



Jefferson Lab Alignment Group

Data Transmittal

TO: J. Fisher

DATE: 07/25/2022

FROM: Elena Balan

Checked: KJT

: Z2044 / C003

DETAILS:

M:\align\DATA\SRFCryo\SNSPPU\CM003\FINAL\220504A

Data bellow presents the final fiducials coordinates for the SNS cryomodule C003 surveyed in April 2022. The coordinate system established is as follows: the cavity string defines the beam axis, the primary Bayonet of the return can is controlling roll, and the upstream coupler defines the origin in Z. Positive Z downstream, positive X beam left and positive Y up. Coordinates presented in the table below are in inches. Consider that the measurements for the fiducials were taken using a 0.5" SMR and a Hubbs nest that has an H value of 0.5000" to centerline of sphere.

Name	X[inch]	Y[inch]	Z[inch]
SNS_FIDA	21.504	-0.001	135.749
SNS_FIDB	-0.009	21.448	135.744
SNS_FIDC	-21.559	0.01	135.733
SNS_FIDD	21.517	0.013	97.826
SNS_FIDE	-0.013	21.587	97.831
SNS_FIDF	-21.532	0.03	97.789
SNS_FIDG	21.526	0.093	69.369
SNS_FIDH	-0.055	21.524	69.432
SNS_FIDJ	-21.501	-0.007	69.391
SNS_FIDK	21.513	0.108	26.769
SNS_FIDL	-0.087	21.548	26.776
SNS_FIDM	-21.556	-0.025	26.807
SNS_FIDN	21.495	0.048	-11.216
SNS_FIDP	-0.088	21.481	-11.192
SNS_FIDR	-21.532	-0.096	-11.215

In Vacuum Vessel			
Name	X[inch]	Y[inch]	Z[inch]
US VV Flange	-0.049	-0.075	-53.863
DS VV Flange	-0.041	0.039	178.448