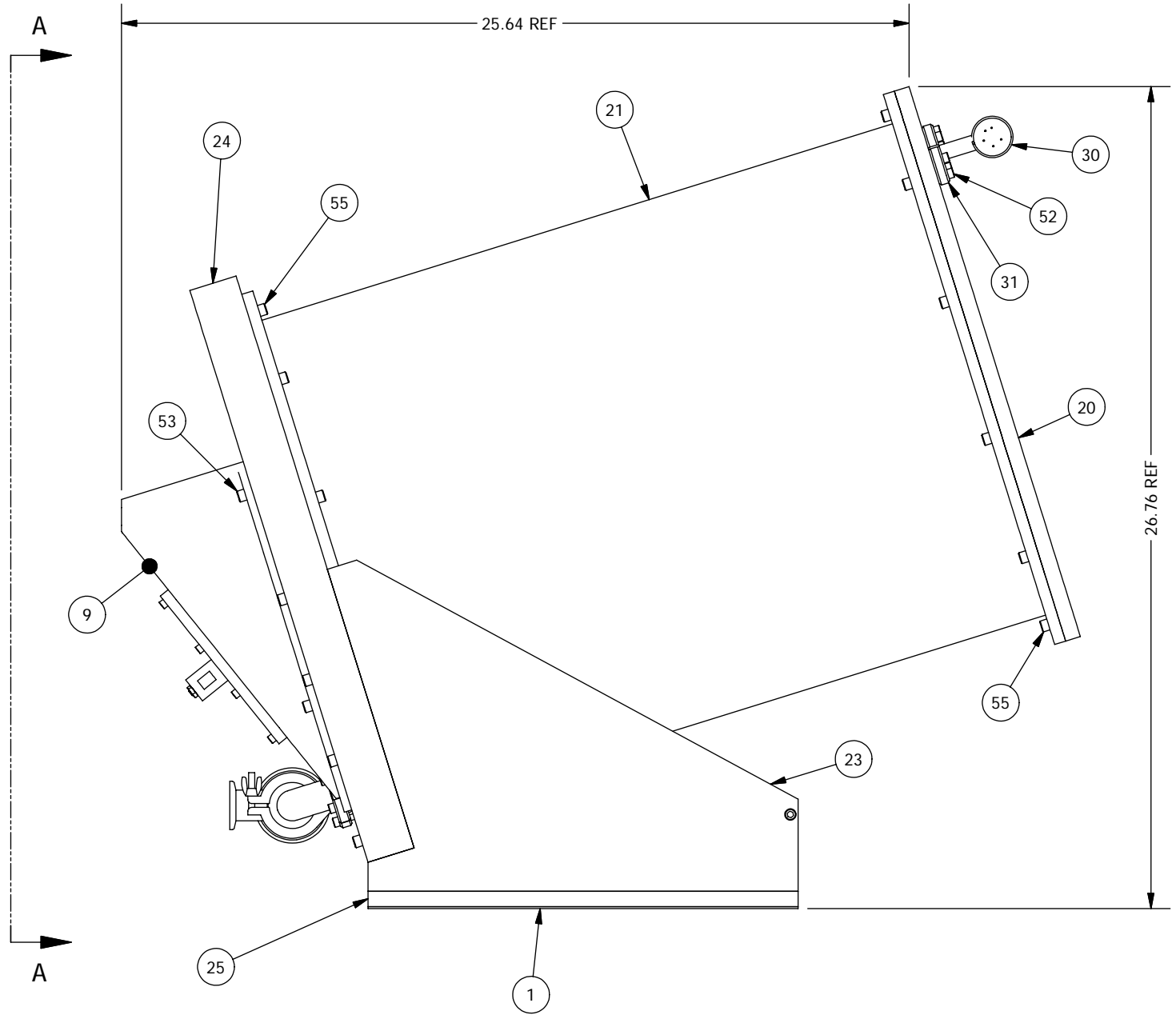


NOTES

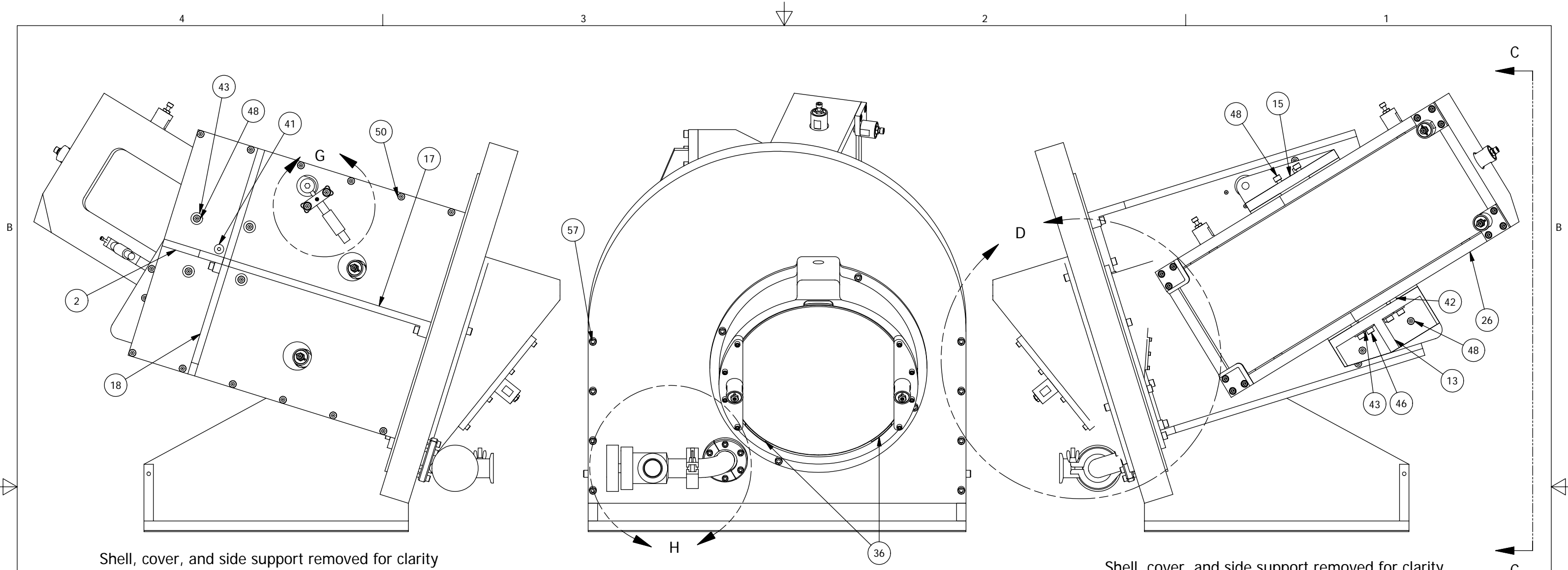
1. Test fit assembly before anodizing.
2. Test-pump to 0.0001 mbar with a dummy prism plate (PFS14010) before mounting real grating and prism.
3. Test-pump to 0.0001 mbar with real prism before mounting real grating.
4. Working vacuum pressure should be set to 0.005 mbar target, and always maintained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

57	8	SHCS 1/4-20 UNCx2	-				
56	2	SHCS 1/4-20 UNCx1	-	29	1	Nor-Cal Vacuum Valve Assembly	-
55	24	SHCS 1/4-20 UNCx0.875	-	28.4	1	Sylgard-184 RTV	-
54	12	SHCS 1/4-20 UNCx0.75	-	28.3	1	PFSP1 Prism	PFS01009
53	4	SHCS 1/4-20 UNCx0.625	-	28.2	1	PFSP2 Prism	PFS01010
52	6	SHCS 10-32 UNFx0.625	-	28.1	1	Echelle Grating	PFS01011
51	8	SHCS 8-32 UNCx0.625	-	28	1	PFS Dispersive Optics	-
50	49	SHCS 1/4-20x1 UNC vented	-	27	2	Prism Axial Spring Plunger Assembly	PFS00006
49	2	SHCS 1/4-20x1.25 UNC vented	-	26	1	Grating Mount Assembly	PFS00010
48	12	SHCS 1/4-20x0.875 UNC vented	-	25	1	Prism/Grating Assembly Base Plate	PFS11001
47	3	SHCS 1/4-20x0.75 UNC vented	-	24	1	Prism/Grating Assembly Front Plate	PFS11002
46	6	SHCS 1/4-20x0.625 UNC vented	-	23	2	Prism/Grating Assembly Side Support	PFS11003
45	6	SHCS 1/4-20x0.5 UNC vented	-	22	1	Prism/Grating Assembly Lateral Stiffener	PFS11004
44	8	SHCS 4-40x0.5 UNC vented	-	21	1	Prism/Grating Assembly Vacuum Shell	PFS11005
43	8	Washer, ANSI A, Normal 0.25	-	20	1	Prism/Grating Assembly Vacuum Cover	PFS11006
42	2	Shim Washer MCM3088A509	-	19	1	Grating Mount Side Plate	PFS11007
41	1	Shoulder Screw MCM94035A308	-	18	1	Grating Mount Side Plate Stiffener	PFS11008
40	1	Shoulder Screw MCM97345A716	-	17	1	Grating Mount Brace 2	PFS11009
39	1	Die Spring Screw Cap MCM96235K9	-	16	1	Grating Mount Azimuthal Bushing	PFS11010
38	1	Die Spring MCM9295K13	-	15	1	Grating Mount Azimuthal Base	PFS11011
37	3	UHMW Polyethylene Tape MCM76445A723	-	14	1	Grating Mount Altitudinal Arm 1	PFS11013
36	3	Radial pad 4.00 x 1.50	-	13	1	Grating Mount Altitude Arm 2	PFS11014
35	2	Micrometer - Starrett 463L	-	12	1	Grating Mount Stiffener	PFS11015
34	1	Parker O-ring 2-270	-	11	1	Grating Azimuth Micrometer Mount	PFS11016
33	2	Parker O-ring 2-386	-	10	1	Grating Altitude Micrometer Mount	PFS11017
32	1	NW16 Centering Ring	-	9	1	Prism PFSP1 Cell	PFS11018
31	2	KF16 Bulkhead clamp	-	8	1	Prism PFSP2 Cell	PFS11019
30	1	GP-275203 Convectron Vacuum Gauge	-	7	2	Prism PFSP1 Retention Clip	PFS11020
29.6	6	SHCS 10-32 UNFx0.75	-	6	2	Prism PFSP2 Safety Clip	PFS11021
29.5	1	Nor-Cal NW 90 Radius Elbow 2E-NW-25B	-	5	1	Prism PFSP1 Radial Preload Block	PFS11022
29.4	1	Nor-Cal Manual Angle Valve ESV-1002-NWB	-	4	1	Grating Mount Brace 1	PFS11033
29.3	2	Nor-Cal NW Centering Ring NW-25-CR-SV	-	3	1	Grating Mount Brace 3	PFS11034
29.2	1	Nor-Cal NW 25 Nut Clamp	-	2	1	Grating Mount Brace 4	PFS11035
29.1	1	Nor-Cal NW Bulkhead Clamp NW-25-BCP	-	1	1	Prism/Grating Assembly Shear Pad	PFS11037
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

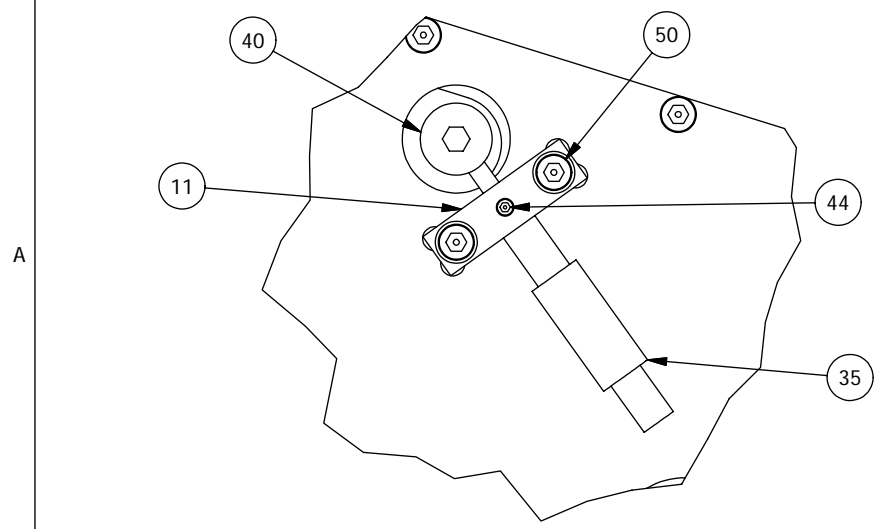
MATERIAL	UNLESS OTHERWISE SPECIFIED FRACTIONAL DECIMAL ANGULAR +/- 1/32 .XX +/- 0.01 +/- 0.1 DEG .XXX +/- 0.002 GOAL .XXX +/- 0.005 REQD BREAK SHARP EDGES MACHINED SURFACES 125		
EST WEIGHT	176 lb (+67 with optics)		
SCALE	1:5		Planet inder Spectrograph
DWN	CRANE	10/9/2007	
APVD	BY	DATE	Prism/Grating Mount Assembly
SHEET B		DRAWING NUMBER PFS00011	
			REV 4



Shell, cover, and side support removed for clarity

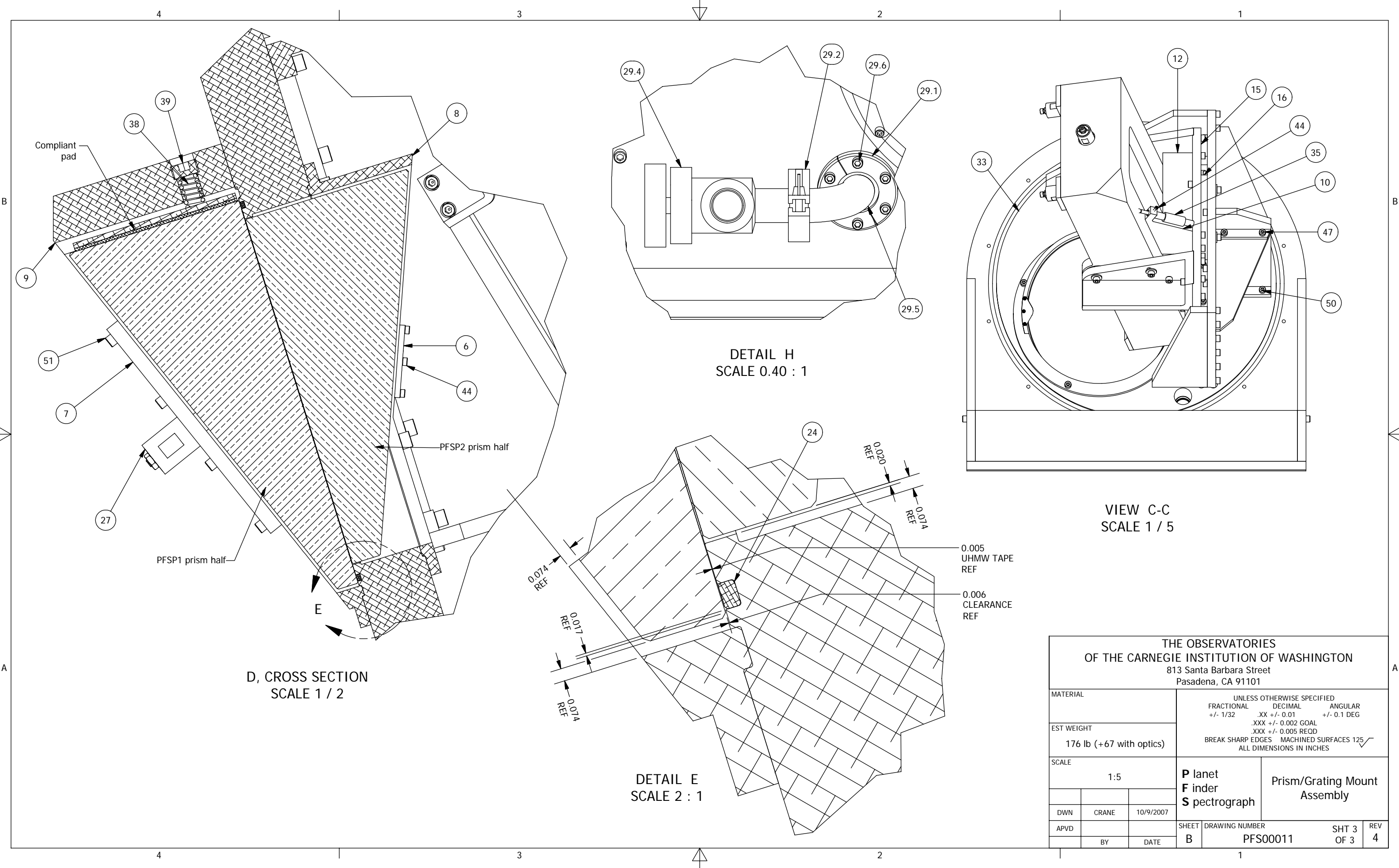
VIEW A-A
SCALE 1 / 5
Shell and cover removed for clarity

Shell, cover, and side support removed for clarity



DETAIL G
SCALE 1 / 2

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 ± 0.01 ± 0.1 DEG .XXX ± 0.002 GOAL .XXX ± 0.005 REQD BREAK SHARP EDGES MACHINED SURFACES 125 \sqrt ALL DIMENSIONS IN INCHES		
EST WEIGHT		176 lb (+67 with optics)		
SCALE		1:5		
		P lanet F nder S pectrograph		Prism/Grating Mount Assembly
DWN	CRANE	10/9/2007		
APVD	BY	DATE	SHEET	DRAWING NUMBER
			B	PFS00011
			SHT 2 OF 3	REV 4



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 ✓ ALL DIMENSIONS IN INCHES		
EST WEIGHT		176 lb (+67 with optics)		
SCALE		1:5		
		P lanet F inder S pectrograph		Prism/Grating Mount Assembly
DWN	CRANE	10/9/2007		
APVD	BY	DATE	SHEET	REV
			B	4
			DRAWING NUMBER	SHT 3 OF 3
			PFS00011	REV 4