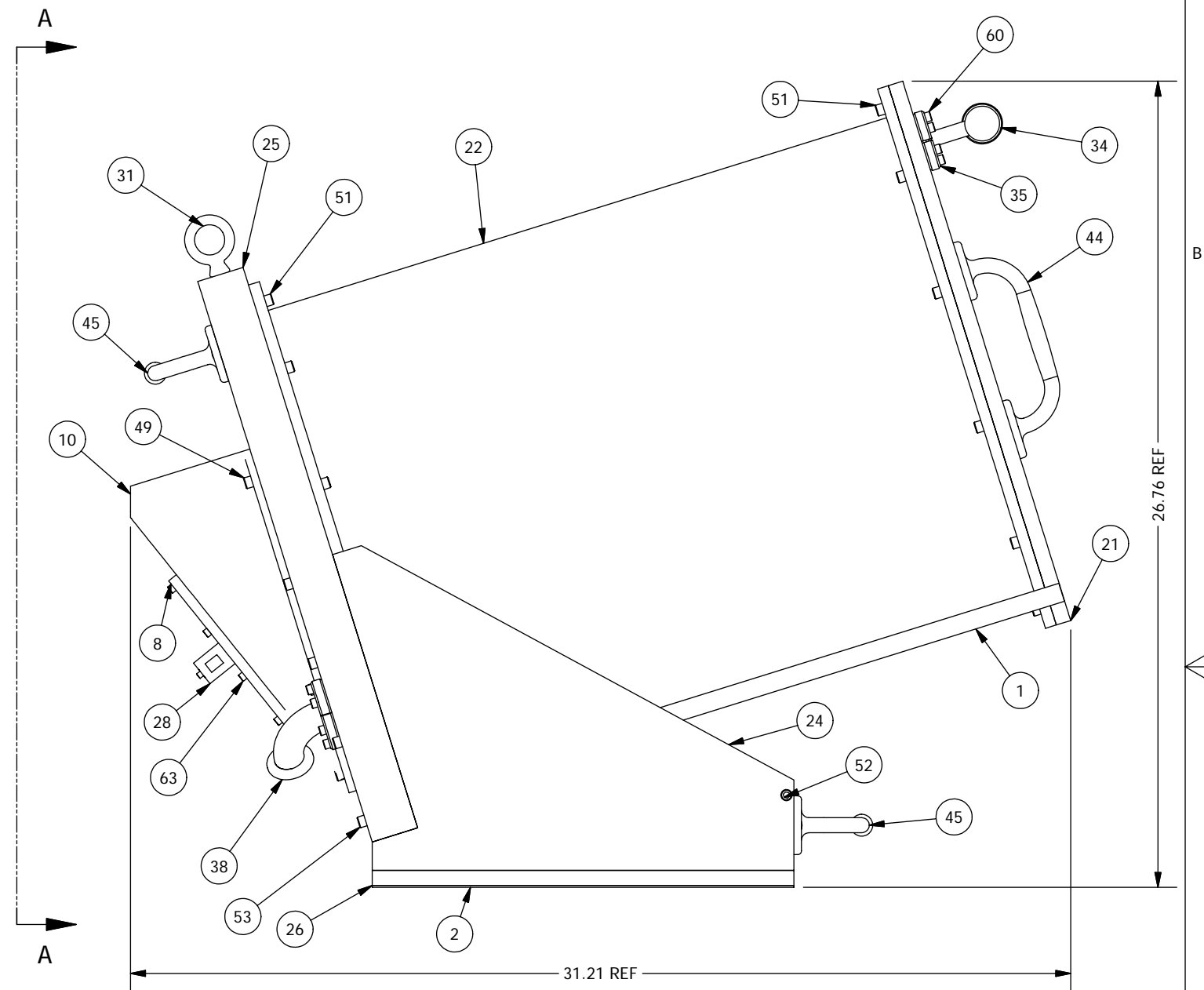


**NOTES**

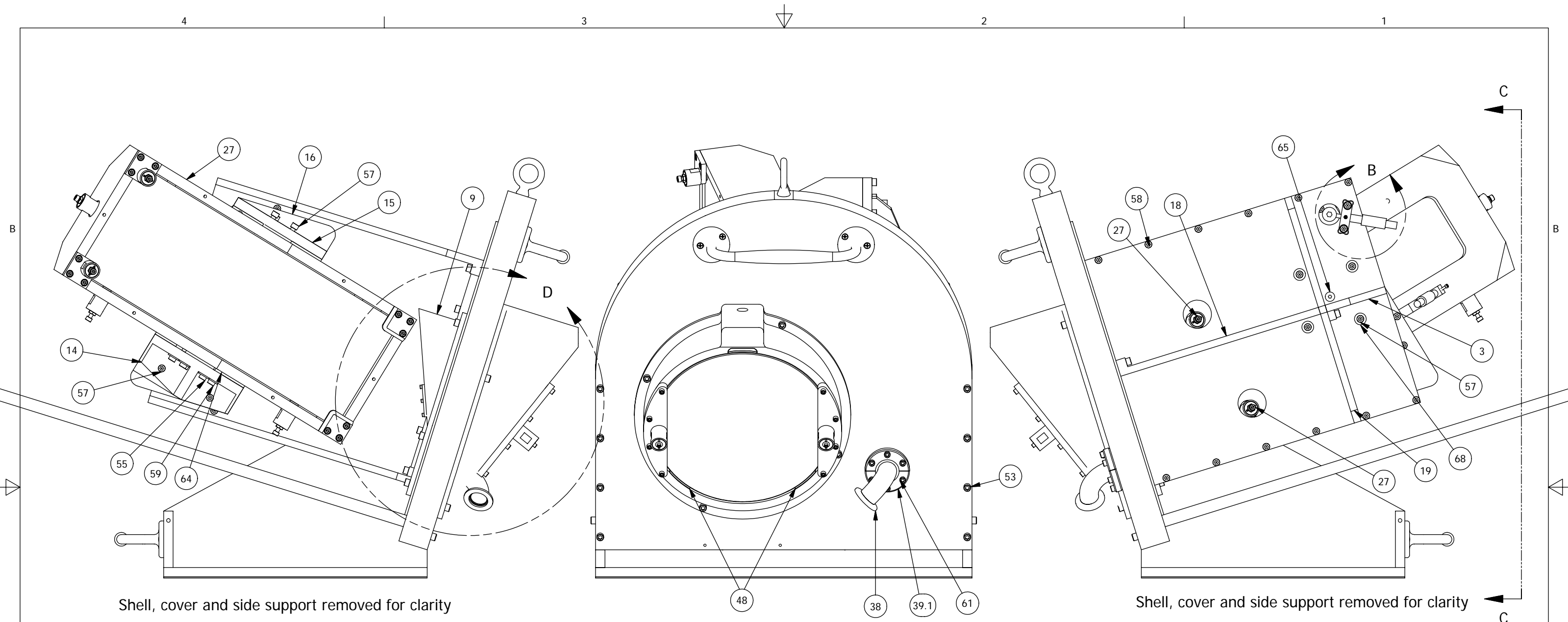
1. Test fit assembly before anodizing
2. Test-pump to 0.0001 mbar with dummy prism plate (PFS14010) before mounting real grating and prism
3. Test-pump to 0.001 mbar with real prism before mounting real grating
4. Working vacuum pressure should be set to 0.005 mbar target, and always maintained between 0.0002 and 0.012 mbar

				68	8	Washer, ANSI A, Normal 0.25	-
37	1	NW16 Centering Ring	-	67	3	UHMW Polyethylene Tape MCM76445A723	-
36	2	Micrometer - Starrett 463L	-	66	1	Shoulder Screw MCM97345A716	-
35	2	KF16 Bulkhead clamp	-	65	1	Shoulder Screw MCM94035A308	-
34	1	GP-275203 Convector Vacuum Gauge	-	64	2	Shim Washer MCM3088A509	-
33	12	FHMS, Phillips, 8-32 UNC x 3/8 in	-	63	8	SHCS 8-32 UNCx0.625	-
32	12	FHMS, Phillips, 8-32 UNC x 1/2 in	-	62	8	SHCS 4-40x0.5 UNC vented	-
31	1	Eyebolt MCM33045T81	-	61	6	SHCS 10-32 UNFx0.75	-
30	1	Die Spring Screw Cap MCM96235K9	-	60	6	SHCS 10-32 UNFx0.625	-
29	1	Die Spring MCM9295K13	-	59	2	SHCS 1/4-20x1.25 UNC vented	-
28	2	Prism Axial Spring Plunger Assembly	PFS00006	58	49	SHCS 1/4-20x1 UNC vented	-
27	1	Grating Mount Assembly	PFS00010	57	12	SHCS 1/4-20x0.875 UNC vented	-
26	1	Prism/Grating Assembly Base Plate	PFS11001	56	3	SHCS 1/4-20x0.75 UNC vented	-
25	1	Prism/Grating Assembly Front Plate	PFS11002	55	6	SHCS 1/4-20x0.625 UNC vented	-
24	2	Prism/Grating Assembly Side Support	PFS11003	54	6	SHCS 1/4-20x0.5 UNC vented	-
23	1	Prism/Grating Assembly Lateral Stiffener	PFS11004	53	8	SHCS 1/4-20 UNCx2	-
22	1	Prism/Grating Assembly Vacuum Shell	PFS11005	52	2	SHCS 1/4-20 UNCx1	-
21	1	Prism/Grating Assembly Vacuum Cover	PFS11006	51	24	SHCS 1/4-20 UNCx0.875	-
20	1	Grating Mount Side Plate	PFS11007	50	12	SHCS 1/4-20 UNCx0.75	-
19	1	Grating Mount Side Plate Stiffener	PFS11008	49	4	SHCS 1/4-20 UNCx0.625	-
18	1	Grating Mount Brace 2	PFS11009	48	1	Radial pad 4.00 x 1.50	-
17	1	Grating Mount Azimuthal Bushing	PFS11010	47	1	Radial pad 4.00 x 1.50	-
16	1	Grating Mount Azimuthal Base	PFS11011	46	1	Radial pad 4.00 x 1.50	-
15	1	Grating Mount Altitudinal Arm 1	PFS11013	45	2	Pull Handle MCM1402A4	-
14	1	Grating Mount Altitude Arm 2	PFS11014	44	2	Pull Handle MCM1402A11	-
13	1	Grating Mount Stiffener	PFS11015	43	2	Parker O-ring 2-386	-
12	1	Grating Azimuth Micrometer Mount	PFS11016	42	1	Parker O-ring 2-270	-
11	1	Grating Altitude Micrometer Mount	PFS11017	41.5	1	Sylgard-184 RTV	-
10	1	Prism PFSP1 Cell	PFS11018	41.4	1	PFS1 Lens	PFS01001
9	1	Prism PFSP2 Cell	PFS11019	41.3	1	PFSP1 Prism	PFS01009
8	2	Prism PFSP1 Retention Clip	PFS11020	41.2	1	PFSP2 Prism	PFS01010
7	2	Prism PFSP2 Safety Clip	PFS11021	41.1	1	Echelle Grating	PFS01011
6	1	Prism PFSP1 Radial Preload Block	PFS11022	41	1	PFS Dispersive Optics	-
5	1	Grating Mount Brace 1	PFS11033	40	1	Nor-Cal NW Centering Ring NW-25-CR-SV	-
4	1	Grating Mount Brace 3	PFS11034	39.2	1	Nor-Cal NW Bulkhead Clamp NW-25-BCP (B)	-
3	1	Grating Mount Brace 4	PFS11035	39.1	1	Nor-Cal NW Bulkhead Clamp NW-25-BCP (A)	-
2	1	Prism/Grating Assembly Shear Pad	PFS11037	39	1	Nor-Cal NW Bulkhead Clamp NW-25-BCP	-
1	2	Vacuum Shell Guide	PFS11041	38	1	Nor-Cal NW 90 Radius Elbow 2E-NW-25B	-
<b>ITEM</b>	<b>QTY</b>	<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>ITEM</b>	<b>QTY</b>	<b>DESCRIPTION</b>	<b>PART NUMBER</b>
Bill of Material				Bill of Material			



**THE OBSERVATORIES  
OF THE CARNEGIE INSTITUTION OF WASHINGTON**  
813 Santa Barbara Street  
Pasadena, CA 91101

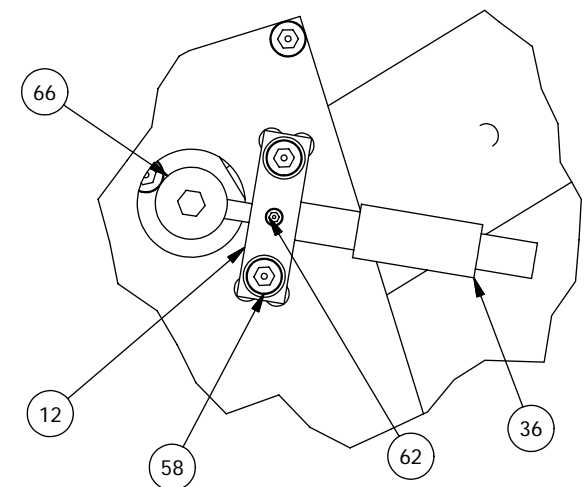
MATERIAL		UNLESS OTHERWISE SPECIFIED FRACTIONAL DECIMAL ANGULAR +/- 1/32 .XX +/- 0.01 +/- 0.1 DEG .XXX +/- 0.002 GOAL .XXX +/- 0.005 REQD BREAK SHARP EDGES MACHINED SURFACES 125	
EST WEIGHT 176 lb (+67 with optics)			
SCALE 1:5		<b>P</b> lanet <b>F</b> inder <b>S</b> pectrograph	Prism/Grating Mount Assembly
DWN	CRANE		
APVD	BY	DATE	SHEET <b>B</b>
DRAWING NUMBER <b>PFS00011</b>			SHT 1 OF 3
			REV <b>5</b>



Shell, cover and side support removed for clarity

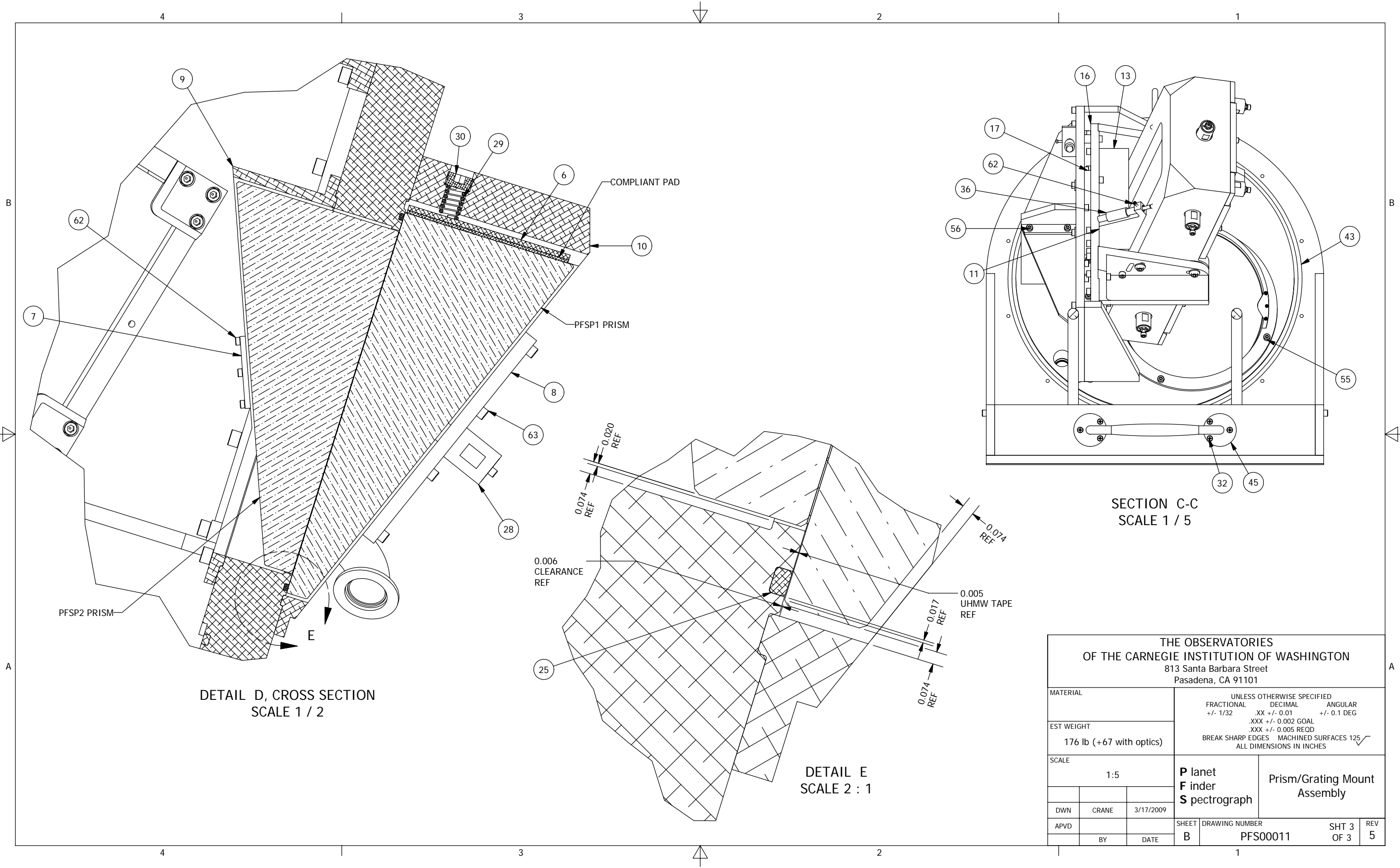
VIEW A-A  
SCALE 1 / 5  
Shell and cover removed for clarity

Shell, cover and side support removed for clarity



DETAIL B  
SCALE 1 / 2

<b>THE OBSERVATORIES OF THE CARNEGIE INSTITUTION OF WASHINGTON</b> 813 Santa Barbara Street Pasadena, CA 91101				
MATERIAL		UNLESS OTHERWISE SPECIFIED FRACTIONAL DECIMAL ANGULAR +/- 1/32 .XX +/- 0.01 +/- 0.1 DEG		
EST WEIGHT		.XXX +/- 0.002 GOAL .XXX +/- 0.005 REQD BREAK SHARP EDGES MACHINED SURFACES 125 ✓ ALL DIMENSIONS IN INCHES		
SCALE		1:5		<b>P lanet F nder S pectrograph</b>
DWN	CRANE	3/17/2009		SHEET DRAWING NUMBER <b>B PFS00011</b>
APVD	BY	DATE		
				REV 5



<b>THE OBSERVATORIES OF THE CARNEGIE INSTITUTION OF WASHINGTON</b> 813 Santa Barbara Street Pasadena, CA 91101				
MATERIAL		UNLESS OTHERWISE SPECIFIED FRACTIONAL DECIMAL ANGULAR +/- 1/32 .XX +/- 0.01 +/- 0.1 DEG		
EST WEIGHT		.XXX +/- 0.002 GOAL .XXX +/- 0.005 REQD BREAK SHARP EDGES MACHINED SURFACES 125 ✓ ALL DIMENSIONS IN INCHES		
SCALE		1:5		<b>P</b> lanet <b>F</b> inder <b>S</b> pectrograph Prism/Grating Mount Assembly
DWN	CRANE	3/17/2009		
APVD	BY	DATE	SHEET B	DRAWING NUMBER PFS00011
			SHT 3 OF 3	REV 5