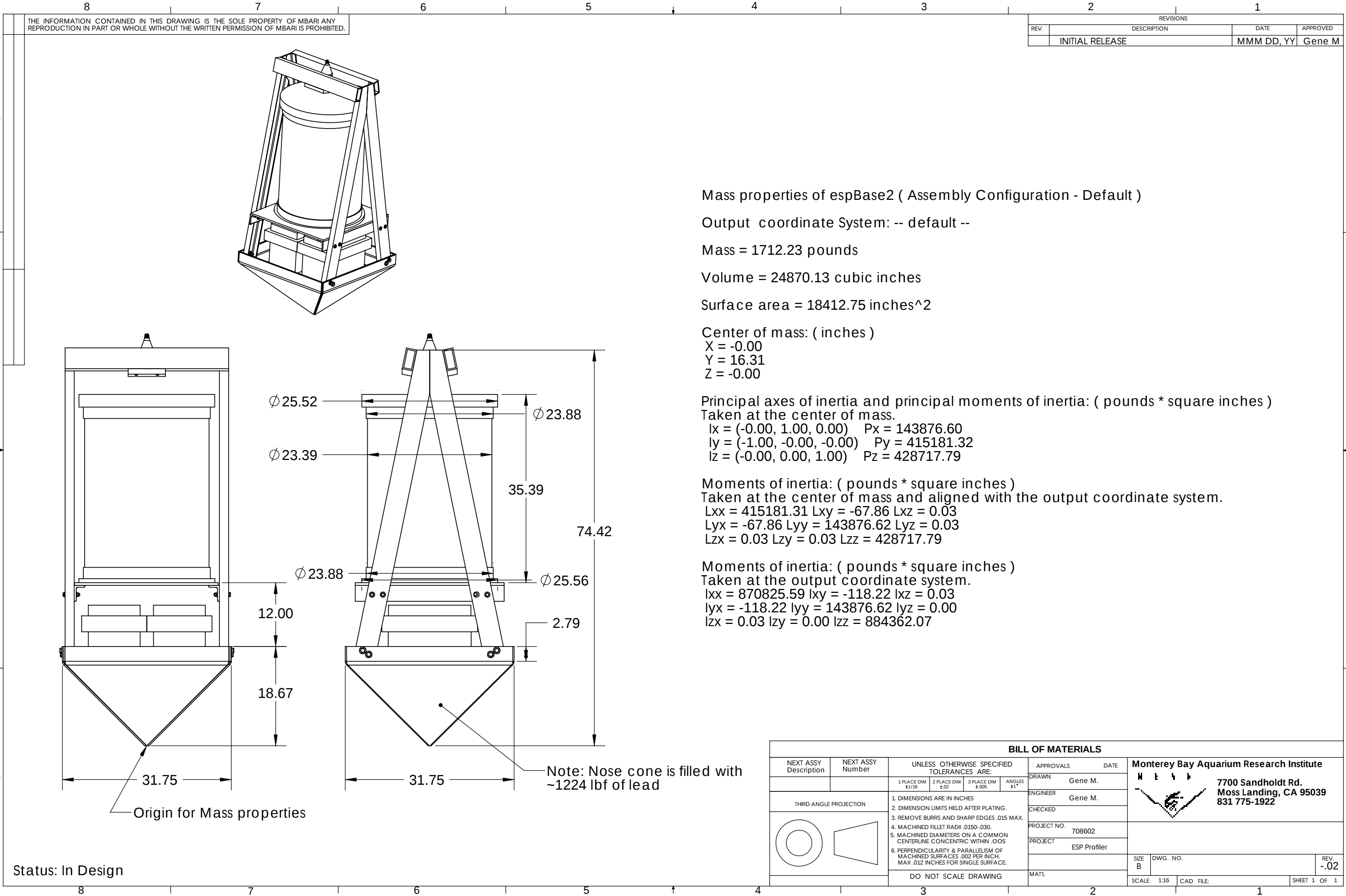




THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MBARI ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF MBARI IS PROHIBITED.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	INITIAL RELEASE	MMM DD, YY	Gene M

Mass properties of espBase2 (Assembly Configuration - Default)

Output coordinate System: -- default --

Mass = 1712.23 pounds

Volume = 24870.13 cubic inches

Surface area = 18412.75 inches^2

Center of mass: (inches)

X = -0.00

Y = 16.31

Z = -0.00

Principal axes of inertia and principal moments of inertia: (pounds * square inches)

Taken at the center of mass.

Ix = (-0.00, 1.00, 0.00) Px = 143876.60

Iy = (-1.00, -0.00, -0.00) Py = 415181.32

Iz = (-0.00, 0.00, 1.00) Pz = 428717.79

Moments of inertia: (pounds * square inches)

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

Lxx = 415181.31 Lxy = -67.86 Lxz = 0.03

Lyx = -67.86 Lyy = 143876.62 Lyz = 0.03

Lzx = 0.03 Lzy = 0.03 Lzz = 428717.79

Moments of inertia: (pounds * square inches)

Taken at the output coordinate system.

Ixx = 870825.59 Ixy = -118.22 Ixz = 0.03

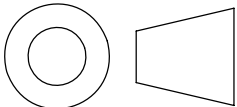
Iyx = -118.22 Iyy = 143876.62 Iyz = 0.00

Izx = 0.03 Izy = 0.00 Izz = 884362.07

Note: Nose cone is filled with ~1224 lbf of lead

Origin for Mass properties

Status: In Design

BILL OF MATERIALS											
NEXT ASSY Description	NEXT ASSY Number	UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				APPROVALS		DATE		Monterey Bay Aquarium Research Institute H E L P  7700 Sandholdt Rd. Moss Landing, CA 95039 831 775-1922	
		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	DRAWN	Gene M.				
						ENGINEER	Gene M.				
						CHECKED					
						PROJECT NO.	708602				
THIRD ANGLE PROJECTION		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.				PROJECT	ESP Profiler				
								SIZE B	DWG. NO.		REV. -.02
		DO NOT SCALE DRAWING				MAT'L		SCALE 1:16 CAD FILE:		SHEET 1 OF 1	