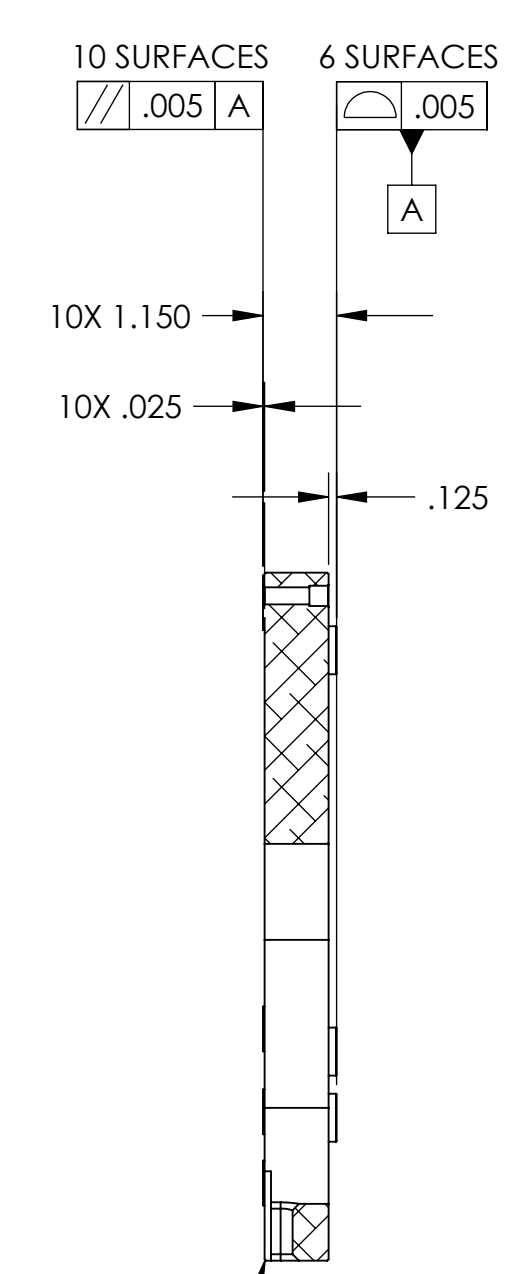
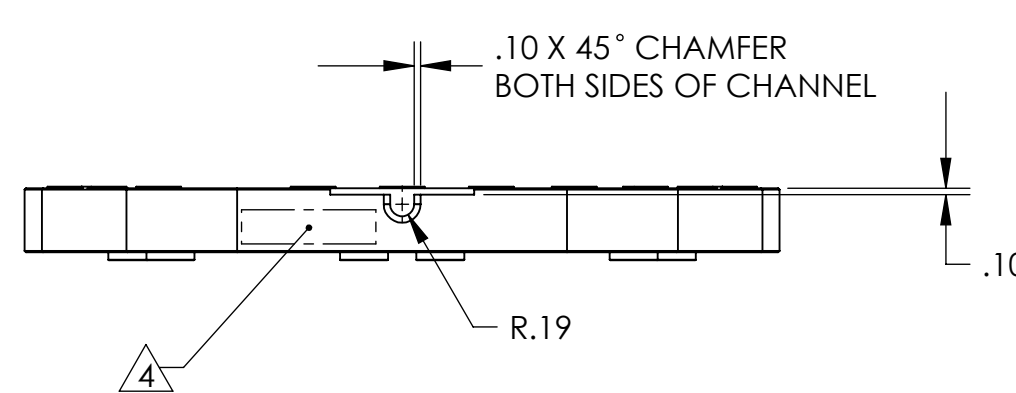
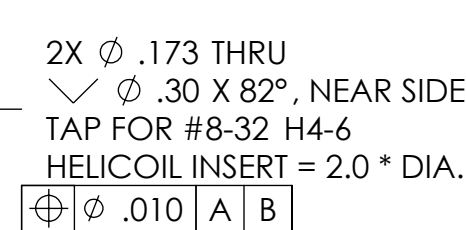
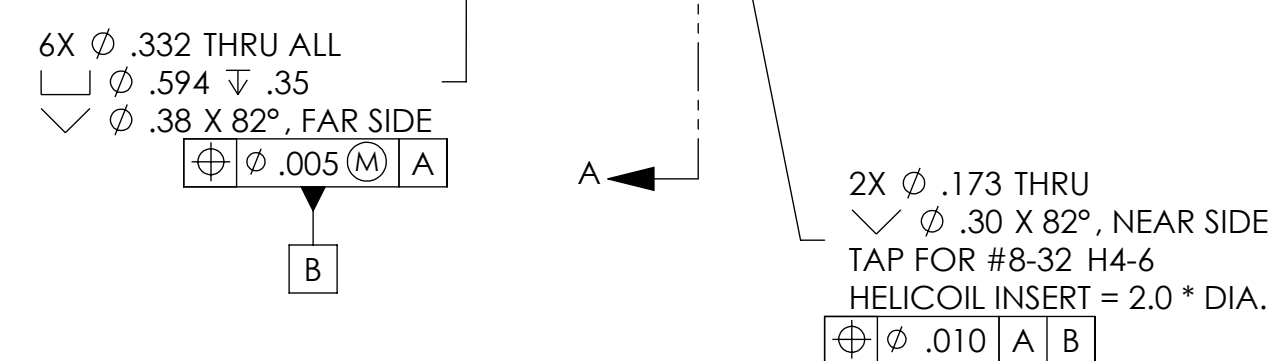
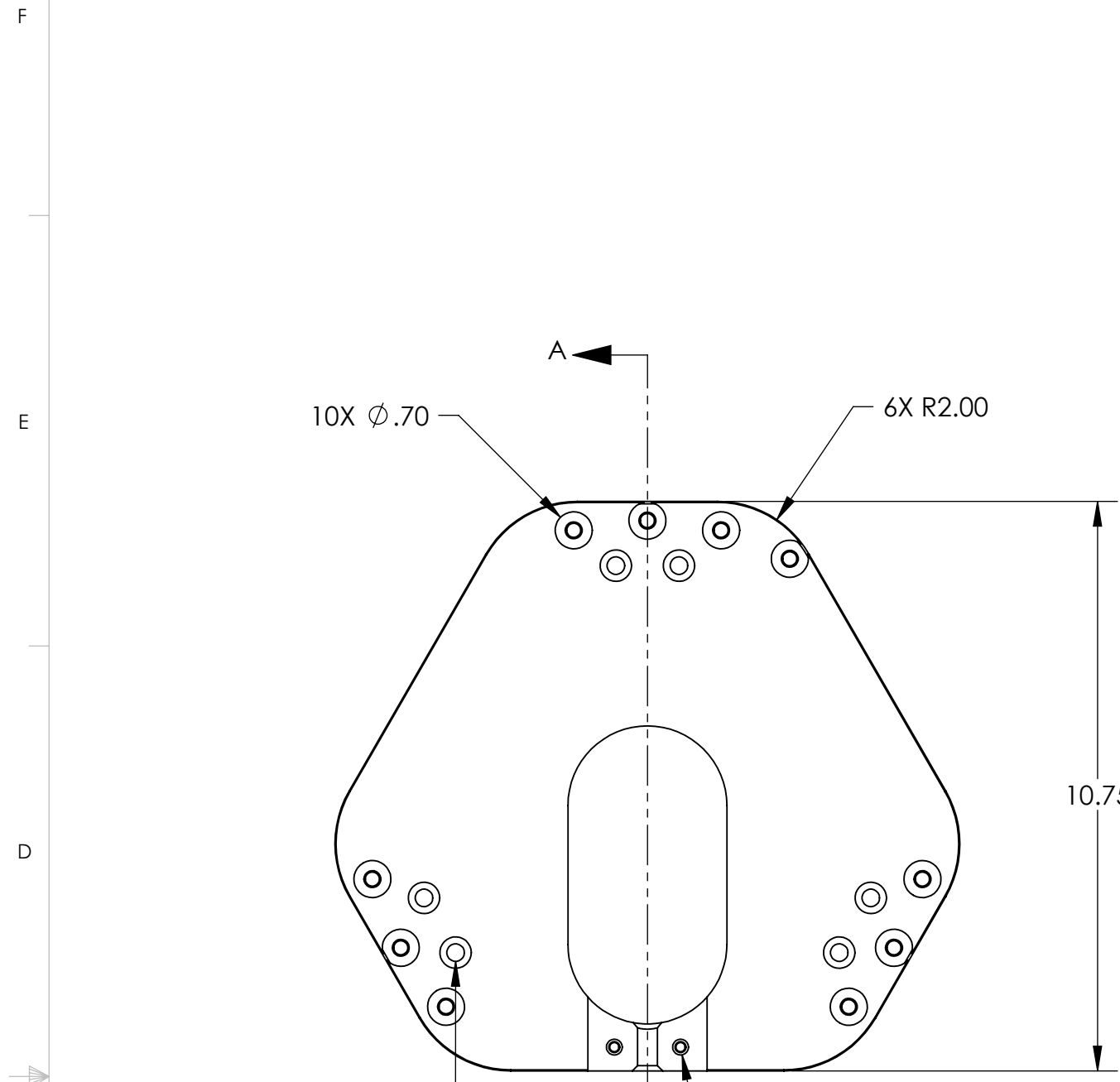
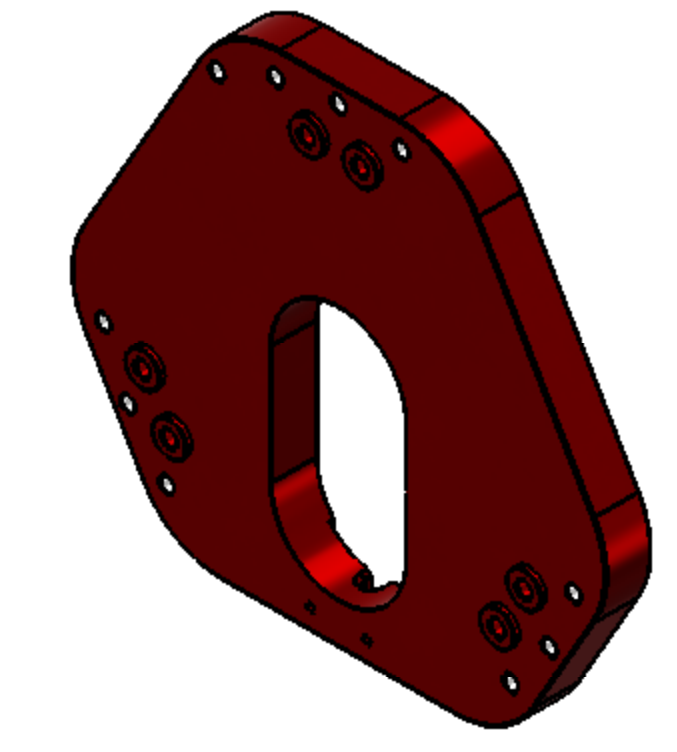
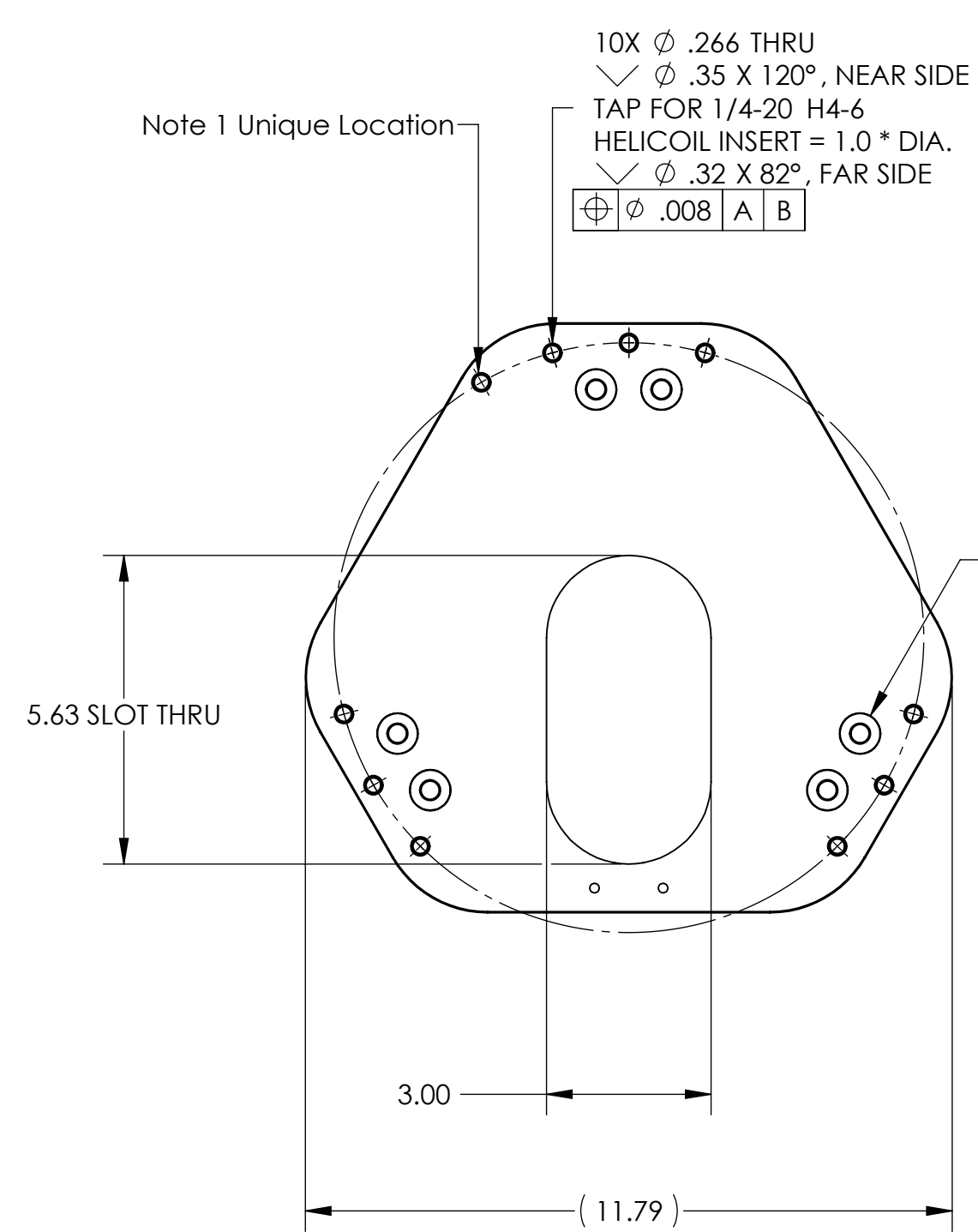


REVISION HISTORY				
REV	DATE	ECO	APPROVAL	DESCRIPTION
V1 / C	18 Jul 2007	1069	B. Schiffner	Release for Enhanced LIGO.
V2	17 Apr 2009		A. Stein	Release for Advanced LIGO. Added 1x 1/4"-20 Heli-Coil for easier mounting of Horz GS-13s. Changed base shape, to accommodate new hole. Added chamfers and c'sinks.



2X .02 X 45° CHAMFER  
 AROUND FULL PERIMETER  
 INCLUDES INTERSECTING BOSSES

SECTION A-A



6X  $\phi$  .75  
 CH .01 X 45°

- MANUFACTURING NOTES:
- 1) MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. ABRASIVE REMOVAL TECHNIQUES (OTHER THAN DRESSED BLANCHARD GRINDING) ARE NOT ACCEPTABLE.
  - 2) ALL MACHINING FLUIDS MUST BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE, AND SILICONE, SUCH AS CINCINNATI MILACRON CIMTECH 410.
  - 3) THOROUGHLY CLEAN PART TO REMOVE ALL OIL, GREASE, DIRT, AND CHIPS.
  - 4) WHERE INDICATED, MECHANICALLY SCRIBE, STAMP, OR ENGRAVE THE FOLLOWING INFORMATION AS SHOWN BELOW: **PART NUMBER-REVISION** (AND **TYPE** IF INDICATED), FOLLOWED ON THE NEXT LINE WITH A UNIQUE 3-DIGIT **SERIAL NUMBER** STARTING AT 001 FOR THE FIRST PART AND INCREMENTING THEREAFTER. USE 0.38" TALL CHARACTERS UNLESS PART SIZE DICTATES SMALLER.  
 D071180-V2  
 S/N - ###
  - 5) DO NOT INSTALL HELI-COILS UNTIL POST-CLEANING.
- POST-MANUFACTURING NOTES:
- P1) CLEAN TO LIGO STANDARDS, CLASS A (PER E0900047 AND E960022).
- P2) INSTALL CLASS-A CLEAN HELI-COILS. BREAK OFF AND REMOVE TANGS. CHECK THAT END OF EACH INSERT REMAINS ENGAGED IN THREAD AFTER TANG REMOVAL.

HELI-COIL TABLE (See Note 5)				
Item No.	Thread Size	Material	Heli-Coil P/N 1185...	Qty.
1	#8-32 x .33"	Nitronic 60	-2EN328	2
2	1/4"-20 x .25"	Nitronic 60	-4EN250	10

APPROVALS	DATE
ENGINEERING (HPD): D. Bryce	5/31/2007
QUALITY (HPD): C. Danaher	5/31/2007
MATERIAL:	6061-T6 Al
FINISH:	None
MASS:	7.9 lbs

UNLESS OTHERWISE SPECIFIED:  
 DIMENSIONS ARE IN INCHES  
 DECIMAL TOLERANCES:  
 .XX ±.015 .XXX ±.005  
 ANG TOL: ± 1° SURFACE ROUGHNESS:  
 REMOVE ALL SHARP EDGES.  
 LEAVE .005 X 45° MIN CHAMFER,  
 OR .005 MIN RADIUS.  
 THIS PRINT & THE EMBEDDED CAD  
 MODEL ARE THE DOCUMENTATION OF  
 RECORD. UNLESS OTHERWISE SPECIFIED,  
 ALL DIMENSIONS IN THE MODEL ARE  
 BASIC, WITH TOLERANCES GIVEN BY:  
 $\square$  .010 A B

ORIGINAL DESIGN BY: **High Precision Devices**

1468 Valtec Lane, Suite C, Boulder, Colorado 80301  
 Phone: (303) 447-2558 Fax: (303) 447-2548 Web Site: www.hpd-online.com

DESCRIPTION: **GS-13 Adapter Plate**

P/N: **D071180** CONFIG: -

CAD FILE NAME: D071180\_GS-13\_Adapter\_Plate

PROJECT: HAM ISI, Advanced LIGO

SIZE SCALE: 1:3 DRAWN BY: **Jonas Waterman (HPD)** REV **V2**

SHEET 1 OF 1 DATE PRINTED: **4/17/2009**