

Jefferson Lab Alignment Group

DATA TRANSMITTAL

TO: Tim Whitlatch and Brian Carpenter

DATE: Jul 16, 02

FROM: Chris Gould

Checked: # : Z793r

DETAILS:

The following are the results of the SNS space frame 02 inspection performed the week of July 8, 2002. A right hand coordinate system was established with the central axis running through the average inner diameters of the six support rings. Ring one is upstream and ring six is downstream. An average plane through the top two tubes controls roll. Positive X is to the beam left and positive Y is up. Positive Z runs downstream with Z = 0 as the average of the four upstream tubes. Values are in inches. Attached is the check sheet with measured values to the corresponding features.

Ring	X	Y	ID	OD	Thickness
1	-0.05	0.04	30.85	36.74	0.76
2	0.00	-0.01	30.74	36.83	1.51
3	0.09	-0.01	30.75	36.54	0.76
4	-0.03	-0.06	30.82	36.68	0.77
5	0.00	-0.02	30.72	36.69	1.50
6	-0.02	0.06	30.88	36.76	0.75

	Ring 2	Ring 5
.750-10 UNC thru hole (drawing value = 14.8)		
BL Top	14.6	14.8
BL Bot	15.1	14.9
BR Top	14.8	14.8
BR Bot	14.9	14.9
Bolt circle (drawing value = 17.04)		
BL Top	16.99	17.03
BL Bot	17.00	17.05
BR Top	17.03	17.07
BR Bot	17.05	17.09
Ring cutout (drawing value = 26.0)		
BL	26.2	24.4
BR	25.3	23.1
Counterbore diameter	1.26	1.26
Counterbore angle	9.1	8.6

DATA TRANSMITTAL (cont.)

: Z767

DATE: May 9, 2002

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*The tube hole locations are defined by the average location of the adjacent upstream and downstream tube position.
(Drawing Value = 11.93)

	X	Y
Ring 1		
Tube Hole top BL	11.95	11.96
Tube Hole bot BL	11.96	-11.92
Tube Hole top BR	-11.94	12.01
Tube Hole bot BR	-11.91	-11.88
Ring 2		
Tube Hole top BL	11.88	11.89
Tube Hole bot BL	11.89	-11.96
Tube Hole top BR	-11.94	11.93
Tube Hole bot BR	-11.95	-11.93
Ring 3		
Tube Hole top BL	11.85	11.91
Tube Hole bot BL	11.90	-11.98
Tube Hole top BR	-11.99	11.90
Tube Hole bot BR	-11.96	-11.99
Ring 4		
Tube Hole top BL	11.85	11.93
Tube Hole bot BL	11.92	-11.95
Tube Hole top BR	-11.98	11.91
Tube Hole bot BR	-11.98	-12.00
Ring 5		
Tube Hole top BL	11.88	11.95
Tube Hole bot BL	11.96	-11.88
Tube Hole top BR	-11.94	11.91
Tube Hole bot BR	-11.95	-11.91
Ring 6		
Tube Hole top BL	11.92	12.05
Tube Hole bot BL	11.99	-11.77
Tube Hole top BR	-11.94	12.01
Tube Hole bot BR	-11.95	-11.77

	Ring 1	Ring 3	Ring 4	Ring 6
Ring cutout (drawing value = 26.0)				
BL	24.9	25.2	25.3	27.9
BR	27.8	26.1	25.1	24.5
Offset Hole (drawing value = .88)				
BL	0.90	0.81	0.82	0.89
BR	-0.84	-0.94	-0.95	-0.88