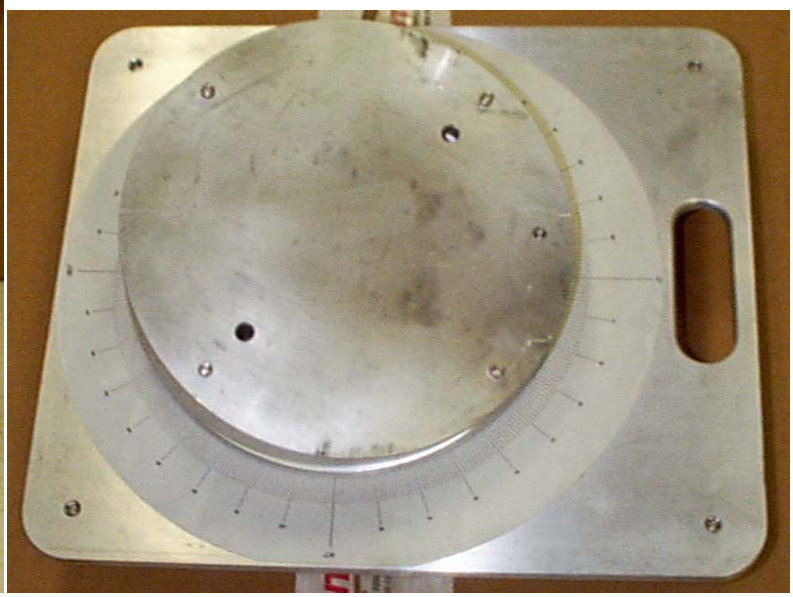
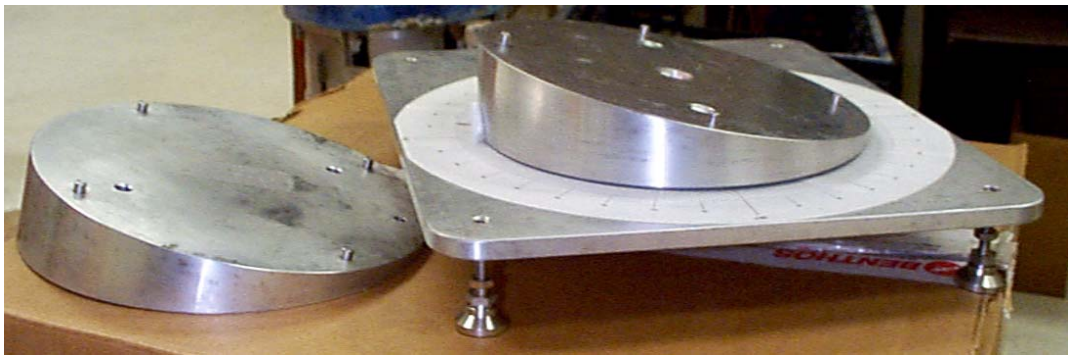
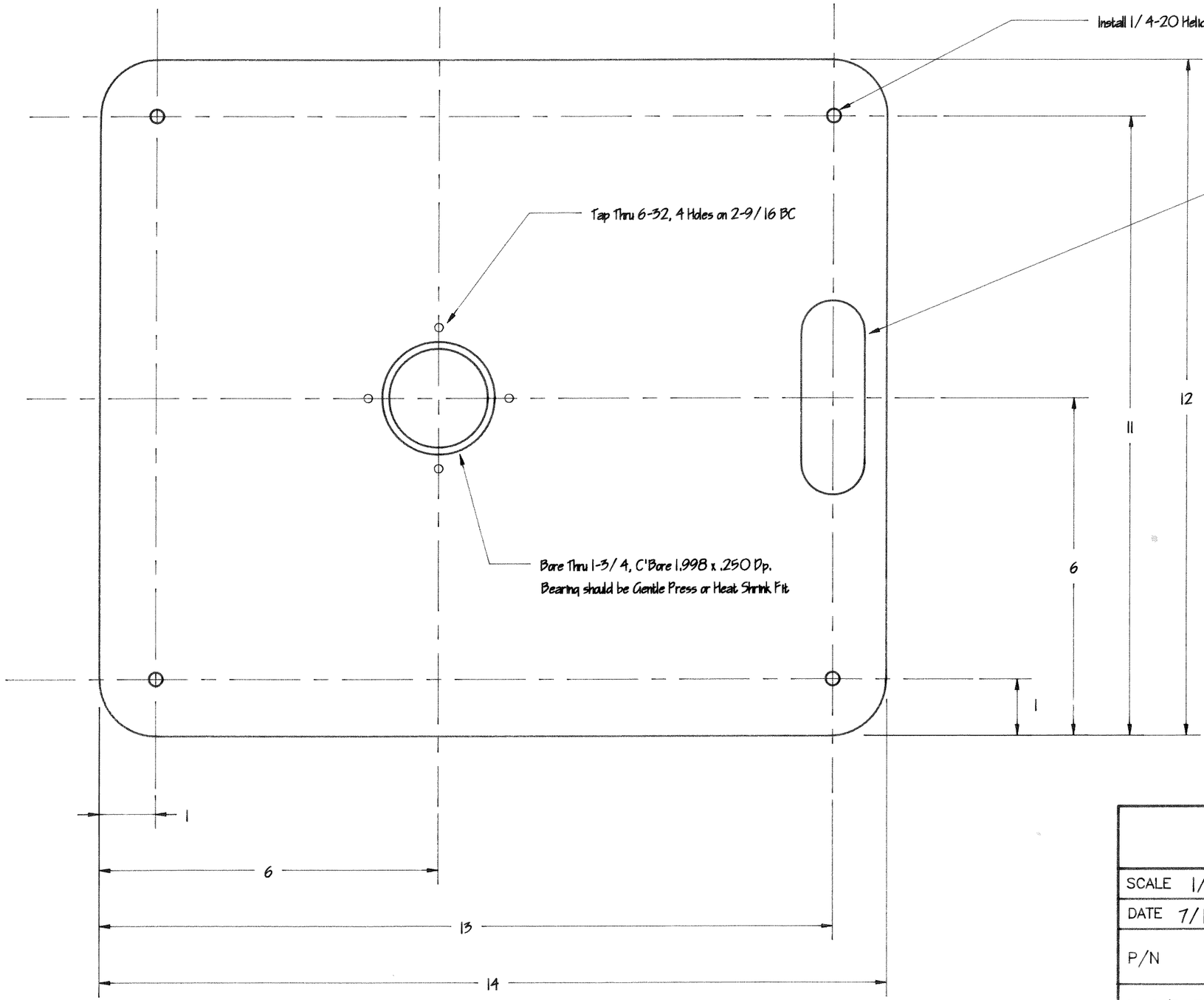
ADCP compass calibration table
USGS Woods Hole Coastal and Marine Science Center
Woods Hole, MA 02543
6 Nov. 2009

Concept: Marinna Martini
Design: Ray Davis

The point of this was to provide smooth rotation as we found the ADCP would reject wobbly data when dragging the unit around on a piece of cardboard. Back in 1997, it cost about $600 to build. It is made of non ferrous material. You can also calibrate the ADCP as down-looking by setting the ADCP, transducer down, on the flat surface resulting from the two wedges fit together.
Not listed in Ray's drawings and parts order are the graduated markings and a simple bubble level. The markings were a printout glued to the table, and a bubble level is handy when setting up the table, as the feet are adjustable.





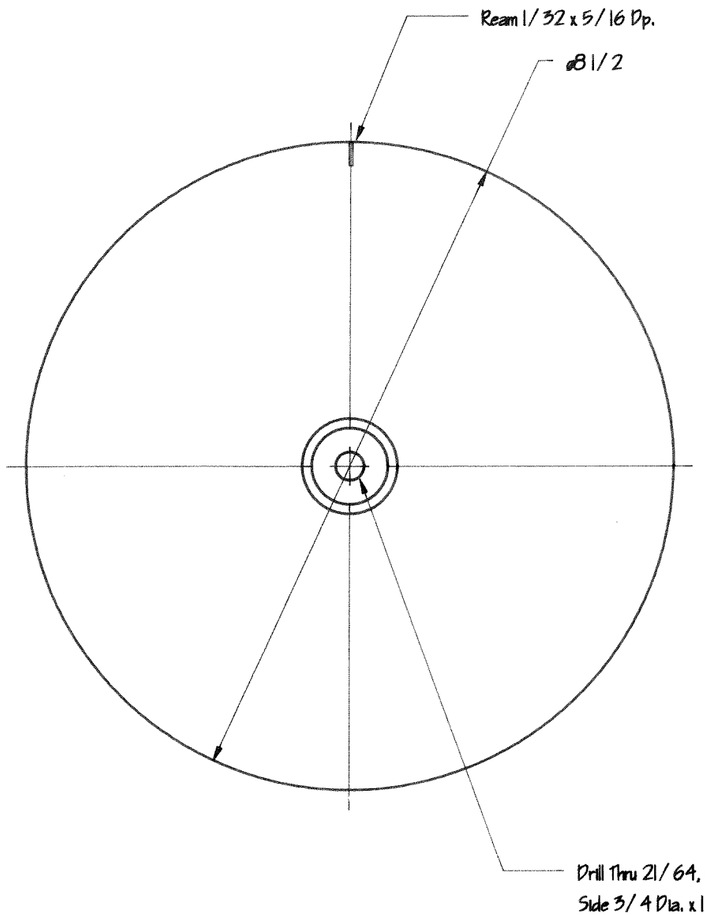


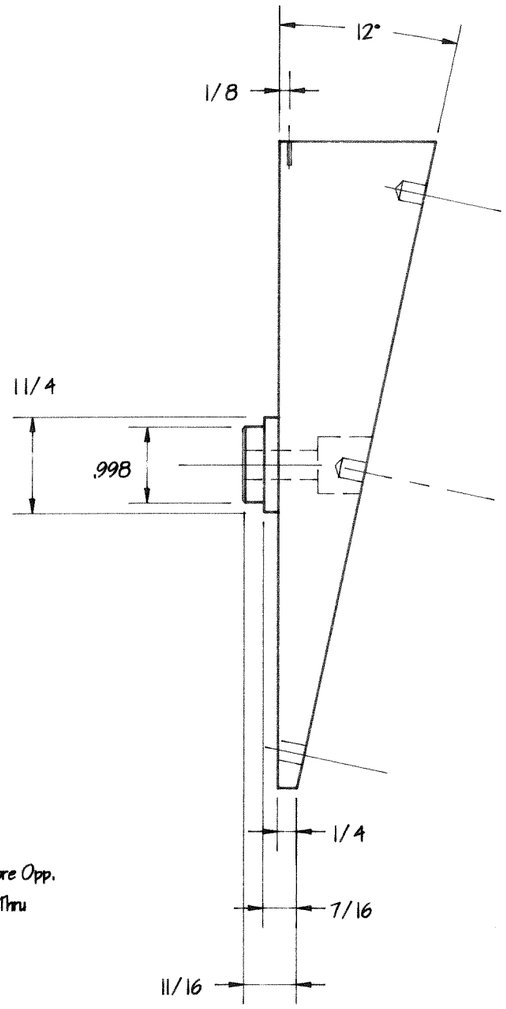
Note

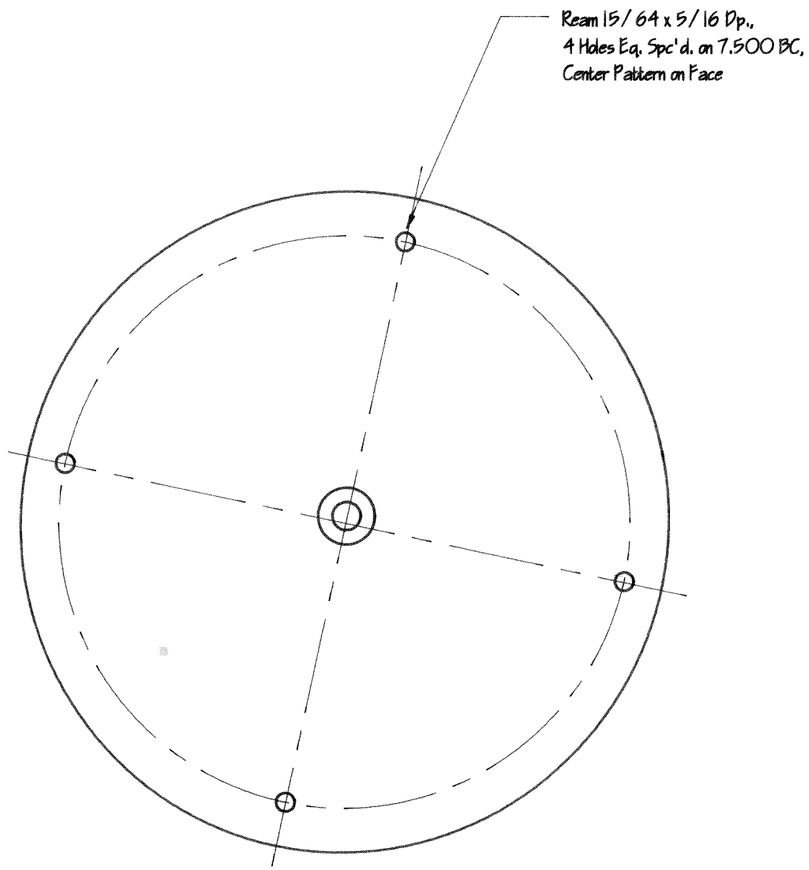
1. Make 1 Piece
2. Material: 3/8" Thick 6061-T6 Al.
3. Round/ Smooth All Edges 1/32 R
4. Tol: ±.001, 1/64

MARINNA STUFF

SCALE 1/2 X	REVISIONS	DRAWN BY
DATE 7/11/97		R.E. Davis
P/N	ADCP Test Stand Plate	
DWG/FILE	ADCPPLAT	DRAWING NO. 1 of 6



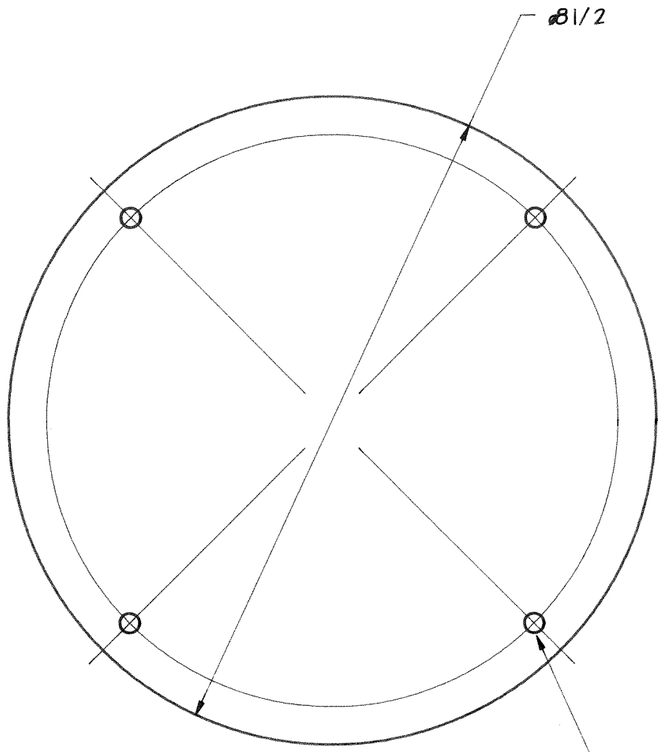


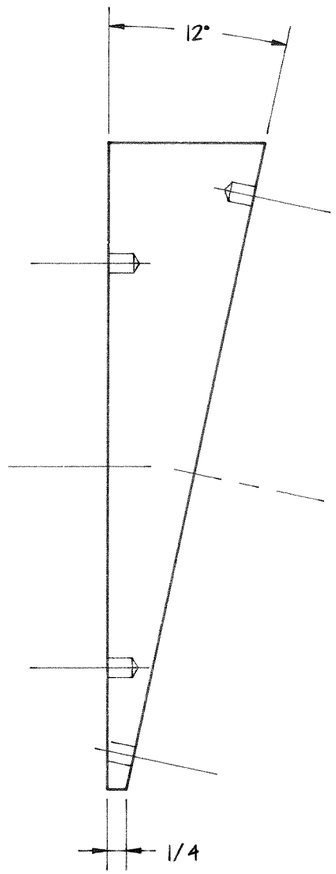


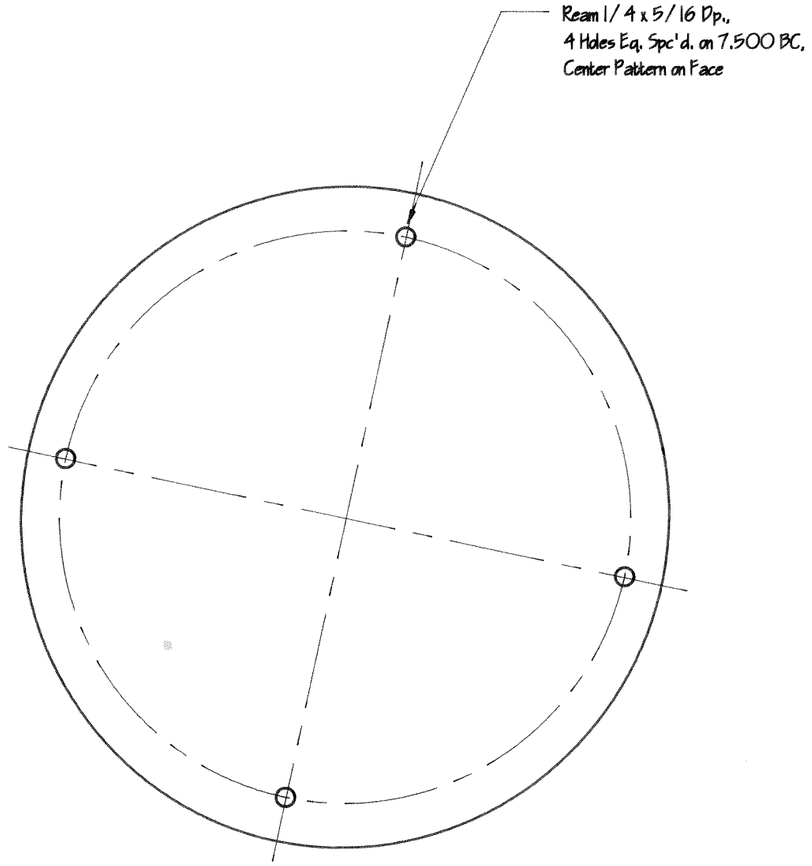
Note

1. Make 1 Piece
2. Material: 6061-T6 Al
3. Chamfer Edges 1/32 x 1/32
4. Tol: ±.001, 1/64, 1/4°

MARINNA STUFF		
SCALE 1/2X	REVISIONS	DRAWN BY
DATE 7/11/97		R.E. Davis
P/N	ADCP Bevel Table	
DWG/FILE	ADCPBEVT	DRAWING NO. 2 of 6





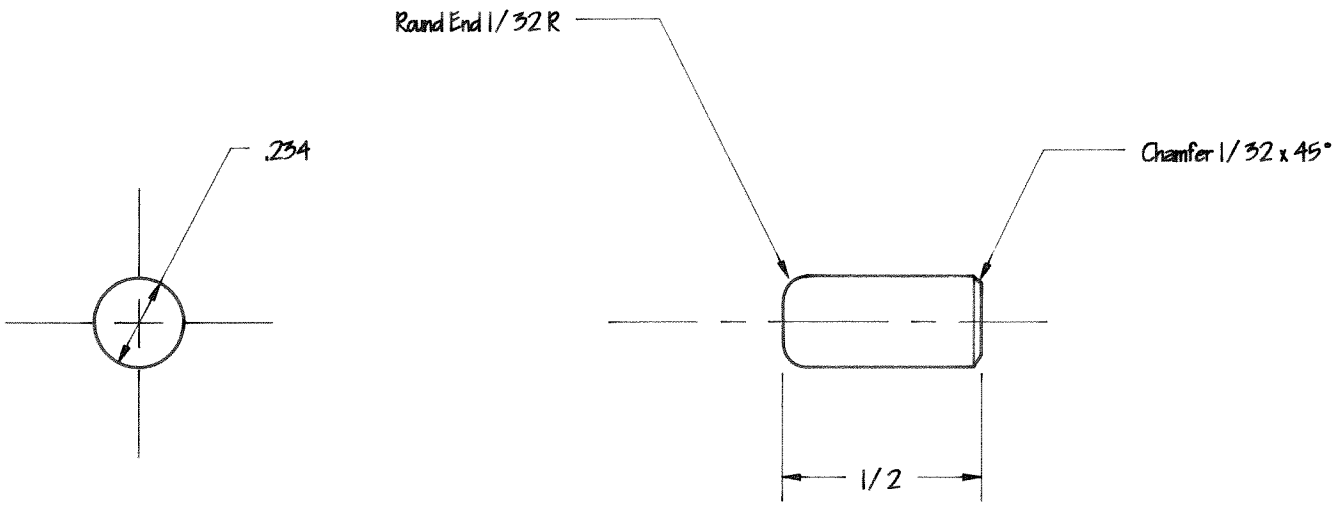


Ream 15/64 x 5/16 Dp.,
4 Holes Eq. Spc'd. on 7.500 BC
This Hole Pattern 45° Offset
from Opp. Facce

Note

1. Make 1 Piece
2. Material: 6061-T6 Al
3. Chamfer Edges 1/32 x 1/32
4. Tol: ±.001, 1/64, 1/4°

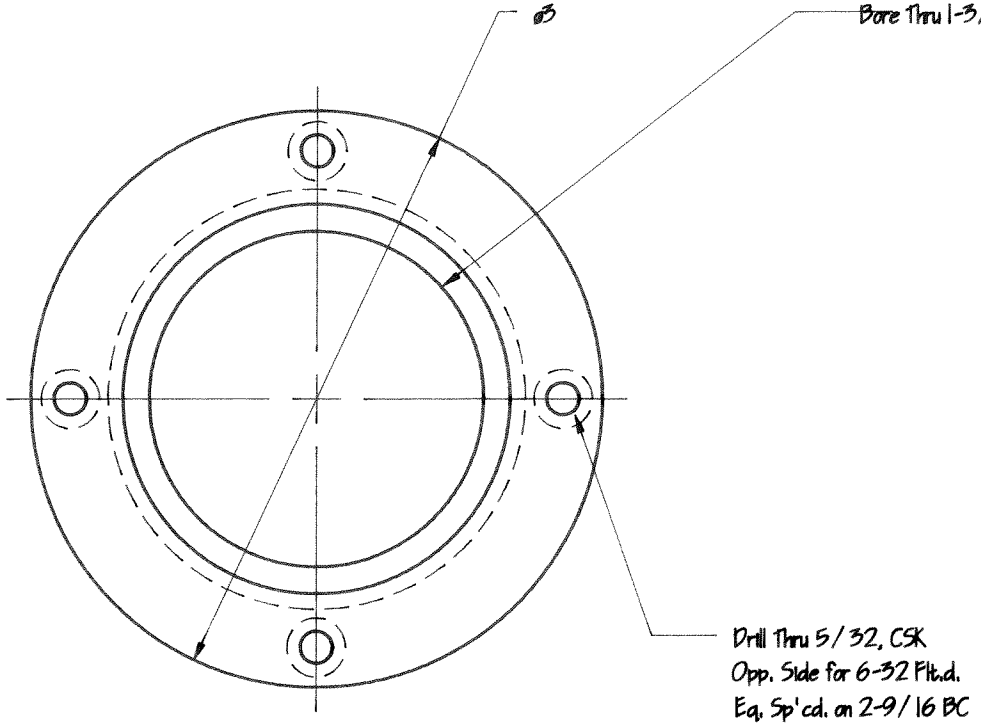
MARINNA STUFF		
SCALE 1/2X	REVISIONS	DRAWN BY
DATE 7/11/97		R.E. Davis
P/N	ADCP Flat Table	
DWG/FILE	ADCPFLTT	DRAWING NO. 3 of 6

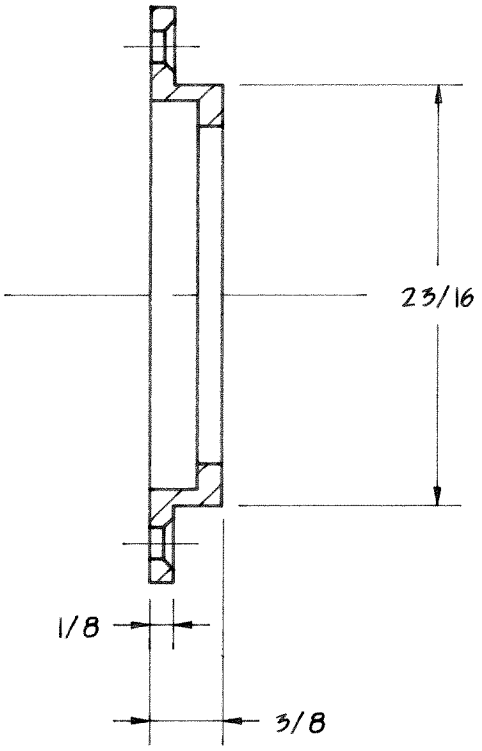


Note

1. Make 8 Pieces
2. Material: SS
3. Tol: +.001, ±1/64
4. Press into the eight 15/32 Reamed holes, Drawings # 2 and 3

MARINNA STUFF		
SCALE 2X	REVISIONS	DRAWN BY
DATE 7/14/97		R.E. Davis
P/N	ADCP Locating Pins	
DWG/FILE	ADCPLPIN	DRAWING NO. 4 of 6



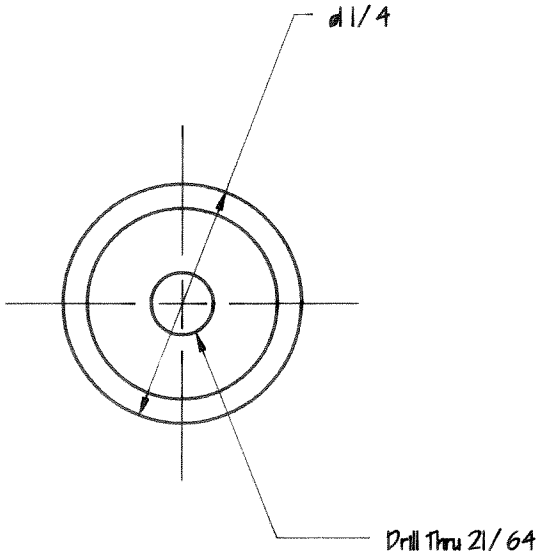


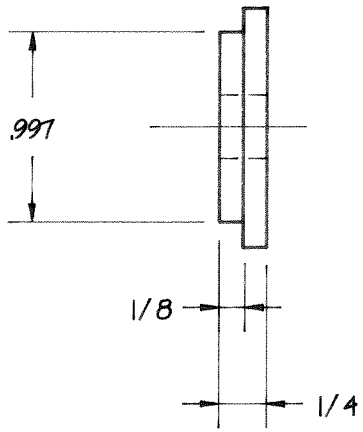
Note

1. Make 1 Piece
2. Material: 6061-T6 Al
3. Break/Smooth Edges
4. Tol: ±.005, 1/64

MARINNA STUFF

SCALE Full	REVISIONS	DRAWN BY
DATE 7/14/97		R.E. Davis
P/N	ADCP Bearing Retainer	
DWG/FILE	ADCPBGRT	DRAWING NO. 5 of 5





Note

1. Make 1 Piece
2. Material: SS
3. Break Edges
4. Tol: ± .001, 1/64

MARINNA STUFF

SCALE Full	REVISIONS	DRAWN BY
DATE 7/14/97		R.E. Davis
P/N	ADCP Washer	
DWG/FILE ADCPWASH		DRAWING NO. 6 pf 6

Ardis: Please call us today - Thanks - Ray

Form DI-1/(Rev. April 1985)

UNITED STATES
DEPARTMENT OF THE INTERIOR
REQUISITION

To Ray Davis	Bureau/Office	Requisition No.: Date: 7/11/97
Project Charged 32214	Time for Delivery: 4 Days.	Payment Terms: VISA
Vendor: McMaster-Carr 473 Ridge Road Dayton, New Jersey 08810-0317 908-329-3200	Charge shipping costs to 32214 Delivery to: R.E. Davis USGS/MOF 35W Woods Hole Rd	Contract Number Company Size: Small

ITEM NO. FORM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1.	# 6111K78 1/4" SS level mount	4	Each	$ 12.83	$51.32
2.	# 5908K21 SS Ball Bearing	1	Each	$39.17	$39.17
		Shipping Approx			5.00
				TOTAL	$95.49

To Be Completed by Fiscal Authority Only

FUND CERTIFICATION: Funds in the amounts shown are available and chargeable to the cost authorities shown above.

Signature R G Davis	Date 7/11/97	Approved by (Signature)	Date
, R Carne		Title	
Requisitioned by (Signature) R G Davis	Date 7/11/97	Bureau Officer (Signature)	Date
Title MOF Supervisor/Office Mechanical Engineer		Title	