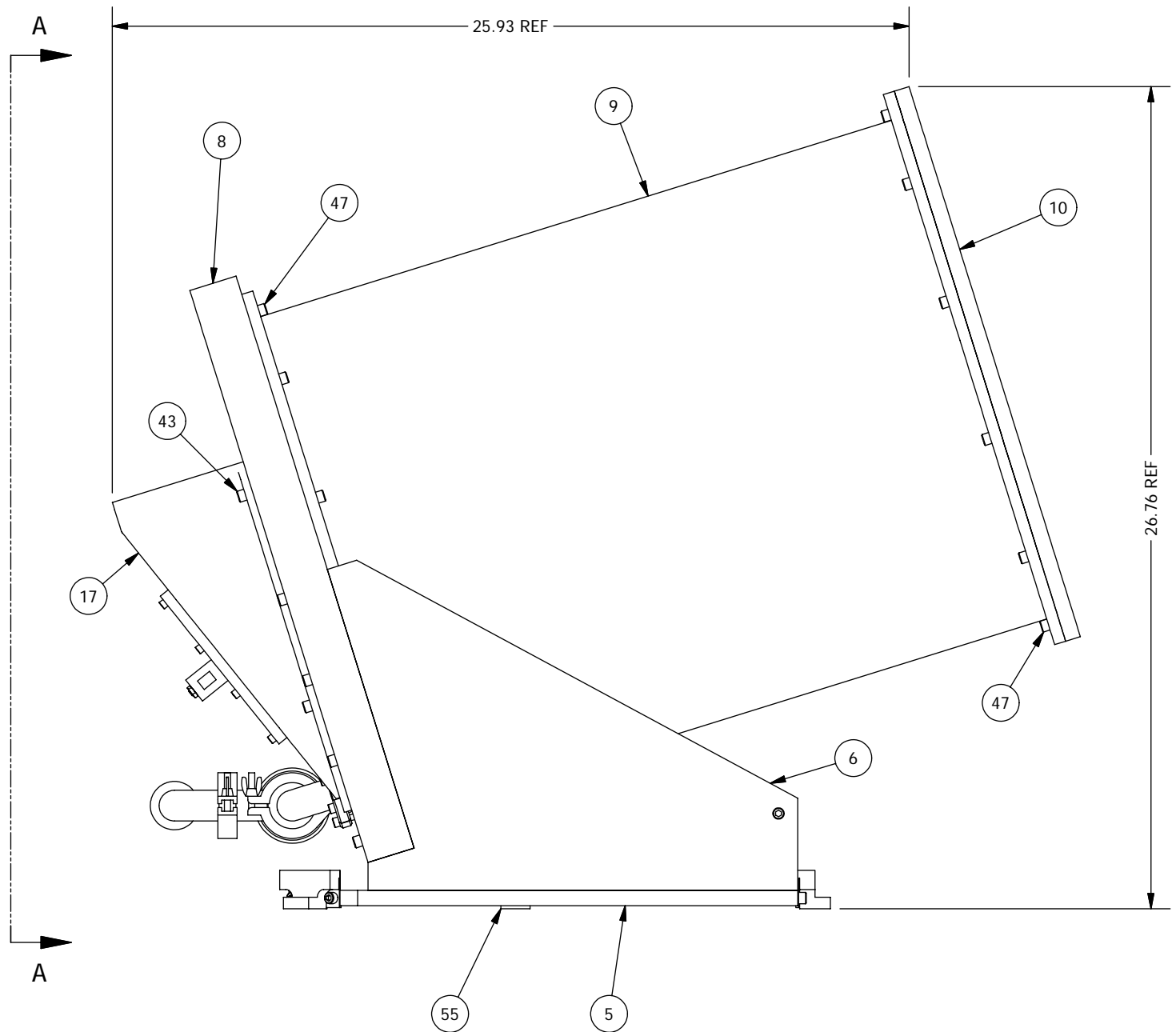


**NOTES**

1. Test fit assembly before anodizing.
2. Test-pump to 0.0001 mbar with a dummy window or metal blank before mounting real grating and prism.
3. Test-pump to 0.0001 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

55	1	Gage Block Mitutoyo 614191	-				
54	6	SHCS 1/4-20 UNCx0.5	-	22	1	Grating Mount Altitudinal Arm 1	PFS11013
53	3	Table Top Flexure 1	PFS11036	21	1	Grating Mount Stiffener	PFS11015
52	2	SHCS 1/4-20x0.75 UNC vented	-	20	2	Prism PFSP1 Retention Clip	PFS11020
51	1	Grating Mount Brace 4	PFS11035	19	2	Prism PFSP2 Safety Clip	PFS11021
50	8	SHCS 1/4-20 UNCx2	-	18	1	Prism PFSP2 Cell	PFS11019
49	6	SHCS 1/4-20x0.5 UNC vented	-	17	1	Prism PFSP1 Cell	PFS11018
48	1	Grating Mount Side Plate Stiffener	PFS11008	16	1	Grating Mount Brace 2	PFS11009
47	24	SHCS 1/4-20 UNCx0.875	-	15	1	Grating Mount Brace 3	PFS11034
46	8	SHCS 8-32 UNCx0.625	-	14	1	Grating Mount Brace 1	PFS11033
45	2	SHCS 1/4-20 UNCx1	-	13	1	Parker O-ring 2-270	-
44	11	SHCS 1/4-20 UNCx0.75	-	12	2	Parker O-ring 2-386	-
43	4	SHCS 1/4-20 UNCx0.625	-	11	1	Grating Mount Side Plate	PFS11007
42	50	SHCS 1/4-20x1 UNC vented	-	10	1	Prism/Grating Assembly Vacuum Cover	PFS11006
41	6	SHCS 1/4-20x0.625 UNC vented	-	9	1	Prism/Grating Assembly Vacuum Shell	PFS11005
40	12	SHCS 1/4-20x0.875 UNC vented	-	8	1	Prism/Grating Assembly Front Plate	PFS11002
39	2	SHCS 1/4-20x1.25 UNC vented	-	7	1	Prism/Grating Assembly Lateral Stiffener	PFS11004
38	8	SHCS 4-40x0.5 UNC vented	-	6	2	Prism/Grating Assembly Side Support	PFS11003
37	8	Washer, ANSI A, Normal 0.25	-	5	1	Prism/Grating Assembly Base Plate	PFS11001
36	2	Shim Washer MCM3088A509	-	4	1	Grating Mount Assembly	PFS00010
35	1	Shoulder Screw MCM94035A308	-	3	2	Prism Axial Spring Plunger Assembly	PFS00006
34	1	Shoulder Screw MCM97345A716	-	2.6	6	SHCS 10-32 UNFx0.75	-
33	1	Die Spring Screw Cap MCM96235K9	-	2.5	2	Nor-Cal NW 90 Radius Elbow 2E-NW-25B	-
32	1	Die Spring MCM9295K13	-	2.4	1	Nor-Cal Manual Angle Valve ESV-1002-NWB	-
31	3	UHMW Polyethylene Tape MCM76445A723	-	2.3	3	Nor-Cal NW Centering Ring NW-25-CR-SV	-
30	3	Radial pad 4.00 x 1.50	-	2.2	2	Nor-Cal NW 25 Nut Clamp	-
29	2	Micrometer - Starrett 463L	-	2.1	1	Nor-Cal NW Bulkhead Clamp NW-25-BCP	-
28	1	Prism PFSP1 Radial Preload Block	PFS11022	2	1	Nor-Cal Vacuum Valve Assembly	-
27	1	Grating Azimuth Micrometer Mount	PFS11016	1.4	1	Echelle Grating	PFS01011
26	1	Grating Altitude Micrometer Mount	PFS11017	1.3	1	Sylgard-184 RTV	-
25	1	Grating Mount Azimuthal Base	PFS11011	1.2	1	PFSP2 Prism	PFS01010
24	1	Grating Mount Azimuthal Bushing	PFS11010	1.1	1	PFSP1 Prism	PFS01009
23	1	Grating Mount Altitude Arm 2	PFS11014	1	1	PFS Dispersive Optics	-
ITEM	QTY	DESCRIPTION	PART NUMBE	ITEM	QTY	DESCRIPTION	PART NUMBE
Bill of Material				Bill of Material			

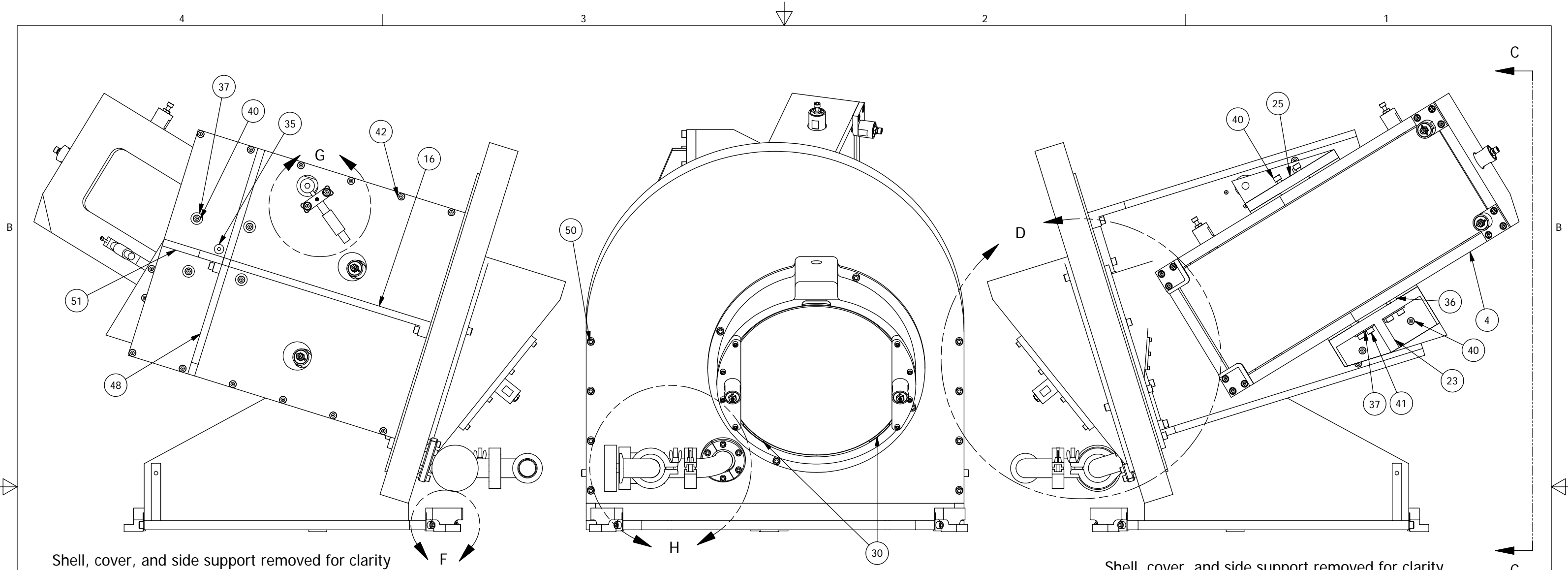


**THE OBSERVATORIES  
OF THE CARNEGIE INSTITUTION OF WASHINGTON**  
813 Santa Barbara Street  
Pasadena, CA 91101

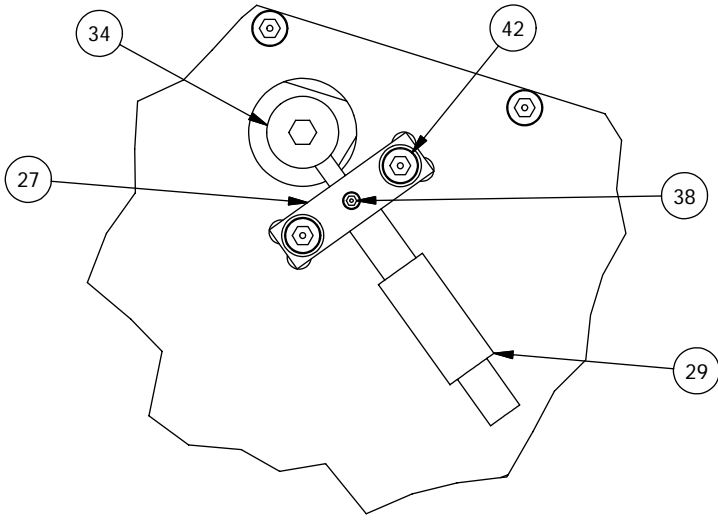
MATERIAL	UNLESS OTHERWISE SPECIFIED FRACTIONAL DECIMAL ANGULAR +/- 1/32 .XX +/- 0.01 +/- 0.1 DEG .XXX +/- 0.002 GOAL .XXX +/- 0.005 REQD BREAK SHARP EDGES MACHINED SURFACES 125		
EST WEIGHT	176 lb (+67 with optics)		
SCALE	1:5		
DWN	CRANE	5/15/2006	
APVD	BY	DATE	
SHEET	DRAWING NUMBER	SHT 1	REV
B	PFS00011	OF 3	2

**Planet  
finder  
Spectrograph**

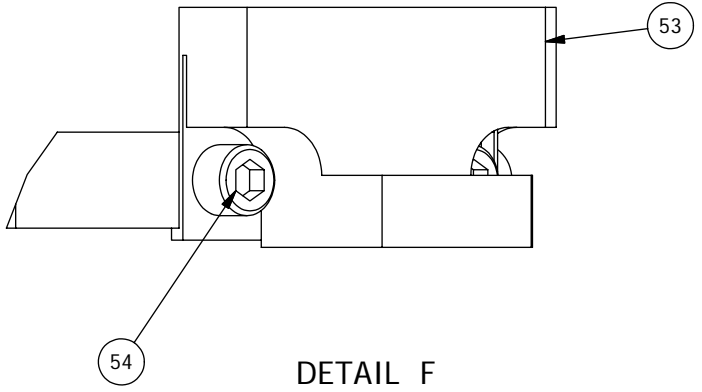
**Prism/Grating Mount  
Assembly**



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

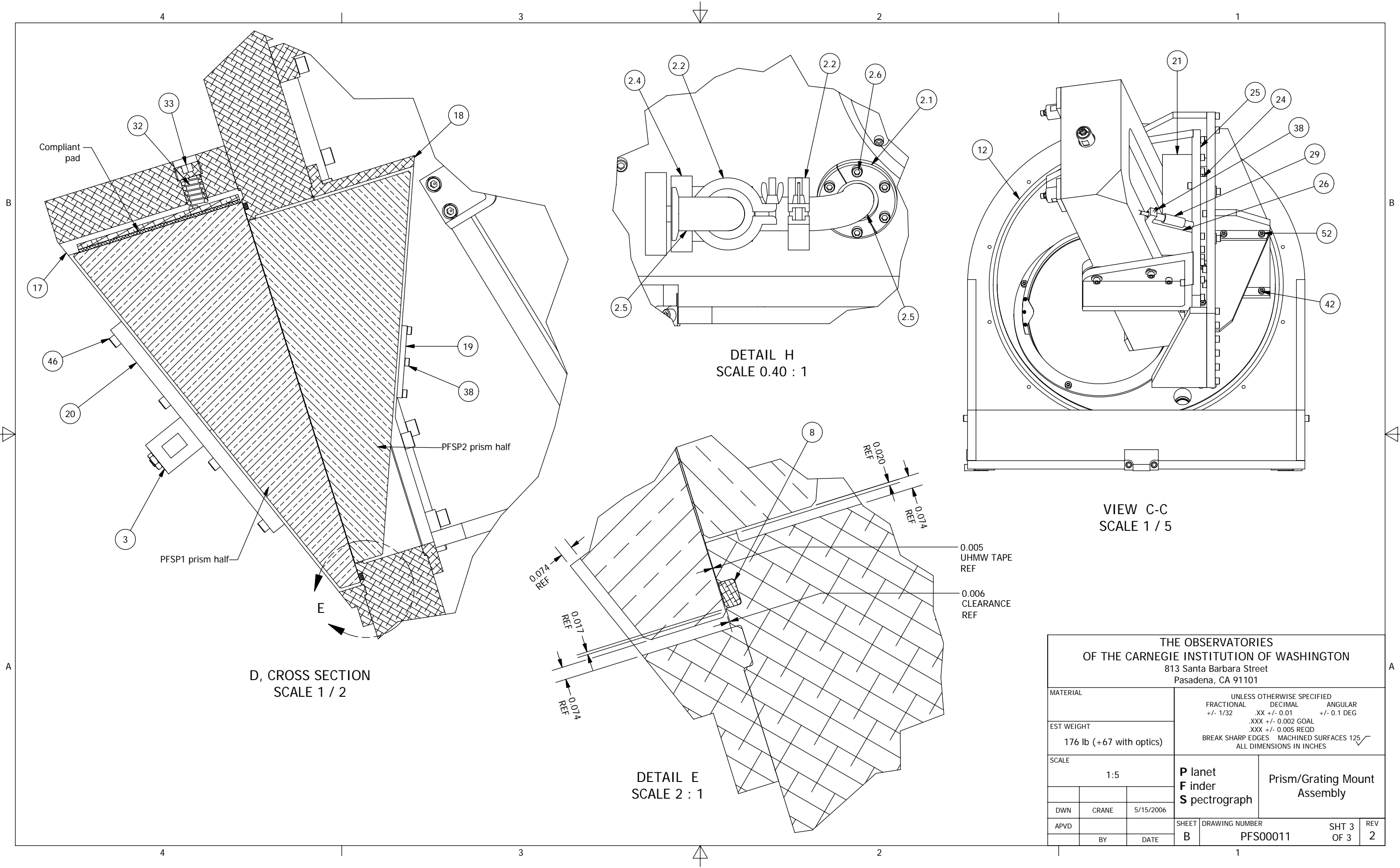


DETAIL G  
SCALE 1 / 2



DETAIL F  
SCALE 1 : 1

THE OBSERVATORIES OF THE CARNEGIE INSTITUTION OF WASHINGTON 813 Santa Barbara Street Pasadena, CA 91101				
MATERIAL		UNLESS OTHERWISE SPECIFIED FRACTIONAL DECIMAL ANGULAR $\pm 1/32$ .XX $\pm 0.01$ $\pm 0.1$ DEG		
EST WEIGHT		.XXX $\pm 0.002$ GOAL .XXX $\pm 0.005$ REQD BREAK SHARP EDGES MACHINED SURFACES 125 $\sqrt$ ALL DIMENSIONS IN INCHES		
SCALE		1:5		<b>P</b> lanet <b>F</b> nder <b>S</b> pectrograph Prism/Grating Mount Assembly
DWN	CRANE	5/15/2006		
APVD	BY	DATE	SHEET	REV
			B	2
			DRAWING NUMBER	OF 3
			PFS00011	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 inder S pectrograph</b>
DWN	CRANE	5/15/2006		SHEET
APVD				DRAWING NUMBER
	BY	DATE		<b>B</b>
				<b>PFS00011</b>
				SHT 3 OF 3
				REV 2