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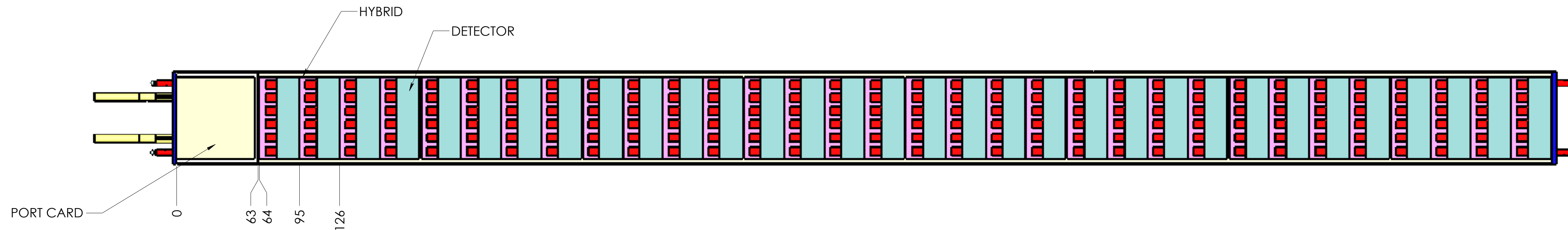
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DWG. NO. nnXnnn4 SIZE A REV. 1 SH. 1

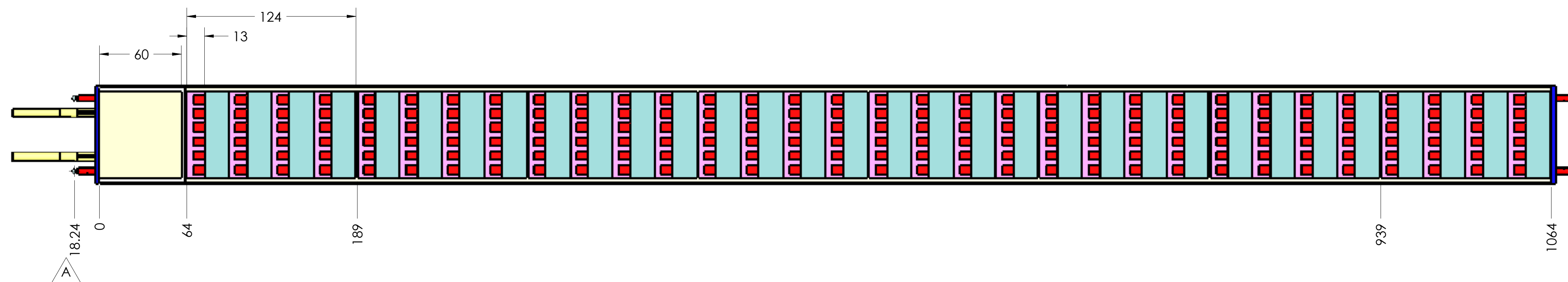
DESCRIPTION

MATERIAL

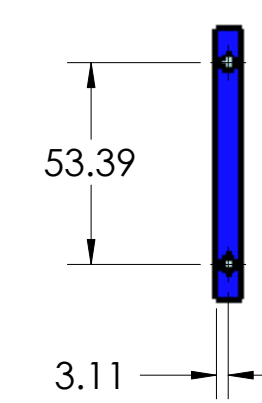
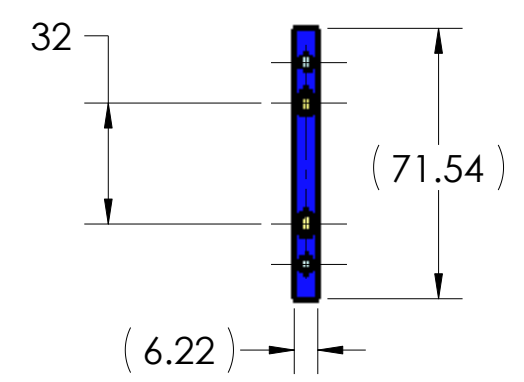
MAT. LOCATION



BACK SIDE



FRONT SIDE



NOTES:
1. UNITS ARE IN METRIC.

UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		SER. NO. DATE ISSD		ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY UNIVERSITY OF CALIFORNIA - BERKELEY	
TOLERANCES	X.X ± 2.5	FRAC. ± 1/64	ACCT. NO.	NO. REQD.	DATE RECD.	4.72mm FLAT TUBE STAVE ASSEMBLY	
	X.XX ± .25	ANGLES ± 30°	DEL. TO			MICROFILMED: DWG. TYPE ASSY SHOWN ON - SCALE: 1:2 DO NOT SCALE PRINTS	
	X.XXX ± 0.13	FINISH -	SURFACE TREATMENT			SHEET 1 OF 1	
DO NOT SCALE PRINT		PROJECT NUMBER		DATE 12/17/06		P1AP-11 AP6250 27E301	
THREADS ARE CLASS 2		PROJECT NAME		DATE 12/17/06		REV. A	
CHAMFER ENDS OF ALL SCREW THREADS 30°		DWG. W. K. MILLER		DATE 12/17/06			
CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS		CHK BY W. O. MILLER		DATE -			
BREAK EDGES .016 MAX. ON MACHINED WORK		APR -					
REMOVE BURRS, WELD SPLATTER & LOOSE SCALE							
IN ACCORDANCE WITH ASME Y14.5m & B46.1							
REV	DWG	CHK	ZONE	DATE	CHANGES		
A				1-8-06	CHANGES REFLECT NEW TOOLING BALL		

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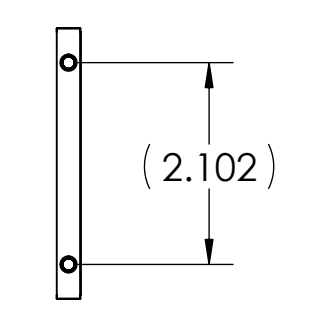
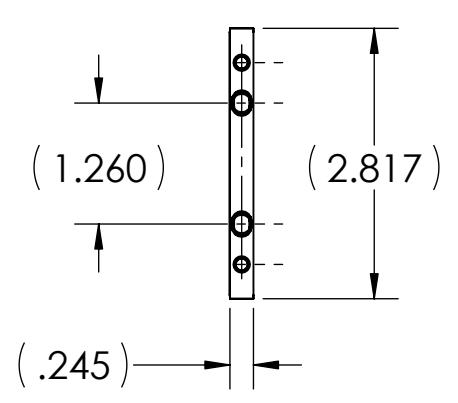
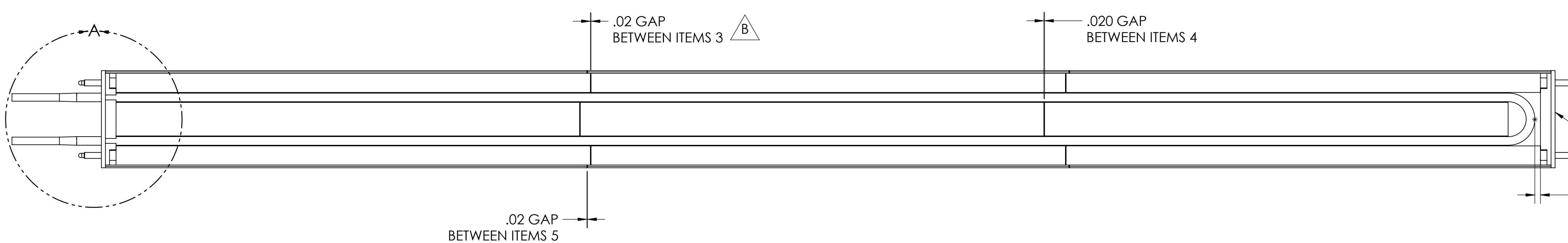
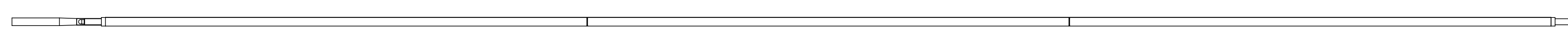
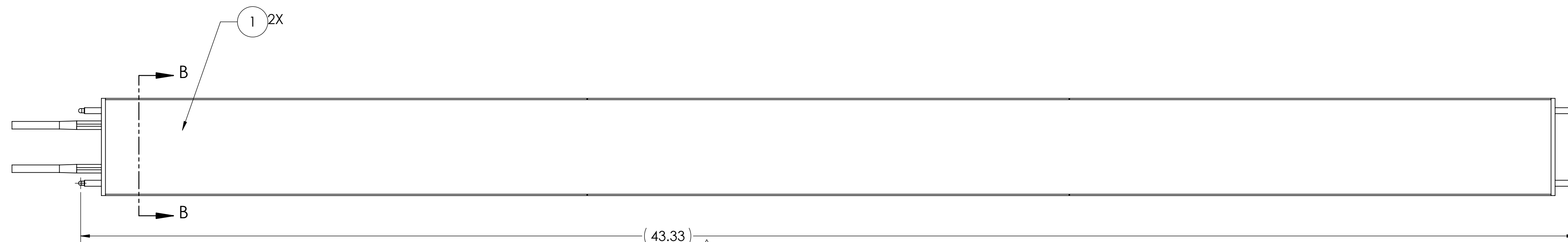
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DWG. NO. nnXnnn4	SIZE B	REV. 1	SH. 1
DESCRIPTION		MATERIAL	MAT. LOCATION



NOTES:
1. UNITS ARE IN INCHES.

6	1	B2	1	27E305-3	END CLOSEOUT SUB-ASSEMBLY 2	
5	2	D4	6	27E309	COMPOSITE SIDE CLOSEOUT	
4	2	D6	3	27E308-1	HONEYCOMB CORE PART #1	
3	2	D6	6	27E308-3	HONEYCOMB CORE PART #2	
2	2	D6	1	27E303	COOLING TUBE WITH END CLOSEOUT #1	
1	1	D6	2	27E310	COMPOSITE FACESHEET	
ITEM NO	SHEET LOCATION	ZONE	QTY	PART DOCUMENT NUMBER	DESCRIPTION	REFERENCE DESIGNATION MATERIAL NOTES

REV	DWG	CHK	ZONE	DATE	CHANGES
B				2-21-07	CHANGES REFLECT REVISED END CAP AND CORRECTION
A				1-8-06	CHANGES REFLECT NEW TOOLING BALL

UNLESS OTHERWISE SPECIFIED

TOLERANCES: X.X ± 0.1, X.XX ± 0.01, X.XXX ± 0.005

FRAC. ± 1/64, ANGLES ± 30°, FINISH -

DO NOT SCALE PRINT

THREADS ARE CLASS 2

CHAMFER ENDS OF ALL SCREW THREADS 30°

CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS

BREAK EDGES .016 MAX. ON MACHINED WORK

REMOVE BURRS, WELD SPLATTER & LOOSE SCALE

IN ACCORDANCE WITH ASME Y14.5m & B46.1

SHOP ORDERS

ACCT. NO., NO. REQD., DATE ISSD, DATE RECD.

SURFACE TREATMENT, IDEN. METHOD TAG

PROJECT NAME: US ATLAS SILICON SUBSYSTEM

DWG. BY: W. K. MILLER, DATE: 12/17/06

CHK. BY: W. O. MILLER, DATE: 12/17/06

APR. BY: , DATE: -

SER. NO., DATE ISSD, DATE RECD.

ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY UNIVERSITY OF CALIFORNIA - BERKELEY

4.72mm FLAT TUBE STAVE SUB ASSEMBLY

MICROFILMED: DWG. TYPE: ASSY, SHOWN ON: 27E301, SCALE: 1:2, DO NOT SCALE PRINTS

PATENT CLEAR: DESIGN ACCT. NO. P1AP-11, CATEGORY CODE: AP6250, SHEET 1 OF 2

DWG. NO. 27E302, SIZE B, REV. B

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DWG. NO. nnXnnn4 SIZE REV. SH. B 2

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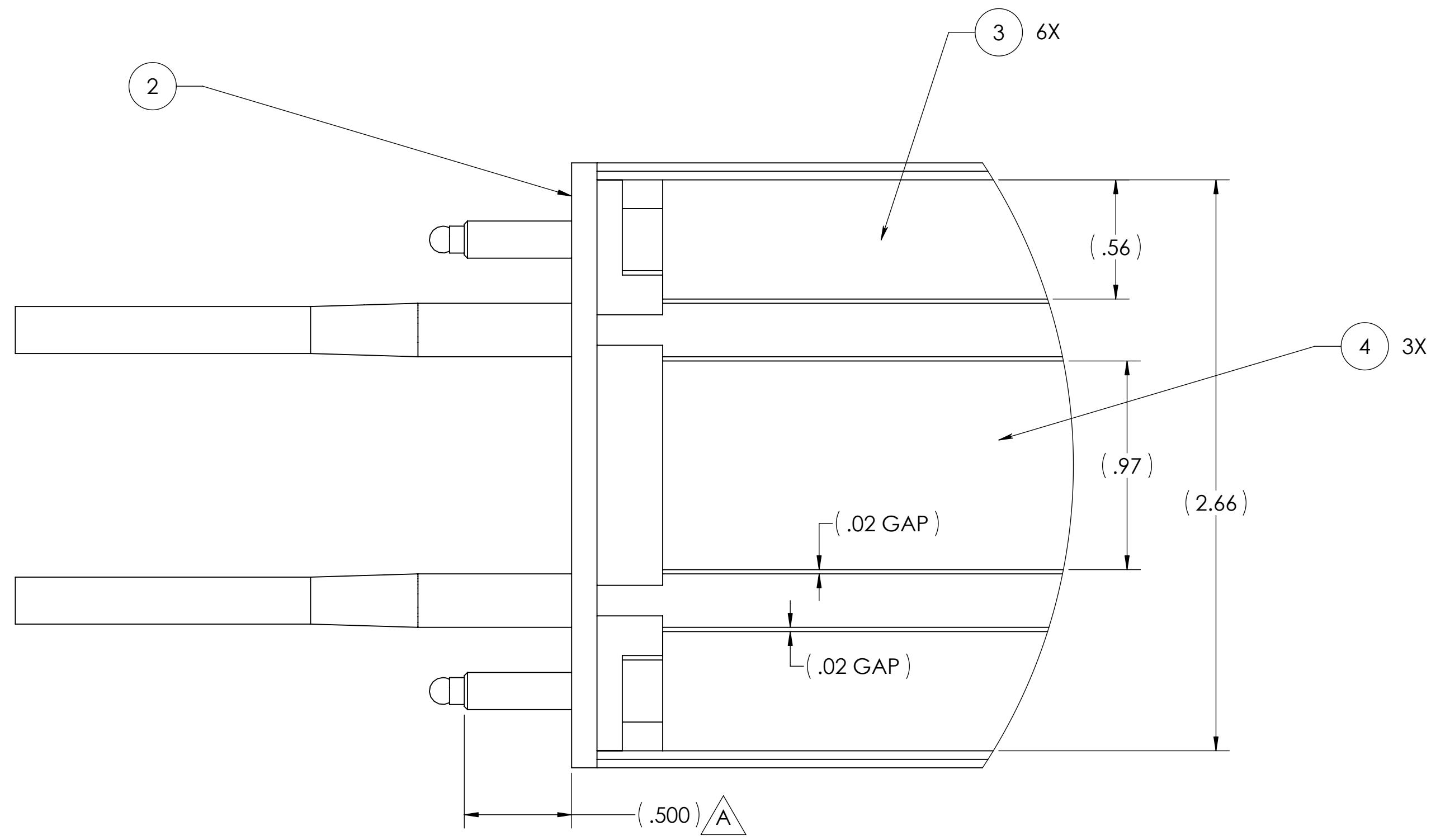
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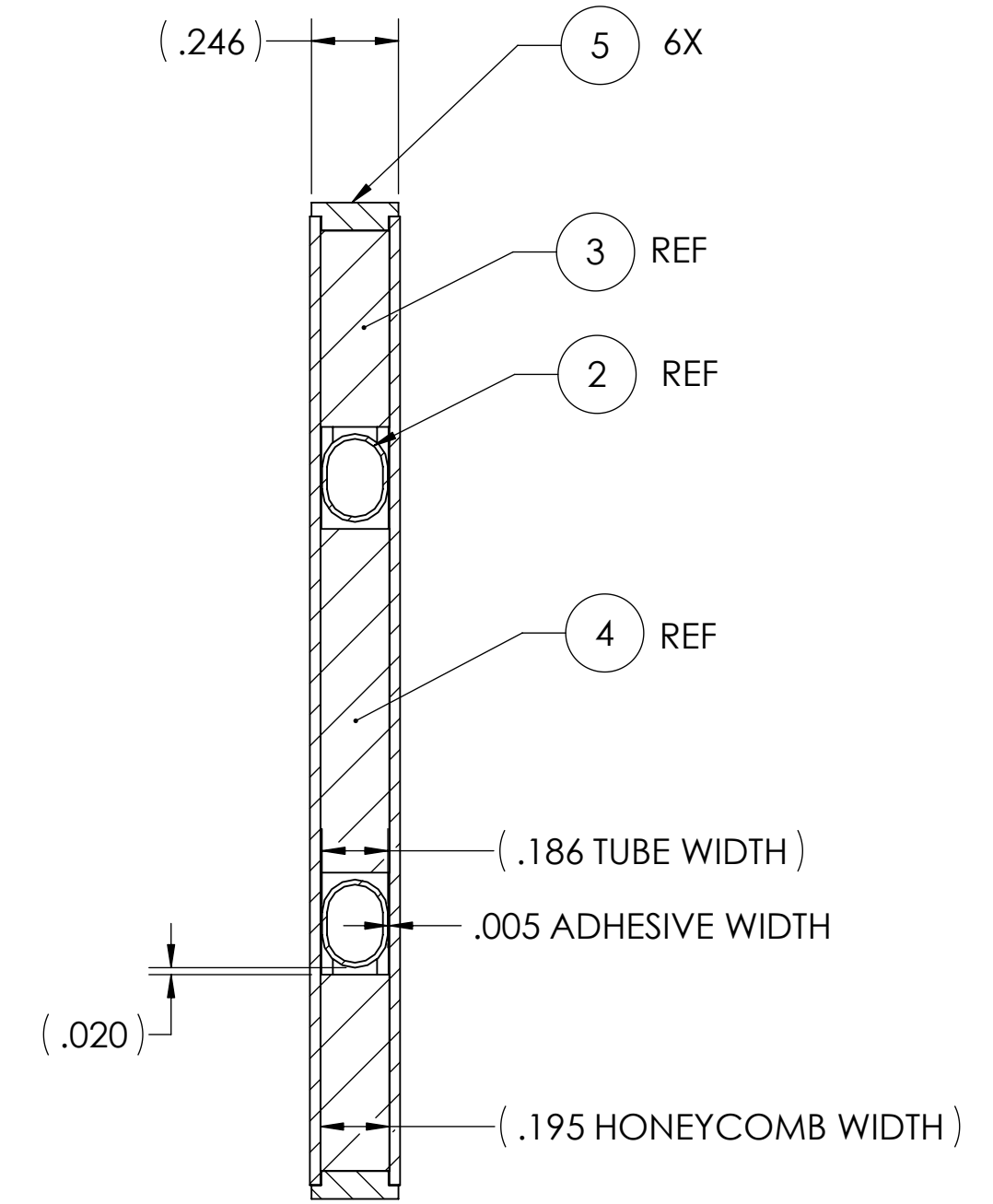
B

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DETAIL A
SCALE 2 : 1



SECTION B-B
SCALE 2 : 1

UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		SER. NO.	ERNEST ORLANDO LAWRENCE	
X.X ± 0.1	FRAC. ± 1/64	ACCT. NO.	NO. REQD.	DATE ISSD	BERKELEY NATIONAL LABORATORY	
X.XX ± 0.01	ANGLES ± 30°	DEL. TO	DATE REQD.	DATE REQD.	UNIVERSITY OF CALIFORNIA - BERKELEY	
X.XXX ± 0.005	FINISH -	SURFACE TREATMENT			4.72mm FLAT TUBE STAVE SUB ASSEMBLY	
DO NOT SCALE PRINT		IDEN. METHOD TAG				
THREADS ARE CLASS 2		PROJECT NUMBER				
CHAMFER ENDS OF ALL SCREW THREADS 30°		PROJECT NAME	US ATLAS SILICON SUBSYSTEM	MICROFILMED:	DWG. TYPE	SHOWN ON
CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS		DWG. BY	W. K. MILLER	DATE	12/17/06	SCALE: 1:2
BREAK EDGES .016 MAX. ON MACHINED WORK		CHK. BY	W. O. MILLER	DATE	12/17/06	DO NOT SCALE PRINTS
REMOVE BURRS, WELD SPLATTER & LOOSE SCALE		APPR. BY		DATE		
IN ACCORDANCE WITH ASME Y14.5m & B46.1						
		PATENT CLEAR:	P1AP-11	DESIGN ACCT. NO.	AP6250	SCALE: 1:2
				CATEGORY CODE	27E301	DO NOT SCALE PRINTS
				DWG. NO.	27E302	SHEET 2 OF 2
				REV.	B	

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DWG. NO. nnXnnn4	SIZE A	REV. 1	SH. 1
DESCRIPTION		MATERIAL	MAT. LOCATION

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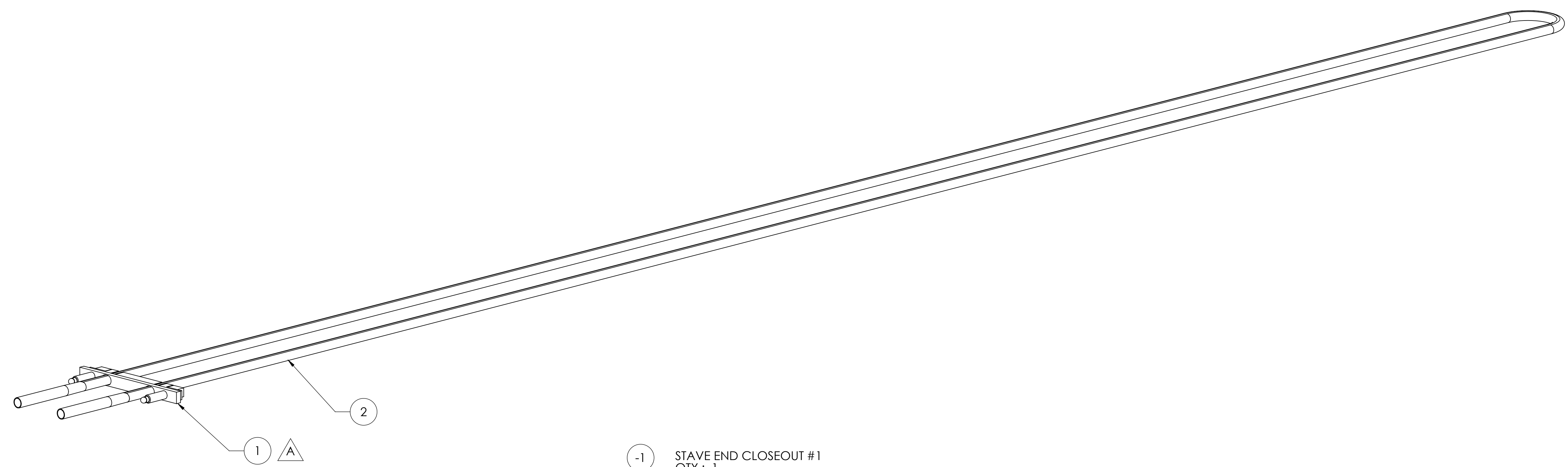
D

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-1 STAVE END CLOSEOUT #1
QTY : 1

A

A

NOTES:
1. ORIGINAL TUBE OUTER DIAMETER IS 7/32 in.

2	1	B7	1	27E304	COOLING TUBE	
1	1	B7	1	27E305-1	END CLOSEOUT SUB-ASSEMBLY	
ITEM NO	SHEET LOCATION	ZONE	QTY	PART DOCUMENT NUMBER	DESCRIPTION	REFERENCE DESIGNATION MATERIAL NOTES
UNLESS OTHERWISE SPECIFIED				SHOP ORDERS	SER. NO. DATE ISSD	
TOLERANCES		X.X ± 0.1		FRAC. ± 1/64	ERNEST ORLANDO LAWRENCE	
X.XX ± 0.01		ANGLES ± 30°		BERKELEY NATIONAL LABORATORY		
X.XXX ± 0.005		FINISH -		UNIVERSITY OF CALIFORNIA - BERKELEY		
DO NOT SCALE PRINT				TUBE AND END CLOSEOUT		
THREADS ARE CLASS 2				4.72 mm FLAT TUBE STAVE ASSEMBLY		
CHAMFER ENDS OF ALL SCREW THREADS 30°				MICROFILMED: DWG. TYPE SHOWN ON SCALE: 1:1.25		
CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS				DO NOT SCALE PRINTS		
BREAK EDGES .016 MAX. ON MACHINED WORK				ASSY 27E302 SHEET 1 OF 2		
REMOVE BURRS, WELD SPLATTER & LOOSE SCALE				P1AP-11 AP6250 27E303		
IN ACCORDANCE WITH ASME Y14.5m & B46.1				REV. A		
REV	DWG	CHK	ZONE	DATE	CHANGES	
A				2-21-07	REVISED END CAP	

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DWG. NO.	SIZE	REV.	SH.
nnXnnn4	A	2	

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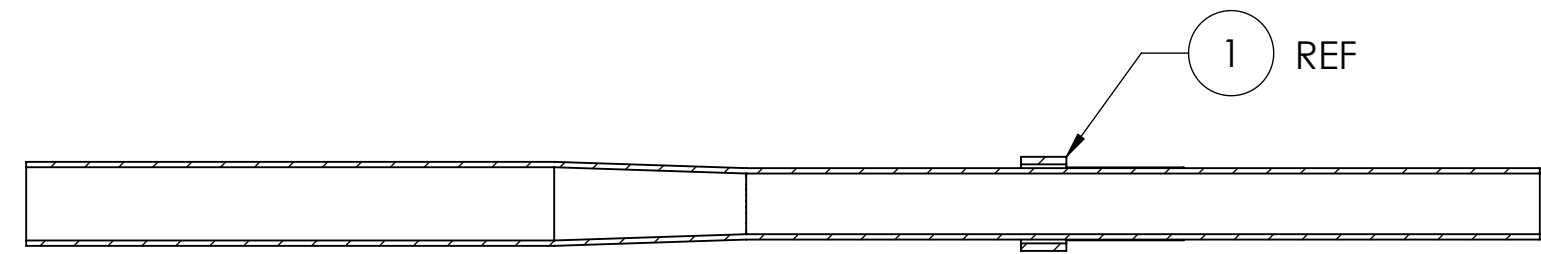
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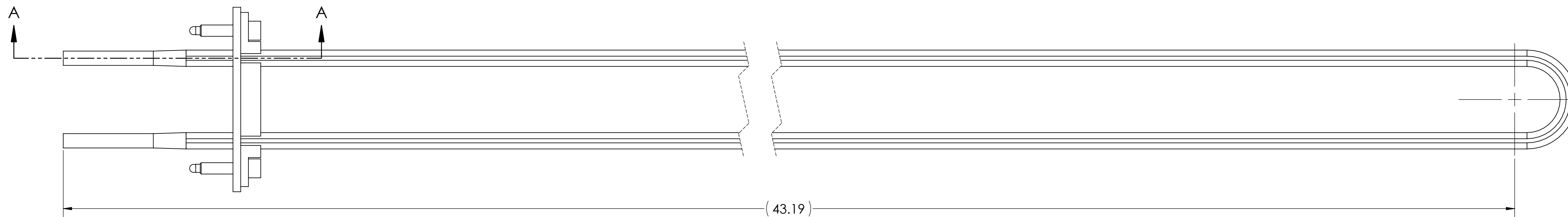
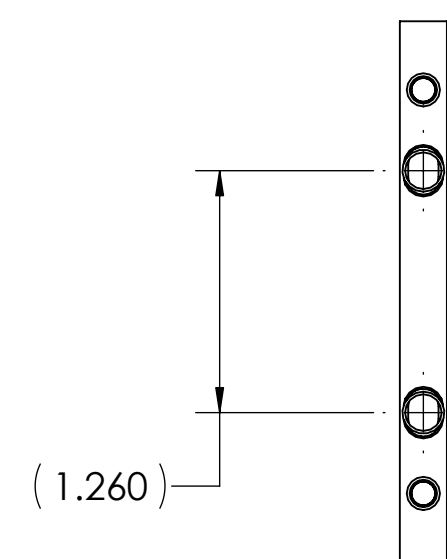
B

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SECTION A-A
SCALE 2 : 1



UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		SER. NO.	ERNEST ORLANDO LAWRENCE	
X.X ± 0.1	FRAC. ± 1/64	ACCT. NO.	NO. REQD.	DATE ISSD	BERKELEY NATIONAL LABORATORY	
X.XX ± 0.01	ANGLES ± 30°	DEL. TO	DATE RECD.	DATE RECD.	UNIVERSITY OF CALIFORNIA - BERKELEY	
X.XXX ± 0.005	FINISH -	SURFACE TREATMENT		TUBE AND END CLOSEOUT		
DO NOT SCALE PRINT		IDEN. METHOD TAG		4.72 mm FLAT TUBE STAVE ASSEMBLY		
THREADS ARE CLASS 2		PROJECT NUMBER		SCALE: 1:1		
CHAMFER ENDS OF ALL SCREW THREADS 30°		PROJECT NAME		SHEET 2 OF 2		
CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS		DWG. BY		DATE 12/17/06	MICROFILMED:	DWG. TYPE
BREAK EDGES .016 MAX. ON MACHINED WORK		CHK. BY		DATE 12/17/06	PATENT CLEAR:	ASSY
REMOVE BURRS, WELD SPLATTER & LOOSE SCALE		APPR. BY		DATE -	DESIGN ACCT. NO.	27E302
IN ACCORDANCE WITH ASME Y14.5m & B46.1					CATEGORY CODE	AP6250
					DWG. NO.	27E303
					SIZE	A

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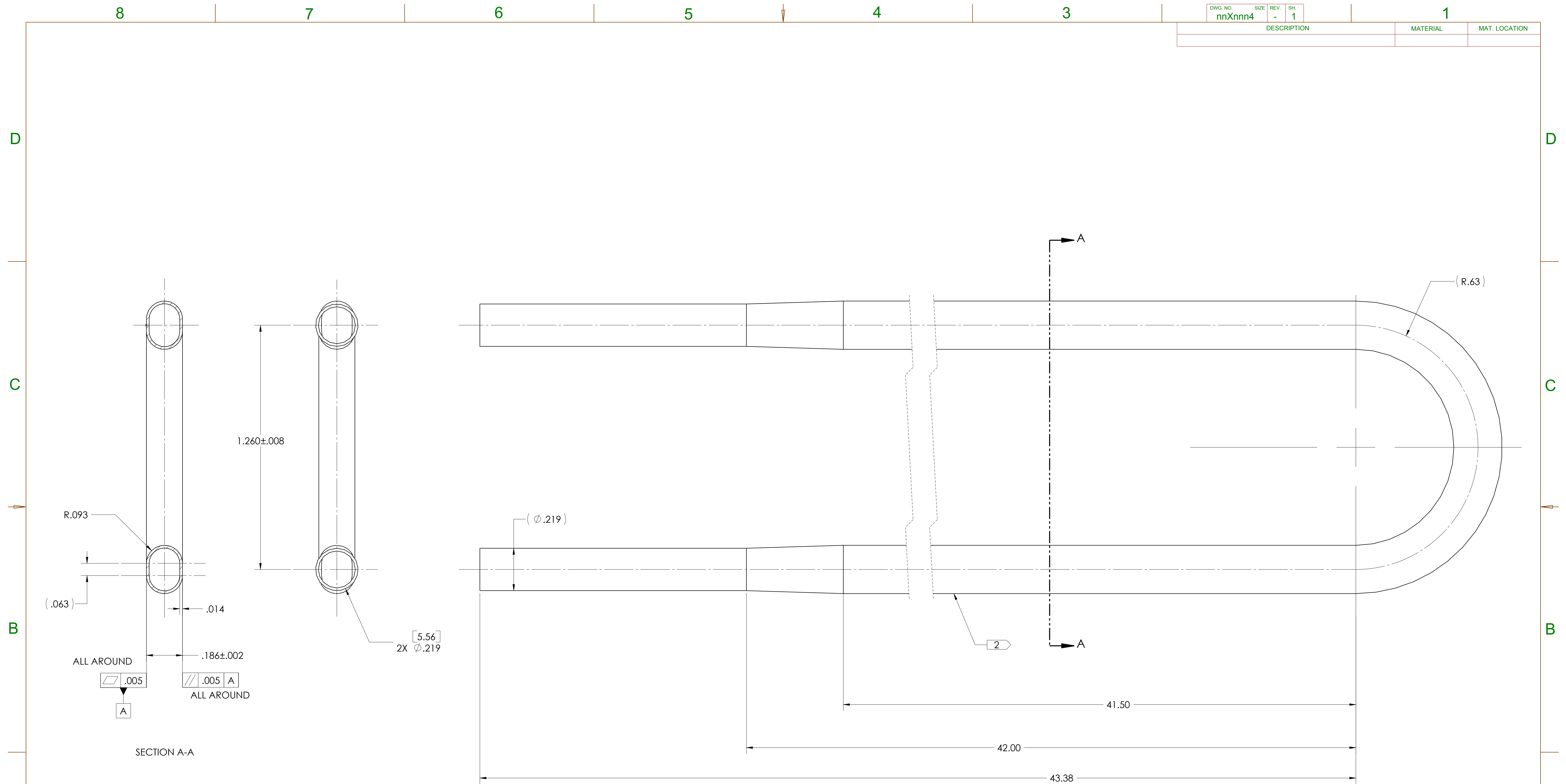
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DWG. NO. nnXnnn4	SIZE -	REV. -	SH. 1	1
DESCRIPTION		MATERIAL	MAT. LOCATION	

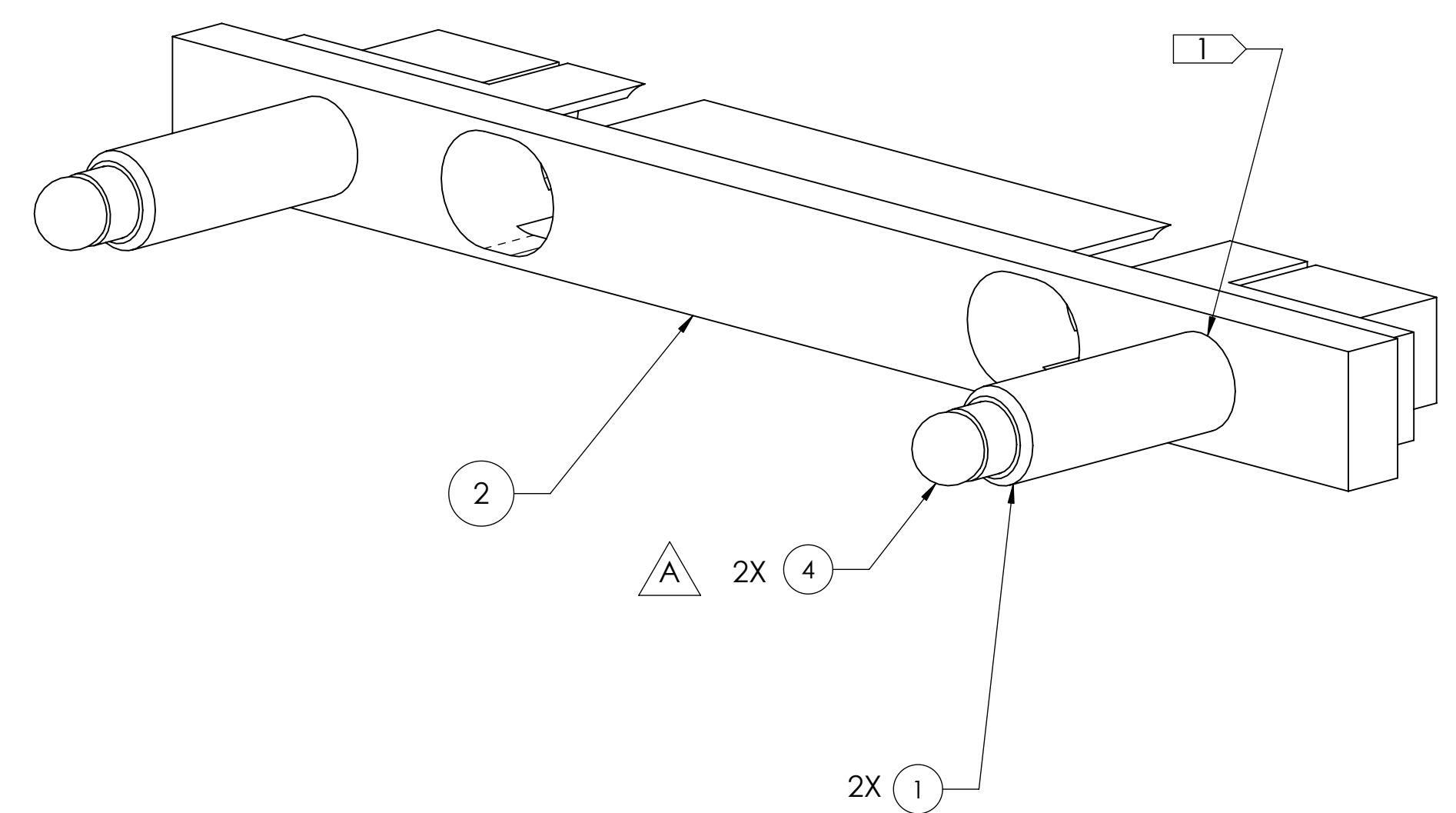


NOTES:

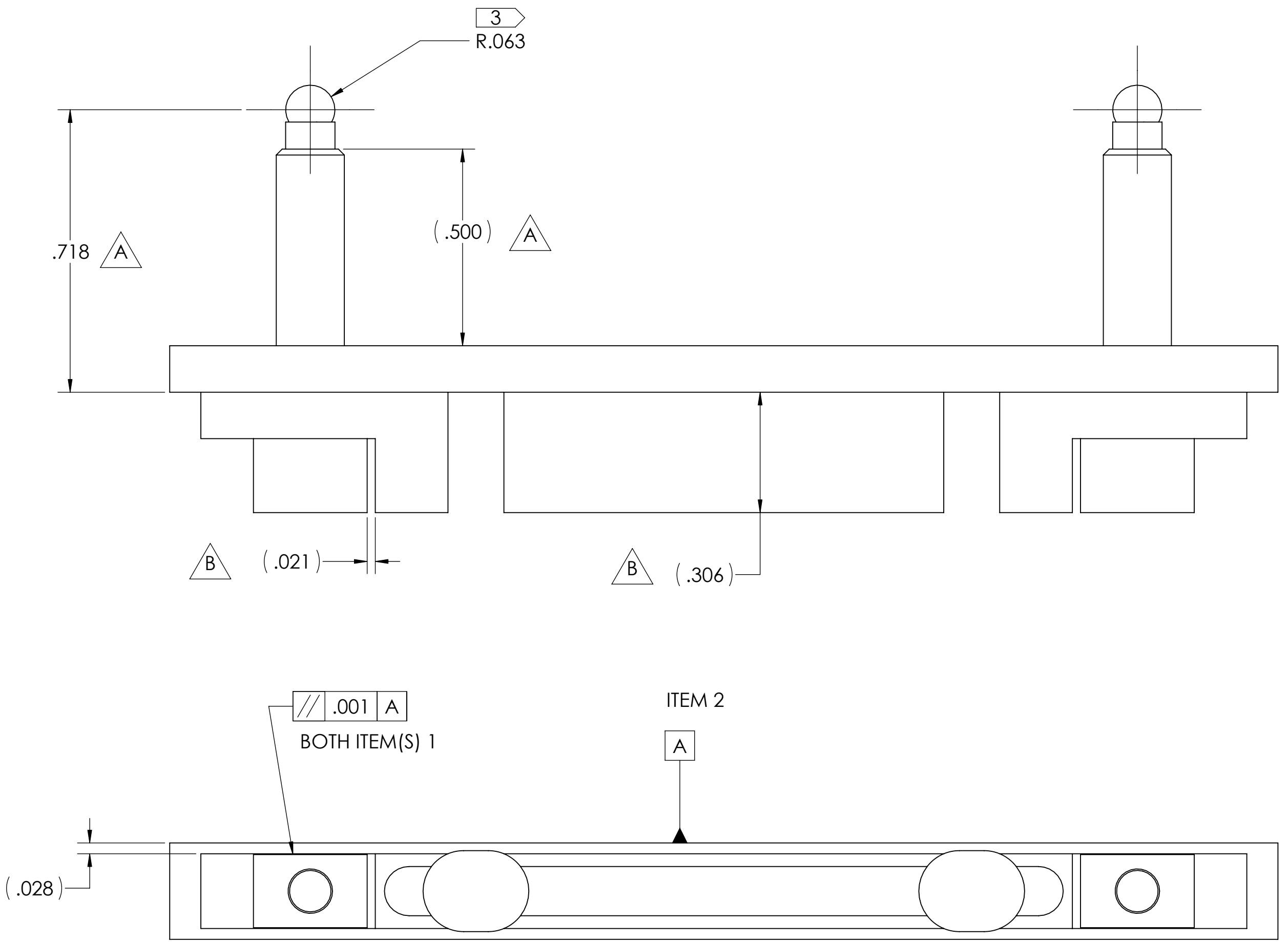
1. ORIGINAL EXTRUDED ALUMINUM TUBING 7/32 OUTER DIA. (.014 WALL THICKNESS).
2. FINISH: GRAY ANODIZE TUBE EXTERNAL SURFACES

<table border="1"> <tr> <td>UNLESS OTHERWISE SPECIFIED</td> <td>SHOP ORDERS</td> <td>SER. NO.</td> <td>ERNEST ORLANDO LAWRENCE</td> </tr> <tr> <td>X.X ± 0.1</td> <td>ACCT. NO.</td> <td>NO.</td> <td>BERKELEY NATIONAL LABORATORY</td> </tr> <tr> <td>X.XX ± 0.01</td> <td>DEL. TO</td> <td>DATE</td> <td>UNIVERSITY OF CALIFORNIA - BERKELEY</td> </tr> <tr> <td>X.XXX ± 0.005</td> <td>FRAC. ± 1/64</td> <td>ISSD</td> <td></td> </tr> <tr> <td>ANGLES ± 30°</td> <td>FINISH: NOTE 2</td> <td>DATE</td> <td></td> </tr> <tr> <td colspan="2">SURFACE TREATMENT</td> <td>REGRD</td> <td></td> </tr> <tr> <td colspan="2">DO NOT SCALE PRINT</td> <td colspan="2">4.72 mm FLAT COOLING TUBE</td> </tr> <tr> <td colspan="2">THREADS ARE CLASS 2</td> <td colspan="2">MICROFILMED:</td> </tr> <tr> <td colspan="2">CHAMFER ENDS OF ALL SCREW THREADS 30°</td> <td colspan="2">DWG. TYPE: PART</td> </tr> <tr> <td colspan="2">CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS</td> <td colspan="2">SHOWN ON: 27E303</td> </tr> <tr> <td colspan="2">BREAK EDGES .016 MAX. ON MACHINED WORK</td> <td colspan="2">SCALE: 4:1</td> </tr> <tr> <td colspan="2">REMOVE BURRS, WELD SPLATTER & LOOSE SCALE</td> <td colspan="2">SHEET 1 OF 1</td> </tr> <tr> <td colspan="2">IN ACCORDANCE WITH ASME Y14.5m & B46.1</td> <td colspan="2">DWG. NO: 27E304</td> </tr> </table>				UNLESS OTHERWISE SPECIFIED	SHOP ORDERS	SER. NO.	ERNEST ORLANDO LAWRENCE	X.X ± 0.1	ACCT. NO.	NO.	BERKELEY NATIONAL LABORATORY	X.XX ± 0.01	DEL. TO	DATE	UNIVERSITY OF CALIFORNIA - BERKELEY	X.XXX ± 0.005	FRAC. ± 1/64	ISSD		ANGLES ± 30°	FINISH: NOTE 2	DATE		SURFACE TREATMENT		REGRD		DO NOT SCALE PRINT		4.72 mm FLAT COOLING TUBE		THREADS ARE CLASS 2		MICROFILMED:		CHAMFER ENDS OF ALL SCREW THREADS 30°		DWG. TYPE: PART		CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS		SHOWN ON: 27E303		BREAK EDGES .016 MAX. ON MACHINED WORK		SCALE: 4:1		REMOVE BURRS, WELD SPLATTER & LOOSE SCALE		SHEET 1 OF 1		IN ACCORDANCE WITH ASME Y14.5m & B46.1		DWG. NO: 27E304		<table border="1"> <tr> <td>DESIGN ACCT. NO.</td> <td>CATEGORY CIDE</td> <td>DO NOT SCALE PRINTS</td> </tr> <tr> <td>P1AP-11</td> <td>AP6250</td> <td></td> </tr> </table>		DESIGN ACCT. NO.	CATEGORY CIDE	DO NOT SCALE PRINTS	P1AP-11	AP6250	
UNLESS OTHERWISE SPECIFIED	SHOP ORDERS	SER. NO.	ERNEST ORLANDO LAWRENCE																																																												
X.X ± 0.1	ACCT. NO.	NO.	BERKELEY NATIONAL LABORATORY																																																												
X.XX ± 0.01	DEL. TO	DATE	UNIVERSITY OF CALIFORNIA - BERKELEY																																																												
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P1AP-11	AP6250																																																														
<table border="1"> <tr> <td>REV</td> <td>DWG</td> <td>CHK</td> <td>ZONE</td> <td>DATE</td> <td>CHANGES</td> </tr> <tr> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </table>				REV	DWG	CHK	ZONE	DATE	CHANGES	-	-	-	-	-	-	<table border="1"> <tr> <td>DATE</td> <td>BY</td> <td>DATE</td> <td>BY</td> </tr> <tr> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </table>		DATE	BY	DATE	BY	-	-	-	-																																						
REV	DWG	CHK	ZONE	DATE	CHANGES																																																										
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DWG. NO.	SIZE	REV.	SH.	
nnXnnn4	B	1		
DESCRIPTION		MATERIAL	MAT. LOCATION	



(-1) STAVE END CLOSEOUT #1
QTY: 1



REAR VIEW

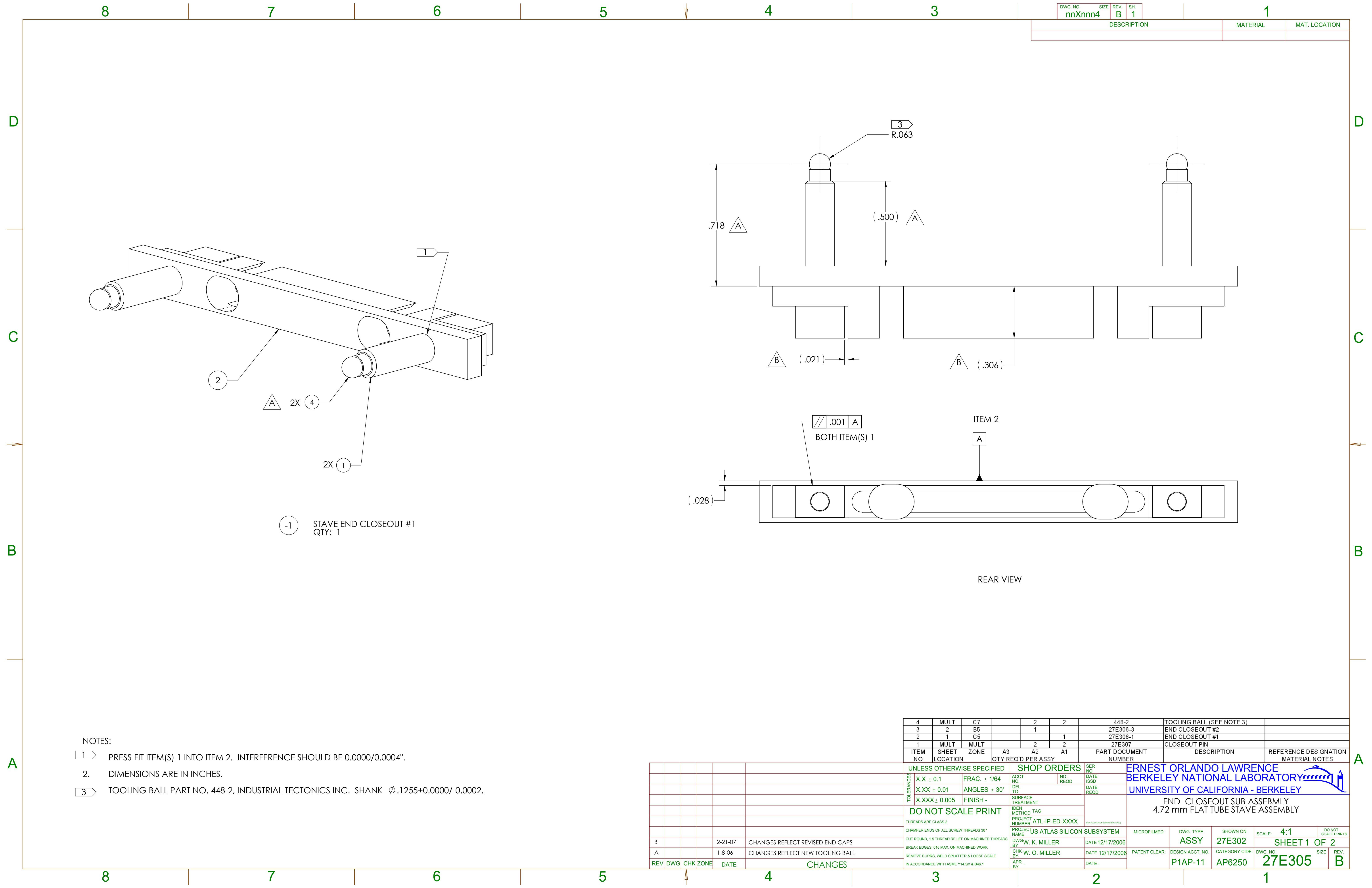
- NOTES:
- 1 PRESS FIT ITEM(S) 1 INTO ITEM 2. INTERFERENCE SHOULD BE 0.0000/0.0004".
 - 2. DIMENSIONS ARE IN INCHES.
 - 3 TOOLING BALL PART NO. 448-2, INDUSTRIAL TECTONICS INC. SHANK ϕ .1255+0.0000/-0.0002.

ITEM NO	SHEET LOCATION	ZONE	A3	A2	A1	PART DOCUMENT NUMBER	DESCRIPTION	REFERENCE DESIGNATION MATERIAL NOTES
4	MULT	C7		2	2	448-2	TOOLING BALL (SEE NOTE 3)	
3	2	B5		1		27E306-3	END CLOSEOUT #2	
2	1	C5			1	27E306-1	END CLOSEOUT #1	
1	MULT	MULT		2	2	27E307	CLOSEOUT PIN	

UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		SER. NO.	ERNEST ORLANDO LAWRENCE
X.X ± 0.1	FRAC. ± 1/64	ACCT. NO.	NO. REQD.	DATE ISSD	BERKELEY NATIONAL LABORATORY
X.XX ± 0.01	ANGLES ± 30°	DEL. TO		DATE RECD.	UNIVERSITY OF CALIFORNIA - BERKELEY
X.XXX ± 0.005	FINISH -	SURFACE TREATMENT			
DO NOT SCALE PRINT		IDEN METHOD TAG			
THREADS ARE CLASS 2		PROJECT NUMBER			
CHAMFER ENDS OF ALL SCREW THREADS 30°		PROJECT NAME			
CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS		DWG. BY	DATE		
BREAK EDGES .016 MAX. ON MACHINED WORK		W. K. MILLER	12/17/2006		
REMOVE BURRS, WELD SPLATTER & LOOSE SCALE		CHK BY	DATE		
IN ACCORDANCE WITH ASME Y14.5m & B46.1		W. O. MILLER	12/17/2006		
		APP. BY	DATE		

MICROFILMED:	DWG. TYPE	SHOWN ON	SCALE:	DO NOT SCALE PRINTS
	ASSY	27E302	4:1	
PATENT CLEAR:	DESIGN ACCT. NO.	CATEGORY CODE	DWG. NO.	REV.
	P1AP-11	AP6250	27E305	B

REV	DWG	CHK	ZONE	DATE	CHANGES
B				2-21-07	CHANGES REFLECT REVISED END CAPS
A				1-8-06	CHANGES REFLECT NEW TOOLING BALL



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DWG. NO. nnXnnn4 SIZE B REV. 2 SH. 2

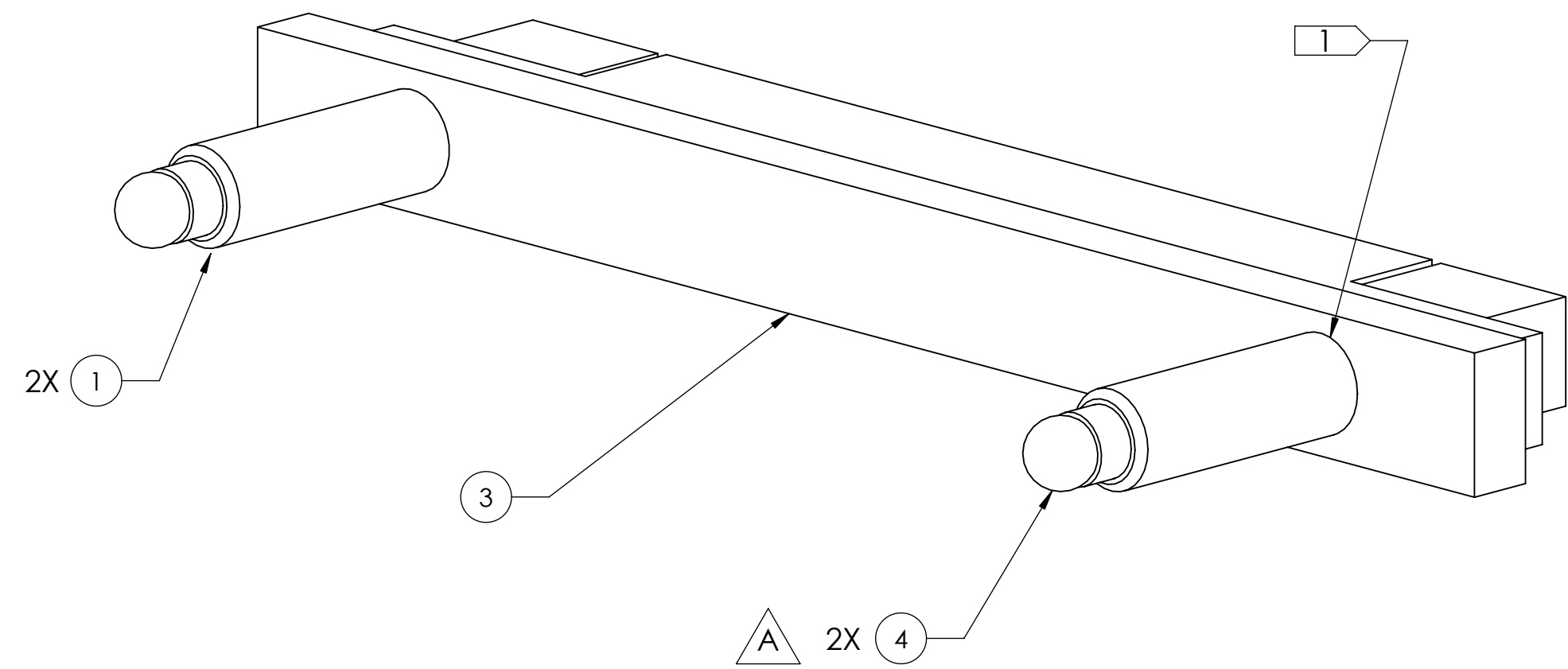
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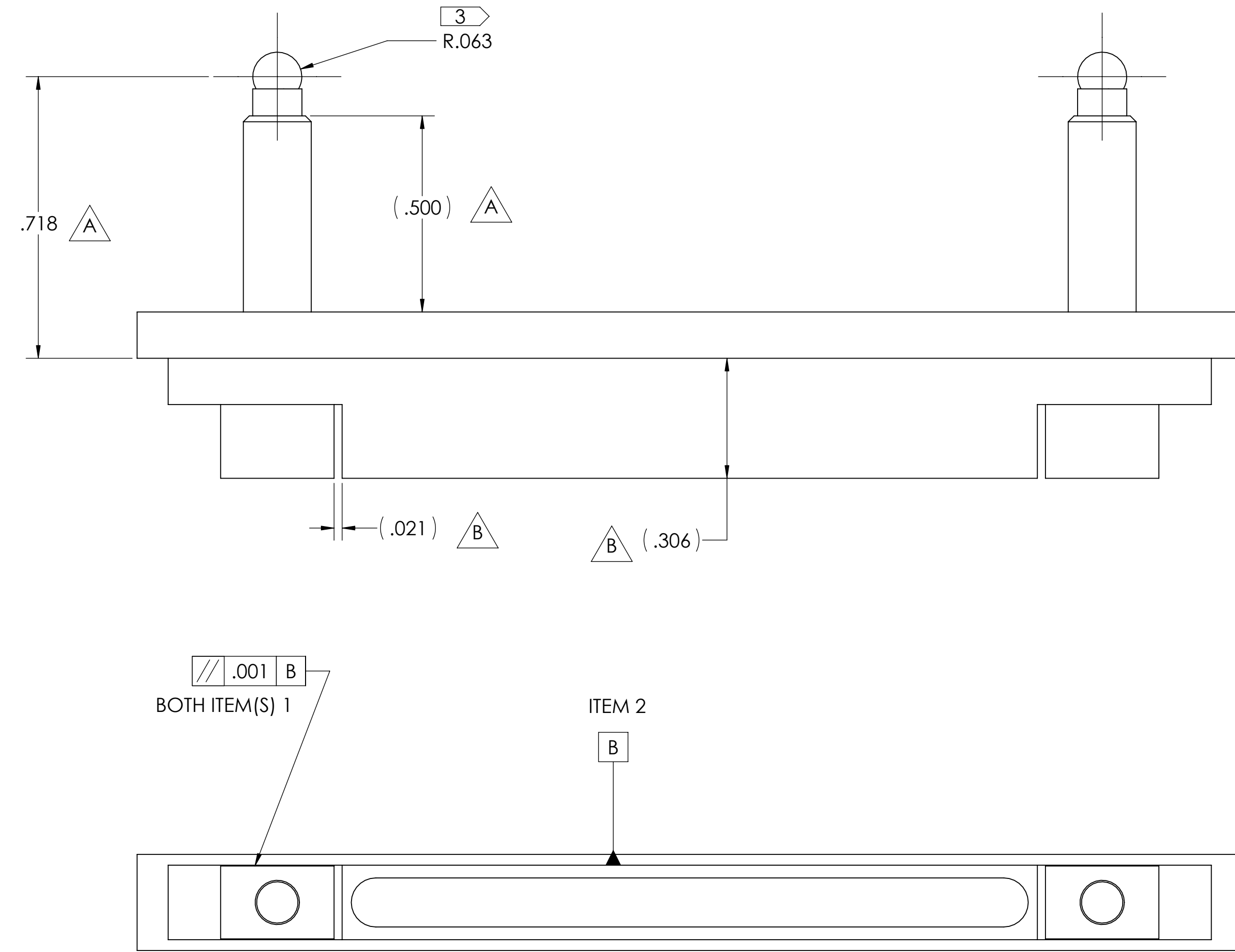
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-3 STAVE END CLOSEOUT #2 QTY: 1



REAR VIEW

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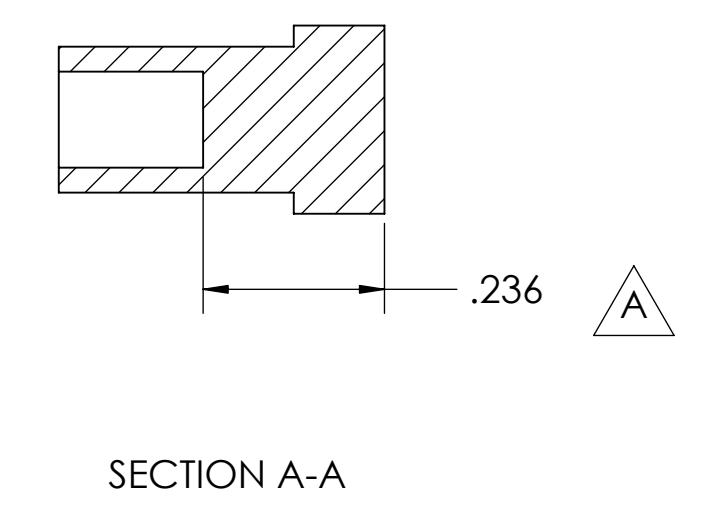
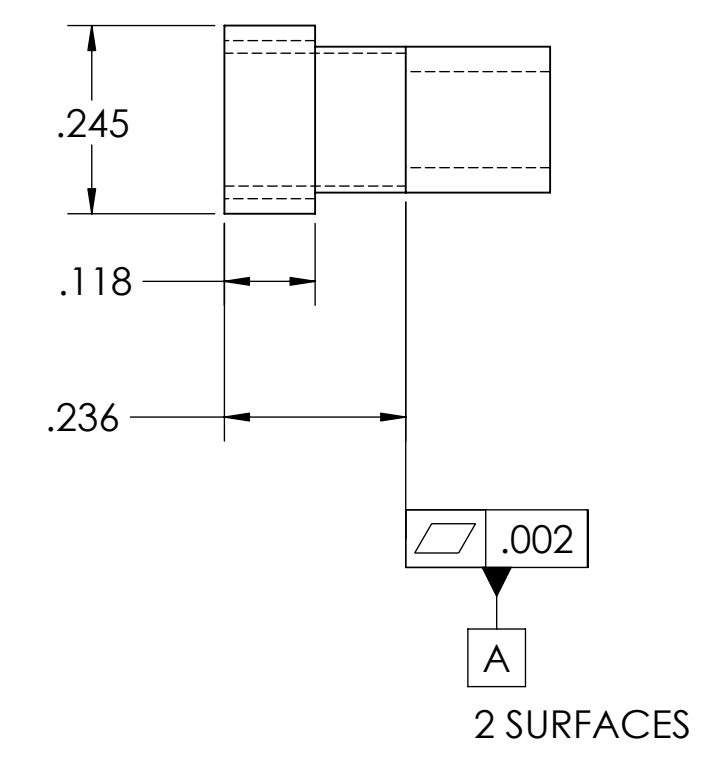
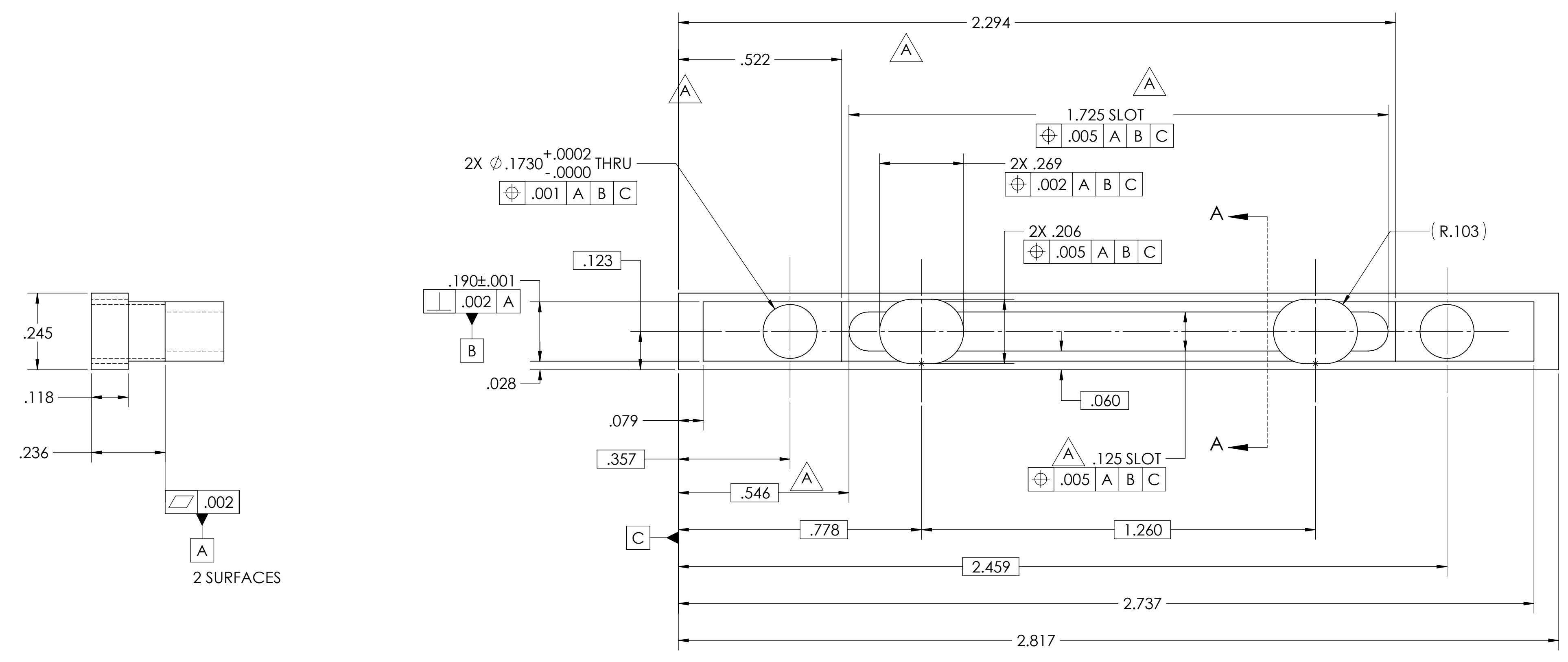
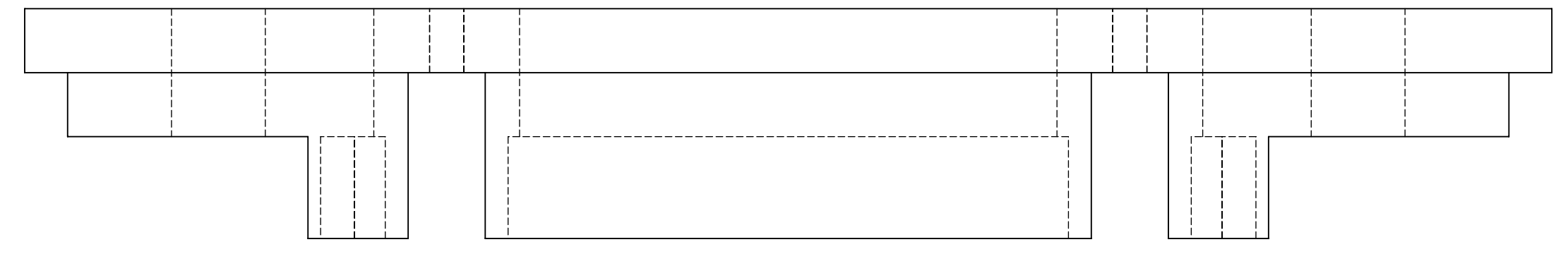
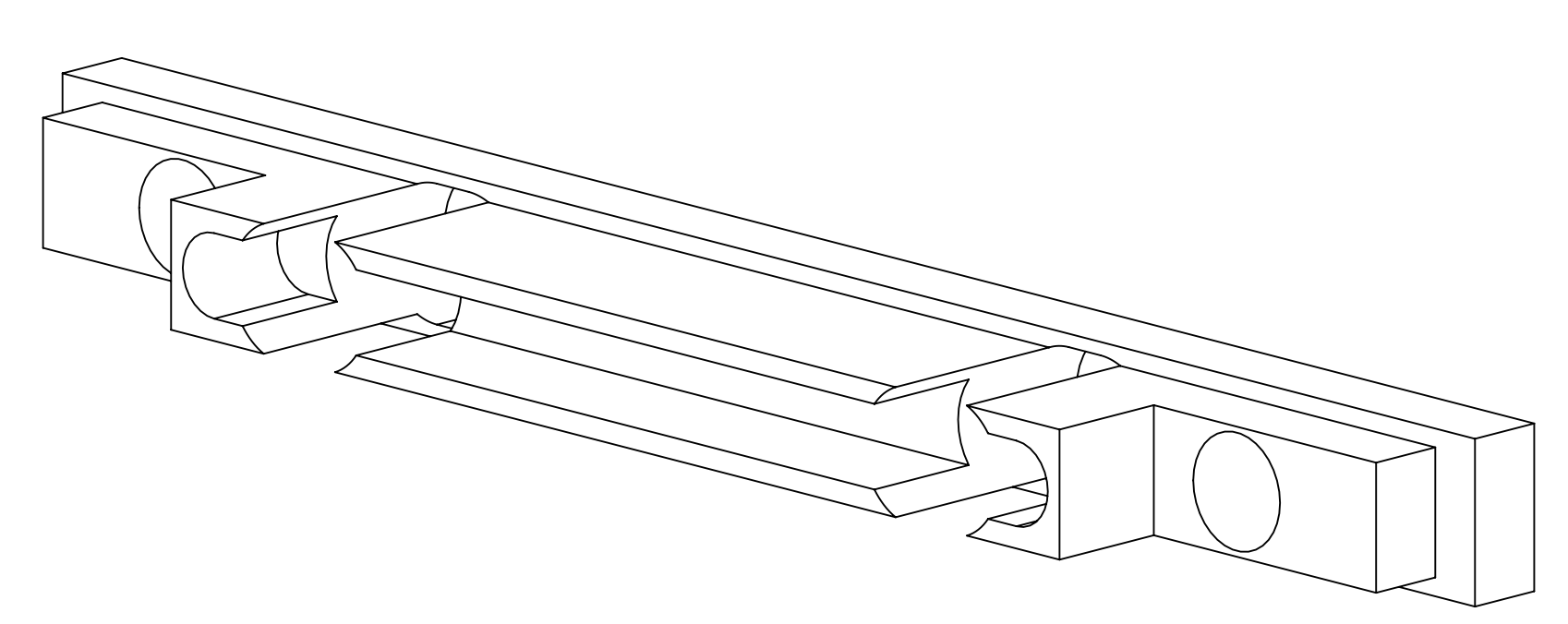
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UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		SER. NO.	ERNEST ORLANDO LAWRENCE	
X.X ± 0.1	FRAC. ± 1/64	ACCT. NO.	NO. REQD.	DATE ISSD	BERKELEY NATIONAL LABORATORY	
X.XX ± 0.01	ANGLES ± 30°	DEL. TO	DATE REQD.	DATE REQD.	UNIVERSITY OF CALIFORNIA - BERKELEY	
X.XXX ± 0.005	FINISH -	SURFACE TREATMENT			END CLOSEOUT SUB ASSEMBLY	
DO NOT SCALE PRINT		ITEM METHOD TAG			4.72 mm FLAT TUBE STAVE ASSEMBLY	
THREADS ARE CLASS 2		PROJECT NUMBER			MICROFILMED:	DWG. TYPE
CHAMFER ENDS OF ALL SCREW THREADS 30°		PROJECT NAME	US ATLAS SILICON SUBSYSTEM	DATE 12/17/2006	ASSY	27E302
CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS		DWG. BY	W. K. MILLER	DATE 12/17/2006	PATENT CLEAR:	SHOWN ON
BREAK EDGES .016 MAX. ON MACHINED WORK		CHK BY	W. O. MILLER	DATE -		SCALE: 4:1
REMOVE BURRS, WELD SPLATTER & LOOSE SCALE		APR BY				DO NOT SCALE PRINTS
IN ACCORDANCE WITH ASME Y14.5m & B46.1						SHEET 2 OF 2
						DWG. NO. 27E305
						SIZE B

DWG. NO. nnXnnn4	SIZE A	REV. 1	SH. 1	1
DESCRIPTION		MATERIAL	MAT. LOCATION	



-1 STAVE END CLOSEOUT PART #1
QTY: 1
MATERIAL: 6061-T6 ALUMINUM

NOTES:
FINISH: GRAY ANODIZE PART

TOLERANCES		SHOP ORDERS		SER. NO.		ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY	
X.X ± 0.1	FRAC. ± 1/64	ACCT. NO.	NO. REQD.	NO.	DATE ISSD	UNIVERSITY OF CALIFORNIA - BERKELEY	
X.XX ± 0.01	ANGLES ± 30°	DEL. TO	DATE REQD.	SURFACE TREATMENT		END CLOSEOUT 4.72 mm FLAT TUBE STAVE ASSEMBLY	
X.XXX ± 0.005	FINISH -	DO NOT SCALE PRINT		PROJECT TAG		SCALE: 4:1	
THREADS ARE CLASS 2		PROJECT NAME		PROJECT NO.		DO NOT SCALE PRINTS	
CHAMFER ENDS OF ALL SCREW THREADS 30°		PROJECT NO.		DATE 12/17/2006		MICROFILMED: PART 27E305	
CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS		DWG. BY: W. K. MILLER		DATE 12/17/2006		SHEET 1 OF 2	
BREAK EDGES .016 MAX. ON MACHINED WORK		CHK BY: W. O. MILLER		DATE 12/17/2006		DESIGN ACCT. NO. P1AP-11	
REMOVE BURRS, WELD SPATTER & LOOSE SCALE		APPR. BY:		DATE:		CATEGORY CODE AP6250	
IN ACCORDANCE WITH ASME Y14.5m & B46.1						DWG. NO. 27E306	
REV	DWG	CHK	ZONE	DATE	CHANGES		REV. A

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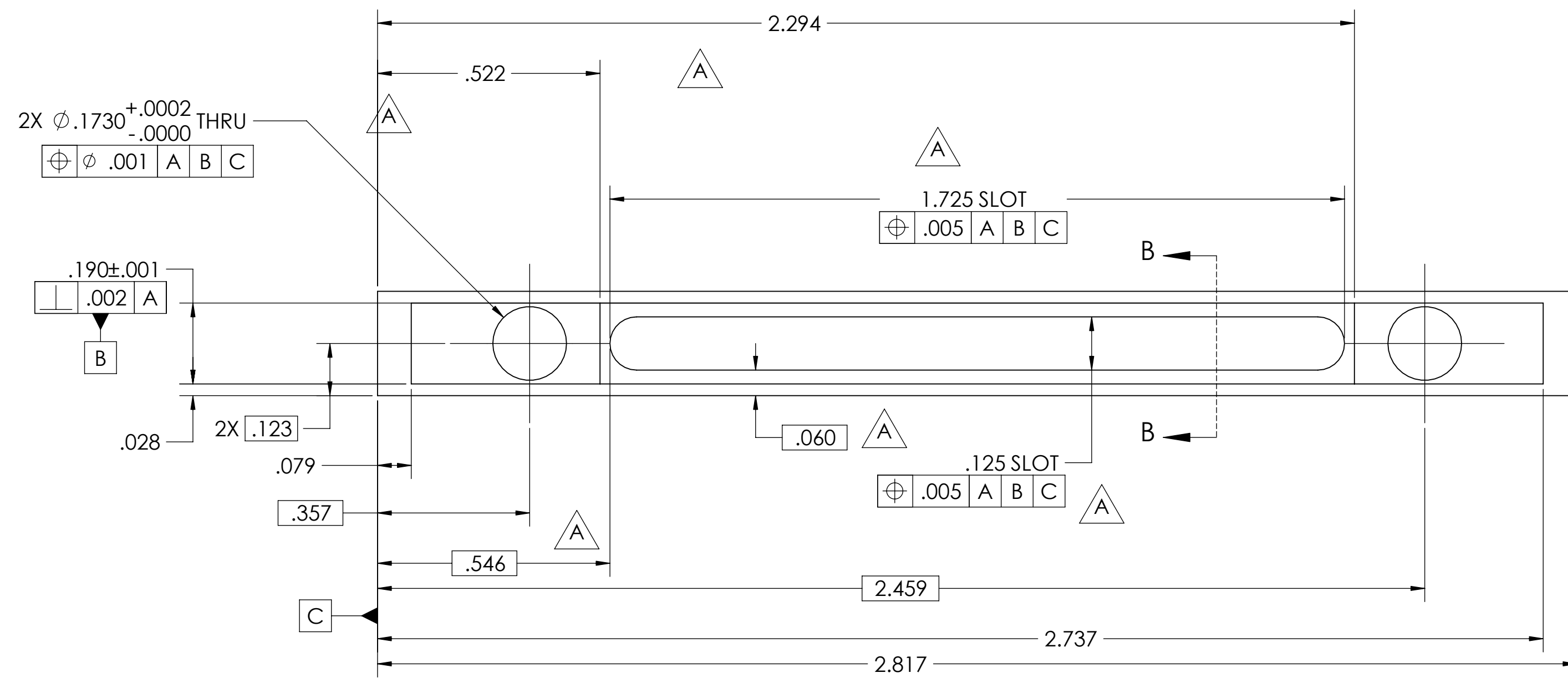
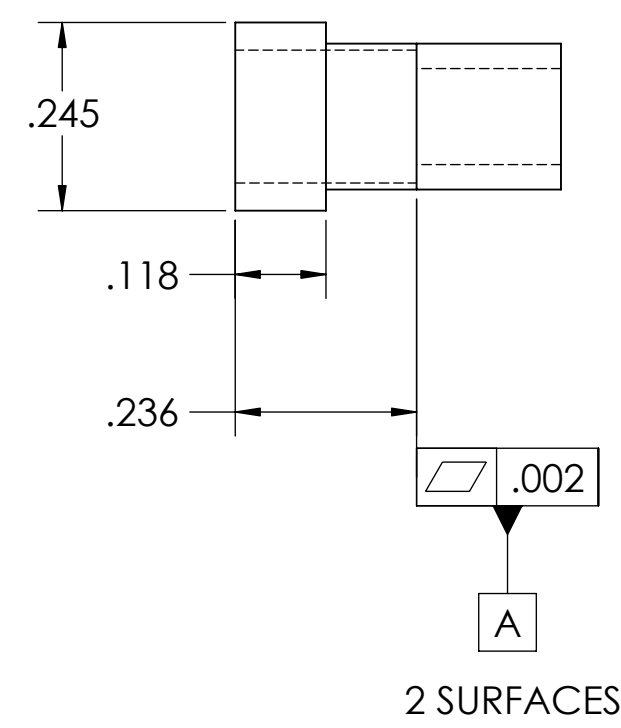
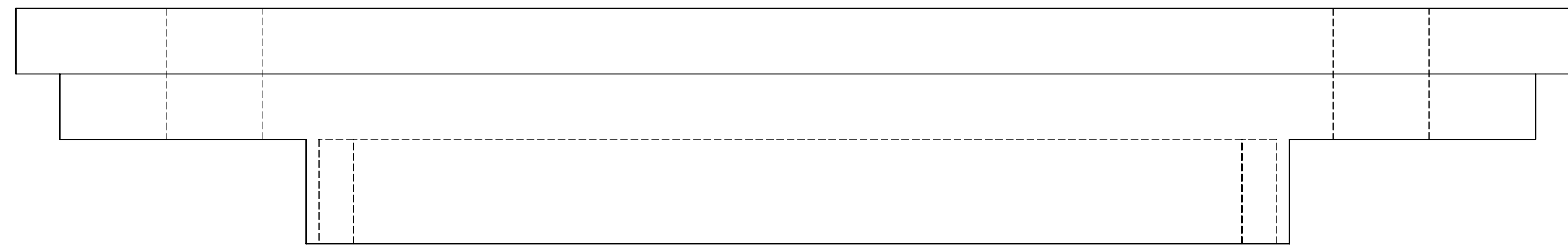
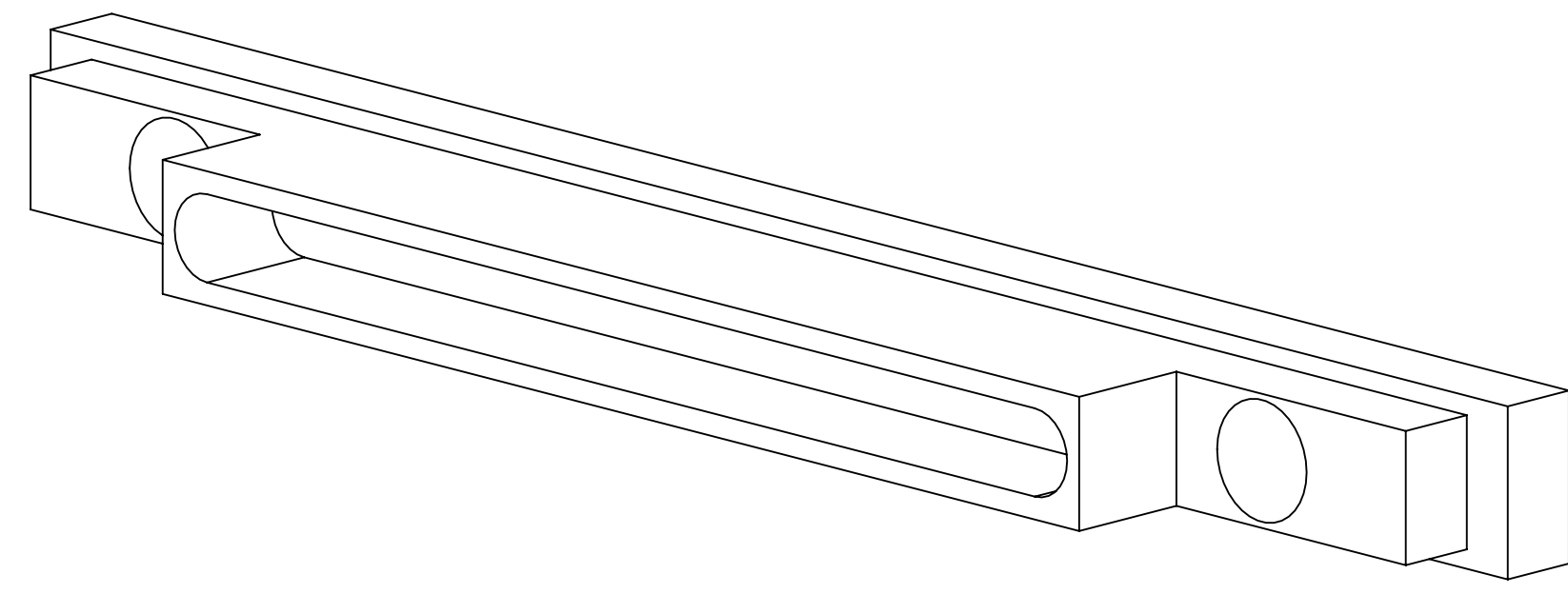
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DWG. NO. nnXnnn4 SIZE A REV. 2 SH. 2

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-3 STAVE END CLOSEOUT PART #2
 QTY: 1
 MATERIAL: 6061-T6 ALUMINUM

UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		SER. NO.	ERNEST ORLANDO LAWRENCE	
X.X ± 0.1	FRAC. ± 1/64	ACCT. NO.	NO. REQD.	DATE ISSD	BERKELEY NATIONAL LABORATORY	
X.XX ± 0.01	ANGLES ± 30°	DEL. TO	DATE RECD.	DATE RECD.	UNIVERSITY OF CALIFORNIA - BERKELEY	
X.XXX ± 0.005	FINISH -	SURFACE TREATMENT		END CLOSEOUT		
DO NOT SCALE PRINT		IDEN. METHOD TAG		4.72 mm FLAT TUBE STAVE ASSEMBLY		
THREADS ARE CLASS 2		PROJECT NUMBER	PROJECT NAME	MICROFILMED:	DWG. TYPE	SHOWN ON
CHAMFER ENDS OF ALL SCREW THREADS 30°		ATL-IP-ED-XXXX	US ATLAS SILICON SUBSYSTEM		PART	27E305
CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS		DWG. BY	DATE		SCALE:	4:1
BREAK EDGES .016 MAX. ON MACHINED WORK		W. K. MILLER	12/17/2006			SHEET 2 OF 2
REMOVE BURRS, WELD SPLATTER & LOOSE SCALE		CHK. BY	DATE	PATENT CLEAR:	DESIGN ACCT. NO.	CATEGORY CODE
IN ACCORDANCE WITH ASME Y14.5m & B46.1		W. O. MILLER	12/17/2006		P1AP-11	AP6250
		APR. BY	DATE		DWG. NO.	27E306
					SIZE	A

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DWG. NO. nnXnnn4	SIZE A	REV. 1	SHEET 1
DESCRIPTION		MATERIAL	MAT. LOCATION

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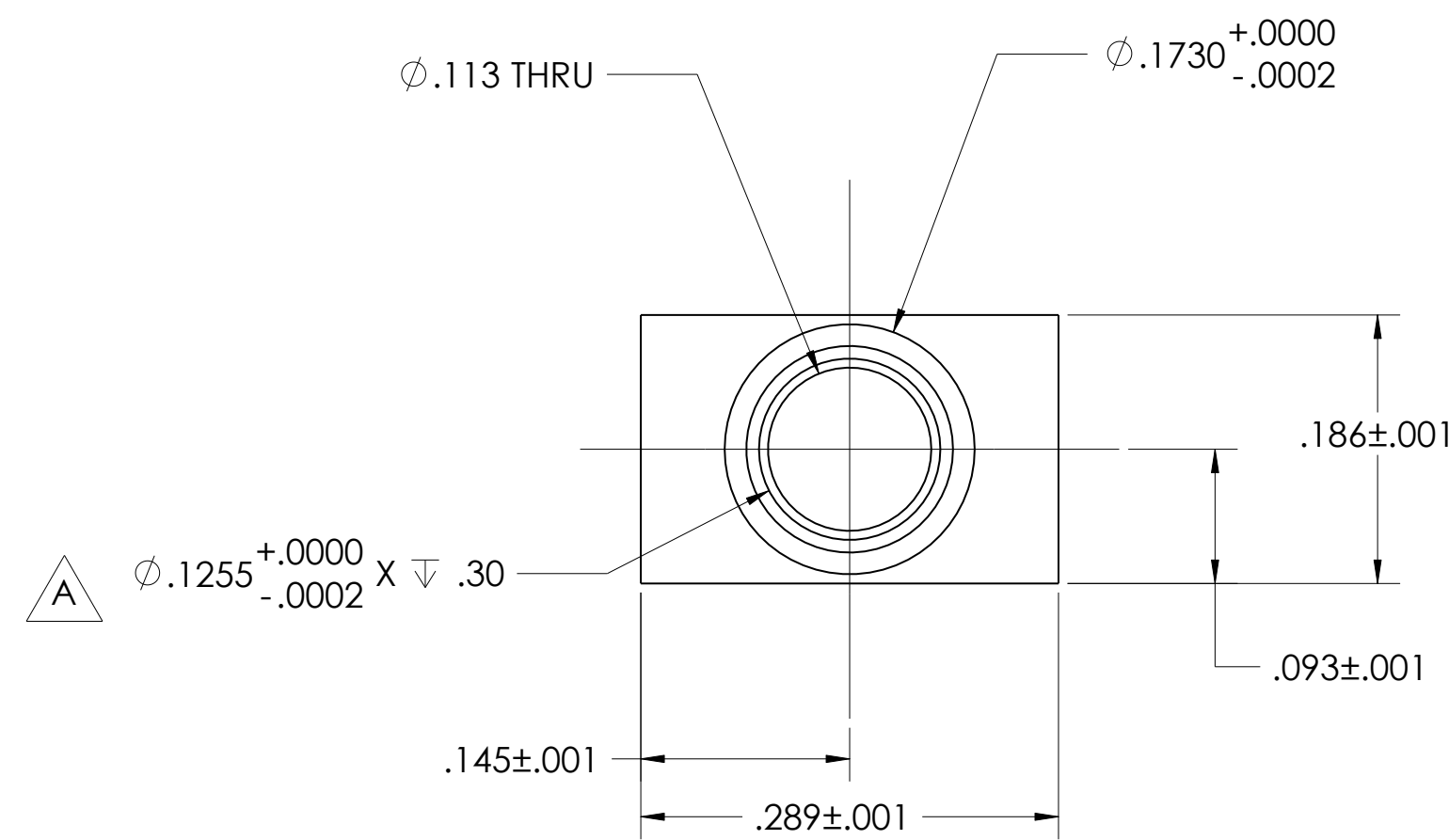
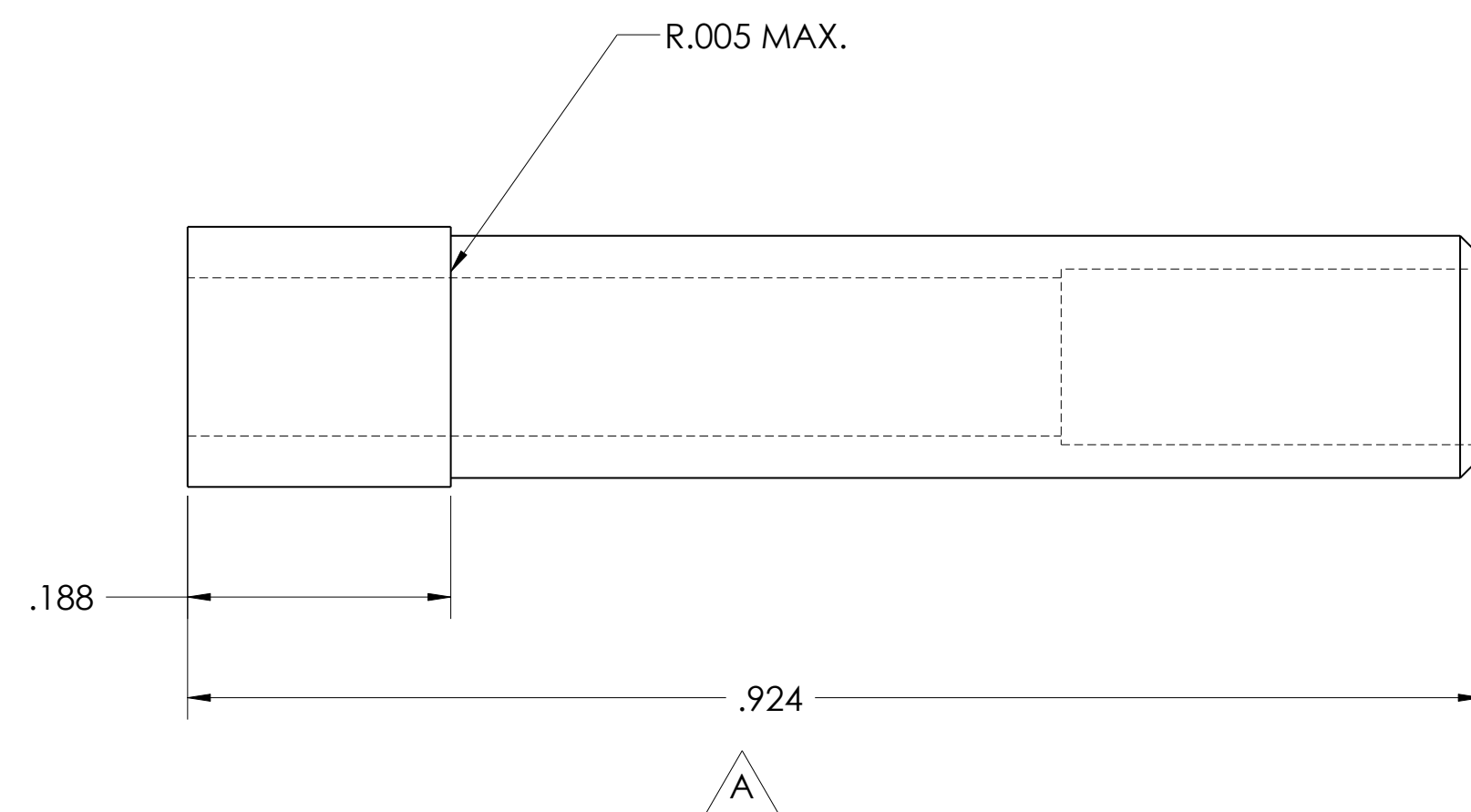
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NOTES:

- 1. MATERIAL: 303 STAINLESS STEEL

				UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		SER. NO. DATE ISSD		ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY		
				X.X ± 0.1 FRAC. ± 1/64		ACCT. NO. NO. REQD.		DATE ISSD		UNIVERSITY OF CALIFORNIA - BERKELEY		
				X.XX ± 0.01 ANGLES ± 30°		DEL. TO		DATE REQD.		CLOSEOUT PIN 4.72 mm TUBE STAVE ASSEMBLY		
				X.XXX ± 0.005 FINISH -		SURFACE TREATMENT				SCALE: 8:1 DO NOT SCALE PRINTS		
				DO NOT SCALE PRINT		IDENT. METHOD TAG				SHEET 1 OF 1		
				THREADS ARE CLASS 2		PROJECT NUMBER ATL-IP-ED-XXXX				MICROFILMED: DWG. TYPE SHOWN ON SCALE: 8:1 DO NOT SCALE PRINTS		
				CHAMFER ENDS OF ALL SCREW THREADS 30°		PROJECT NAME US ATLAS SILICON SUBSYSTEM				DESIGN ACCT. NO. CATEGORY CODE DWG. NO. SIZE REV.		
				CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS		DWG. W. K. MILLER DATE 12/17/2006				P1AP-11 AP6250 27E307 A		
				BREAK EDGES .016 MAX. ON MACHINED WORK		CHK BY W. O. MILLER DATE 12/17/2006						
				REMOVE BURRS, WELD SPLATTER & LOOSE SCALE		APR - DATE -						
				IN ACCORDANCE WITH ASME Y14.5m & B46.1								
REV	DWG	CHK	ZONE	DATE	CHANGES							
A				1-8-06	REVISED PART FOR NEW TOOLING BALL							

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DWG. NO. nnXnnn4 SIZE A REV. 2 SH.

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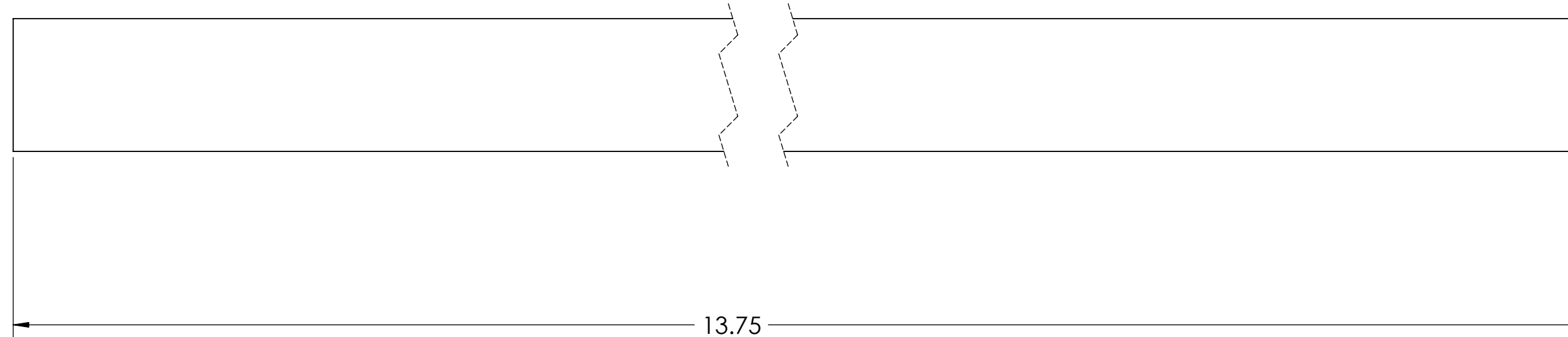
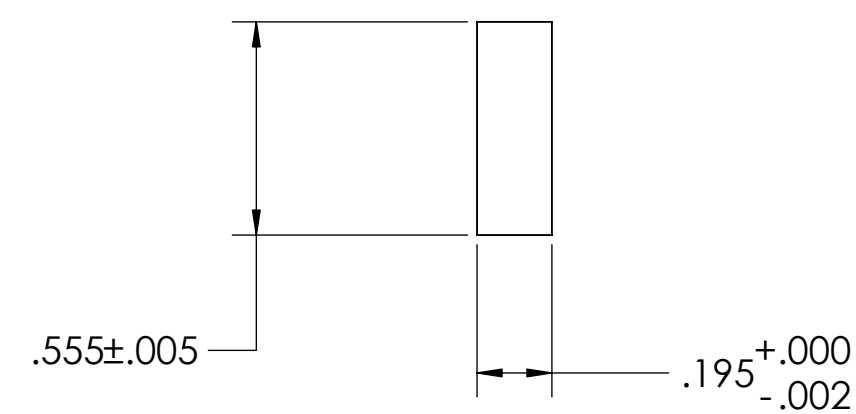
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(-3) HONEYCOMB PART #2
 QTY : 2
 MATERIAL: ULTRACORE UCF-119-3/16 -3.5
 GRAPHITE FIBER HONEYCOMB WITH
 RS-3 CYANATE ESTER RESIN

UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		SER. NO.	ERNEST ORLANDO LAWRENCE	
X.X ± 0.1	FRAC. ± 1/64	ACCT. NO.	NO. REQD.	DATE ISSD	BERKELEY NATIONAL LABORATORY	
X.XX ± 0.01	ANGLES ± 30°	DEL. TO		DATE REQD.	UNIVERSITY OF CALIFORNIA - BERKELEY	
X.XXX ± 0.005	FINISH -	SURFACE TREATMENT			HONEYCOMB CORE MATERIAL	
DO NOT SCALE PRINT		IDEN METHOD TAG			4.72 mm FLAT TUBE STAVE ASSEMBLY	
THREADS ARE CLASS 2		PROJECT NUMBER	ATL-IP-ED-XXXX		MICROFILMED:	SCALE: 2:1
CHAMFER ENDS OF ALL SCREW THREADS 30°		PROJECT NAME	US ATLAS SILICON SUBSYSTEM		DWG. TYPE	DO NOT SCALE PRINTS
CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS		DWG. BY	W. K. MILLER	DATE 12/17/06	PART	27E302
BREAK EDGES .016 MAX. ON MACHINED WORK		CHK BY	W. O. MILLER	DATE 12/17/06	SHOWN ON	SHEET 2 OF 2
REMOVE BURRS, WELD SPLATTER & LOOSE SCALE		APPR BY		DATE -	DESIGN ACCT. NO.	27E308
IN ACCORDANCE WITH ASME Y14.5m & B46.1					CATEGORY CODE	AP6250
					DWG. NO.	REV. A

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DWG. NO. nnXnnn4	SIZE -	REV. -	SH. 1
DESCRIPTION		MATERIAL	MAT. LOCATION

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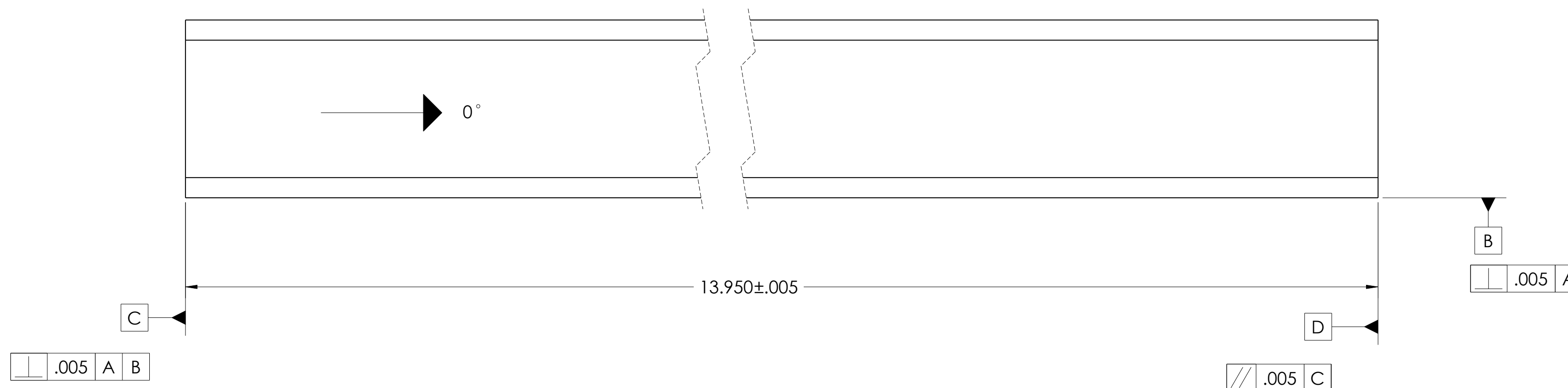
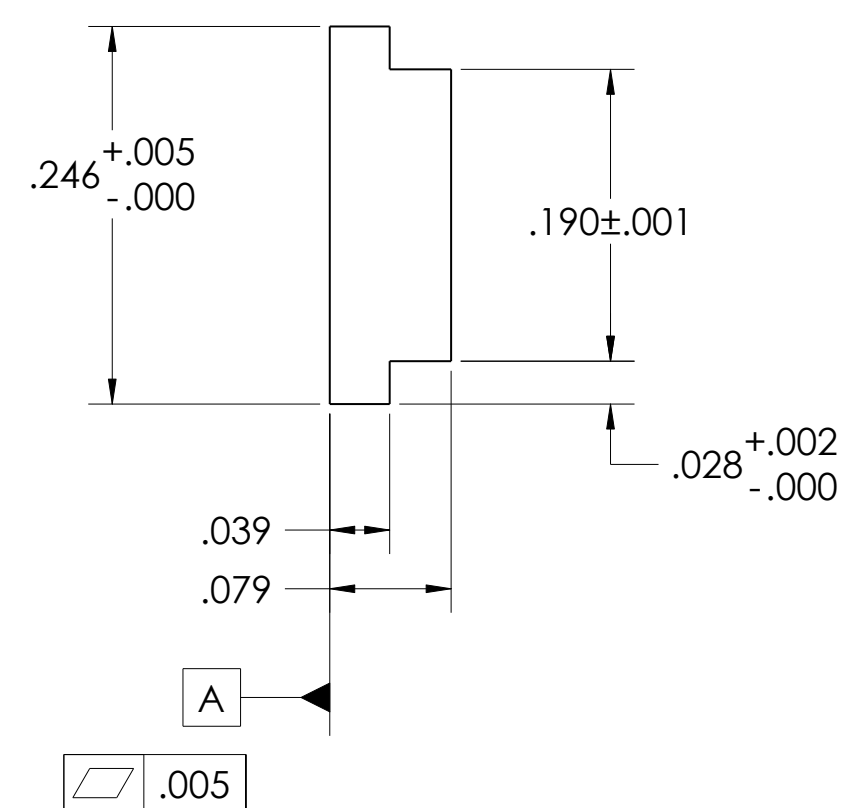
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NOTES:

1. K13D2U 90fsm FIBER AREAL WEIGH T/EX 1515 CYANATE ESER RESIN (250 °F CURE) 34% RESIN CONTENT. 6" UNITAPE WIDTH (BRYTE TECHNOLOGY).
2. FIBER ORIENTATION: (90,0,0,0,0/S).
3. FIBER VOLUME FRACTION 60%.
4. UNITS ARE IN INCHES.

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UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		SER. NO.	ERNEST ORLANDO LAWRENCE		
TOLERANCES	X.X ± 0.1	FRAC. ± 1/64	ACCT. NO.	NO. REQD.	DATE ISSD	BERKELEY NATIONAL LABORATORY	
	X.XX ± 0.01	ANGLES ± 30°	DEL. TO	DATE REQD.		UNIVERSITY OF CALIFORNIA - BERKELEY	
	X.XXX ± 0.005	FINISH -	SURFACE TREATMENT		SIDE COMPOSITE CLOSEOUT		
DO NOT SCALE PRINT			IDEN. METHOD TAG		4.72 mm STAVE ASSEMBLY		
THREADS ARE CLASS 2			PROJECT NUMBER		MICROFILMED:		
CHAMFER ENDS OF ALL SCREW THREADS 30°			PROJECT NAME		DWG. TYPE		
CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS			DWG. W. K. MILLER		PART		
BREAK EDGES .016 MAX. ON MACHINED WORK			DATE 12/17/2006		SHOWN ON		
REMOVE BURRS, WELD SPLATTER & LOOSE SCALE			CHK BY W. O. MILLER		27E302		
IN ACCORDANCE WITH ASME Y14.5m & B46.1			DATE -		SCALE: 8:1		
REV		DWG	CHK	ZONE	DATE	CHANGES	DO NOT SCALE PRINTS
						SHEET 1 OF 1	
				PATENT CLEAR:	DESIGN ACCT. NO.	CATEGORY CODE	DWG. NO.
					P1AP-11	AP6250	27E309
							SIZE
							REV.
							-

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DWG. NO. nnXnnn4	SIZE -	REV. -	SH. 1
DESCRIPTION		MATERIAL	MAT. LOCATION

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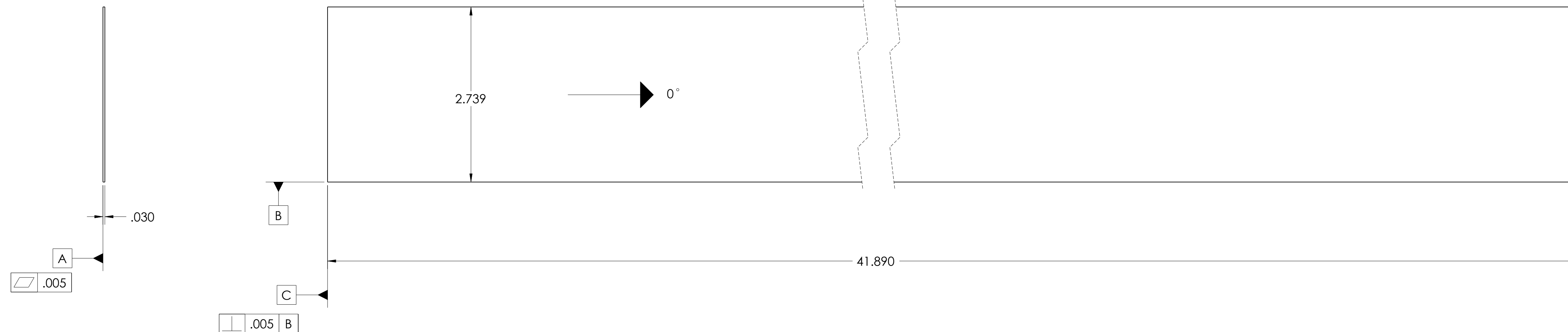
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NOTES:

1. K13D2U 90fsm FIBER AREAL WEIGHT/EX 1515 CYANATE ESER RESIN (250 °F CURE) 34% RESIN CONTENT. 6" UNITAPE WIDTH (BRYTE TECHNOLOGY).
2. FIBER ORIENTATION: (90,0,0,0/S).
3. FIBER VOLUME FRACTION 60%.
4. DIMENSIONS ARE IN INCHES.

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UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		SER. NO.	ERNEST ORLANDO LAWRENCE	
TOLERANCES	X.X ± 0.1	FRAC. ± 1/64	ACCT. NO.	NO. REQD.	DATE ISSD	BERKELEY NATIONAL LABORATORY
	X.XX ± 0.01	ANGLES ± 30°	DEL. TO	DATE REQD.		UNIVERSITY OF CALIFORNIA - BERKELEY
	X.XXX ± 0.005	FINISH -	SURFACE TREATMENT			COMPOSITE FACESHEET
DO NOT SCALE PRINT			IDEN. METHOD	TAG	4.72 mm TUBE STAVE ASSEMBLY	
THREADS ARE CLASS 2			PROJECT NUMBER	ATL-IP-ED-XXXX		
CHAMFER ENDS OF ALL SCREW THREADS 30°			PROJECT NAME	US ATLAS SILICON SUBSYSTEM	MICROFILMED:	DWG. TYPE
CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS			DWG. BY	W. K. MILLER	DATE	12/17/2006
BREAK EDGES .016 MAX. ON MACHINED WORK			CHK. BY	W. O. MILLER	DATE	12/17/2006
REMOVE BURRS, WELD SPLATTER & LOOSE SCALE			APR. BY	-	DATE	-
IN ACCORDANCE WITH ASME Y14.5m & B46.1					PATENT CLEAR:	DESIGN ACCT. NO.
REV	DWG	CHK	ZONE	DATE	CHANGES	
						SCALE: 1:1
						DO NOT SCALE PRINTS
						SHEET 1 OF 1
						DWG. NO. 27E310
						SIZE
						REV. -

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