

ESSCO Measurements of the first 12-meter Panel

November 13th 1981

12 METER MILLIMETER WAVE TELESCOPE

MEMO No. 104

Table 1

INNER PANEL NO 1946-001

X (IN.)	Y (INCHES)										
	-17.5	-14	-10	-5	-2.5	0	2.5	5	10	14	17.5
5	0.1	0.1	0.5	1.0		1.2		0.8	2.0	1.3	0.8
15	0.9	0.1	-0.7	-1.6		-1.0		-0.0	0.0	-2.1	0.0
25		0.1	-0.2	0.5		-0.1		-0.8	-0.4	-0.6	
35		0.2	0.0	0.2		1.3		1.9	1.1	0.0	
45		-0.4	-1.3	-1.0		0.3		0.0	-0.7	0.0	
55			-0.8	-0.4		0.1		1.6	1.8		
65			0.0	0.5		2.1		1.9	1.6		
75			-1.0	2.1		2.3		3.3	3.6		
85				1.6		1.7		1.2			
95				4.1		3.8		2.4			
105				3.5		3.8		3.2			
115				2.3		1.8		2.5			
125					2.4	0.7	1.5				
134					1.0	0.7	-1.5				

RMS = 1.41(MILS) AVE DEV = 0.81(MILS)

Note. The X and Y values are nominal. Table 2 gives these a better precision.

The RMS of 1.41 mils is equal to 36 microns.

ESSCO Measurements of the first 12-meter Panel, November 13th 1981.

Table 2 gives X,Y,Z and Delta in inches. Delta is the difference between the measured and design values of Z.

Table 2

NRAD INNER PANEL NO. 1946-A01 SHT. 1

X(IN.)	Y(IN.)	Z, THEOR. (IN.)	Z, MEAS. (IN.)	DELTA(MILS)
5.000	17.502	6.925	6.926	0.8
15.002	17.503	5.584	5.584	0.0
44.999	14.008	2.726	2.726	0.0
34.997	14.008	3.416	3.416	0.0
25.004	14.008	4.325	4.325	-0.6
15.004	14.006	5.453	5.450	-2.1
5.000	14.005	6.795	6.796	1.3
5.000	10.007	6.681	6.683	2.0
15.004	10.007	5.339	5.339	0.0
24.999	10.007	4.211	4.211	-0.4
35.003	10.007	3.300	3.301	1.1
45.000	10.007	2.610	2.610	-0.7
54.996	10.007	2.144	2.146	1.8
65.002	10.007	1.905	1.907	1.6
75.000	10.007	1.897	1.901	3.6
115.001	5.011	4.153	4.155	2.5
105.001	5.012	3.201	3.204	3.2
95.000	5.012	2.495	2.498	2.4
85.014	5.012	2.032	2.033	1.2
74.999	5.012	1.805	1.809	3.3
64.989	5.012	1.814	1.816	1.9
55.008	5.012	2.053	2.055	1.6
45.000	5.012	2.520	2.520	0.0
35.001	5.012	3.210	3.212	1.9
24.996	5.012	4.122	4.121	-0.8
15.002	5.012	5.250	5.250	-0.0
4.995	5.012	6.593	6.594	0.8
4.995	-0.000	6.564	6.565	1.2
15.021	-0.000	5.218	5.217	-1.0
25.001	-0.000	4.091	4.091	-0.1
35.005	-0.001	3.180	3.181	1.3
45.002	-0.001	2.490	2.490	0.3
55.002	-0.001	2.023	2.023	0.1
65.003	-0.002	1.783	1.786	2.1
75.001	-0.002	1.775	1.777	2.3
85.003	-0.003	2.000	2.002	1.7
95.003	-0.004	2.464	2.468	3.8
105.000	-0.005	3.170	3.174	3.8
115.002	-0.005	4.121	4.123	1.8
125.001	-0.003	5.322	5.323	0.7
134.001	-0.000	6.620	6.621	0.7
134.001	2.498	6.628	6.626	-1.5
125.006	2.497	5.331	5.332	1.5
125.006	-2.510	5.331	5.333	2.4
134.000	-2.508	6.628	6.629	1.0
115.002	-5.005	4.152	4.155	2.3

NRAD INNER PANEL NO. 1946-A01 SHT. 2

X(IN.)	Y(IN.)	Z, THEOR. (IN.)	Z, MEAS. (IN.)	DELTA(MILS)
105.000	-5.005	3.201	3.204	3.5
94.994	-5.007	2.495	2.499	4.1
85.000	-5.008	2.031	2.033	1.6
75.007	-5.009	1.805	1.808	2.1
65.004	-5.009	1.814	1.814	0.5
55.000	-5.009	2.053	2.053	-0.4
45.005	-5.009	2.520	2.519	-1.0
35.004	-5.009	3.210	3.210	0.2
25.008	-5.009	4.121	4.121	0.5
15.007	-5.009	5.249	5.247	-1.6
4.999	-5.009	6.593	6.594	1.0
4.999	-10.004	6.681	6.682	0.5
15.007	-10.003	5.338	5.337	-0.7
25.007	-10.003	4.210	4.210	-0.2
35.000	-10.003	3.300	3.300	0.0
45.006	-10.004	2.610	2.609	-1.3
54.902	-10.004	2.148	2.147	-0.8
65.000	-10.006	1.905	1.905	0.0
75.009	-10.006	1.897	1.896	-1.0
45.003	-13.991	2.725	2.725	-0.4
35.007	-13.991	3.415	3.415	0.2
25.000	-13.991	4.325	4.325	0.1
15.003	-13.991	5.452	5.452	0.1
5.000	-13.991	6.794	6.794	0.1
5.000	-17.498	6.925	6.925	0.1
15.001	-17.497	5.584	5.585	0.9