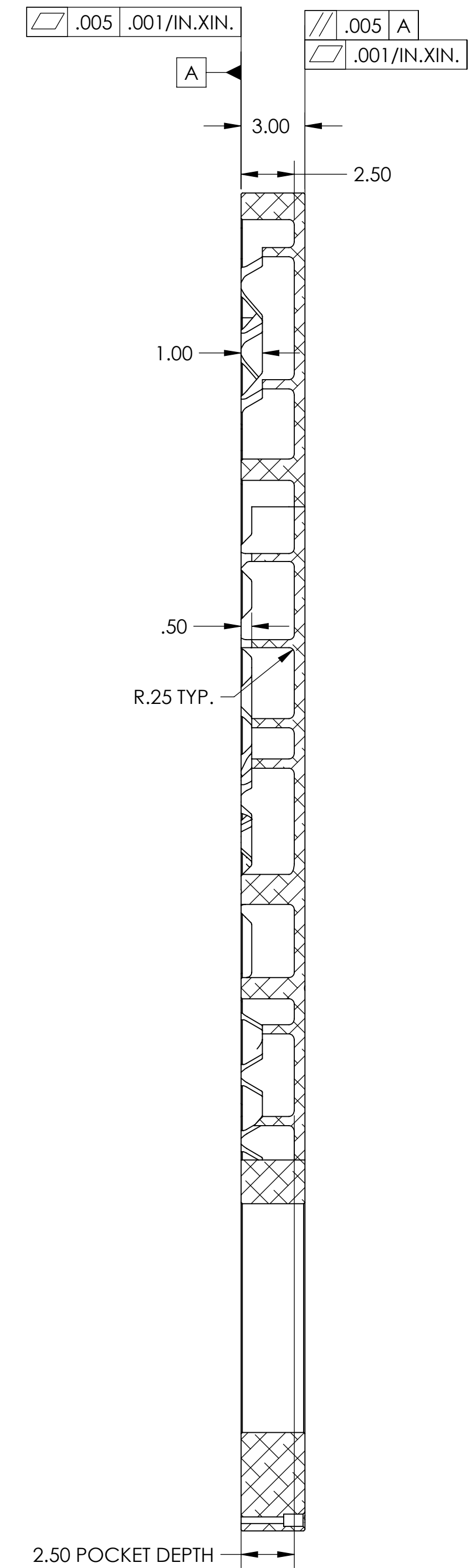
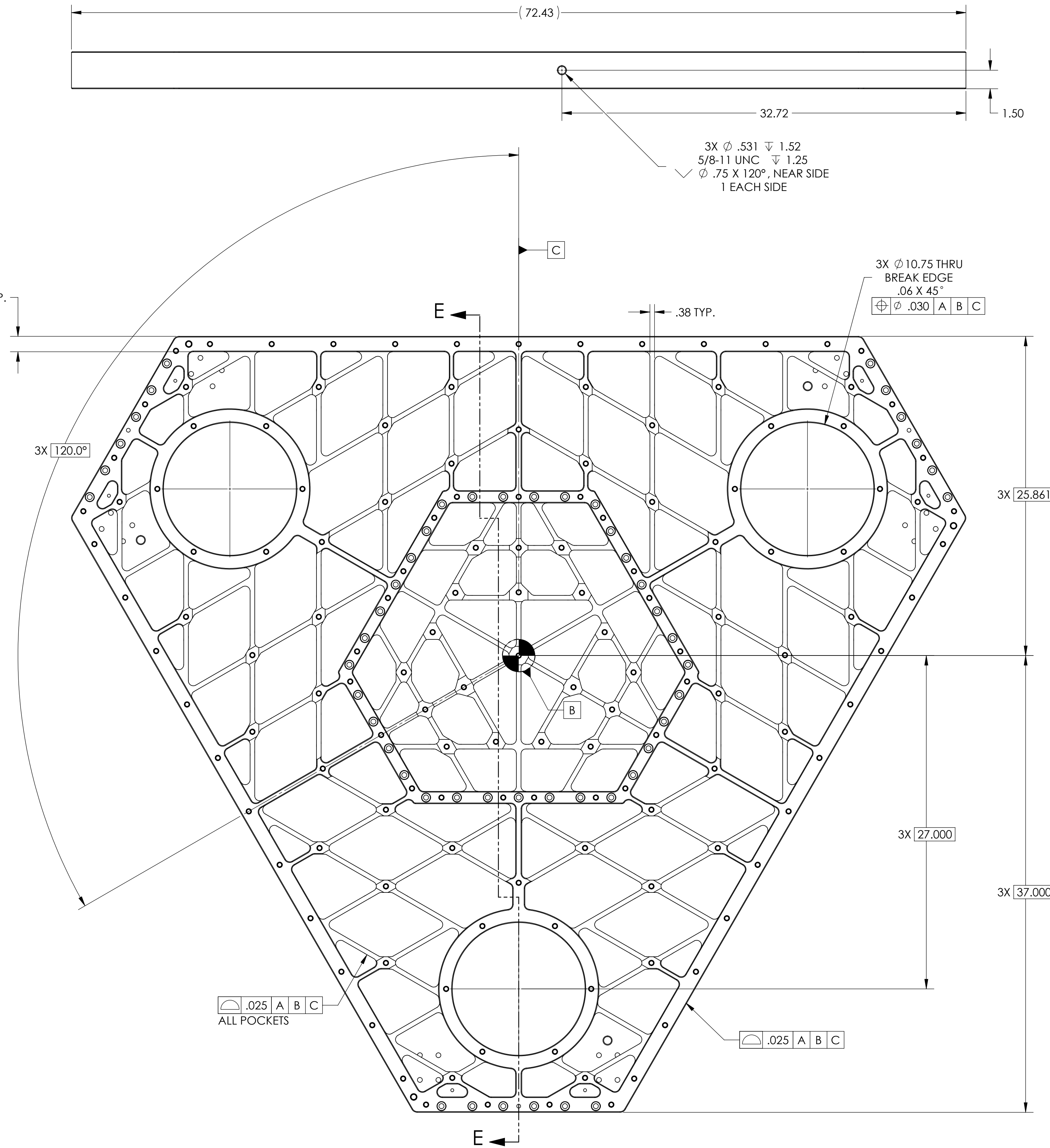


REV.	DATE	DCN #	DRAWING TREE #
v1	28 Dec. 2009	E0900496	T0900600

- NOTES CONTINUED:**
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER AND REVISION ON NOTED SURFACE FOLLOWED ON THE NEXT LINE BY A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE .07" HIGH CHARACTERS. EXAMPLE: DXXXXXX-VY; S/N 001. A VIBRATORY TOOL MAY BE USED.
  6. THIS PART IS TO BE PRODUCED USING THE CAD MODEL. IF THERE ARE DISCREPANCIES BETWEEN THIS DRAWING AND THE CAD MODEL, THE MODEL WILL TAKE PRECEDENCE UNLESS OTHERWISE SPECIFIED.
  7. SURFACES WITH PROFILE CONTROL ARE LOCATED BASIC WITH RESPECT TO REFERENCED DATUMS. A SURFACE PROFILE TOLERANCE OF .025 SHALL APPLY TO THE ENTIRE PART UNLESS SPECIFICALLY TOLERANCED ELSEWHERE ON THE DRAWING.
  8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E048225.
  9. APPROXIMATE WEIGHT = 333 LBS.
  10. A TRUE POSITION TOLERANCE OF  $\phi .010$  IS - THE SAME AS A CONVENTIONAL TOLERANCE OF  $\pm .005$
  11. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH ABRASIVE TECHNIQUES ARE NOT ACCEPTABLE.
  12. ALL THREADED INSERTS TO BE INSTALLED BY LIGO PERSONNEL AFTER DELIVERY OF FINISHED PARTS.



DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 .XX  $\pm .015$   
 .XXX  $\pm .005$   
 ANGULAR  $\pm .5^\circ$

**NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)**

1. INTERPRET DRAWING PER ASME Y14.5-1994.
2. BREAK ALL EDGES AND CORNERS  $.030 \times 45^\circ$ .
3. DO NOT SCALE FROM DRAWING.
4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

**MATERIAL** 6061-T6 Al      **FINISH** 63  $\mu$ inch

**LIGO** CALIFORNIA INSTITUTE OF TECHNOLOGY  
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

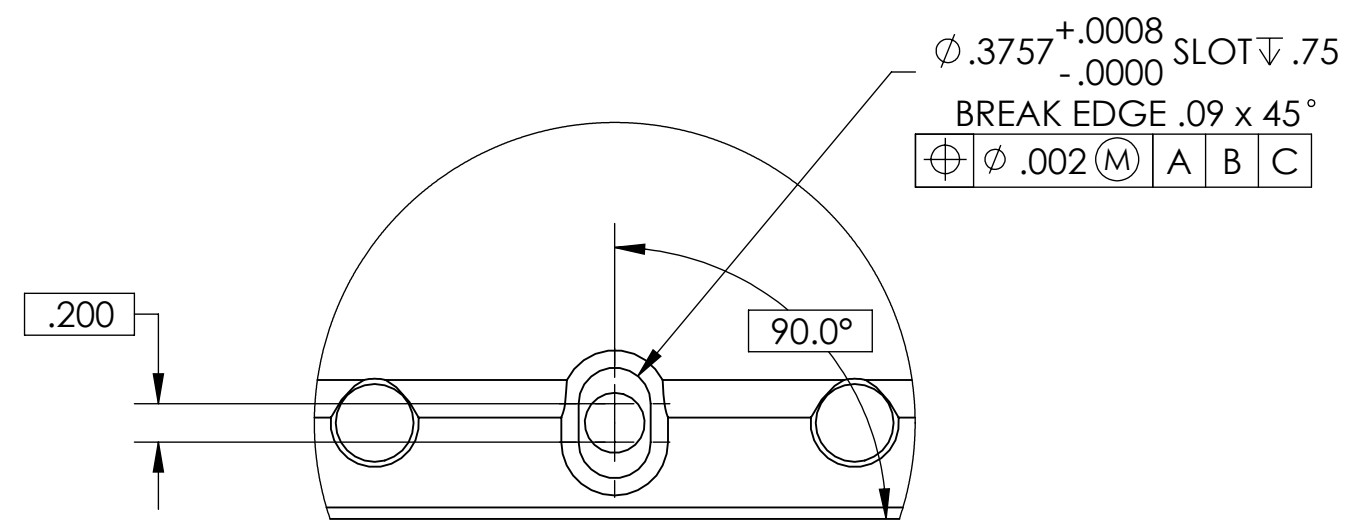
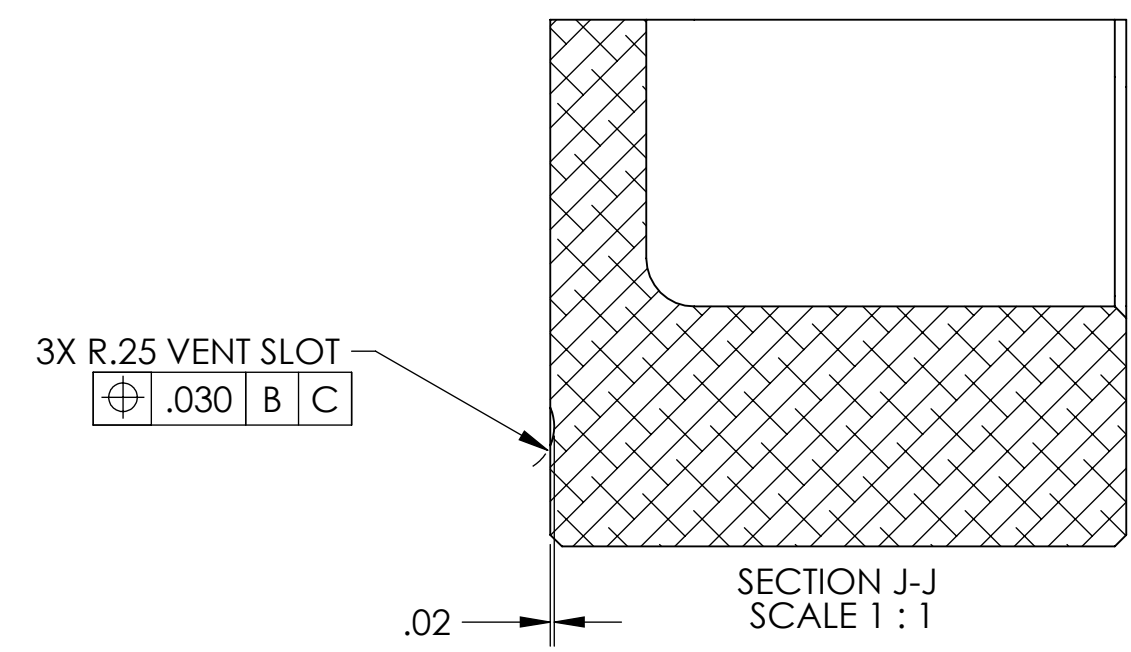
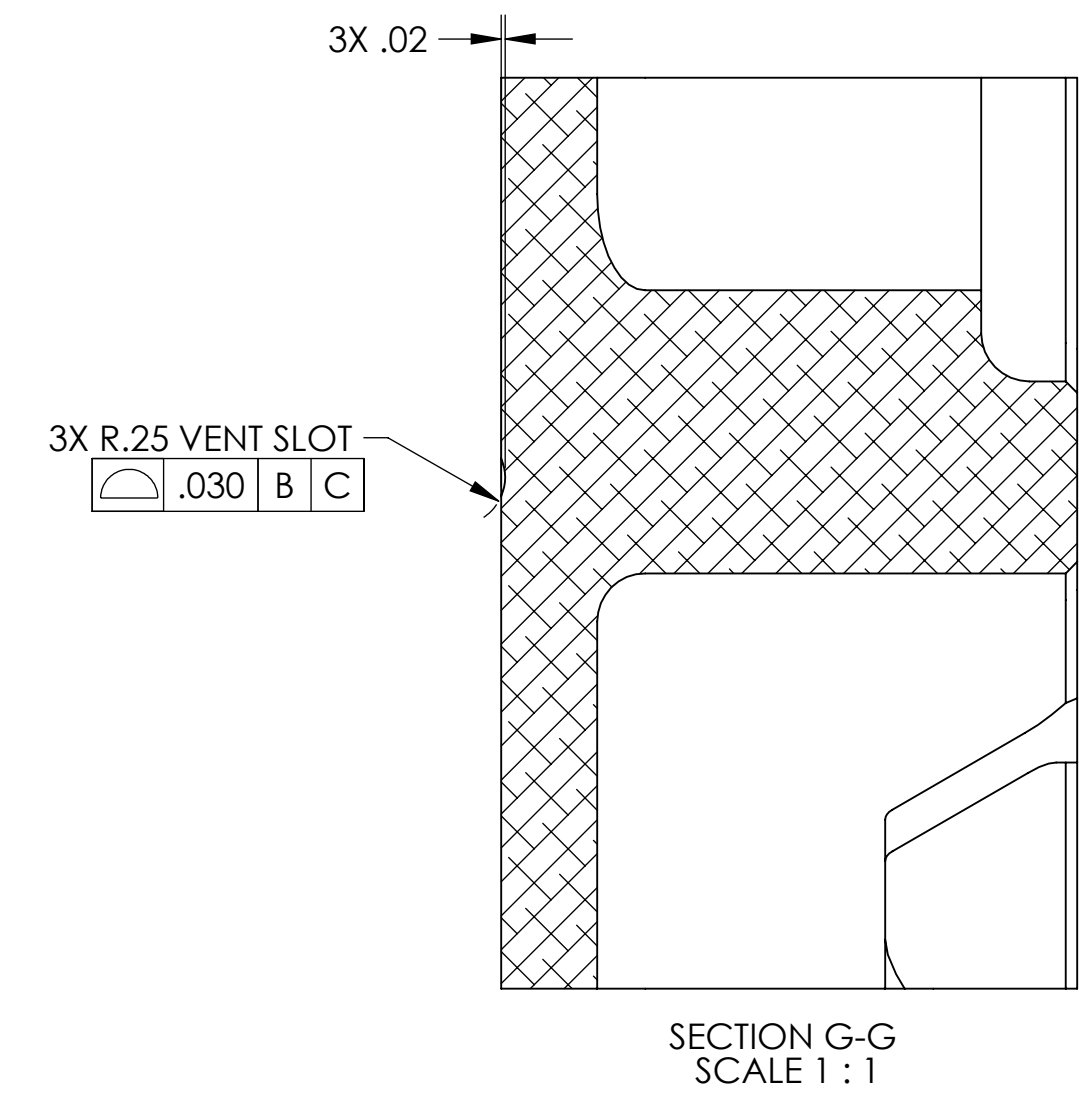
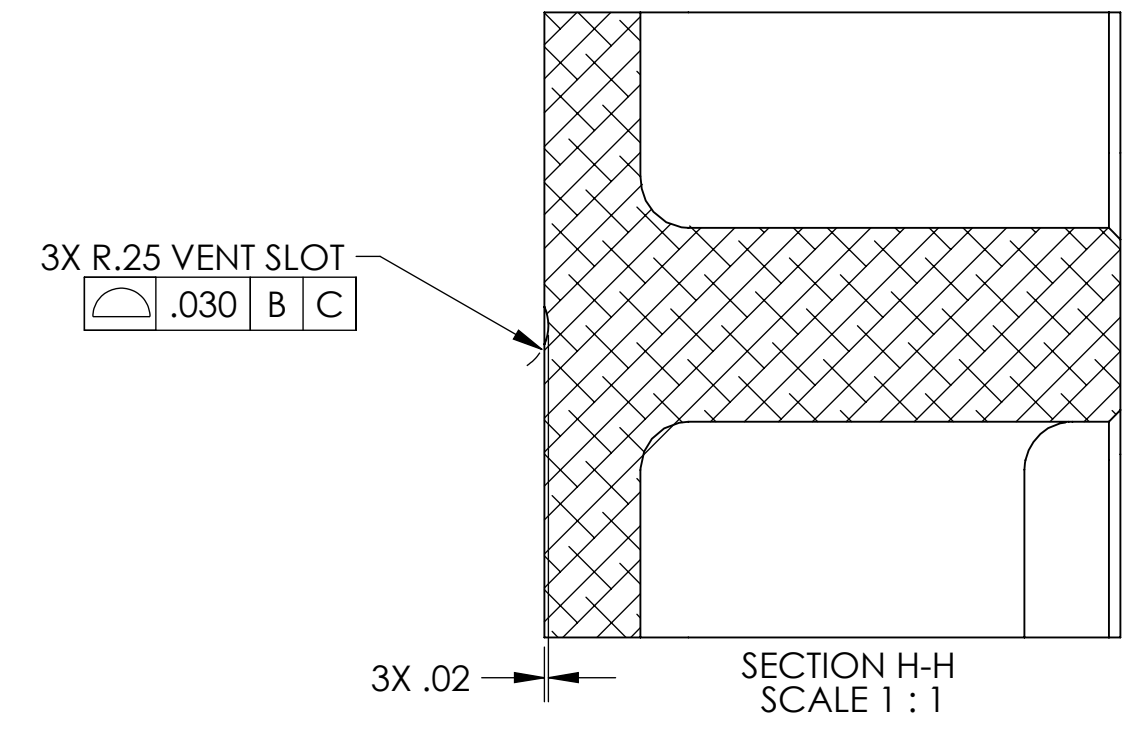
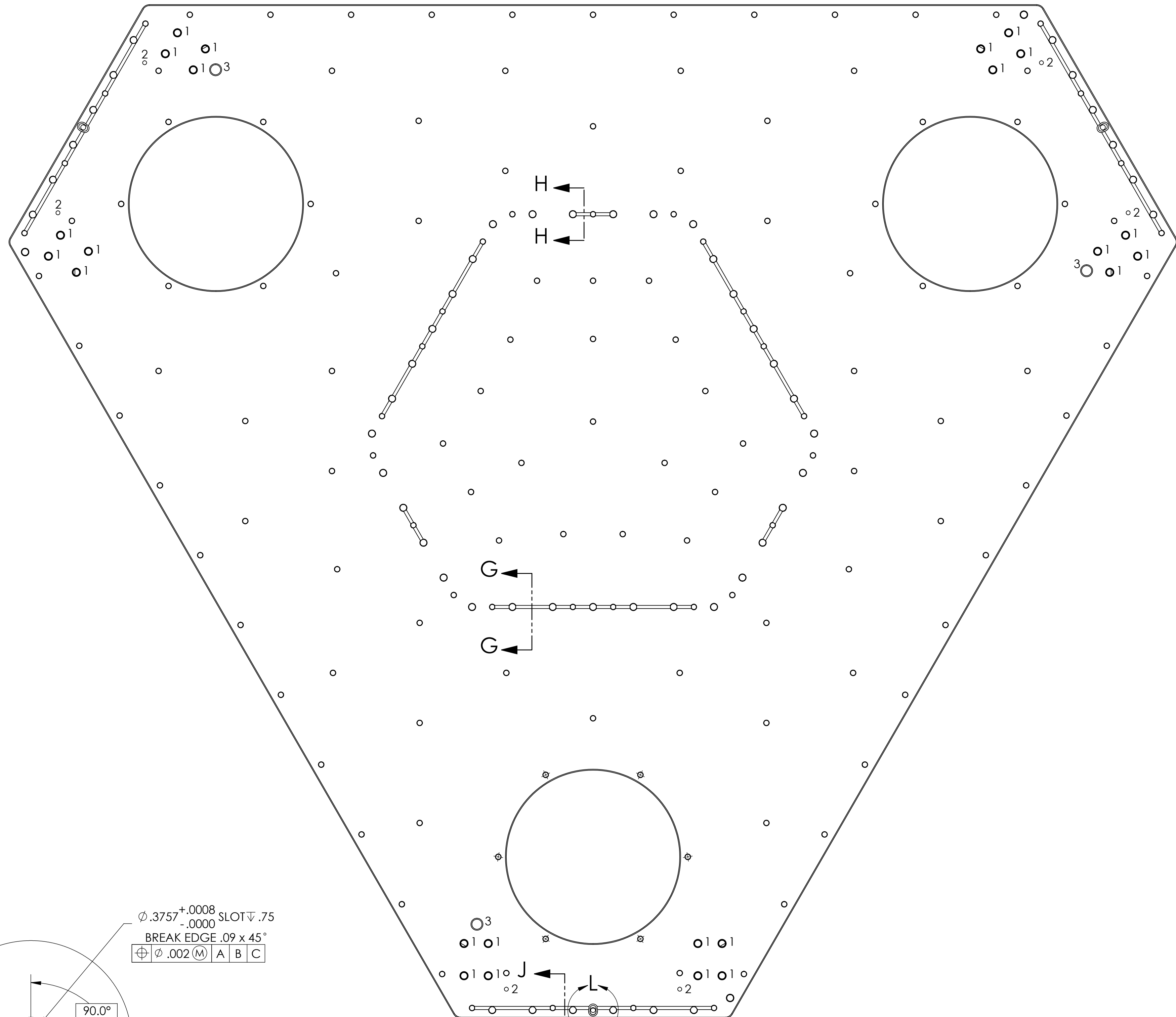
**SYSTEM** ADVANCED LIGO      **SUB-SYSTEM** SEI

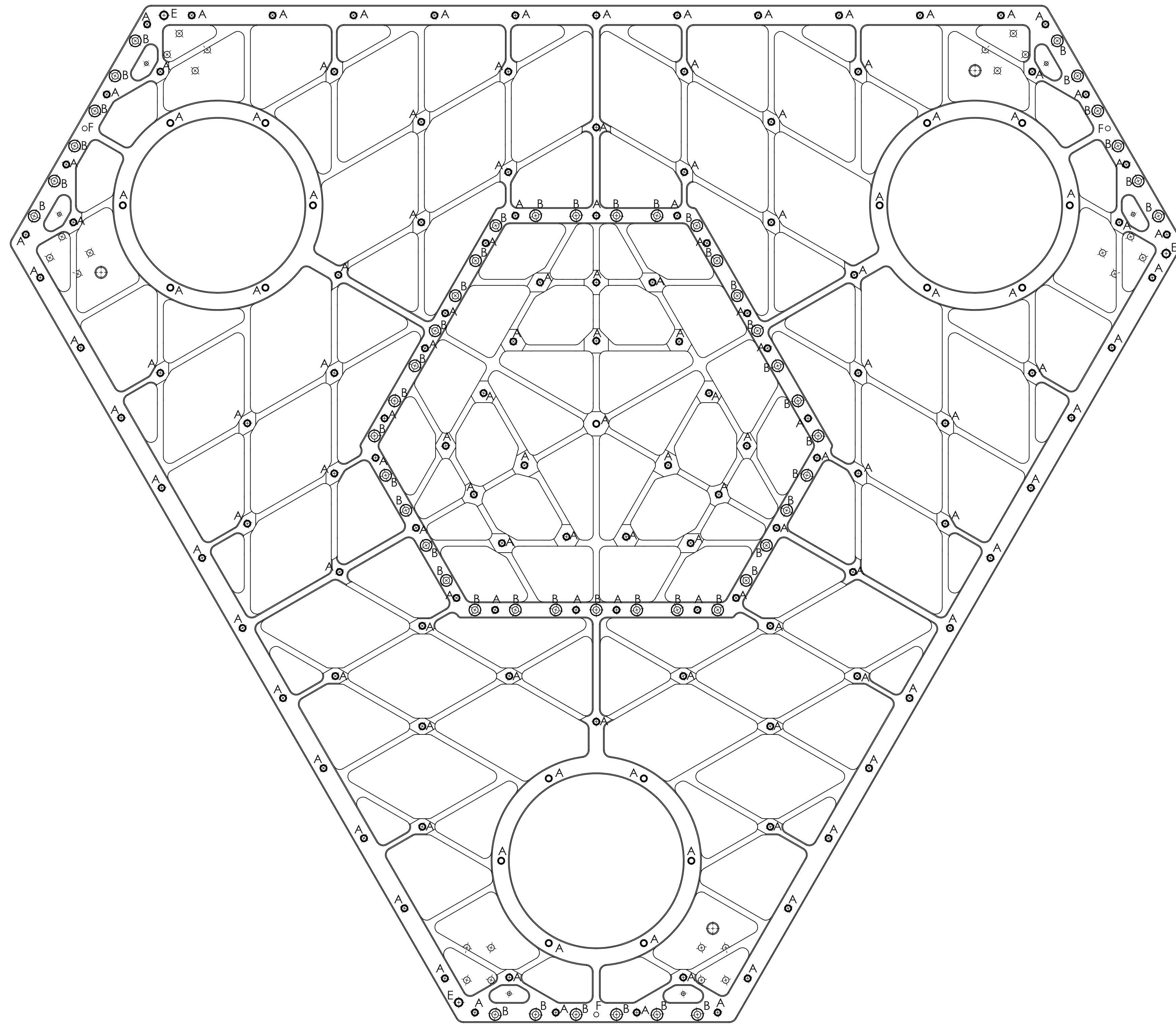
**NEXT ASSY** D0901181

<b>PART NAME</b> Keel Plate, Down-Facing, aLIGO BSC ISI			
<b>DESIGNER</b> A.STEIN	28 Dec. 2009	<b>SIZE</b> D	<b>DWG. NO.</b> D0901518
<b>DRAFTER</b> M.HILLARD	28 Dec. 2009		
<b>CHECKER</b> F.MATCHARD	28 Dec. 2009		
<b>APPROVAL</b> K.MASON	28 Dec. 2009	<b>SCALE:</b> 1:5	<b>PROJECTION:</b>
			<b>SHEET 1 OF 3</b>


D0901518\_Keel\_Plate\_Down-Facing-BSC.dwg PART PDM REV. X-033 DRAWING PDM REV. X-009

TAG	SIZE	QUANTITY	GD&T
1	$\phi$ .397 $\nabla$ 1.30 $\nabla$ $\phi$ .52 X 120° NEAR SIDE TAP FOR 3/8-16 HELICOIL INSERT = 2.0 * DIA.	24	$\oplus \phi$ .010   A   B   C
2	$\phi$ .25 THRU ALL	6	$\oplus \phi$ .030   A   B   C
3	$\phi$ .531 THRU 5/8-11 UNC THRU $\phi$ .75 X 120° NEAR SIDE $\phi$ .75 X 120° FAR SIDE	3	$\oplus \phi$ .010   A   B   C





TAG	SIZE	QUANTITY	GD&T
A	$\phi .31 \nabla$ THRU $3/8-16 \text{ UNC } \nabla 1.13$ $\phi .45 \times 120^\circ$ NEARSIDE	144	$\oplus \phi .010 \text{ A B C}$ A THREAD PITCH DIAMETER LIMIT OF H11 APPLIES.
B	$\phi .406$ THRU ALL $\phi .688 \nabla 1.50$ $\phi .75 \times 90^\circ$ , NEAR SIDE $\phi .46 \times 90^\circ$ , FAR SIDE	51	$\oplus \phi .010 \text{ A B C}$
E	$\phi .5000^{+.0000} \nabla .75$ $\phi .502^{+.001} \nabla .15$ $\phi .55 \times 90^\circ$ , NEAR SIDE $\phi .41$ THRU	3	$\oplus \phi .002 \text{ A B C}$
F	$\phi .31$ THRU ALL	3	$\oplus \phi .030 \text{ A B C}$


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SIZE	DWG. NO.	REV.
D	D0901518	v1
SCALE: 1:4	PROJECTION:	SHEET 3 OF 3

D0901518\_Keel\_Plate\_Down\_Facing\_BSC\_BI\_PART\_PDM\_REV\_X033\_DRAWING\_PDM\_REV\_X009