



# Jefferson Lab Alignment Group

## Data Transmittal

**TO:** T. Michalski, A. DiPette

**DATE:** 7 Jul, 2023

**FROM:** Chris Curtis

**Checked:** LEB

**# :** L2074

**DETAILS:**

M:\align\Calcs\Accel\Leaning Stands

The following are the results of the torque survey of east arc stands conducted during the Spring '23 SAD. All quad stands and two thirds of the dipole stands were torqued. The quad data shows the number of bolts torqued out of 8, and the minimum and maximum turns for that stack. Three stacks (14-16) were known to have been previously torqued. The other twenty-nine stacks are grouped together and had not knowingly been torqued since their installation.

For the dipole data the number of bolts torqued is out of a total of 16. Several of these bolts needed a little tightening, however, none in 1S were found to be loose.

QUADS		PREVIOUSLY TORQUED				
<u>Top Quad / Stack</u>	<u>Date</u>	<u># Tightened</u>	<u>Min Turns</u>	<u>Max Turns</u>	<u>Last Tight'd</u>	<u>Time B/w</u>
QB1A17 / 14	21-Apr	3	0.00	0.63	4/29/19	4 yr. 0 mo.
QB1A18 / 15	21-Apr	0	0.00	0.00	4/29/19	4 yr. 0 mo.
QB1A19 / 16	20-Apr	1	0.00	0.17	4/29/19	4 yr. 0 mo.
<b>Avg:</b>				<b>0.363</b>		

NOT TORQUED					
<u>Top Quad / Stack</u>	<u>Date</u>	<u># Tightened</u>	<u>Min Turns</u>	<u>Max Turns</u>	<u>Avg Turns</u>
QB1A01-16 / 01-13	15-26-May	8	0.25	2.75	1.13
QB1A21-38 / 17-31	23 Mar – 19 Apr	8	0.13	1.30	0.95
QB1A39 / 32	23 Mar	6	0.00	0.50	0.25

DIPOLES		<u>Date</u>	<u># Tightened</u>	<u>Max Turns</u>	<u>Last Tight'd</u>	<u>Time B/w</u>
EA07	24-Apr-23	6	0.625	29-Apr-19	4 yr. 0 mo.	
EA08	19-Apr-23	9	0.500	29-Apr-19	4 yr. 0 mo.	
EA09	18-Apr-23	7	0.250	14-Apr-21	2 yr. 0 mo.	
EA10	14-Apr-23	8	0.375	15-Apr-21	2 yr. 0 mo.	
EA11	12-Apr-23	4	0.063	16-Apr-21	2 yr. 0 mo.	
EA12	7-Apr-23	3	0.500	16-Apr-21	2 yr. 0 mo.	
EA13	29-Mar-23	8	0.250	29-Apr-19	3 yr. 11 mo.	
EA14	29-Mar-23	1	0.063	28-Apr-21	1 yr. 11 mo.	
EA15	29-Mar-23	0	0.000	29-Apr-21	1 yr. 11 mo.	
EA16	29-Mar-23	2	0.125	29-Apr-21	1 yr. 11 mo.	
1S	5-May-23	0	0.000	9-Apr-19	4 yr. 1 mo.	