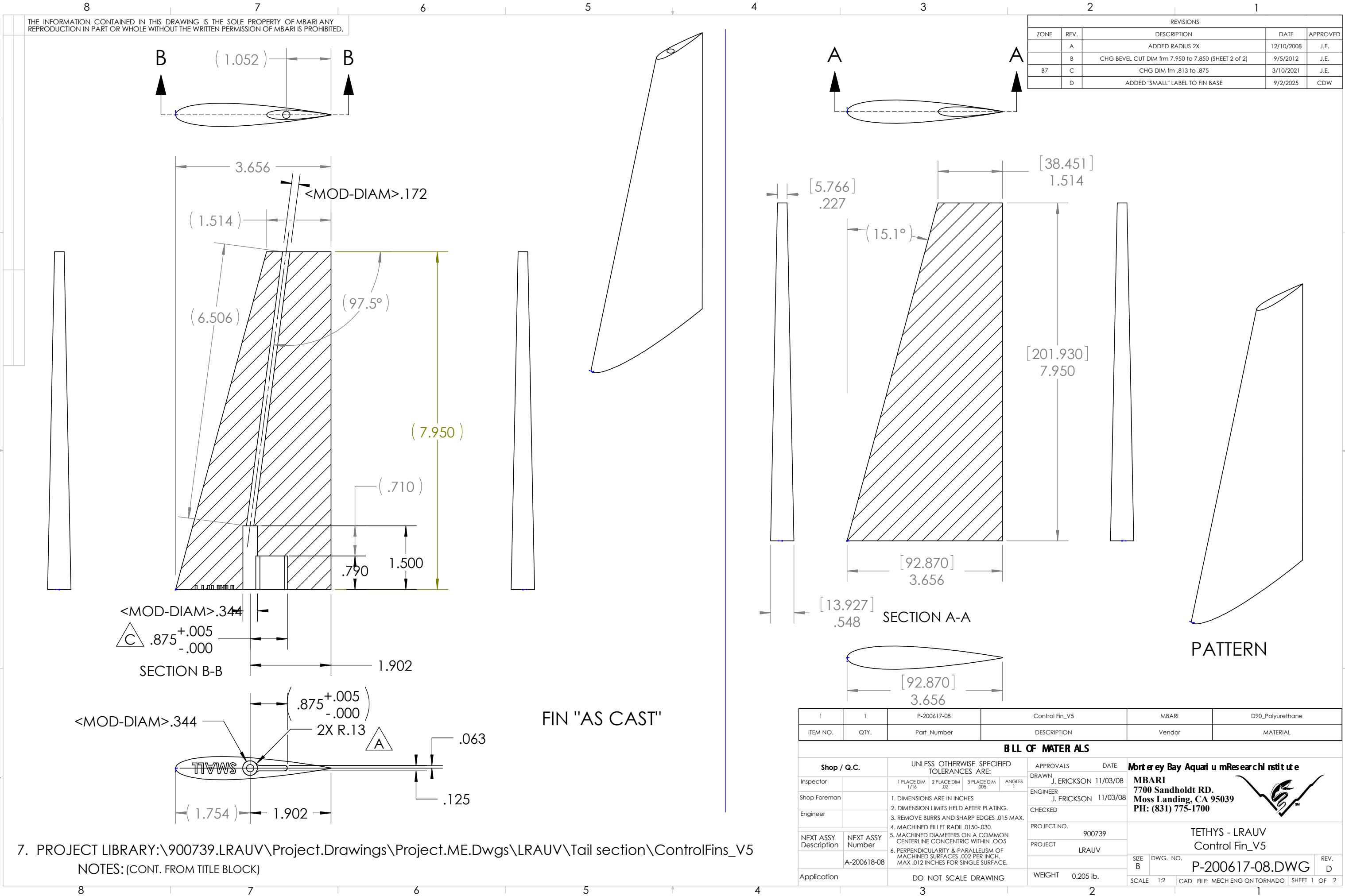
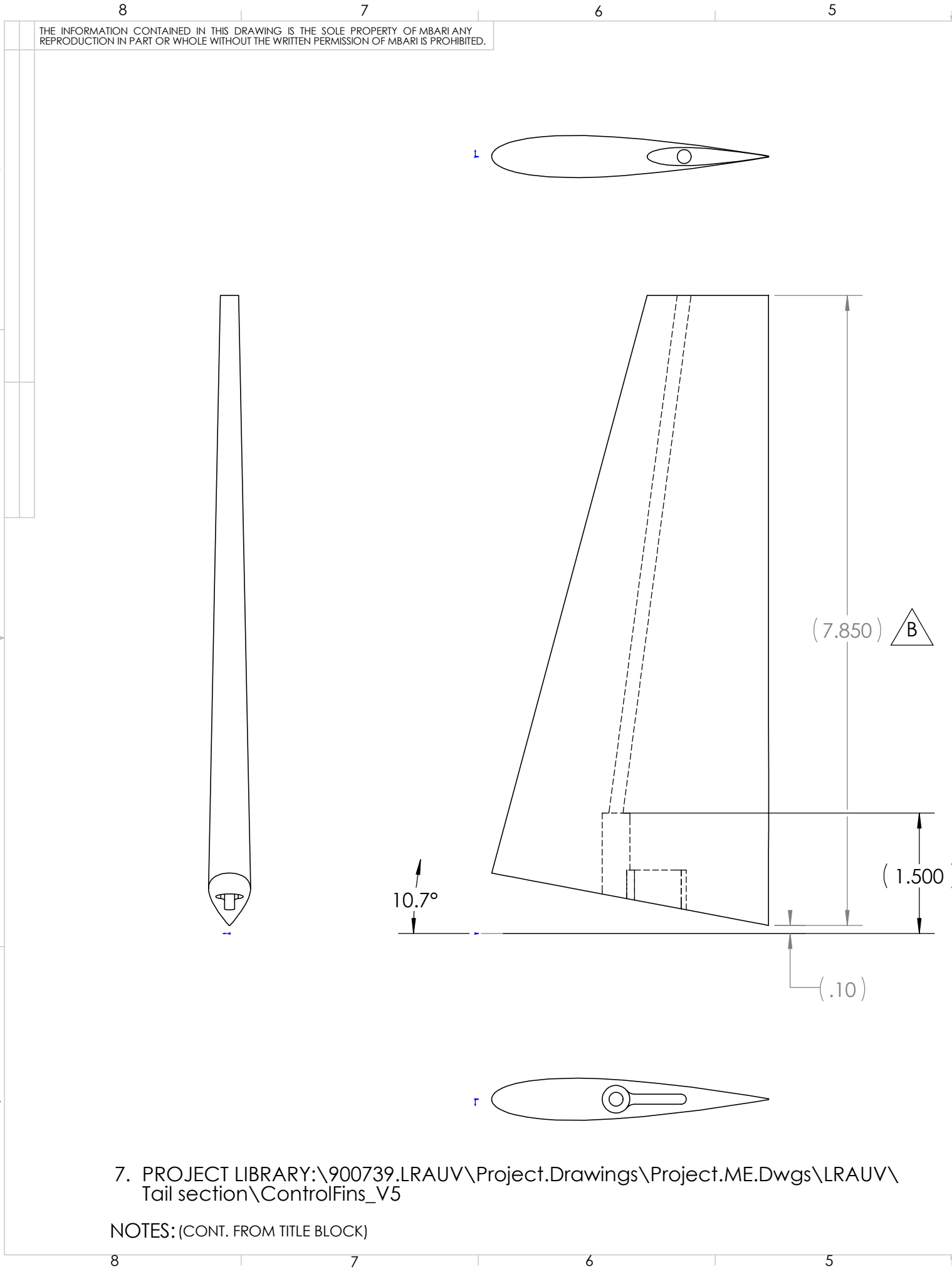






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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	INITIAL RELEASE	X/XX/00	J.E.

Mass properties of P-200617-08_ControlFin_V5

Configuration: Cut
Coordinate system: -- default --

Density = 0.0011 grams per cubic millimeter

Mass = 83.6378 grams

Volume = 79411.4887 cubic millimeters

Surface area = 29519.6317 square millimeters

Center of mass: (millimeters)

X = 52.8434

Y = -0.0002

Z = 83.5392

Principal axes of inertia and principal moments of inertia: (grams * square millimeters)

Taken at the center of mass.

Ix = (0.1540, 0.0000, 0.9881) Px = 25344.7941

Iy = (0.9881, 0.0000, -0.1540) Py = 213224.2522

Iz = (0.0000, 1.0000, 0.0000) Pz = 237429.9922

Moments of inertia: (grams * square millimeters)

Taken at the center of mass and aligned with the output coordinate system.

Lxx = 208765.7145 Lxy = 0.6241 Lxz = 28597.0118

Lyx = 0.6241 Lyy = 237429.9922 Lyz = 0.7364

Lzx = 28597.0118 Lzy = 0.7364 Lzz = 29803.3318

Moments of inertia: (grams * square millimeters)

Taken at the output coordinate system.

lxx = 792456.8755 lxy = -0.2674 lxz = 397815.8176

lyx = -0.2674 lyy = 1054673.6475 lyz = -0.6729

lzx = 397815.8176 lzy = -0.6729 lzz = 263355.8262

CUT FIN

7. PROJECT LIBRARY:\900739.LRAUV\Project.Drawings\Project.ME.Dwgs\LRAUV\
Tail section\ControlFins_V5

NOTES: (CONT. FROM TITLE BLOCK)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	VENDOR	MATERIAL SPECIFICATION
B L L OF M A T E R I A L S					
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 11/03/08	
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING.		ENGINEER J. ERICKSON 11/03/08	
		3. REMOVE BURRS AND SHARP EDGES .015 MAX.		CHECKED	
		4. MACHINED FILLET RADII .0150-.030.		PROJECT NO. 900739	
NEXT ASSY Description	NEXT ASSY Number	5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005		PROJECT LRAUV	
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.		WEIGHT 0.205 lb.	
Application		DO NOT SCALE DRAWING		TETHYS - LRAUV Control Fin_V5 CUT SHAPE	
				SIZE B	DWG. NO. P-200617-08.DWG
				SCALE 1:2	REV. C
				CAD FILE: MECH ENG ON TORNADO	SHEET 2 OF 2

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

