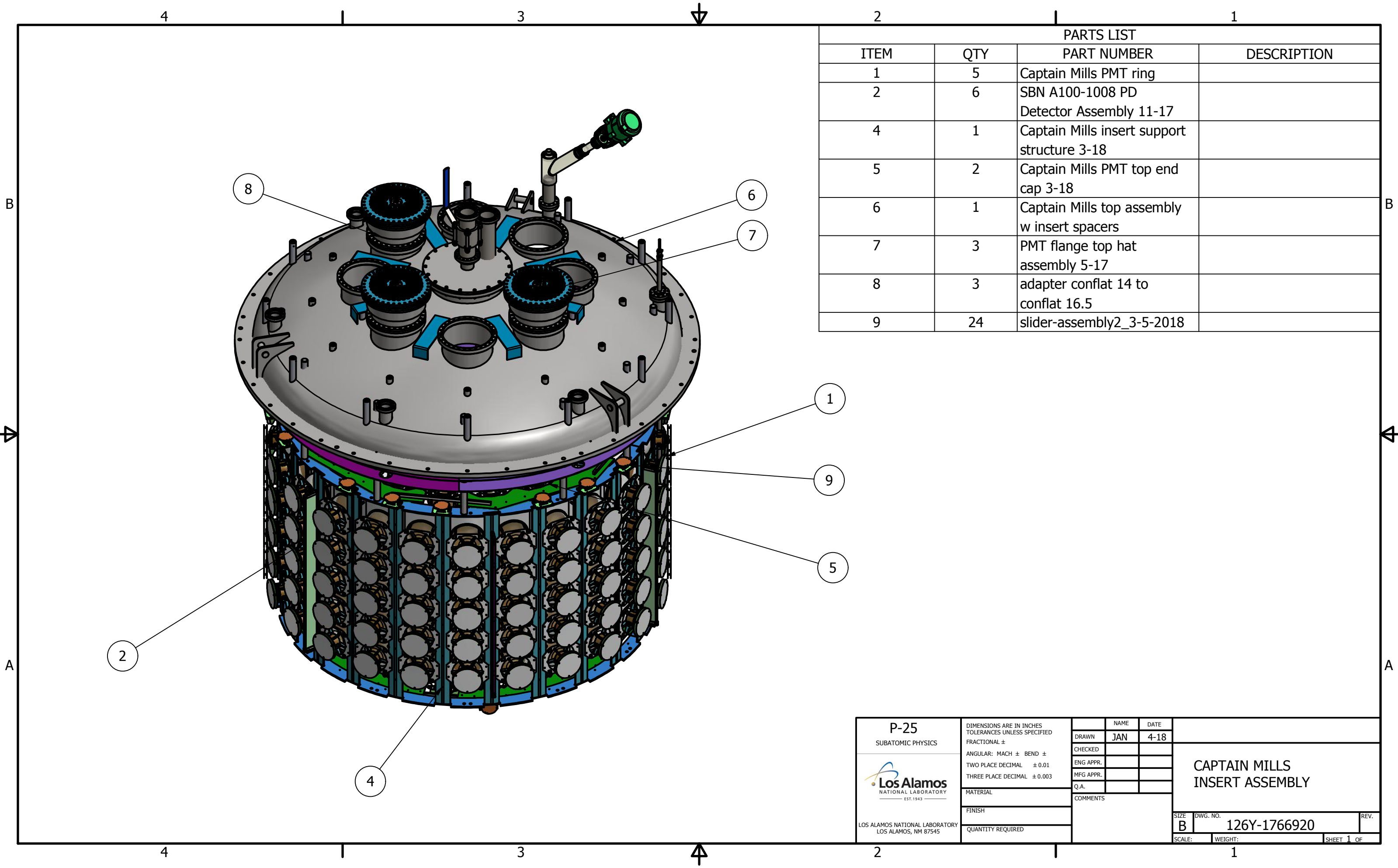
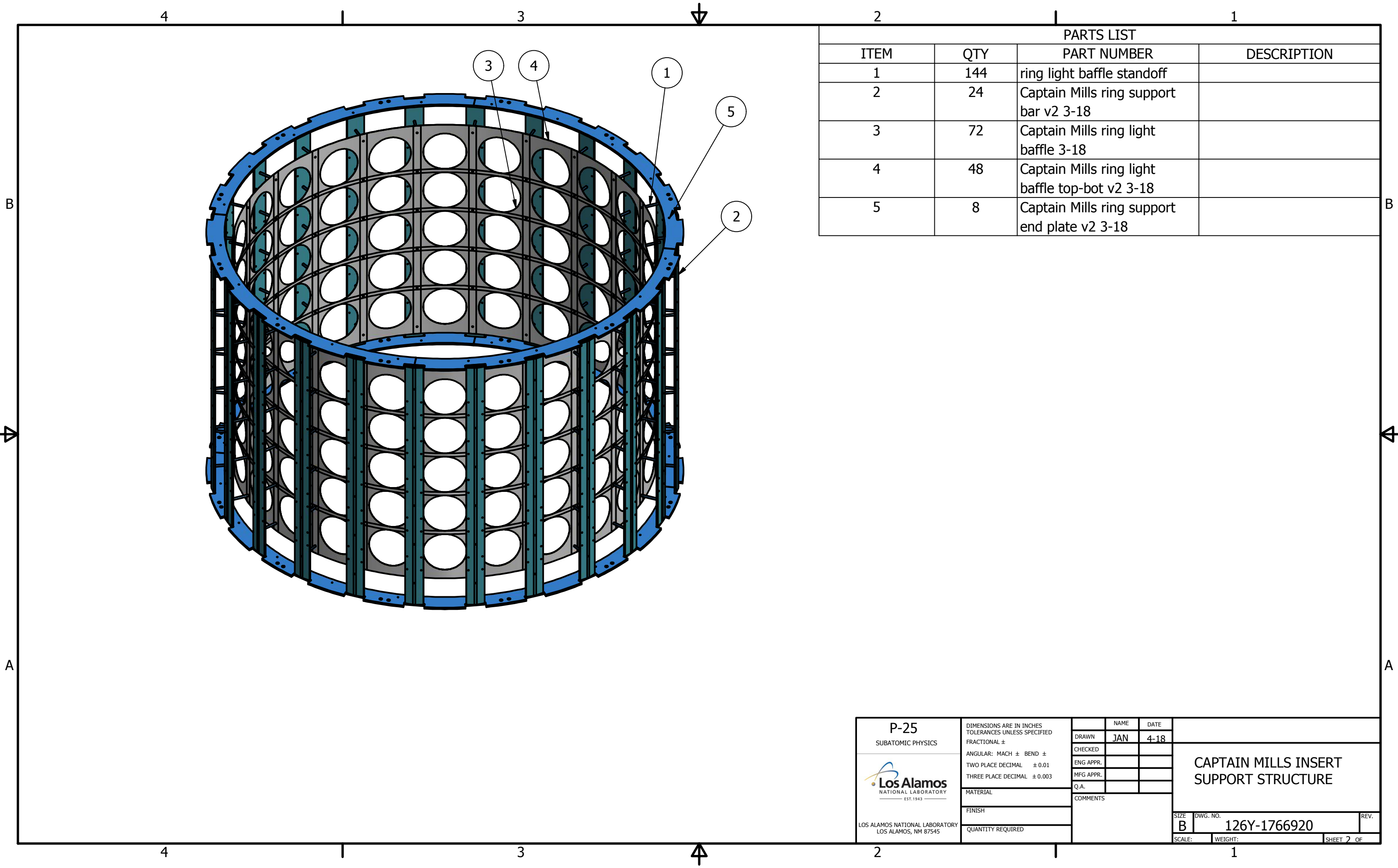




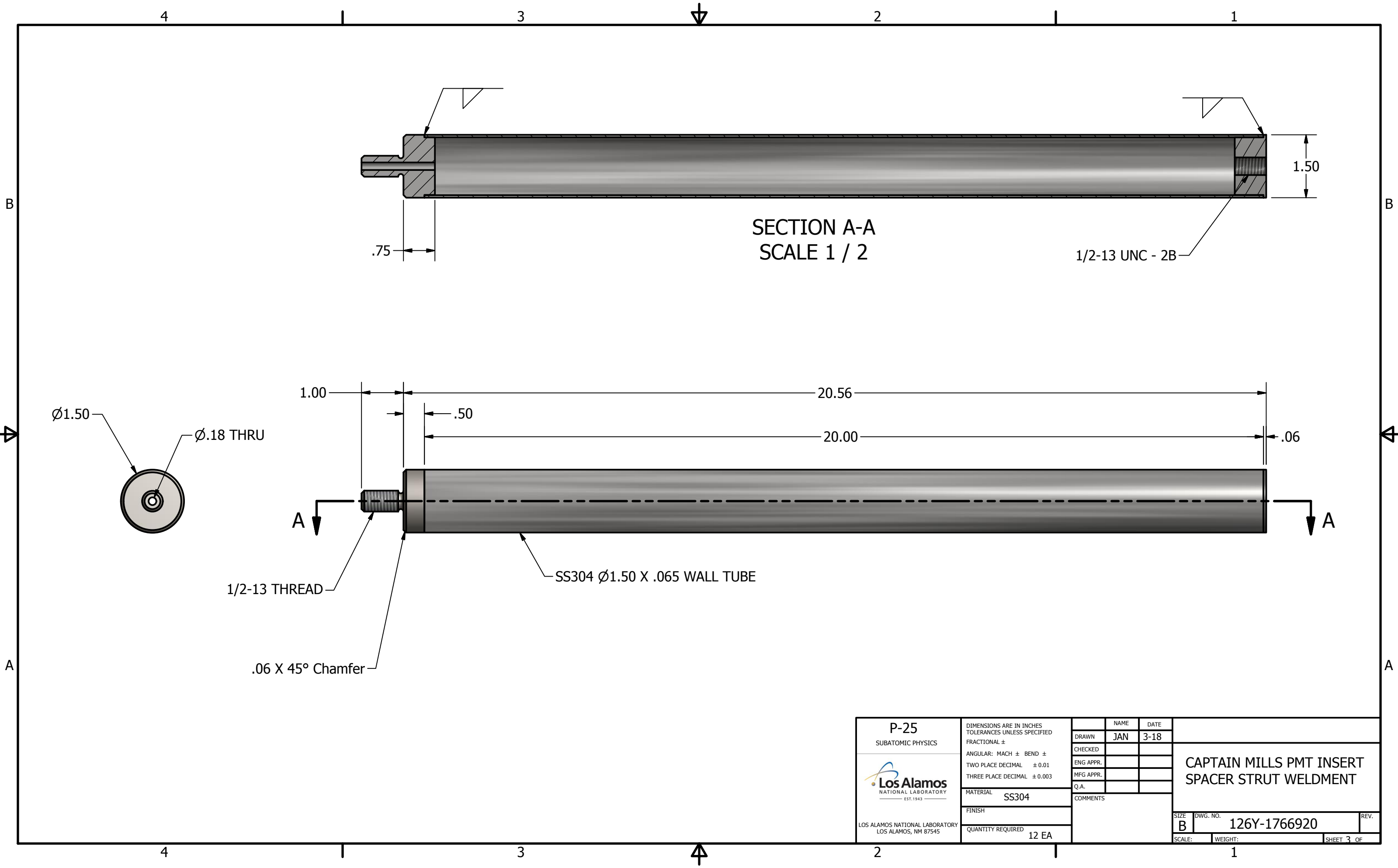
PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	5	Captain Mills PMT ring	
2	6	SBN A100-1008 PD Detector Assembly 11-17	
4	1	Captain Mills insert support structure 3-18	
5	2	Captain Mills PMT top end cap 3-18	
6	1	Captain Mills top assembly w insert spacers	
7	3	PMT flange top hat assembly 5-17	
8	3	adapter conflat 14 to conflat 16.5	
9	24	slider-assembly2_3-5-2018	

P-25 SUBATOMIC PHYSICS		DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± 0.01 THREE PLACE DECIMAL ± 0.003		NAME DRAWN JAN 4-18	DATE 4-18
Los Alamos NATIONAL LABORATORY EST. 1943		MATERIAL		ENG APPR.	
LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM 87545		FINISH		MFG APPR.	
QUANTITY REQUIRED		COMMENTS		Q.A.	
				CAPTAIN MILLS INSERT ASSEMBLY	
				SIZE B	DWG. NO. 126Y-1766920
				SCALE:	WEIGHT: SHEET 1 OF

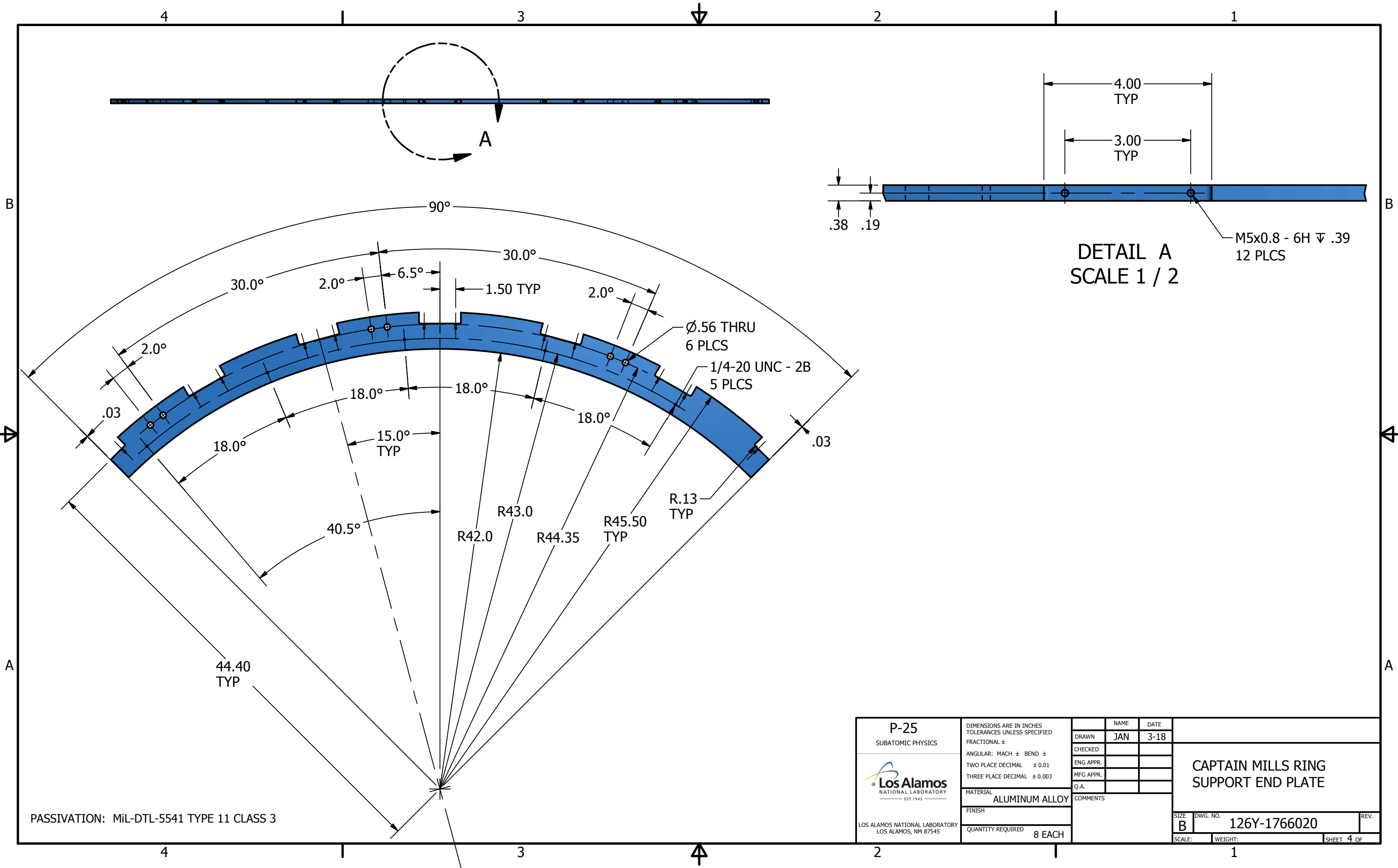


PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	144	ring light baffle standoff	
2	24	Captain Mills ring support bar v2 3-18	
3	72	Captain Mills ring light baffle 3-18	
4	48	Captain Mills ring light baffle top-bot v2 3-18	
5	8	Captain Mills ring support end plate v2 3-18	

P-25 SUBATOMIC PHYSICS		DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± 0.01 THREE PLACE DECIMAL ± 0.003		NAME	DATE	CAPTAIN MILLS INSERT SUPPORT STRUCTURE	
				DRAWN	JAN 4-18		
 LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM 87545		MATERIAL FINISH QUANTITY REQUIRED		CHECKED			
				ENG APPR.			
				MFG APPR.			
				Q.A.			
				COMMENTS		SIZE B	DWG. NO. 126Y-1766920
						SCALE:	WEIGHT:
						SHEET 2 OF	

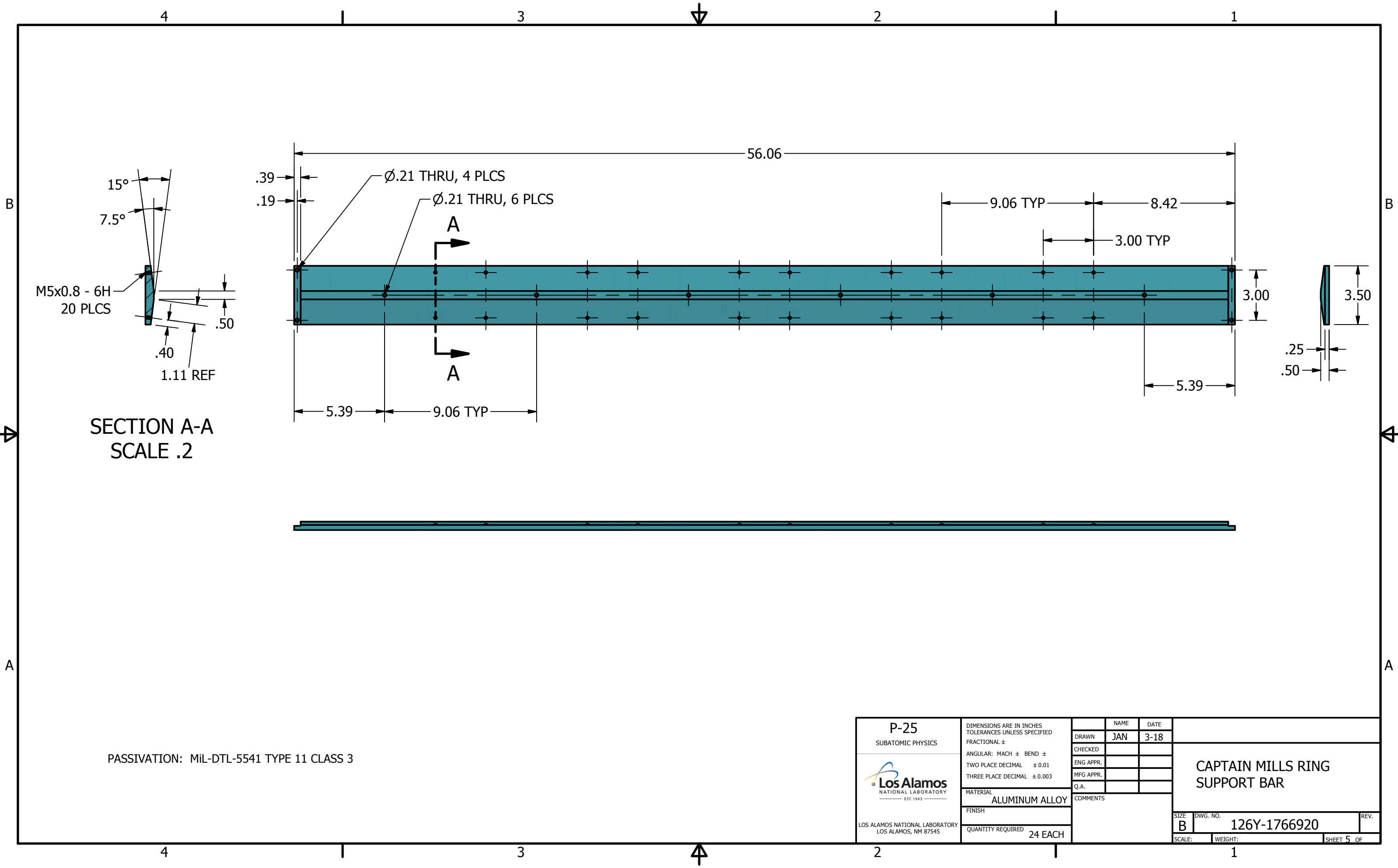


P-25 SUBATOMIC PHYSICS	Los Alamos NATIONAL LABORATORY EST. 1943 LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM 87545	DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± 0.01 THREE PLACE DECIMAL ± 0.003		NAME	DATE	CAPTAIN MILLS PMT INSERT SPACER STRUT WELDMENT	
			DRAWN	JAN	3-18		
			CHECKED				
			ENG APPR.				
			MFG APPR.				
		Q.A.					
		MATERIAL	SS304	COMMENTS			
		FINISH					
		QUANTITY REQUIRED	12 EA				
				SIZE		DWG. NO.	REV.
				B		126Y-1766920	
				SCALE:		WEIGHT:	SHEET 3 OF

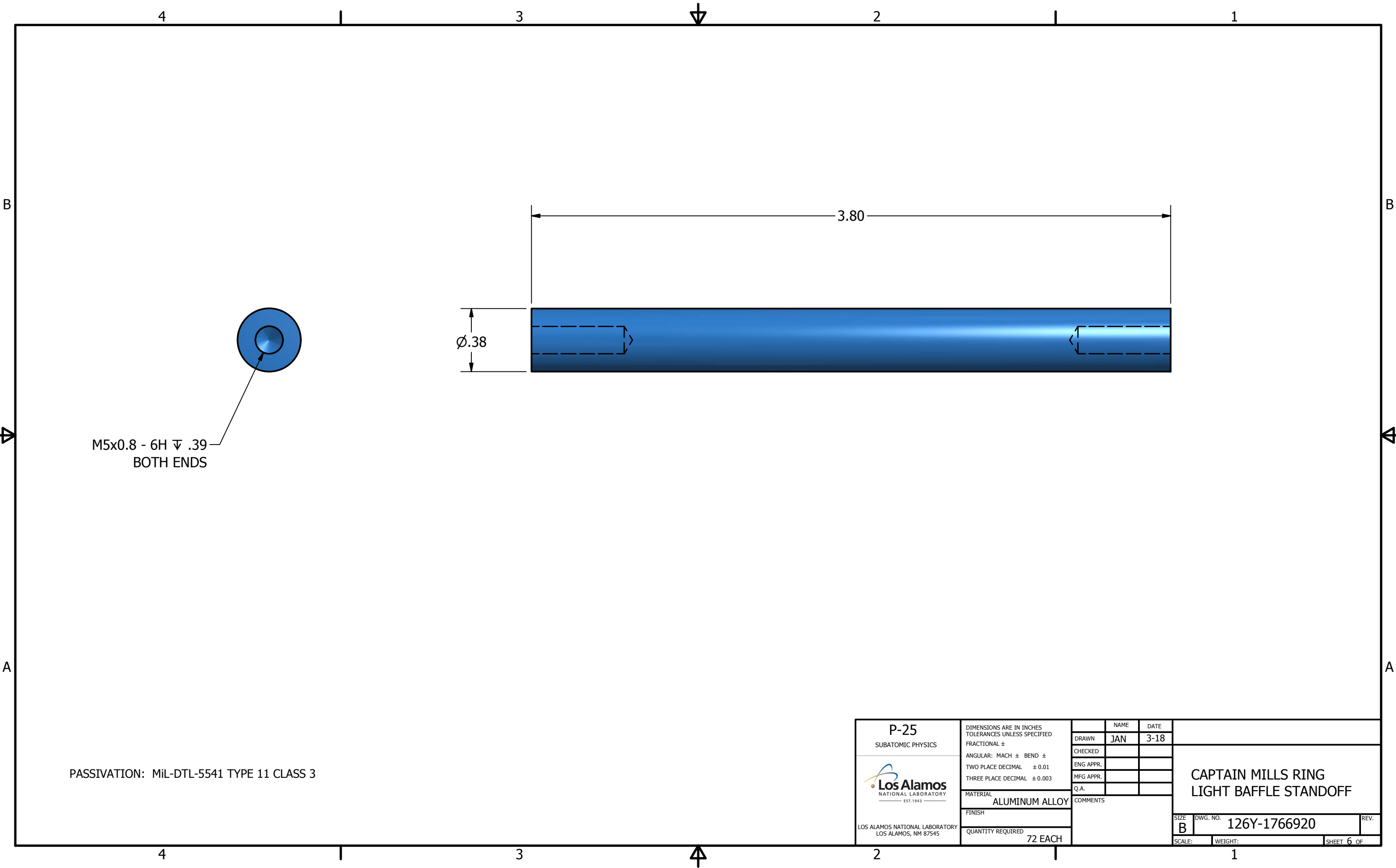


PASSIVATION: MIL-DTL-5541 TYPE 11 CLASS 3

P-25 SUBATOMIC PHYSICS		DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± 0.01 THREE PLACE DECIMAL ± 0.003		NAME DRAWN JAN 3-18	DATE	CAPTAIN MILLS RING SUPPORT END PLATE	
 LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM 87545		MATERIAL ALUMINUM ALLOY		CHECKED			
		FINISH		ENG APPR.			
		QUANTITY REQUIRED 8 EACH		MFG APPR.			
				Q.A.		SIZE B DWG. NO. 126Y-1766020 REV.	
				COMMENTS			
				SCALE:	WEIGHT:	SHEET 4 OF	



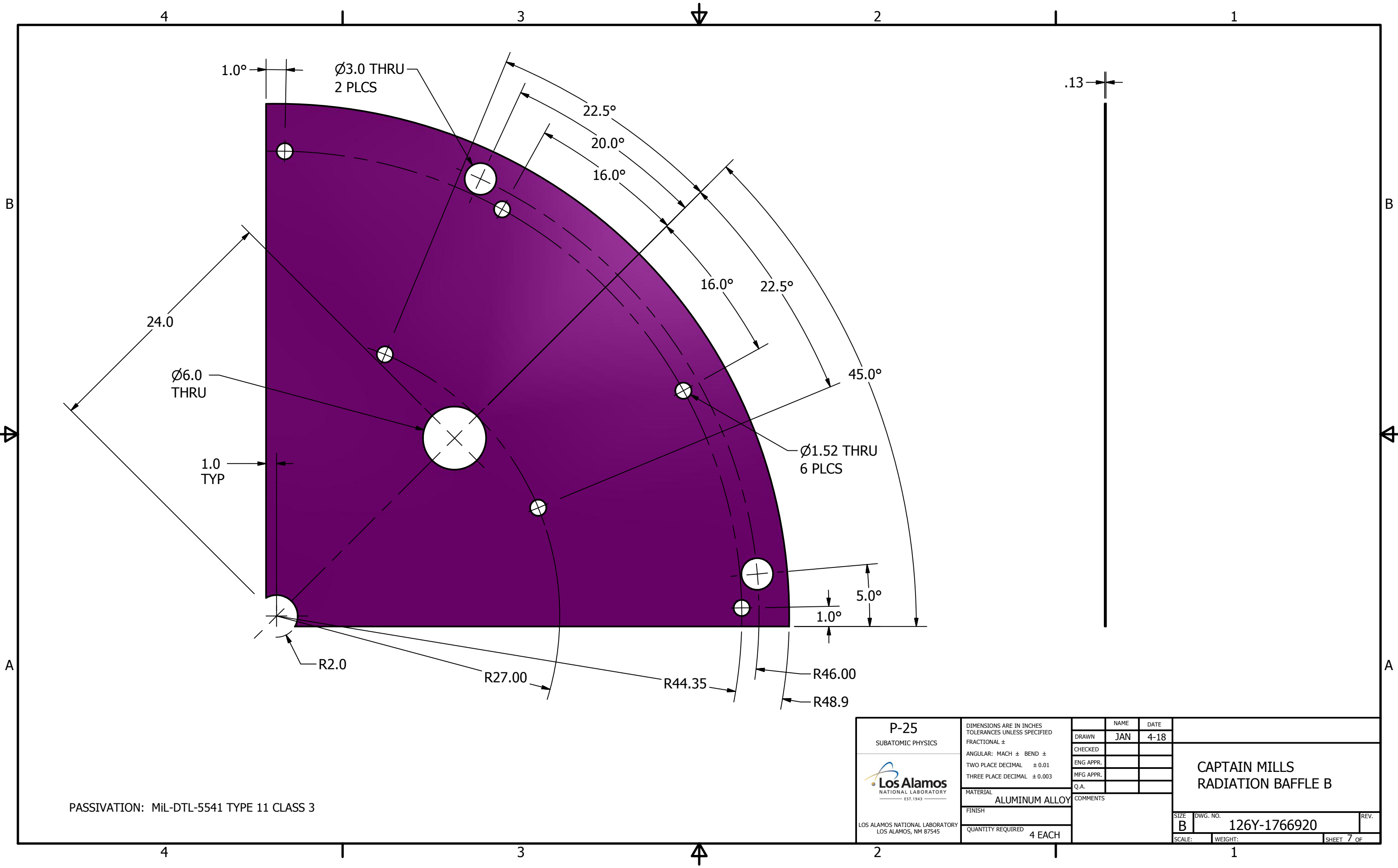
P-25 SUBATOMIC PHYSICS  Los Alamos NATIONAL LABORATORY EST. 1943 LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM 87545	DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± 0.01 THREE PLACE DECIMAL ± 0.003	DRAWN CHECKED ENG APPR. MFG APPR. Q.A.		
	MATERIAL ALUMINUM ALLOY	NAME DATE JAN 3-18		
	FINISH	CAPTAIN MILLS RING SUPPORT BAR		
	QUANTITY REQUIRED 24 EACH			
		SIZE B	DWG. NO. 126Y-1766920	REV.
		SCALE:	WEIGHT:	SHEET 5 OF



M5x0.8 - 6H ∇ .39
BOTH ENDS

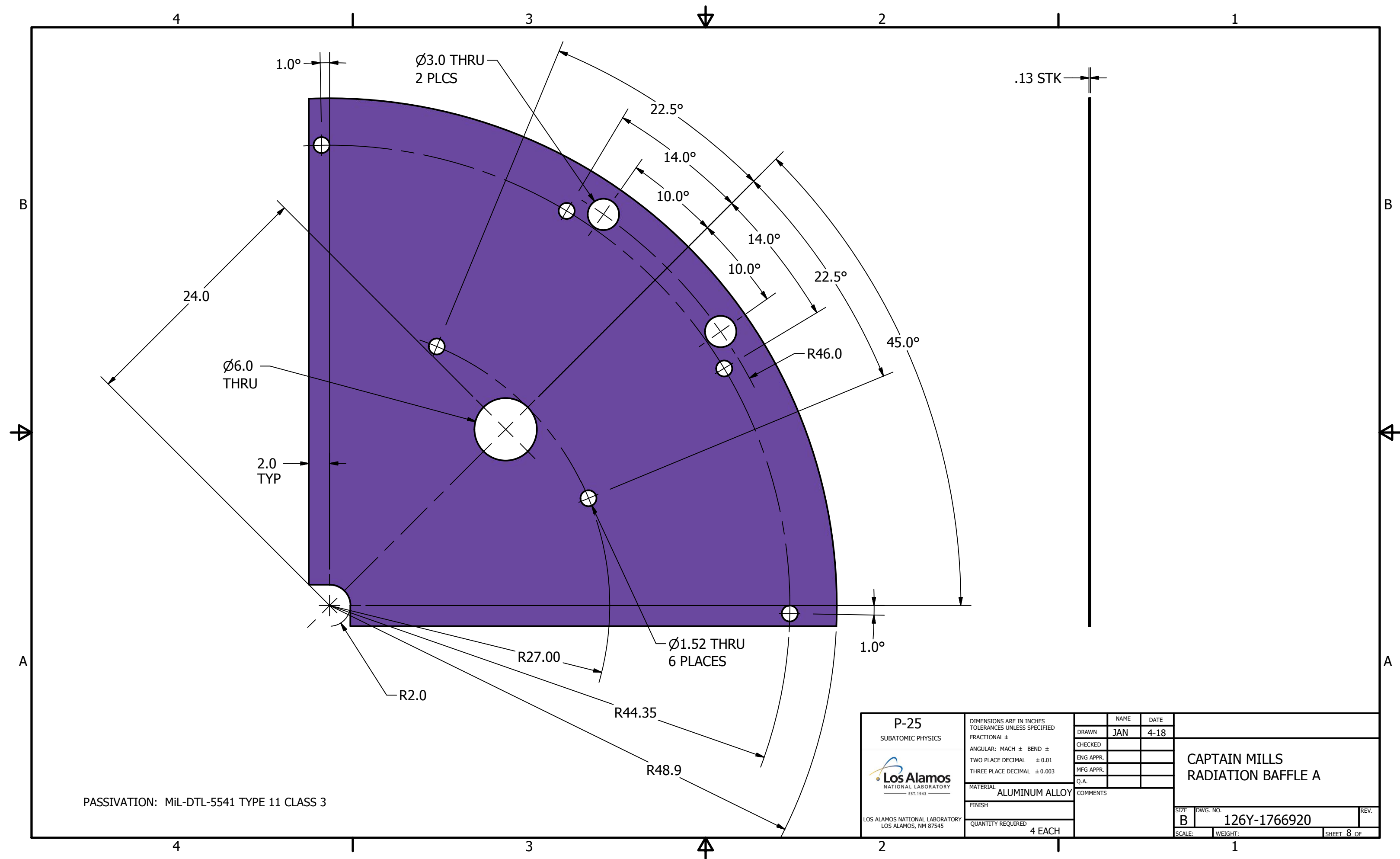
PASSIVATION: MIL-DTL-5541 TYPE 11 CLASS 3

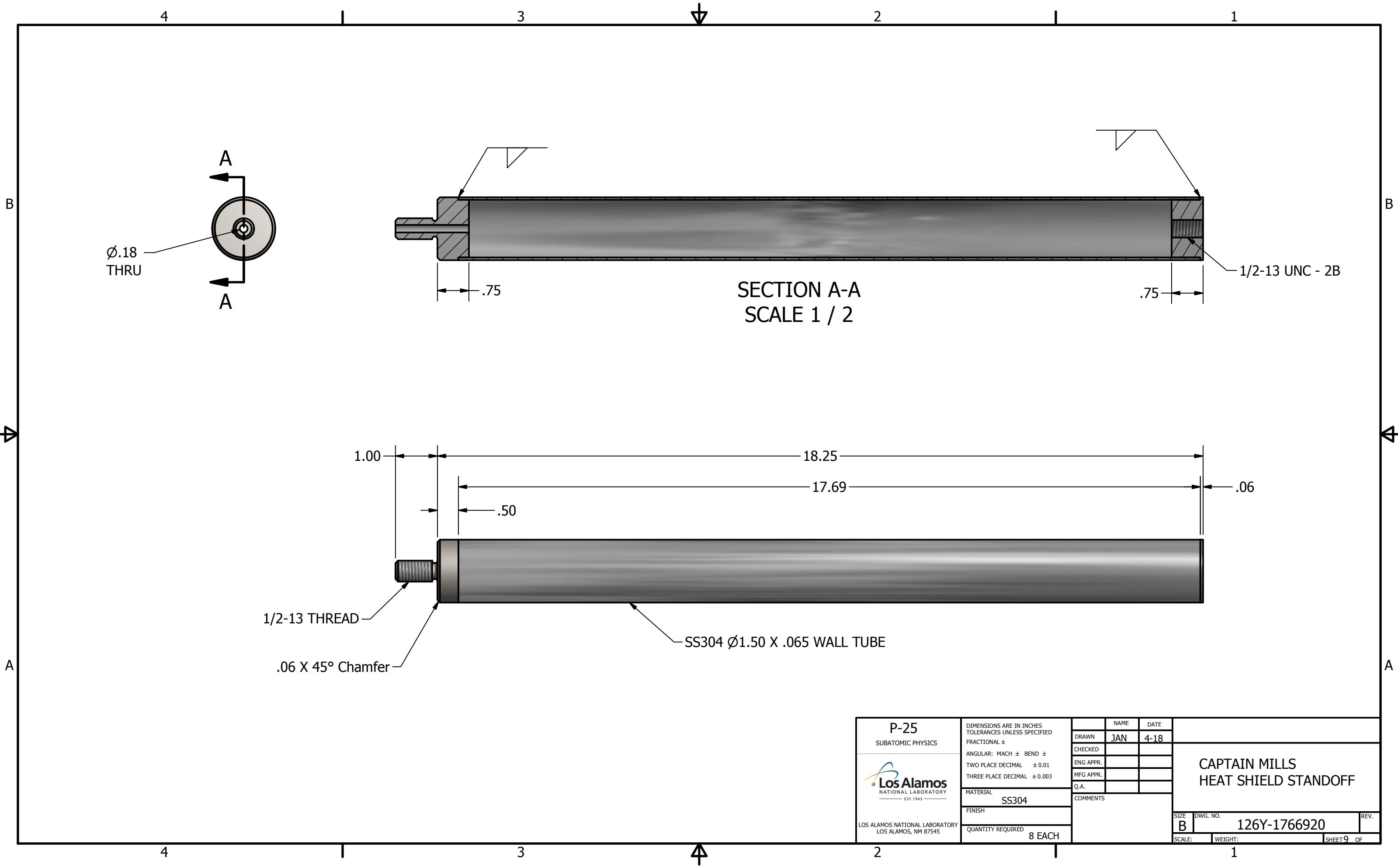
P-25 SUBATOMIC PHYSICS		DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± 0.01 THREE PLACE DECIMAL ± 0.003		NAME		DATE		CAPTAIN MILLS RING LIGHT BAFFLE STANDOFF					
				DRAWN		JAN 3-18							
 LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM 87545		MATERIAL ALUMINUM ALLOY		CHECKED									
				ENG APPR.									
				MFG APPR.									
				Q.A.									
		FINISH		COMMENTS		SIZE		DWG. NO.		REV.			
		QUANTITY REQUIRED				B		126Y-1766920					
		72 EACH						SCALE:		WEIGHT:		SHEET 6 OF	



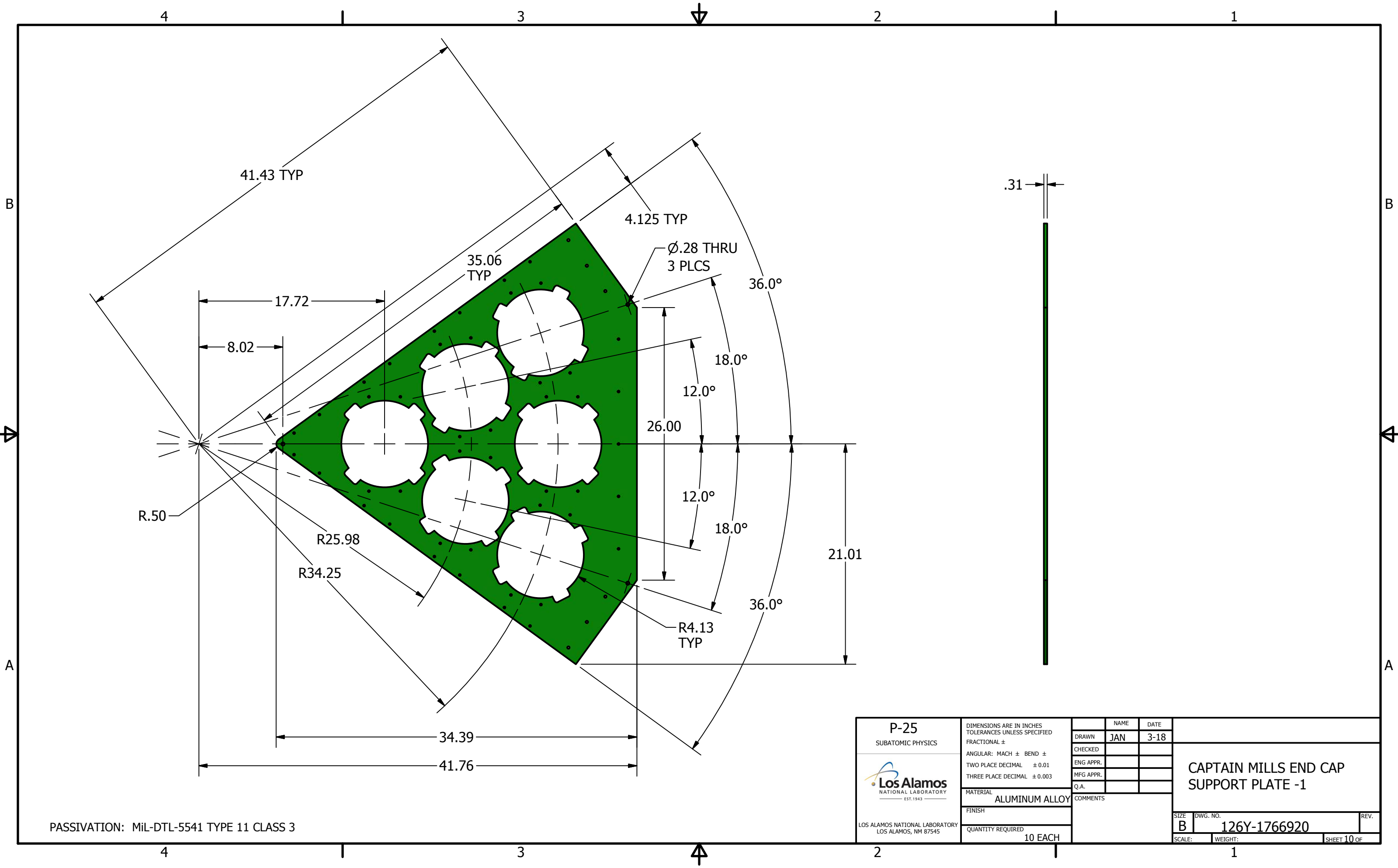
PASSIVATION: MIL-DTL-5541 TYPE 11 CLASS 3

P-25 SUBATOMIC PHYSICS		DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± 0.01 THREE PLACE DECIMAL ± 0.003		NAME JAN	DATE 4-18	CAPTAIN MILLS RADIATION BAFFLE B	
 LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM 87545		MATERIAL ALUMINUM ALLOY		CHECKED			
		FINISH		ENG APPR.			
		QUANTITY REQUIRED 4 EACH		MFG APPR.			
				Q.A.		SIZE B	
				COMMENTS			
				SCALE: WEIGHT: SHEET 7 OF		DWG. NO. 126Y-1766920	
						REV.	





P-25 SUBATOMIC PHYSICS	DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± 0.01 THREE PLACE DECIMAL ± 0.003		NAME	DATE	CAPTAIN MILLS HEAT SHIELD STANDOFF		
		DRAWN	JAN	4-18			
		CHECKED					
		ENG APPR.					
		MFG APPR.					
 Los Alamos NATIONAL LABORATORY EST. 1943 LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM 87545	MATERIAL SS304 FINISH QUANTITY REQUIRED 8 EACH	Q.A.			SIZE B DWG. NO. 126Y-1766920 REV.		
		COMMENTS					
		SCALE:				WEIGHT:	SHEET 9 OF



PASSIVATION: MIL-DTL-5541 TYPE 11 CLASS 3

P-25

SUBATOMIC PHYSICS



LOS ALAMOS NATIONAL LABORATORY
LOS ALAMOS, NM 87545

DIMENSIONS ARE IN INCHES
TOLERANCES UNLESS SPECIFIED
FRACTIONAL ±
ANGULAR: MACH ± BEND ±
TWO PLACE DECIMAL ± 0.01
THREE PLACE DECIMAL ± 0.003

MATERIAL
ALUMINUM ALLOY

FINISH

QUANTITY REQUIRED
10 EACH

	NAME	DATE
DRAWN	JAN	3-18
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS		

SIZE
B

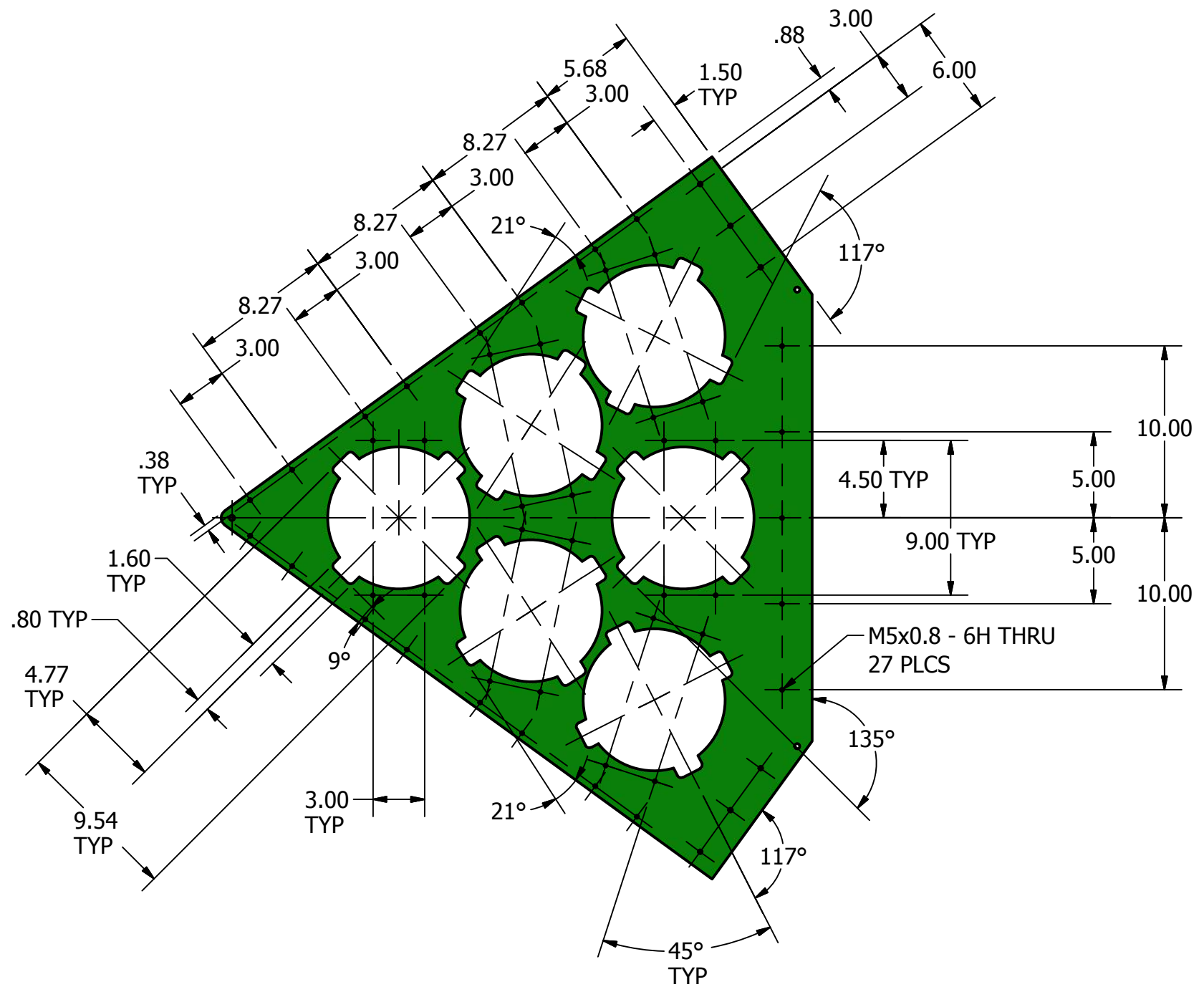
DWG. NO.
126Y-1766920

REV.

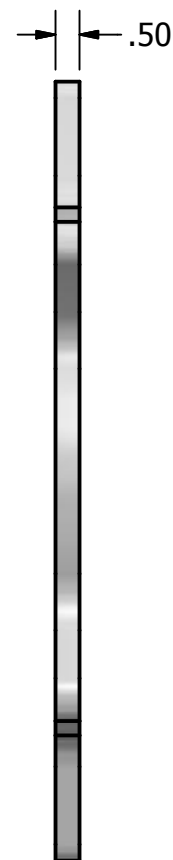
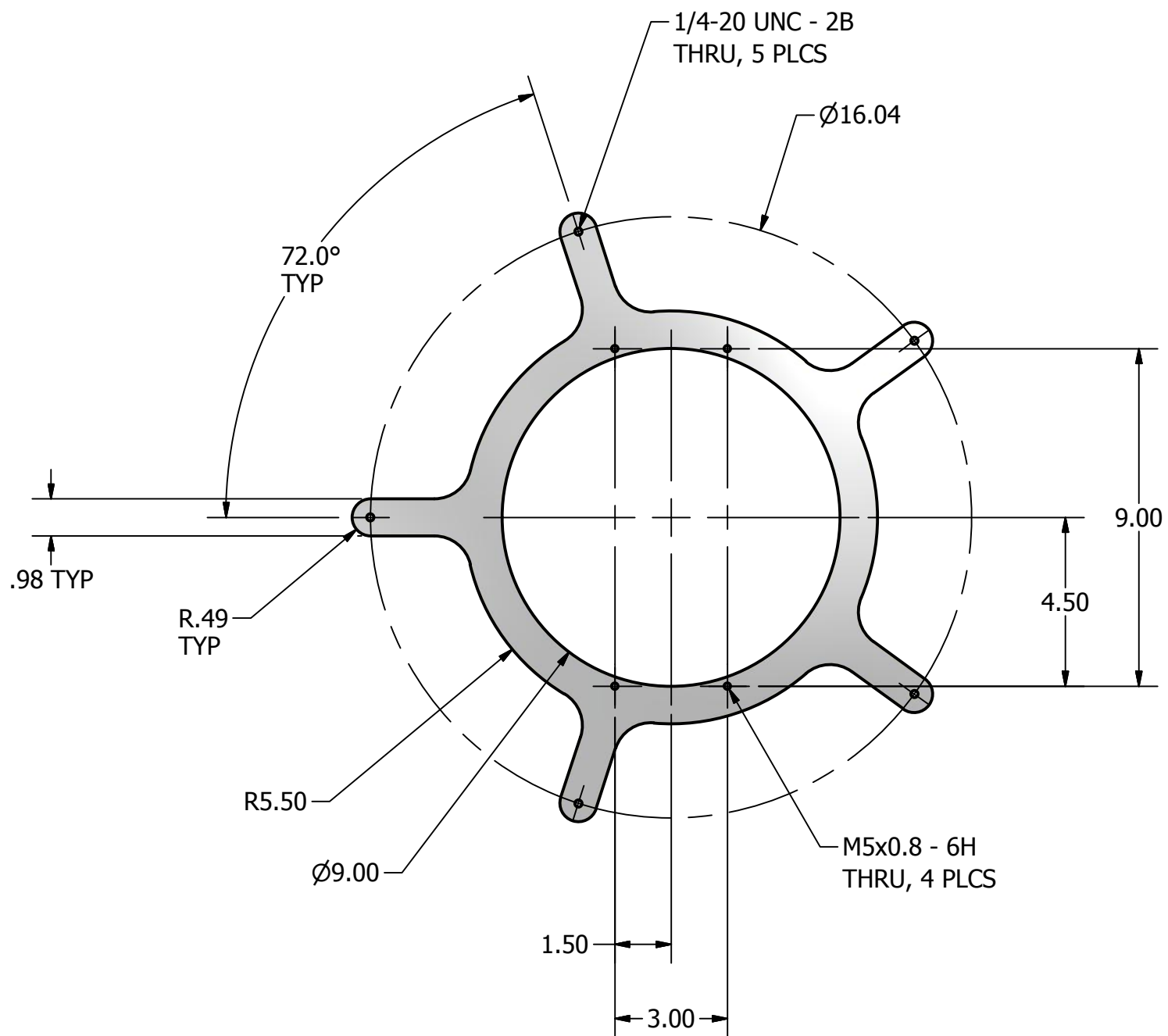
SCALE:

WEIGHT:

SHEET 10 OF

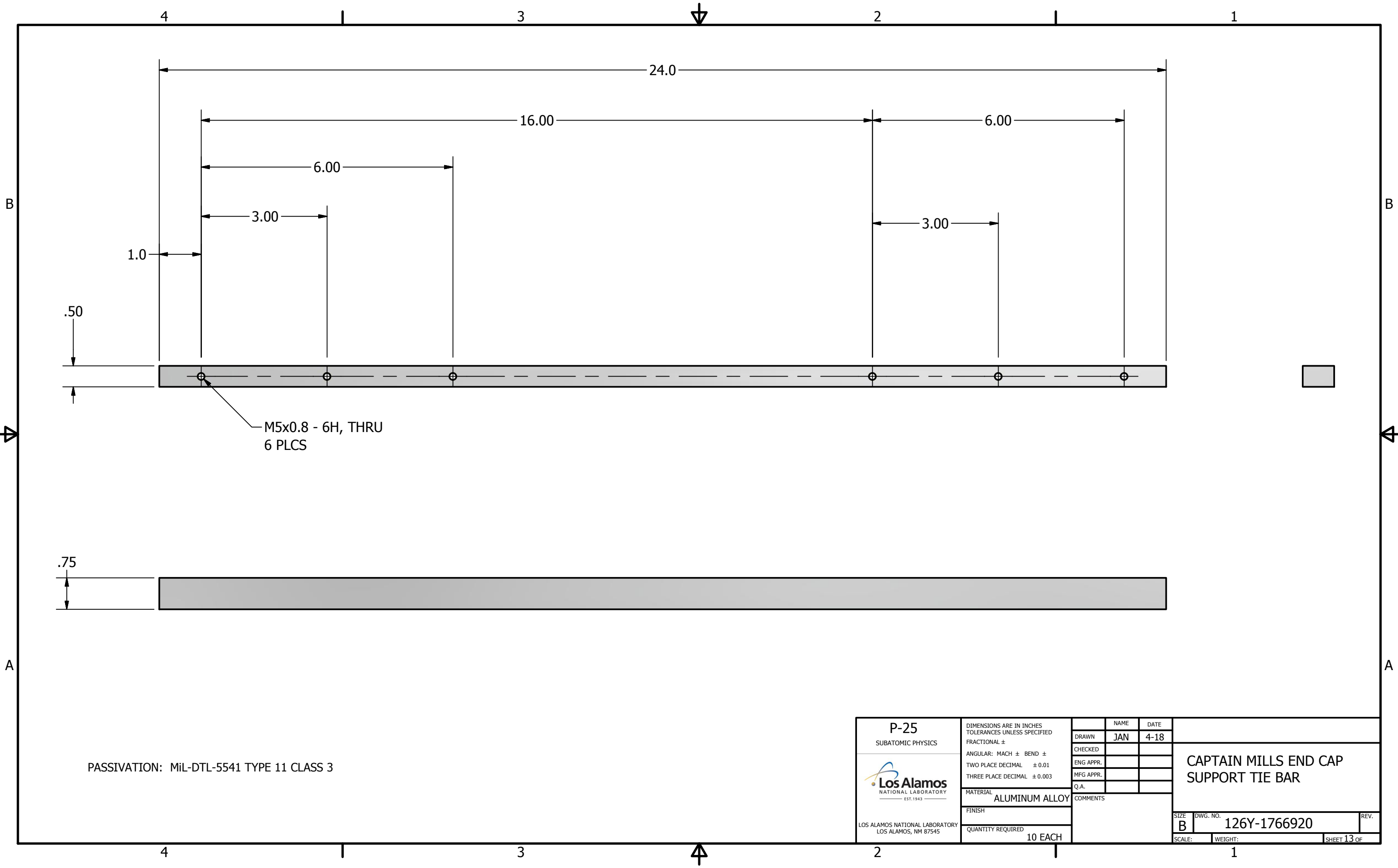


P-25 SUBATOMIC PHYSICS  LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM 87545	DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± 0.01 THREE PLACE DECIMAL ± 0.003		NAME JAN	DATE 4-18	CAPTAIN MILLS END CAP SUPPORT PLATE -2
	MATERIAL		CHECKED		
	FINISH		ENG APPR.		
	QUANTITY REQUIRED		MFG APPR.		
			Q.A.		
		COMMENTS			
SIZE B		DWG. NO. 126Y-1766920		REV.	
SCALE:		WEIGHT:		SHEET 11 OF	



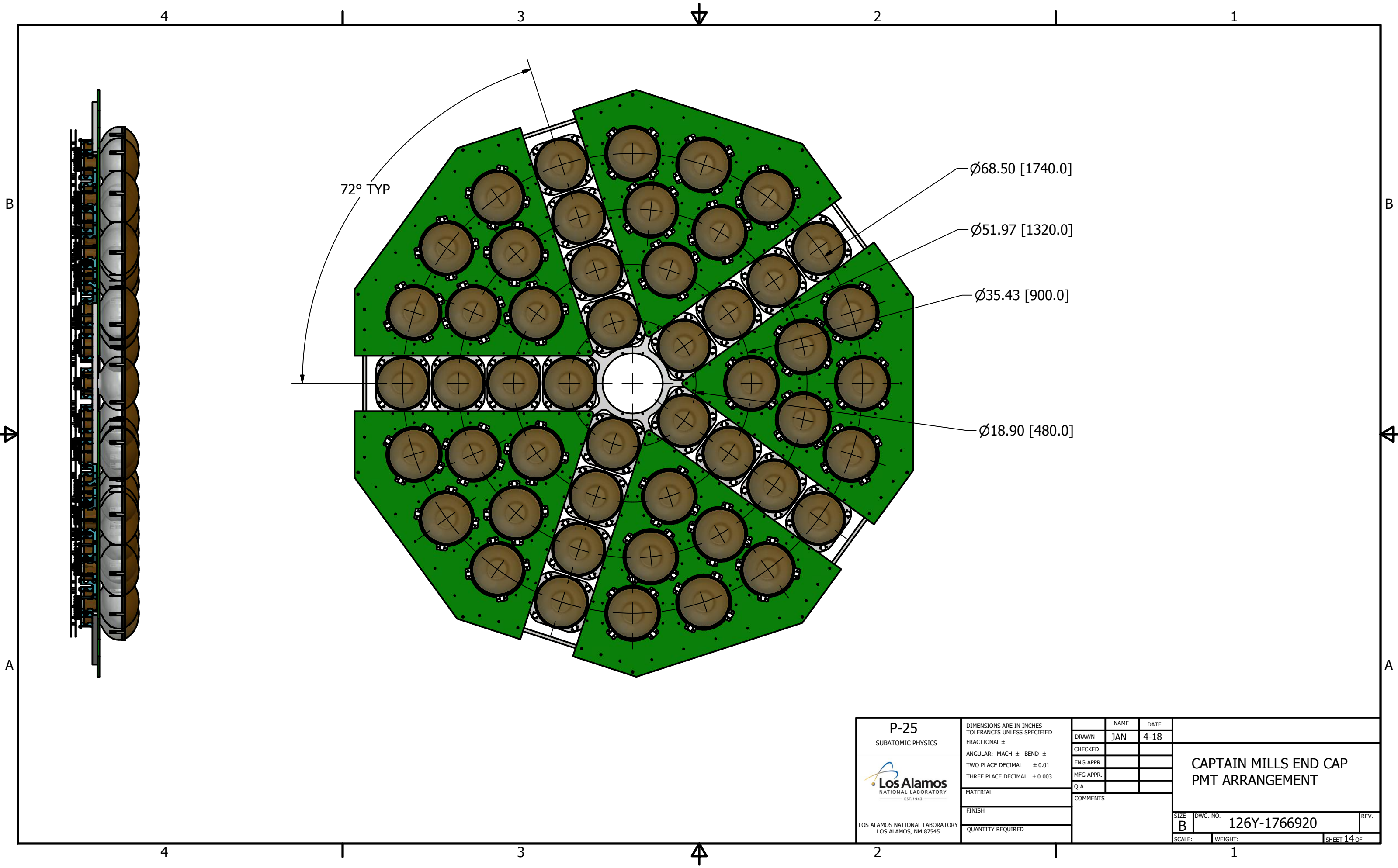
PASSIVATION: MIL-DTL-5541 TYPE 11 CLASS 3

P-25 SUBATOMIC PHYSICS  LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM 87545	DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± 0.01 THREE PLACE DECIMAL ± 0.003	<table><tr><td></td><td>NAME</td><td>DATE</td></tr><tr><td>DRAWN</td><td>JAN</td><td>4-18</td></tr><tr><td>CHECKED</td><td></td><td></td></tr><tr><td>ENG APPR.</td><td></td><td></td></tr><tr><td>MFG APPR.</td><td></td><td></td></tr><tr><td>Q.A.</td><td></td><td></td></tr></table>		NAME	DATE	DRAWN	JAN	4-18	CHECKED			ENG APPR.			MFG APPR.			Q.A.			CAPTAIN MILLS END CAP CENTER SUPPORT SIZE B DWG. NO. 126Y-1766920 REV. SCALE: WEIGHT: SHEET 12 OF
		NAME	DATE																		
	DRAWN	JAN	4-18																		
	CHECKED																				
	ENG APPR.																				
MFG APPR.																					
Q.A.																					
MATERIAL ALUMINUM ALLOY	COMMENTS																				
FINISH																					
QUANTITY REQUIRED 2 EACH																					

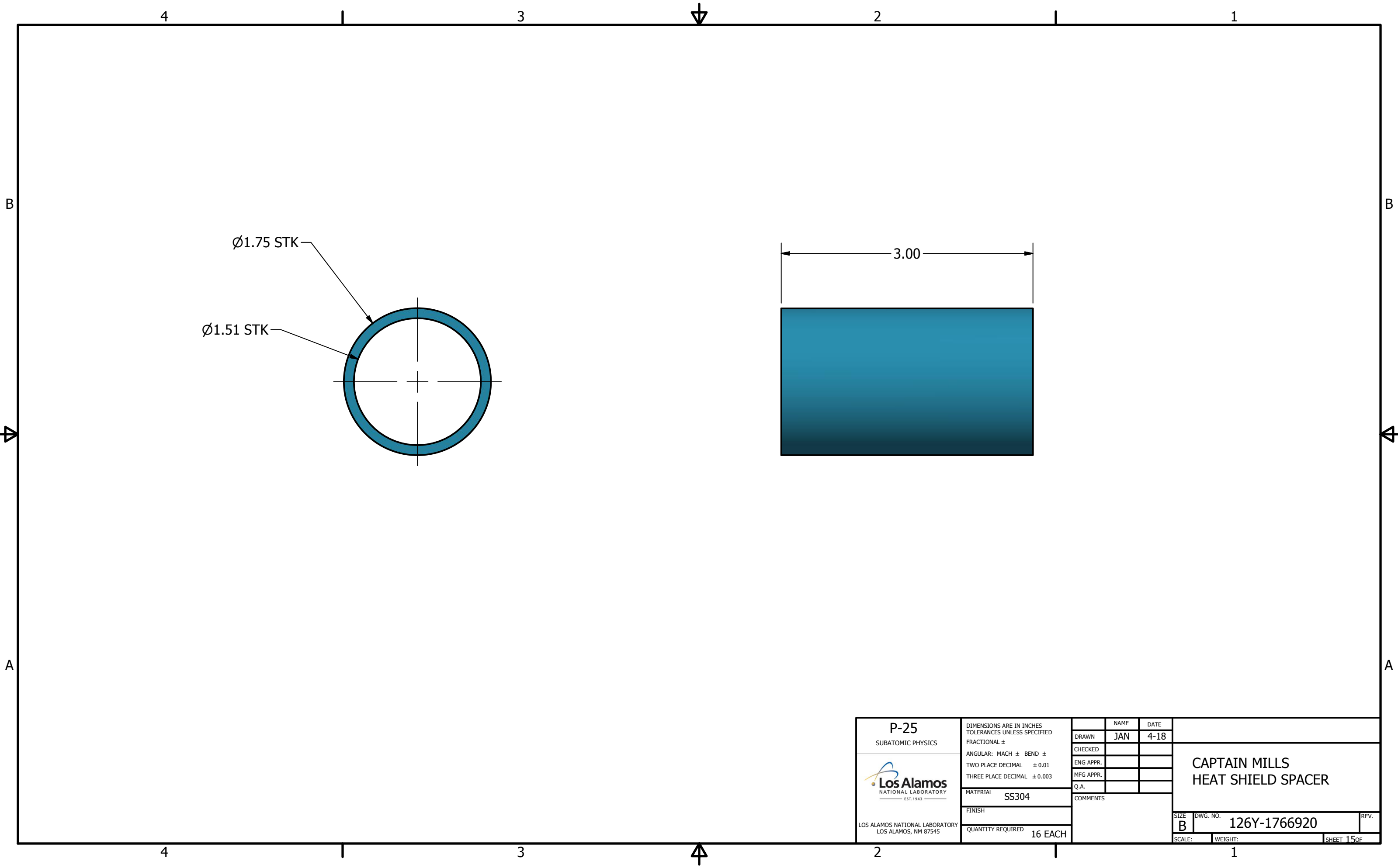


P-25 SUBATOMIC PHYSICS  LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM 87545		DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED			NAME	DATE	CAPTAIN MILLS END CAP SUPPORT TIE BAR			
		FRACTIONAL ±		DRAWN	JAN	4-18				
		ANGULAR: MACH ± BEND ±		CHECKED						
		TWO PLACE DECIMAL ± 0.01		ENG APPR.						
		THREE PLACE DECIMAL ± 0.003		MFG APPR.			SIZE B		DWG. NO. 126Y-1766920	
MATERIAL		Q.A.								
ALUMINUM ALLOY		COMMENTS								
FINISH					SCALE:		WEIGHT:		SHEET 13 OF	
QUANTITY REQUIRED		10 EACH								

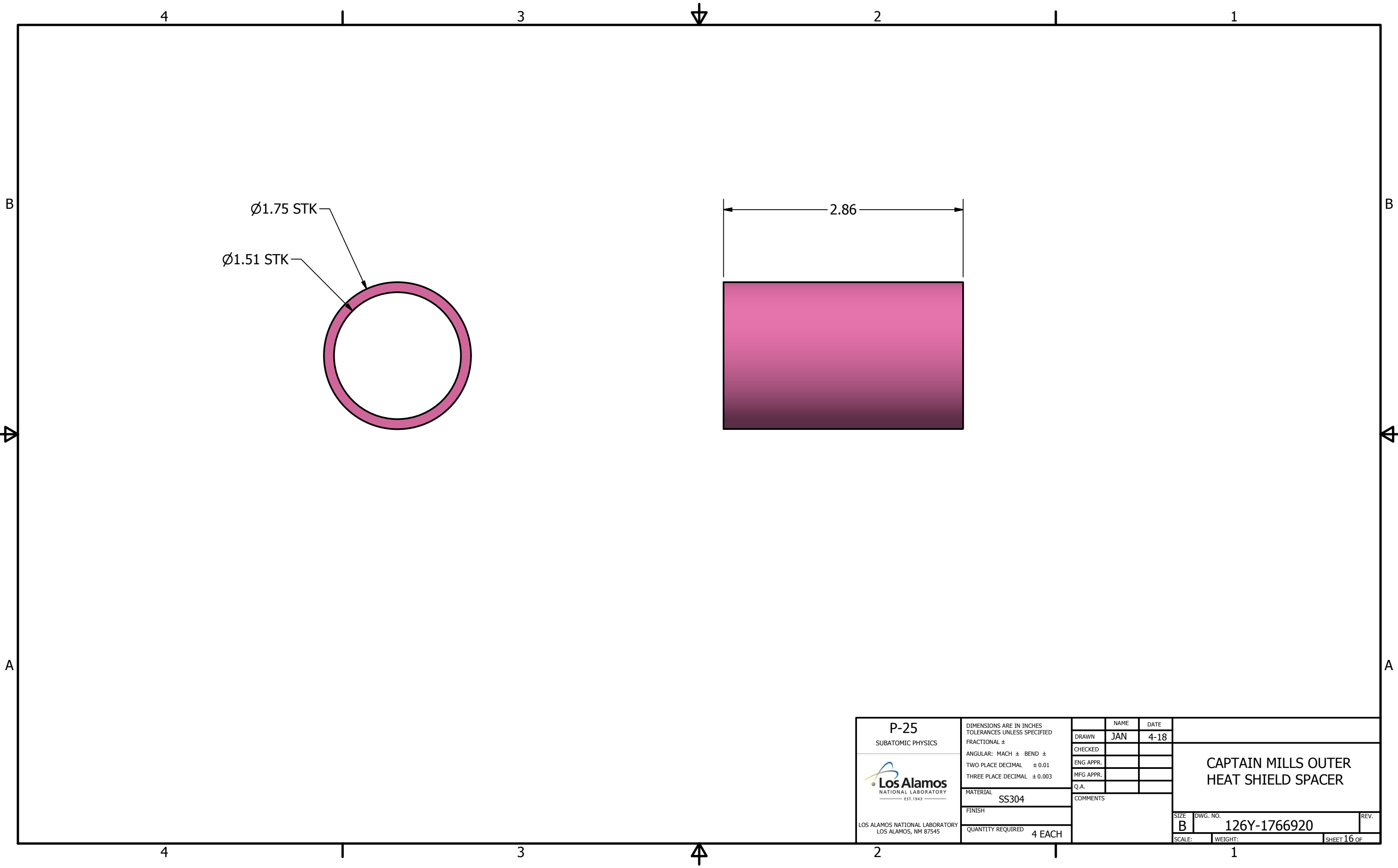
PASSIVATION: MIL-DTL-5541 TYPE 11 CLASS 3



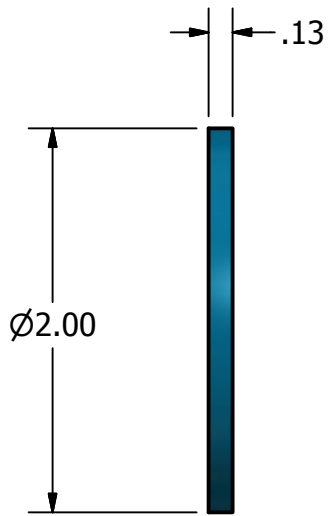
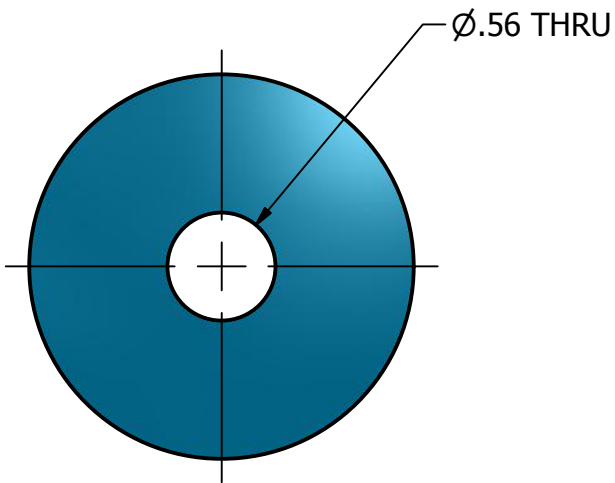
P-25 SUBATOMIC PHYSICS	DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± 0.01 THREE PLACE DECIMAL ± 0.003		NAME	DATE	CAPTAIN MILLS END CAP PMT ARRANGEMENT
		DRAWN	JAN	4-18	
 LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM 87545	MATERIAL FINISH QUANTITY REQUIRED	CHECKED			
		ENG APPR.			
		MFG APPR.			
		Q.A.			
COMMENTS		SIZE B	DWG. NO. 126Y-1766920	REV.	
		SCALE:	WEIGHT:	SHEET 14 OF	



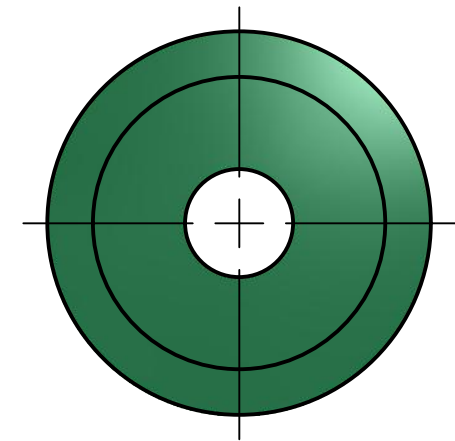
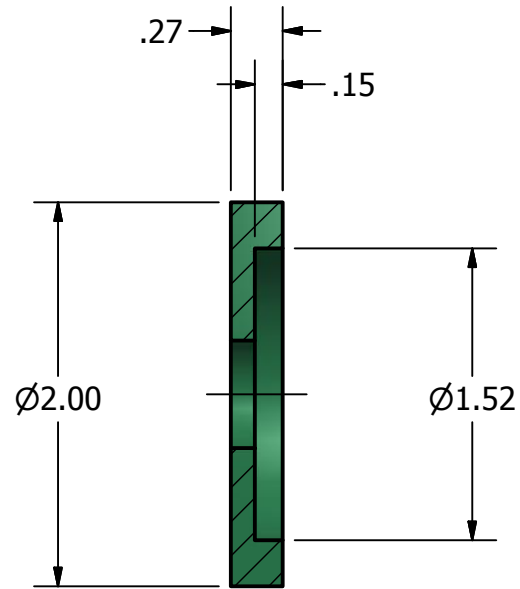
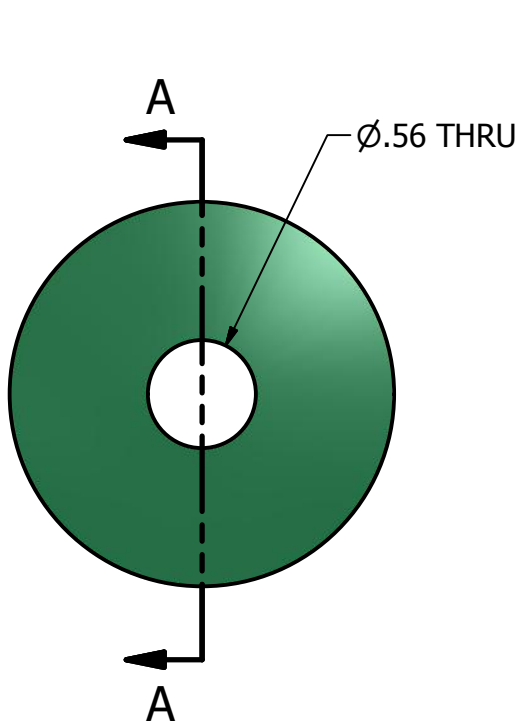
P-25 SUBATOMIC PHYSICS  LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM 87545	DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED FRACTIONAL ±				NAME	DATE	CAPTAIN MILLS HEAT SHIELD SPACER		
	ANGULAR: MACH ± BEND ±			DRAWN	JAN	4-18			
	TWO PLACE DECIMAL ± 0.01			CHECKED					
	THREE PLACE DECIMAL ± 0.003			ENG APPR.					
				MFG APPR.					
	MATERIAL SS304			Q.A.			REV.		
	FINISH			COMMENTS					
	QUANTITY REQUIRED 16 EACH								
				SIZE B		DWG. NO. 126Y-1766920			
				SCALE:		WEIGHT:		SHEET 15Of	



P-25 SUBATOMIC PHYSICS	DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED FRACTIONAL ±			NAME	DATE	CAPTAIN MILLS OUTER HEAT SHIELD SPACER		
	ANGULAR: MACH ± BEND ±		DRAWN	JAN	4-18			
	TWO PLACE DECIMAL ± 0.01		CHECKED					
	THREE PLACE DECIMAL ± 0.003		ENG APPR.					
			MFG APPR.					
 LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM 87545	MATERIAL	SS304	Q.A.					
	FINISH		COMMENTS					
	QUANTITY REQUIRED	4 EACH						
				SIZE	DWG. NO.	REV.		
				B	126Y-1766920			
				SCALE:	WEIGHT:		SHEET 16 OF	

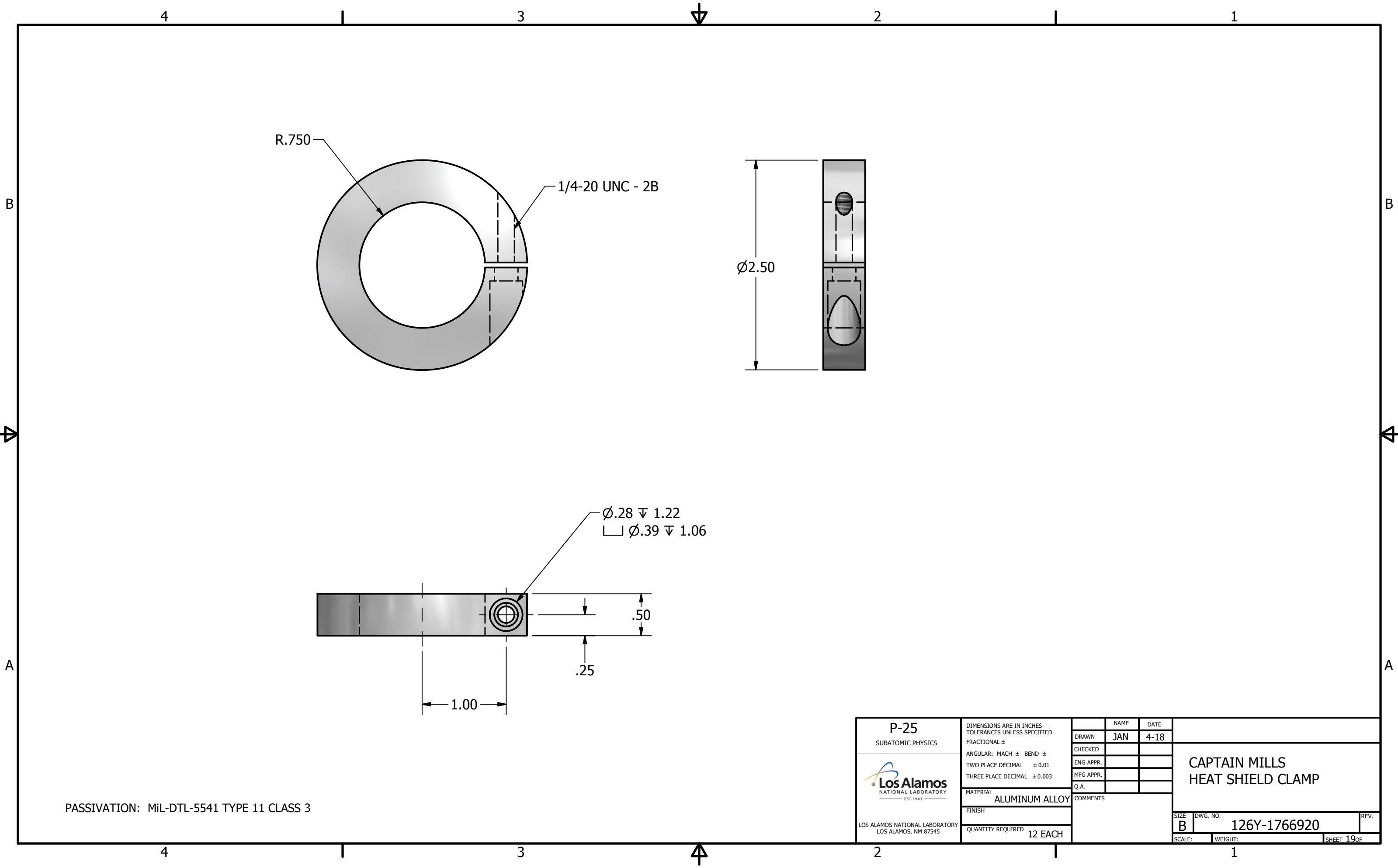


P-25 SUBATOMIC PHYSICS		DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± 0.01 THREE PLACE DECIMAL ± 0.003		DRAWN JAN 4-18	NAME JAN 4-18	DATE JAN 4-18
 LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM 87545		MATERIAL SS304		CHECKED		
		FINISH		ENG APPR.		
		QUANTITY REQUIRED 4 EACH		MFG APPR.		
				Q.A.		
				COMMENTS		
				CAPTAIN MILLS HEAT SHIELD RETAINER A		
				SIZE B		
				DWG. NO. 126Y-1766920		
				REV.		
				SCALE:		
				WEIGHT:		
				SHEET 20 OF		



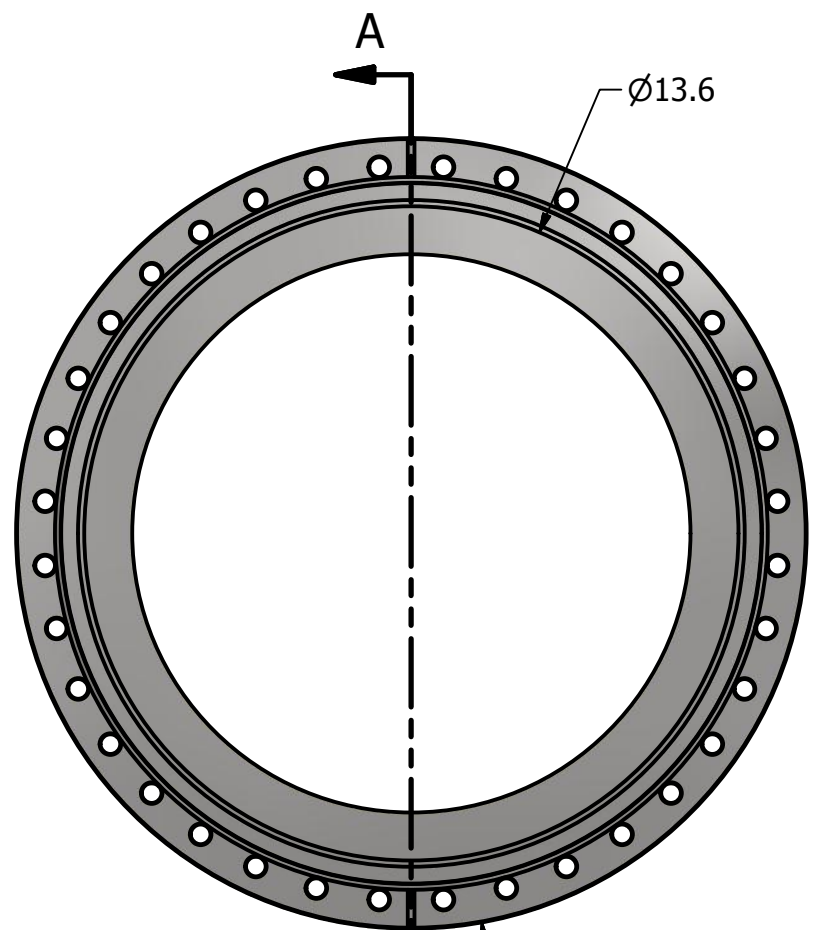
SECTION A-A
SCALE 1 : 1

P-25 SUBATOMIC PHYSICS	DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED		NAME	DATE	CAPTAIN MILLS HEAT SHIELD RETAINER B		
	FRACTIONAL ±		DRAWN	JAN 4-18			
	ANGULAR: MACH ± BEND ±		CHECKED				
	TWO PLACE DECIMAL ± 0.01		ENG APPR.				
	THREE PLACE DECIMAL ± 0.003		MFG APPR.				
 LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM 87545	MATERIAL SS304		Q.A.		SIZE B	DWG. NO. 126Y-1766920	REV.
	FINISH		COMMENTS				
	QUANTITY REQUIRED 4 EACH						
		SCALE:		WEIGHT:		SHEET 18 OF	

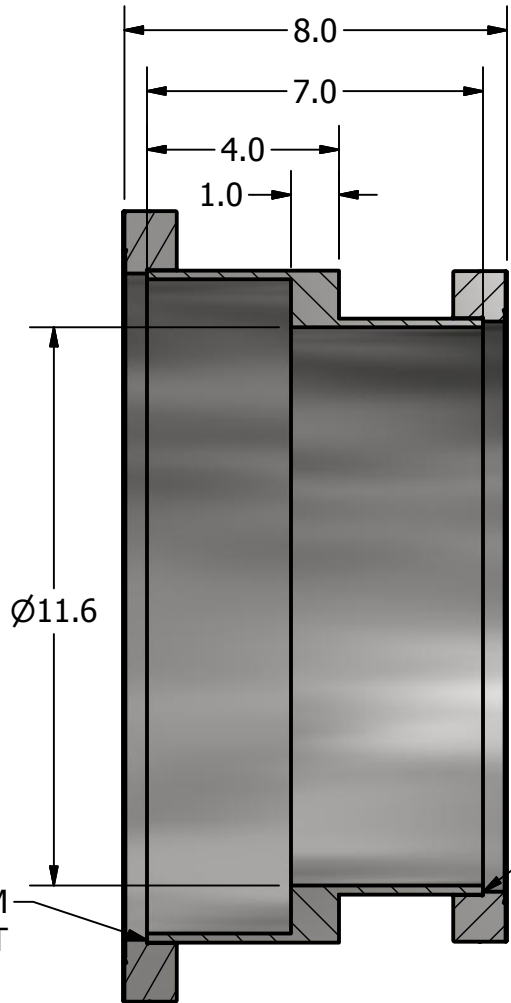


PASSIVATION: MIL-DTL-5541 TYPE 11 CLASS 3

P-25 SUBATOMIC PHYSICS  Los Alamos NATIONAL LABORATORY EST. 1943 LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM 87545	DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED			NAME	DATE	CAPTAIN MILLS HEAT SHIELD CLAMP	
	FRACTIONAL ±		DRAWN	JAN	4-18		
	ANGULAR: MACH ± BEND ±		CHECKED				
	TWO PLACE DECIMAL ± 0.01		ENG APPR.				
	THREE PLACE DECIMAL ± 0.003		MFG APPR.				
	MATERIAL	ALUMINUM ALLOY	Q.A.				
	FINISH		COMMENTS				
	QUANTITY REQUIRED	12 EACH					
SIZE		DWG. NO.		SCALE:		WEIGHT:	REV.
B		126Y-1766920					
				SHEET 19		Of	

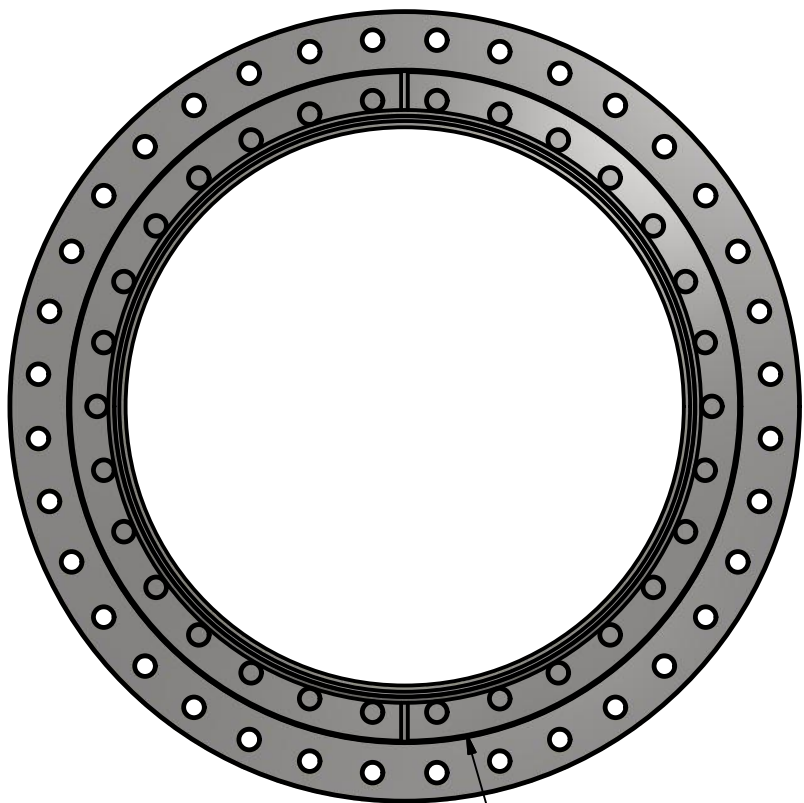


CONFLAT 16.5 OD, 14" TUBE
NON ROTATABLE, CLEARANCE
BOLT HOLES



WELD VACUUM
TIGHT

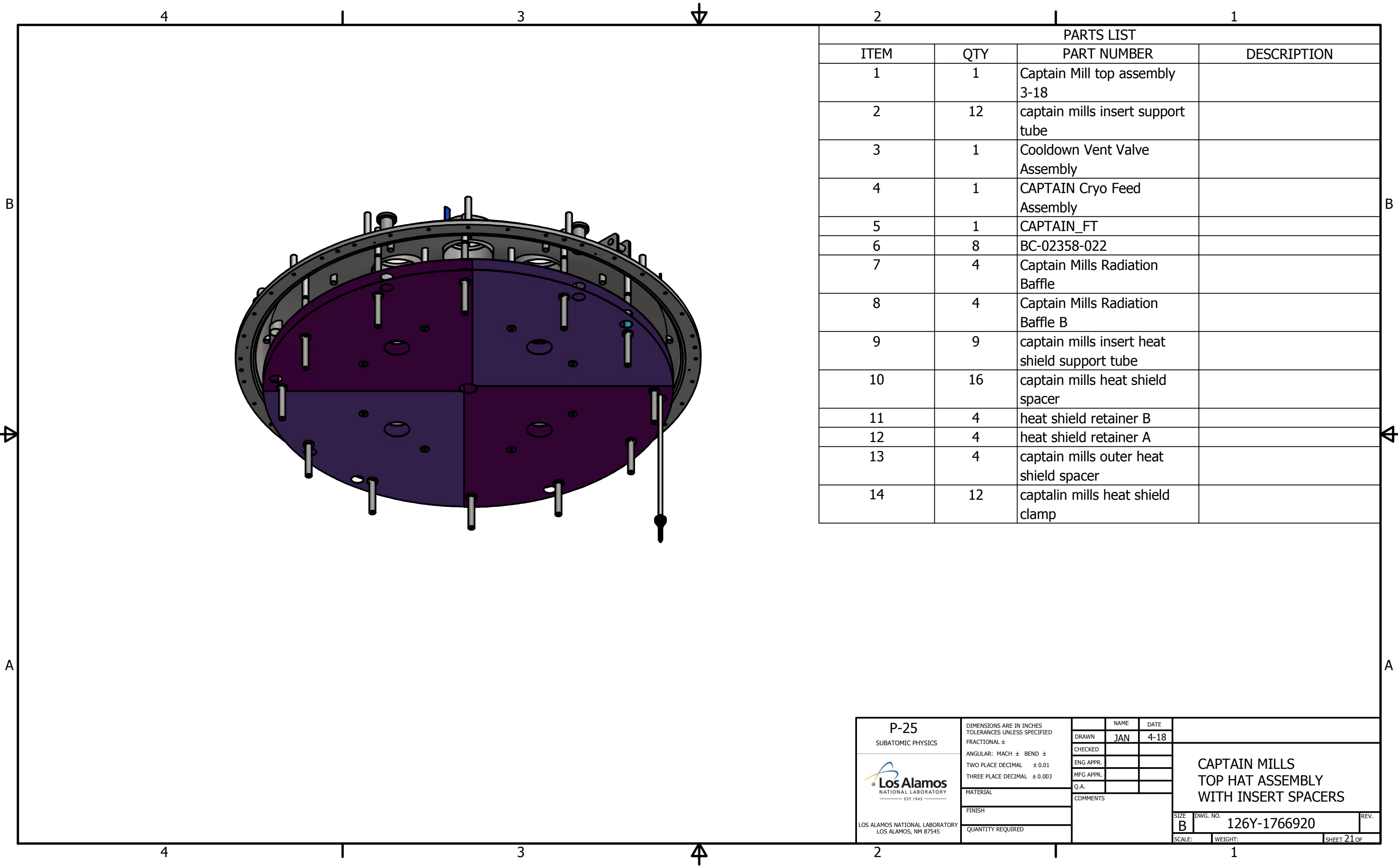
WELD VACUUM
TIGHT

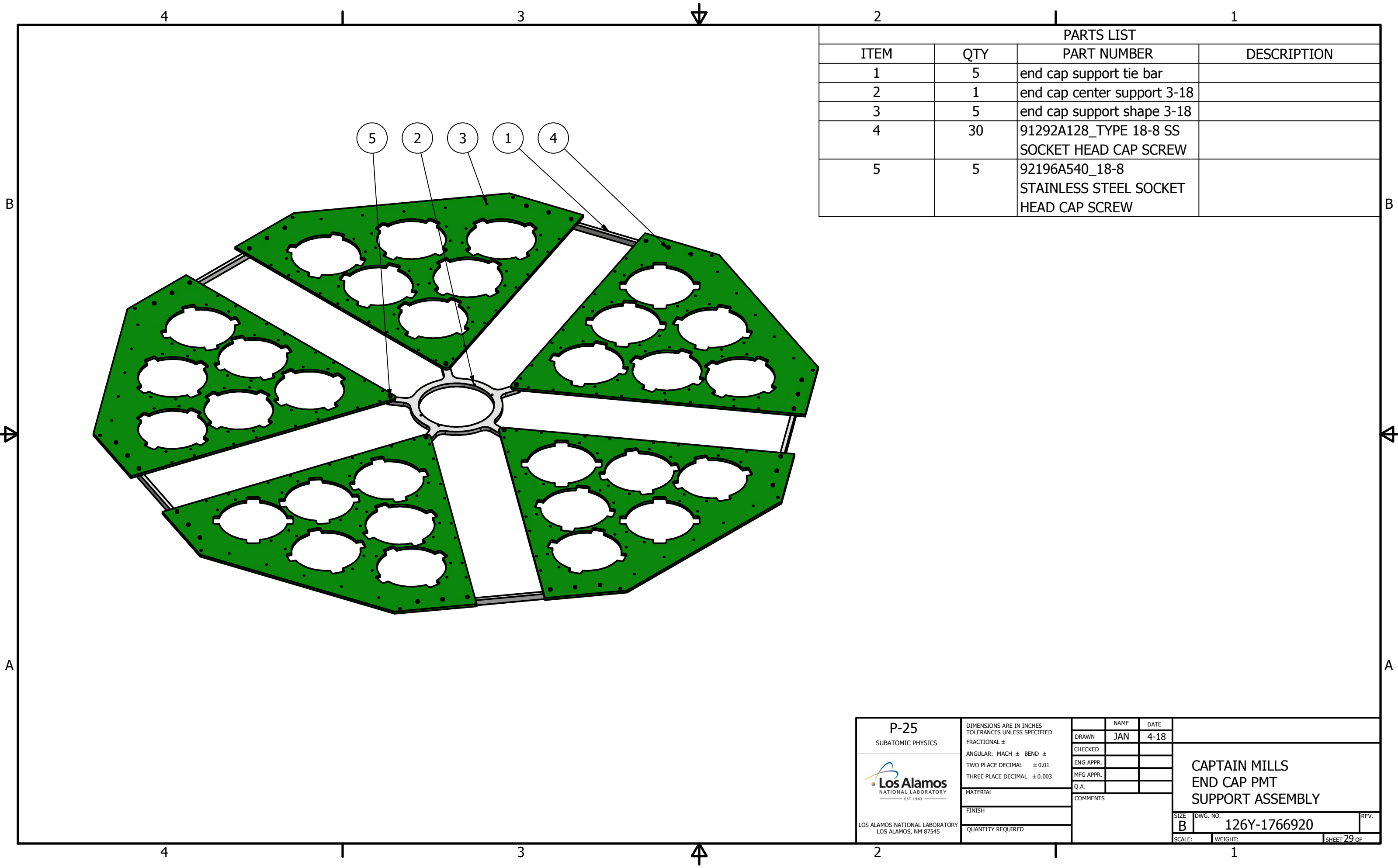


CONFLAT 14 OD, 12" TUBE
NON ROTATABLE, CLEARANCE
BOLT HOLES

SECTION A-A
SCALE 1 / 4

P-25 SUBATOMIC PHYSICS  LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM 87545	DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± 0.01 THREE PLACE DECIMAL ± 0.003			NAME	DATE	CAPTAIN MILLS 14" CONFLAT ADAPTER WELDMENT			
	MATERIAL SS304			DRAWN	JAN				4-18
	FINISH			CHECKED					
	QUANTITY REQUIRED 3 EACH			ENG APPR.					
				MFG APPR.					
			COMMENTS			Q.A.			
						SIZE	DWG. NO.	REV.	
						B	126Y-1766920		
						SCALE:	WEIGHT:	SHEET 20 OF	





PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	5	end cap support tie bar	
2	1	end cap center support 3-18	
3	5	end cap support shape 3-18	
4	30	91292A128_TYPE 18-8 SS SOCKET HEAD CAP SCREW	
5	5	92196A540_18-8 STAINLESS STEEL SOCKET HEAD CAP SCREW	

P-25 SUBATOMIC PHYSICS		DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± 0.01 THREE PLACE DECIMAL ± 0.003		NAME	DATE	CAPTAIN MILLS END CAP PMT SUPPORT ASSEMBLY	
				DRAWN	JAN	4-18	
 LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM 87545		MATERIAL FINISH QUANTITY REQUIRED		CHECKED			
				ENG APPR.			
				MFG APPR.			
				Q.A.			
				COMMENTS		SIZE B	DWG. NO. 126Y-1766920
						SCALE:	WEIGHT: SHEET 29 OF