

New BPM Installation In the NTF Beam Line

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This note provides some measurements and photos of a location in the NTF beam line, off the Linac, in which we hope to install a new Beam Position Monitor. With this new BPM and the one that is currently installed further downstream by the target, NTF will be able to better monitor the angle of the beam.

The figures below are photos of the location we wish to install the new BPM. There is currently a can that, perhaps, housed a wire chamber in the past. We would remove this can assembly, between the flanges. There is a bracket supporting the can, as seen in Figure 4, which can be used to support the new BPM.

Currently, two BPM detector designs have been proposed. The first is a design from 1993, "Linac Upgrade NTF BPM Assembly" Dwg # 9050.000-MD-83548. The second is a current design, one for which hardware may be more readily available, "Fermi Test Facility BPM Button Housing CF63", Dwg # 2782.000-MB-345416.

At this time the implementation of a BPM detector at this location is being reviewed by AD/Instrumentation. October 6, 2011

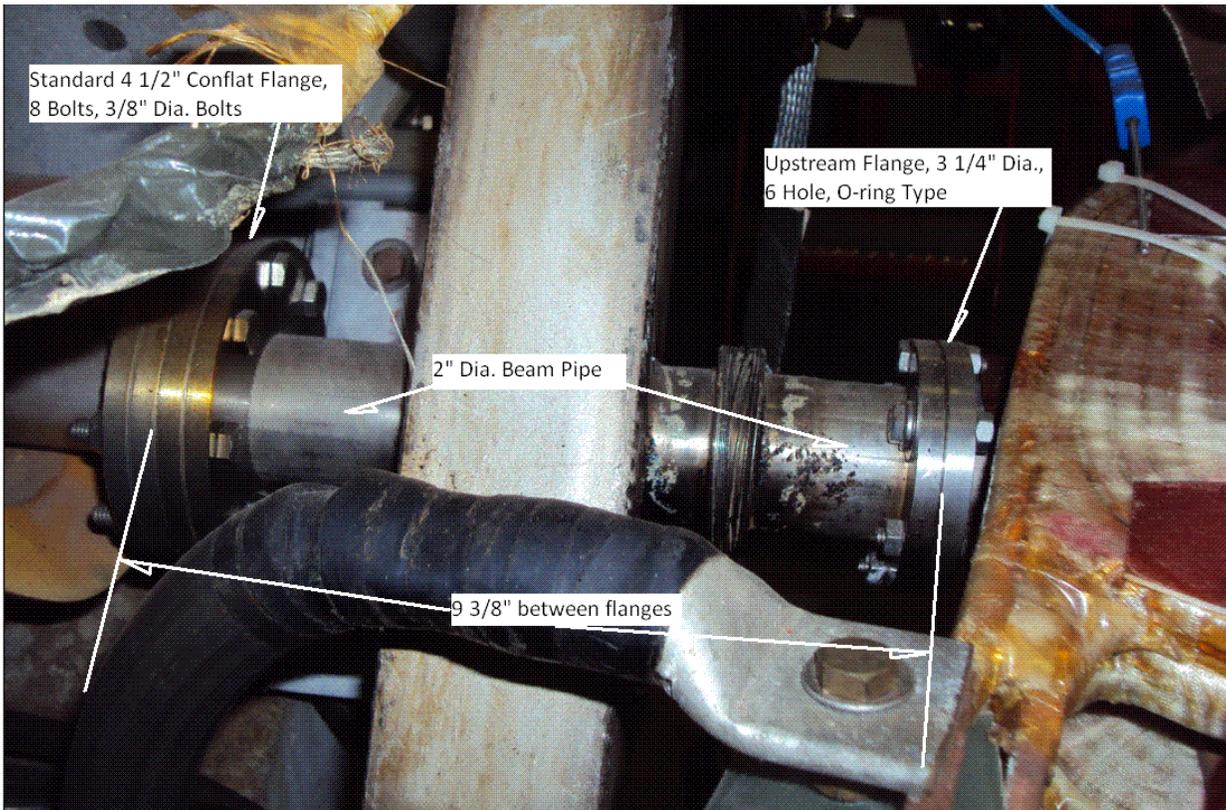


Figure 1.

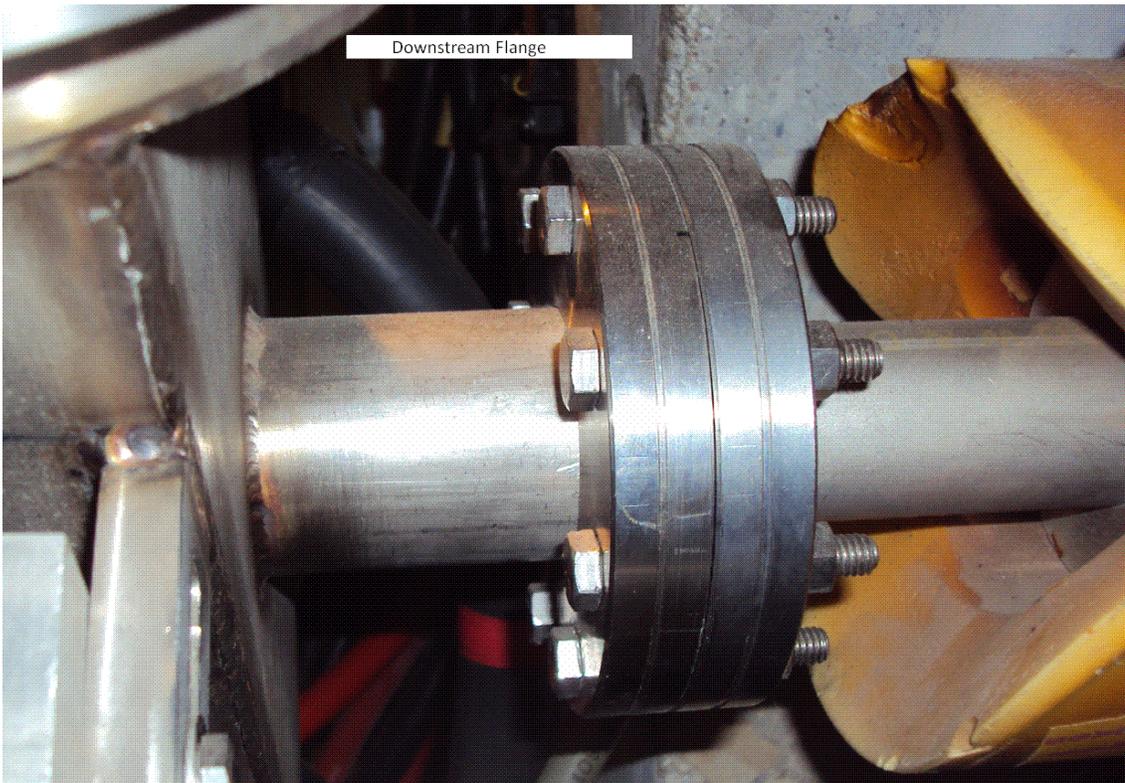


Figure 2.

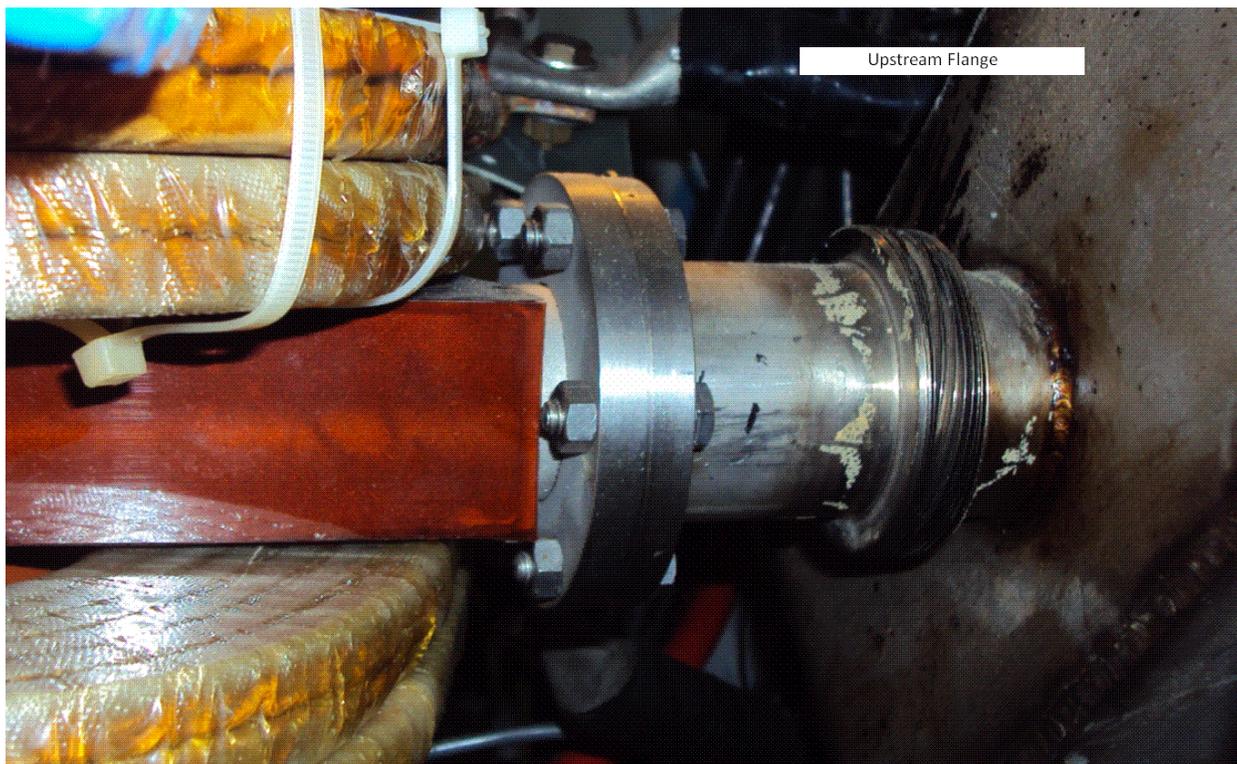


Figure 3

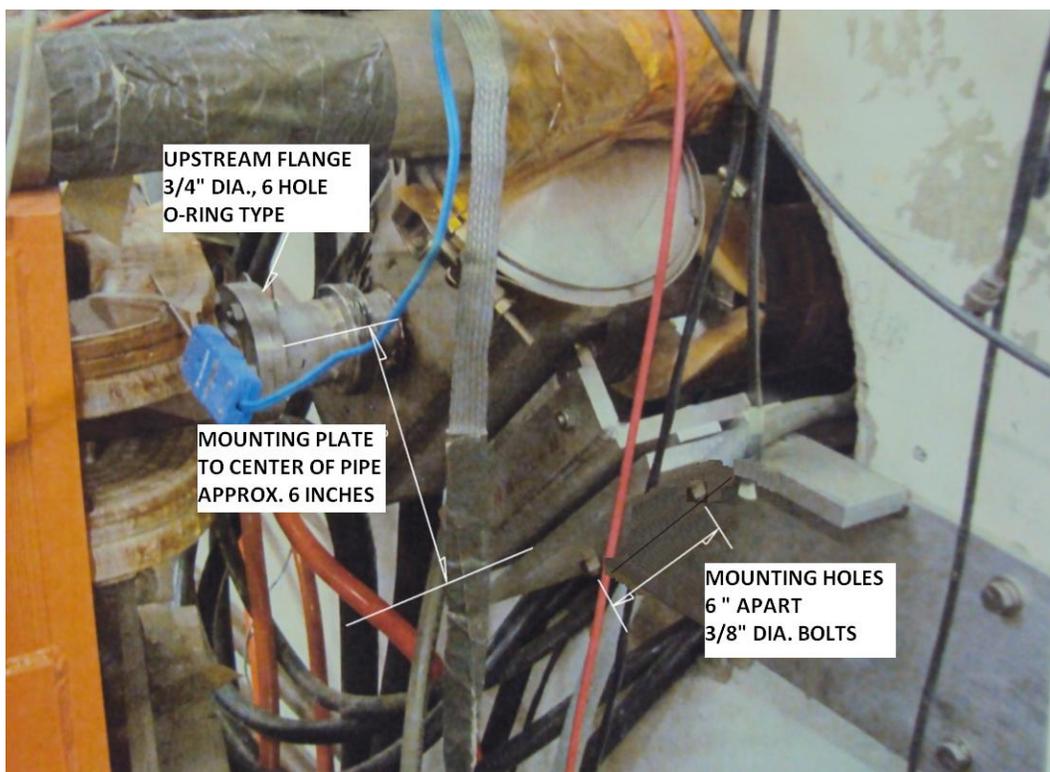


Figure 4.