

12 METER MILLIMETER WAVE TELESCOPE

MEMO No. 193

TO: J. W. FINDLAY

FROM: L. J. KING

SUBJECT: 12M SURFACE RADIAL PROFILE FOR 100# AT EDGE

IN MEMO. #182 (8/10/82), I HAVE CALC. THE EDGE DEFLECTIONS OF THE BACKUP STRUCTURE FOR THE SIMULATED TEMPLATE D.L. OF 100# AT THREE DIFFERENT LOCATIONS.

FOLLOWING ARE THE ADDITIONAL DEFLECTIONS WHICH YOU HAVE REQUESTED ALONG THE RADII FOR THE 100# TEMPLATE DEAD LOAD.

THERE ARE SOME DIFFICULTIES IN GETTING THE EXACT INFOS:

- (1) NO STRUCTURAL POINTS ON THE CENTER LINES OF THE PANELS WHERE ONE THIRD OF THE EDGE BALLS ARE LOCATED.
- (2) ONLY SIX PANEL-SUPPORT JOINTS ALONG EACH RADIUS IN THE PRESENT COMPUTER MODEL.

WITHOUT GOING THROUGH LENGTHY ADDITION TO MY COMPUTER MODEL, ONLY THE DEFLECTIONS ALONG THE RADII OF THE PANEL SUPPORTS ARE GIVEN IN THE TABLE BELOW:

PANEL SUPPORT		DEFLECTIONS (IN MU) DUE TO 100# AT								
		JOINT 15			JOINT 66			JOINT 1015		
NO.	NG.	Y	R	Y	R	Y	R	Y	R	
1		-2	7	-1	7	-2	3			
2		-6	7	-6	9	-2	4			
3		-13	12	-17	14	-11	8			
4	I O	-32	20	-40	24	-25	16			
	I U									
	I T	-63	41	-74	46	-55	36			
	I E									
	I R	-111	77	-125	83	-102	71			

NOTE: Y=VERTICAL DEFLECTION (+UP)
 R=RADIAL DEFLECTION (+OUT)
 MU= .001 MM.