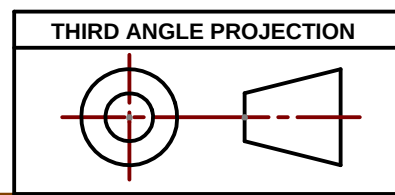
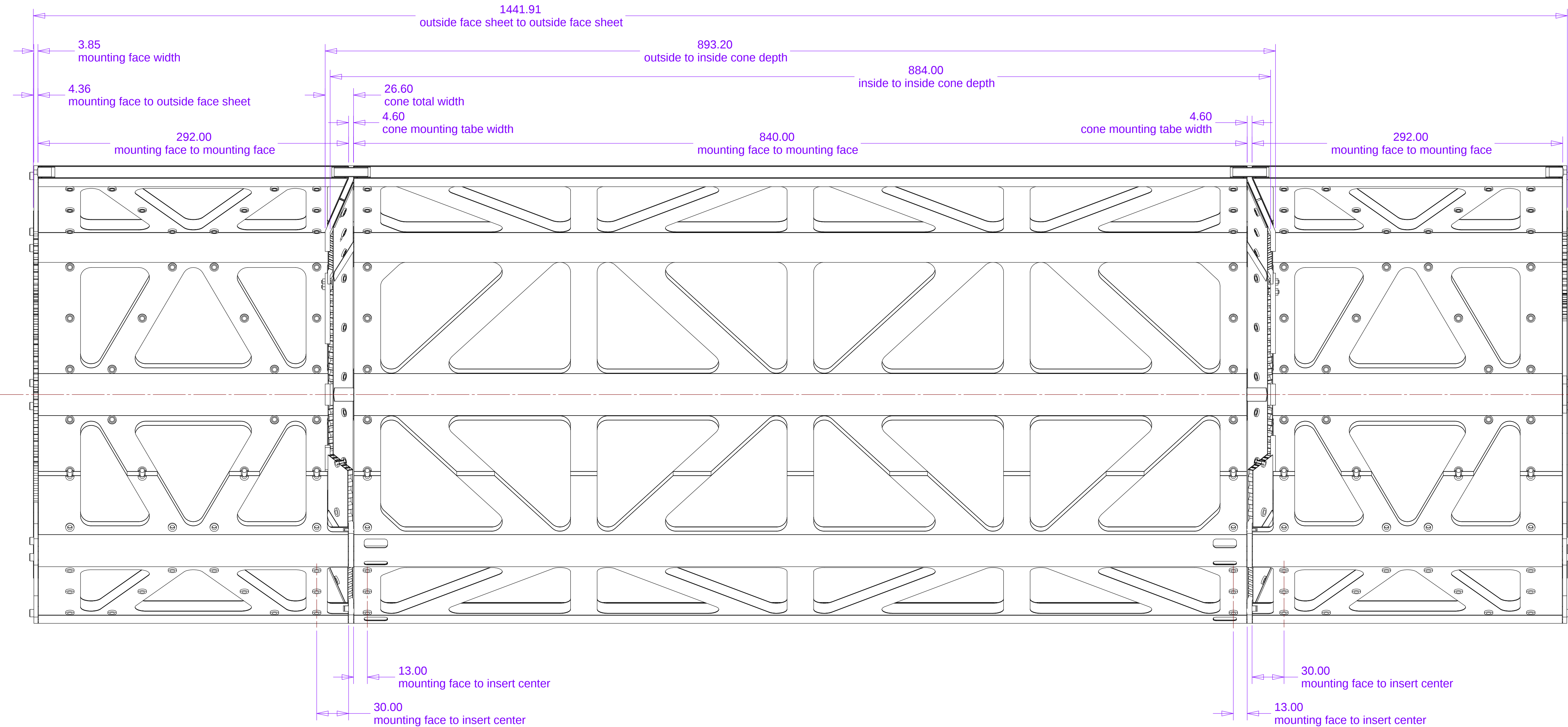
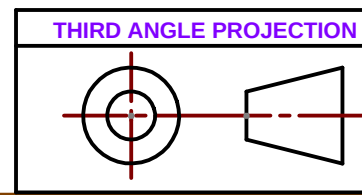




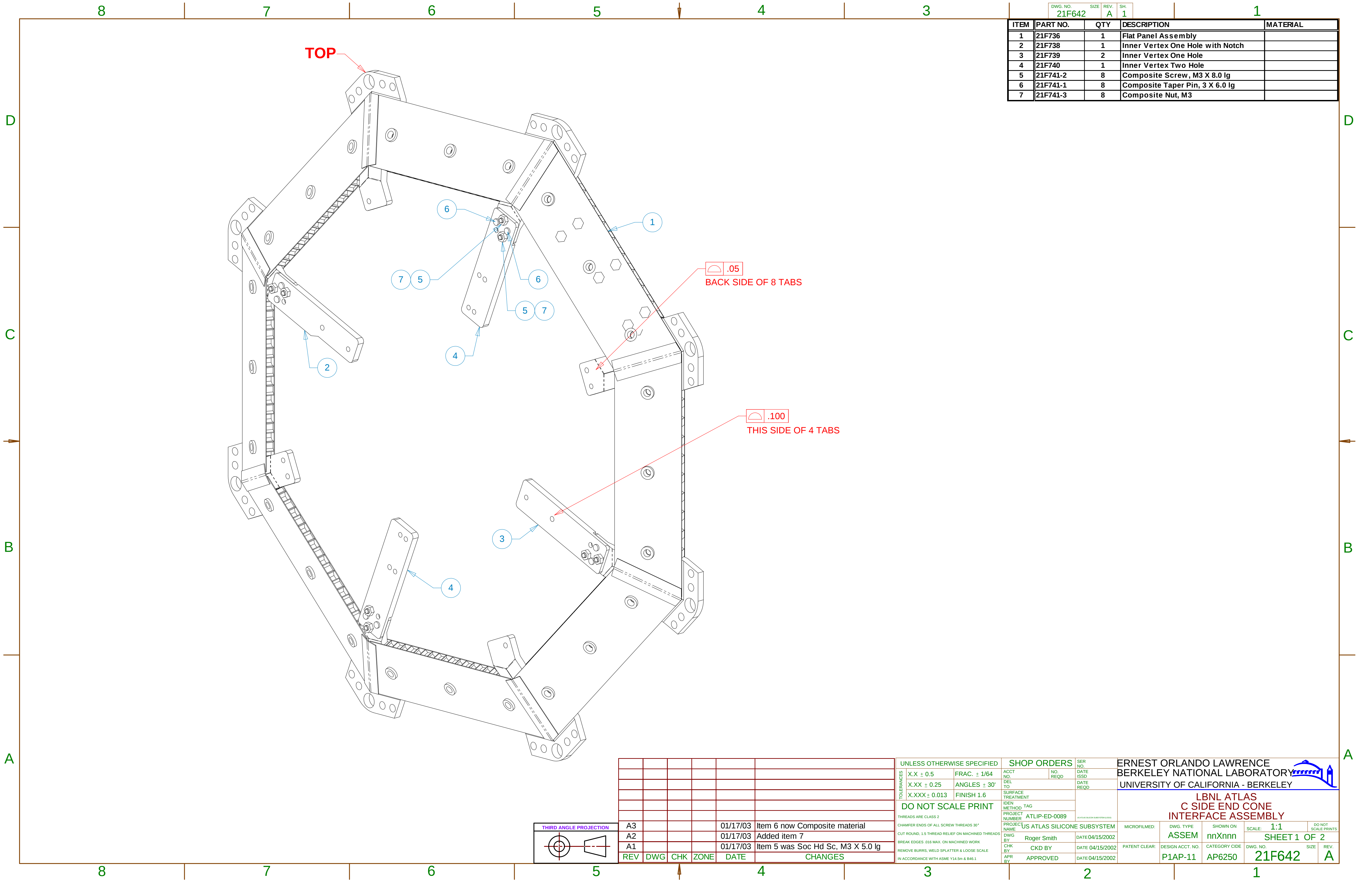
						UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		SER NO.		ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY															
						TOLERANCES		X.X ± 0.5 FRAC. ± 1/64		ACCT NO.		NO. REQD		DATE ISSD													
						X.XX ± 0.25 ANGLES ± 30'		DEL TO		SURFACE TREATMENT		DATE REQD															
						X.XXX ± 0.013 FINISH 1.6				IDEN METHOD TAG																	
						DO NOT SCALE PRINT		PROJECT NUMBER		ATLIP-ED-0089		US ATLAS SILICONE SUBSYSTEM															
						THREADS ARE CLASS 2		PROJECT NAME		US ATLAS SILICONE SUBSYSTEM				MICROFILMED:		DWG. TYPE		SHOWN ON		SCALE: 1:1		DO NOT SCALE PRINTS					
						CHAMFER ENDS OF ALL SCREW THREADS 30°				Roger Smith		DATE 2/11/2003				ASSEM		nnXnnn		SHEET 1 OF 3							
						CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS				W.O. Miller		DATE 2/11/2003				PATENT CLEAR:		DESIGN ACCT. NO.		CATEGORY CODE		DWG. NO.		SIZE		REV.	
						BREAK EDGES .016 MAX. ON MACHINED WORK				W.O. Miller		DATE 2/11/2003						P1AP-11		AP6250		21F640				1	
						REMOVE BURRS, WELD SPLATTER & LOOSE SCALE																					
						IN ACCORDANCE WITH ASME Y14.5m & B46.1																					
REV DWG CHK ZONE DATE						CHANGES																					

[illegible]

SHOP ORDERS		SER NO.	ERNEST ORLANDO LAWRENCE				
ACCT NO.	NO. REQD.	DATE ISSD	BERKELEY NATIONAL LABORATORY				
DEL TO		DATE REQD	UNIVERSITY OF CALIFORNIA - BERKELEY				
SURFACE TREATMENT			LBNL ATLAS A SIDE END CONE INTERFACE ASSEMBLY				
IDEN METHOD TAG							
PROJECT NUMBER	ATLIP-ED-0089						
PROJECT NAME	US ATLAS SILICONE SUBSYSTEM						
DWG BY	Roger Smith	DATE 04/15/2002	MICROFILMED:	DWG. TYPE ASSEM	SHOWN ON nnXnnn	SCALE: 1:1	DO NOT SCALE PRINTS
CHK BY	CKD BY	DATE 04/15/2002	PATENT CLEAR:	DESIGN ACCT. NO. P1AP-11	CATEGORY CODE AP6250	SHEET 1 OF 2	
APR BY	APPROVED	DATE 04/15/2002				DWG. NO. 21F641	SIZE A

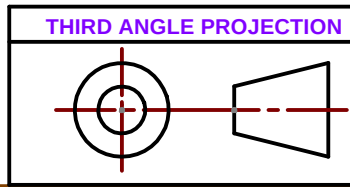


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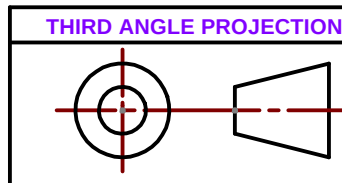


DWG. NO.		SIZE	REV.	SH.		
21F642		A	1		1	
ITEM	PART NO.	QTY	DESCRIPTION		MATERIAL	
1	21F736	1	Flat Panel Assembly			
2	21F738	1	Inner Vertex One Hole with Notch			
3	21F739	2	Inner Vertex One Hole			
4	21F740	1	Inner Vertex Two Hole			
5	21F741-2	8	Composite Screw, M3 X 8.0 lg			
6	21F741-1	8	Composite Taper Pin, 3 X 6.0 lg			
7	21F741-3	8	Composite Nut, M3			

						UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		SER NO.	ERNEST ORLANDO LAWRENCE				
						TOLERANCES	X.X ± 0.5	FRAC. ± 1/64	ACCT NO.	NO. REQD	DATE ISSD	BERKELEY NATIONAL LABORATORY			
							X.XX ± 0.25	ANGLES ± 30°	DEL TO		DATE REQD	UNIVERSITY OF CALIFORNIA - BERKELEY			
							X.XXX ± 0.013	FINISH 1.6	SURFACE TREATMENT			LBNL ATLAS C SIDE END CONE INTERFACE ASSEMBLY			
						DO NOT SCALE PRINT				IDEN METHOD TAG					
						THREADS ARE CLASS 2				PROJECT NUMBER	ATLIP-ED-0089	LBNL ATLAS SILICONE SUBSYSTEM			
						CHAMFER ENDS OF ALL SCREW THREADS 30°				PROJECT NAME	US ATLAS SILICONE SUBSYSTEM	MICROFILMED:	DWG. TYPE	SHOWN ON	SCALE: 1:1
						CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS				DWG BY	Roger Smith	DATE	04/15/2002	ASSEM	nnXnnn
						BREAK EDGES .016 MAX. ON MACHINED WORK				CHK BY	CKD BY	DATE	04/15/2002	PATENT CLEAR:	DESIGN ACCT. NO.
						REMOVE BURRS, WELD SPLATTER & LOOSE SCALE				APR BY	APPROVED	DATE	04/15/2002		P1AP-11
						IN ACCORDANCE WITH ASME Y14.5M & B46.1								CATEGORY CIDE	DWG. NO.
														AP6250	21F642
														SIZE	REV.
															A



REV	DWG	CHK	ZONE	DATE	CHANGES
A3				01/17/03	Item 6 now Composite material
A2				01/17/03	Added item 7
A1				01/17/03	Item 5 was Soc Hd Sc, M3 X 5.0 lg



UNLESS OTHERWISE SPECIFIED	
TOLERANCES	X.X $\pm$ 0.5
	FRAC. $\pm$ 1/64
	X.XX $\pm$ 0.25
	ANGLES $\pm$ 30'
	X.XXX $\pm$ 0.013
	FINISH 1.6

DO NOT SCALE PRINT

THREADS ARE CLASS 2

CHAMFER ENDS OF ALL SCREW THREADS 30°

CUT ROUND .15 THREAD RELIEF ON MACHINED THREADS

BREAK EDGES .015 MAX. ON MACHINED WORK

REMOVE BURRS, WELD SPALLING & LOOSE SCALE

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

RNREST ORLANDO LAWRENCE
ERKELEY NATIONAL LABORATORY
UNIVERSITY OF CALIFORNIA - BERKELEY

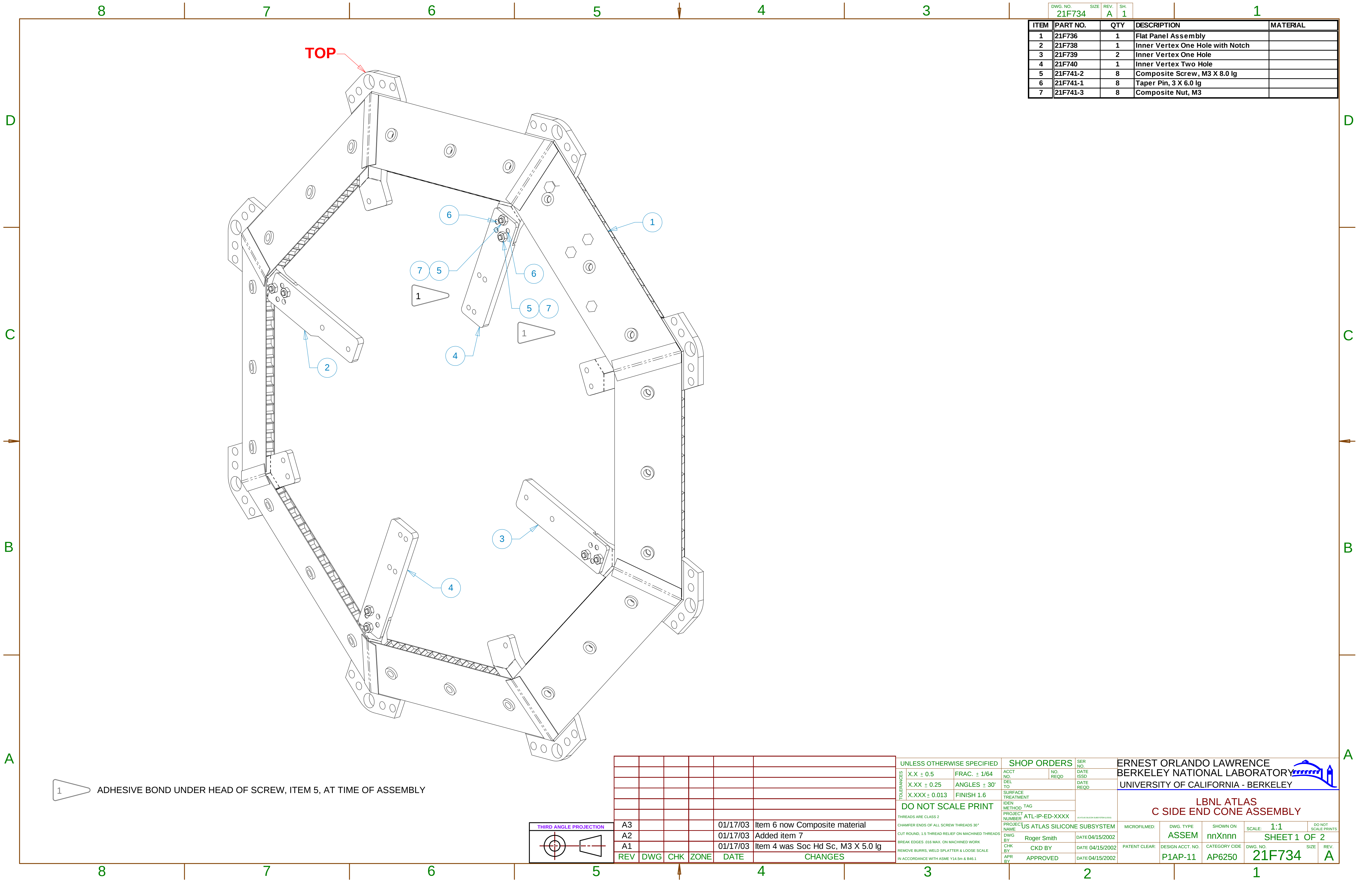

LBLN ATLAS
C SIDE END CONE
INTERFACE ASSEMBLY

MICROFILMED:	DWG. TYPE ASSEM	SHOWN ON nnXnnn	SCALE: 1:1	DO NOT SCALE PRINTS
			SHEET 2 OF 2	
PATENT CLEAR:	DESIGN ACCT. NO. P1AP-11	CATEGORY CODE AP6250	DWG. NO. 21F642	REV. A

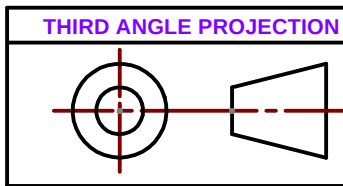
OP ORDERS		SER. NO.	ERNEST ORLANDO LAWRENCE					
NO. REQD		DATE ISSD	BERKELEY NATIONAL LABORATORY					
DATE REQD		UNIVERSITY OF CALIFORNIA - BERKELEY						
E ENT		LB NLBN SLICON SUBSYSTEM (L005) US ATLAS SILICONE SUBSYSTEM	LBNL ATLAS C SIDE END CONE INTERFACE ASSEMBLY					
T TAG								
T ATTILP-ED-0089								
US ATLAS SILICONE SUBSYSTEM			MICROFILMED:	DWG. TYPE ASSEM	SHOWN ON nnXnnn	SCALE: 1:1	DO NOT SCALE PRINTS	
Roger Smith	DATE 04/15/2002		PATENT CLEAR:	DESIGN ACCT. NO. P1AP-11	CATEGORY CIDE AP6250	DWG. NO. 21F642	SIZE	REV. A
CKD BY	DATE 04/15/2002							
APPROVED	DATE 04/15/2002							



THIRD ANGLE PROJECTION		A3			01/17/03	Item 6 now Composite material
	A2				01/17/03	Added item 7
	A1				01/17/03	Item 5 was Soc Hd Sc, M3 X 5.0 lg
	REV	DWG	CHK	ZONE	DATE	CHANGES

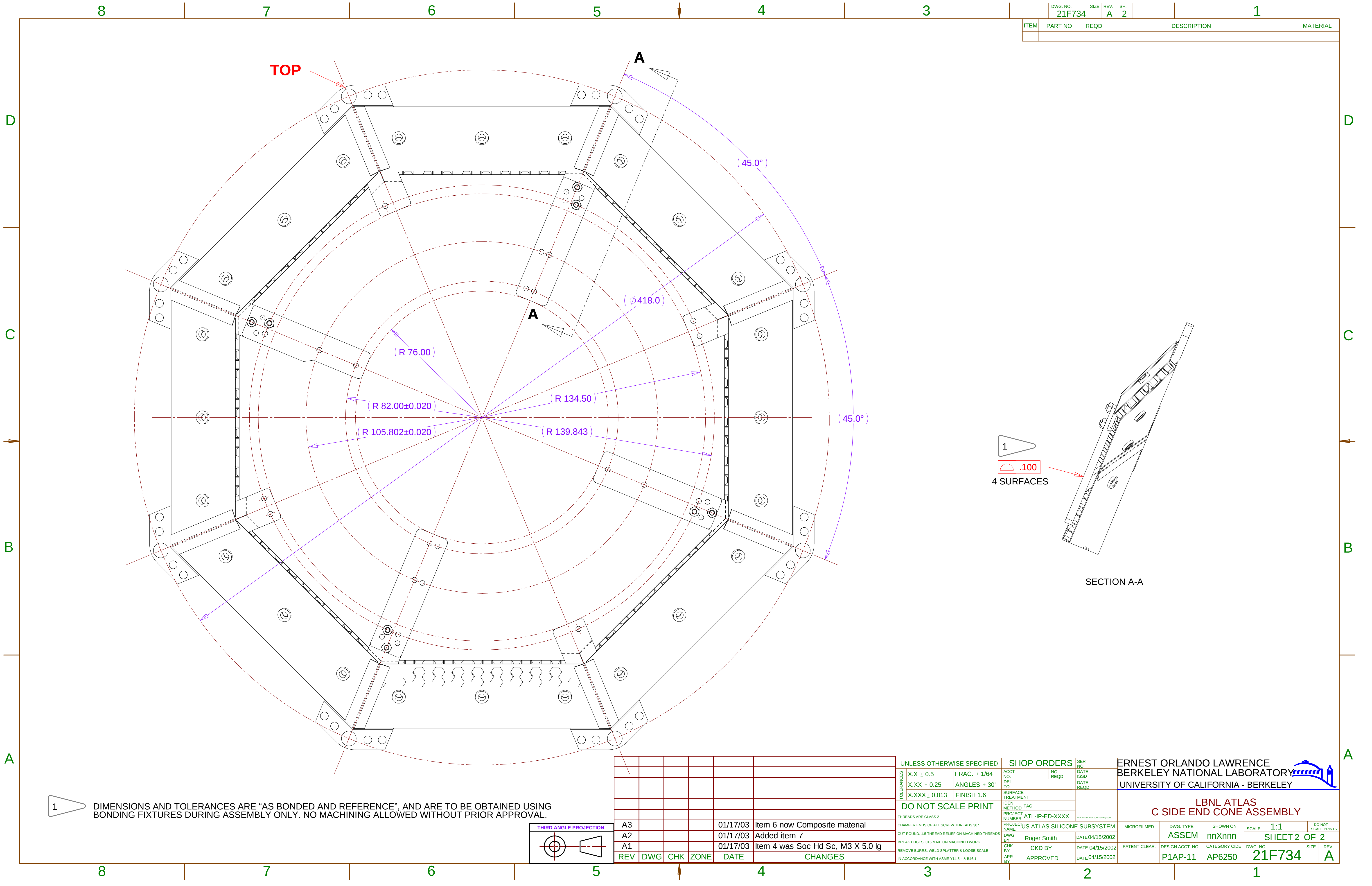


DWG. NO.		SIZE	REV.	SH.		
21F734		A	1		1	
ITEM	PART NO.	QTY	DESCRIPTION		MATERIAL	
1	21F736	1	Flat Panel Assembly			
2	21F738	1	Inner Vertex One Hole with Notch			
3	21F739	2	Inner Vertex One Hole			
4	21F740	1	Inner Vertex Two Hole			
5	21F741-2	8	Composite Screw, M3 X 8.0 lg			
6	21F741-1	8	Taper Pin, 3 X 6.0 lg			
7	21F741-3	8	Composite Nut, M3			

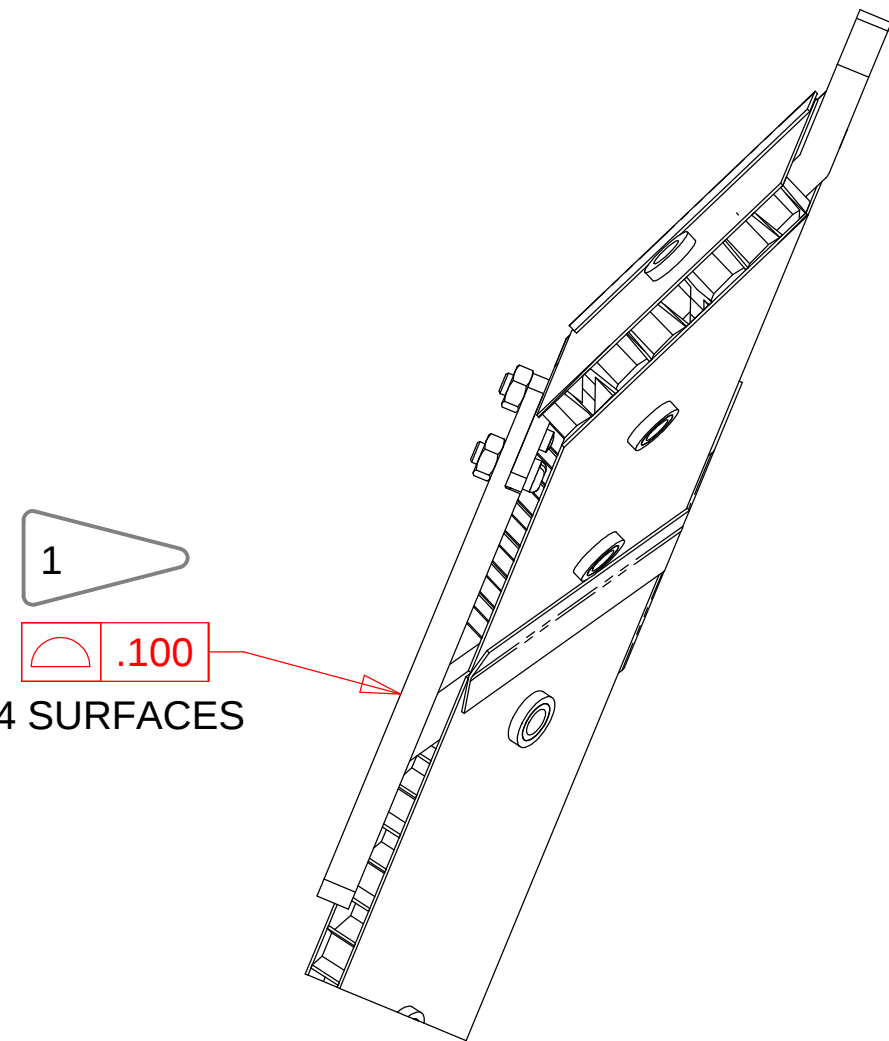


A3				01/17/03	Item 6 now Composite material
A2				01/17/03	Added item 7
A1				01/17/03	Item 4 was Soc Hd Sc, M3 X 5.0 lg
REV	DWG	CHK	ZONE	DATE	CHANGES

UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		SER NO.	ERNEST ORLANDO LAWRENCE						
					BERKELEY NATIONAL LABORATORY						
					UNIVERSITY OF CALIFORNIA - BERKELEY						
TOLERANCES		ACCT NO.		NO. REQD	DATE ISSD	LBNL ATLAS C SIDE END CONE ASSEMBLY					
X.X ± 0.5		FRAC. ± 1/64		DEL TO	DATE REQD						
X.XX ± 0.25		ANGLES ± 30°		SURFACE TREATMENT							
X.XXX ± 0.013		FINISH 1.6		IDENT. METHOD TAG							
DO NOT SCALE PRINT		PROJECT NUMBER		ATL-IP-ED-XXXX	USE ATLAS SILICONE SUBSYSTEM (LBNL)						
THREADS ARE CLASS 2		PROJECT NAME		US ATLAS SILICONE SUBSYSTEM							
CHAMFER ENDS OF ALL SCREW THREADS 30°		DWG BY		Roger Smith	DATE 04/15/2002	MICROFILMED:	DWG. TYPE	SHOWN ON	SCALE: 1:1	DO NOT SCALE PRINTS	
CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS		CHK BY		CKD BY	DATE 04/15/2002	PATENT CLEAR:	DESIGN ACCT. NO.	CATEGORY CIDE	DWG. NO.	SIZE	REV.
BREAK EDGES .016 MAX. ON MACHINED WORK		APR BY		APPROVED	DATE 04/15/2002		P1AP-11	AP6250	21F734		A
REMOVE BURRS, WELD SPLATTER & LOOSE SCALE											
IN ACCORDANCE WITH ASME Y14.5M & B46.1											

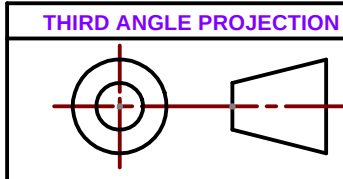


DWG. NO.		SIZE	REV.	SH.	1	
21F734			A	2		
ITEM	PART NO	REQD	DESCRIPTION			MATERIAL



SECTION A-A

1 DIMENSIONS AND TOLERANCES ARE "AS BONDED AND REFERENCE", AND ARE TO BE OBTAINED USING BONDING FIXTURES DURING ASSEMBLY ONLY. NO MACHINING ALLOWED WITHOUT PRIOR APPROVAL.



A3				01/17/03	Item 6 now Composite material	
A2				01/17/03	Added item 7	
A1				01/17/03	Item 4 was Soc Hd Sc, M3 X 5.0 lg	
REV	DWG	CHK	ZONE	DATE	CHANGES	

UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		SER NO.	ERNEST ORLANDO LAWRENCE				
X.X ± 0.5 FRAC. ± 1/64		ACCT NO.	NO. REQD	DATE ISSD	BERKELEY NATIONAL LABORATORY				
X.XX ± 0.25 ANGLES ± 30'		OEL TO	DATE TO	DATE REQD	UNIVERSITY OF CALIFORNIA - BERKELEY				
TOLERANCES		SURFACE TREATMENT		LBNL ATLAS C SIDE END CONE ASSEMBLY					
X.XXX ± 0.013 FINISH 1.6		IDEN METHOD TAG							
DO NOT SCALE PRINT		PROJECT NUMBER							
THREADS ARE CLASS 2		ATL-IP-ED-XXXX		UNIVERSITY OF CALIFORNIA - BERKELEY					
CHAMFER ENDS OF ALL SCREW THREADS 30°		PROJECT NAME		US ATLAS SILICONE SUBSYSTEM					
CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS		DWG BY		1.5 THREAD RELIEF		DWG. TYPE		SHOWN ON	
BREAK EDGES .016 MAX. ON MACHINED WORK		Roger Smith		DATE 04/15/2002		ASSEM		nnXnnn	
REMOVE BURRS, WELD SPLATTER & LOOSE SCALE		CHK BY		DATE 04/15/2002		PATENT CLEAR:		CATEGORY CIDE	
IN ACCORDANCE WITH ASME Y14.5M & B46.1		APR BY		DATE 04/15/2002		DESIGN ACCT. NO.		DWG. NO.	
		APPROVED				P1AP-11		AP6250	
								21F734	
								SCALE: 1:1	
								SHEET 2 OF 2	
								DO NOT SCALE PRINTS	
								SIZE	
								REV.	
								A	