

CERN – STFC – US-LARP Crab Cavity Collaboration Meeting | 11 October 2016

REPORT

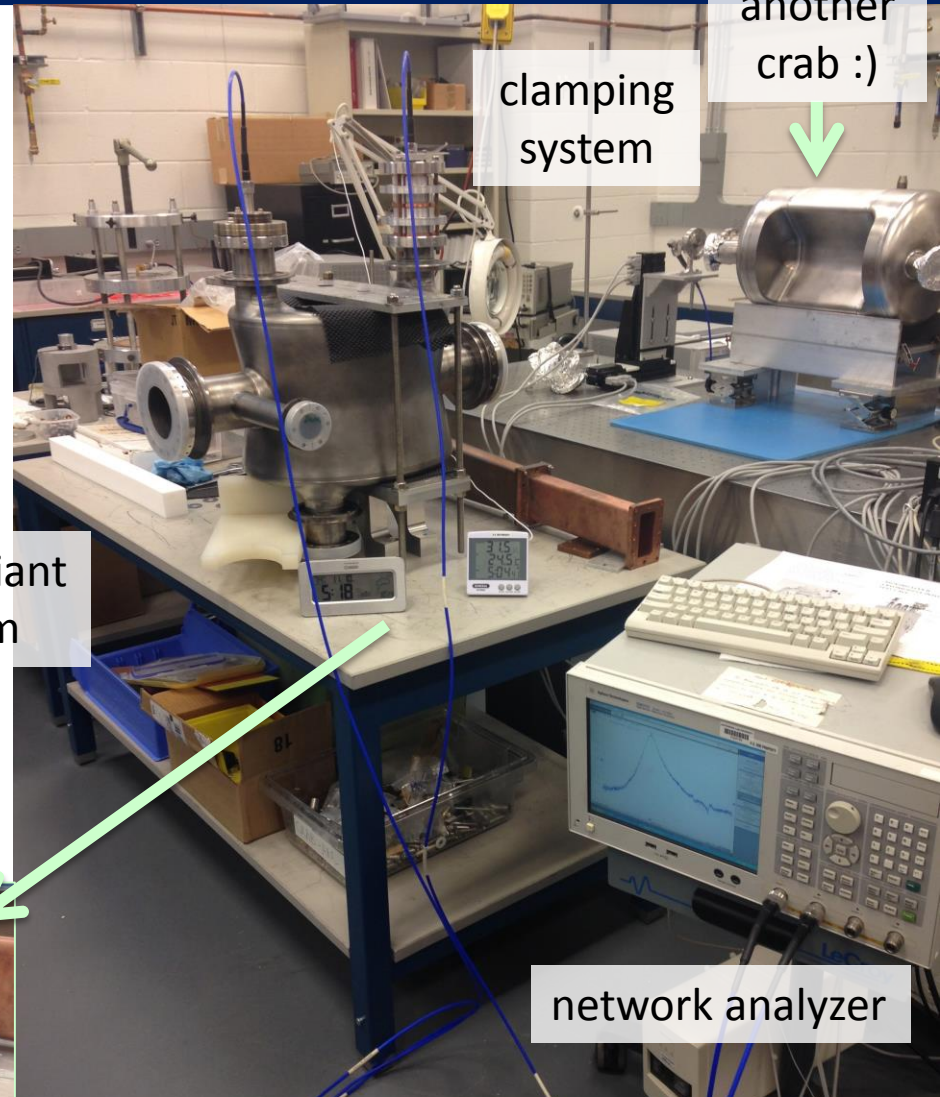
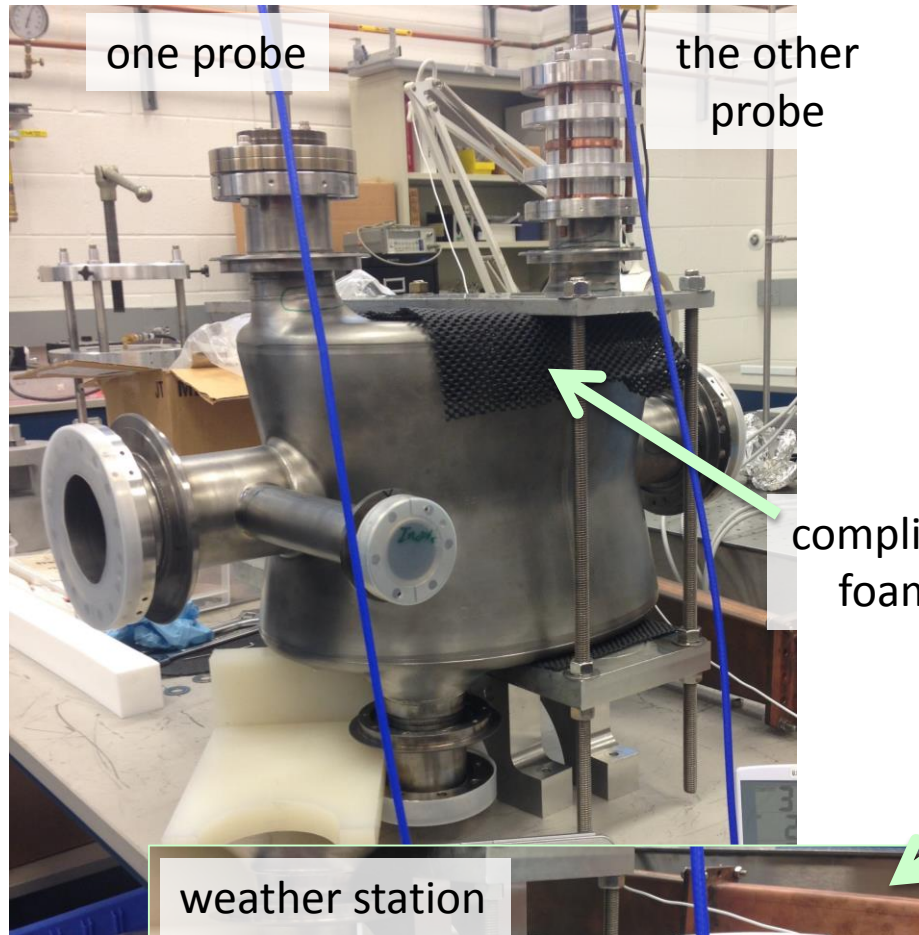
Frequency of clamped NWV-DQW-001 at Jefferson lab

Silvia Verdu-Andres (BNL) and HyeKyoung Park (ODU/Jlab)

Tasks completed for NWV-DQW-001 at Jlab - update

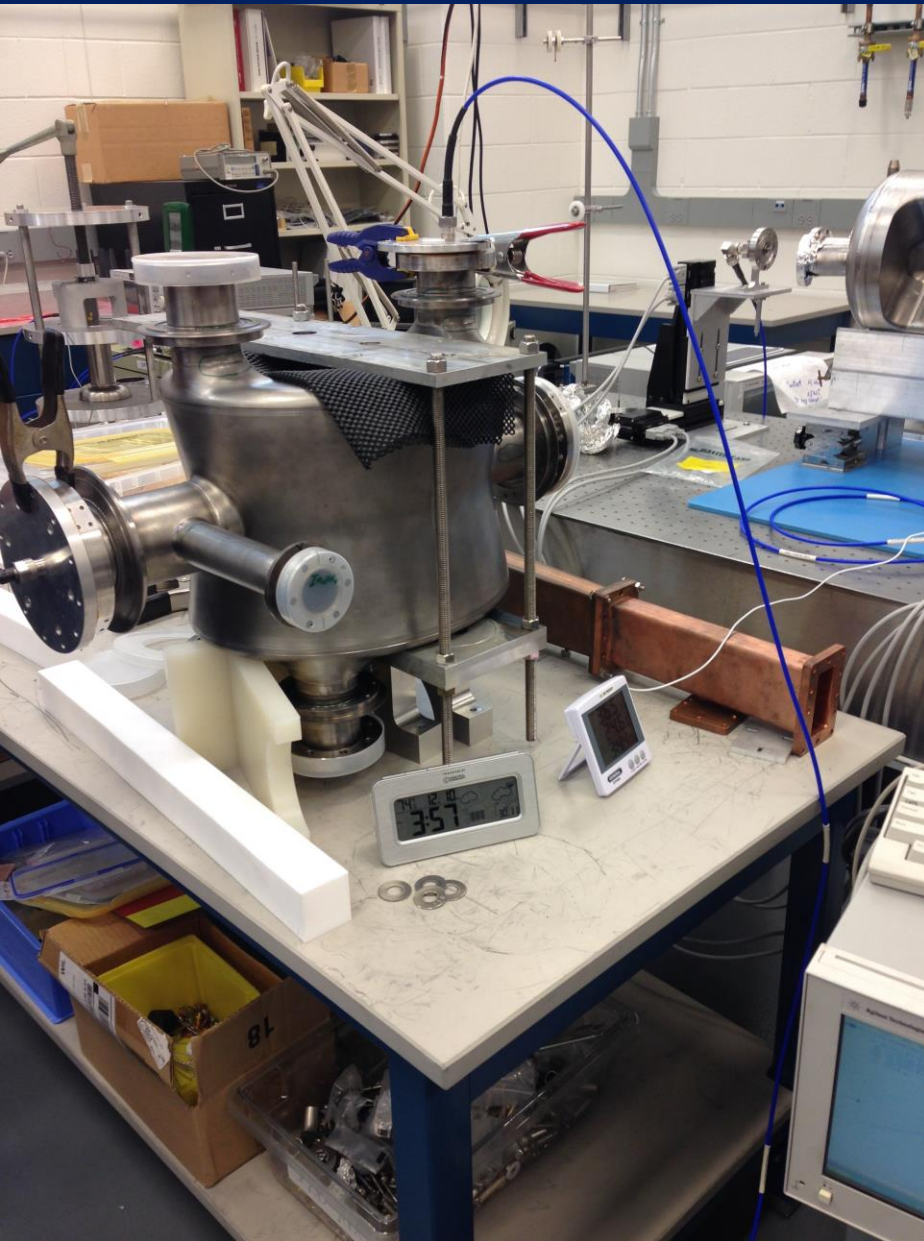
- Visual inspection of parts after reception at Jlab from Niowave → OK
(after thinning and final trimming)
- Inspection by certified weld inspector
 - pickup tube weld → non compliant (structural)
 - NbTi / Nb weld of prep rings → non compliant (may lead to leaks)
 - small ports should transition from butt weld to fillet weld → non compliant with Manufacturing Drawing
- Polishing corner left by thinning operation
- Added marks of locations where thickness should be measured before/after any BCP
- Frequency check with various couplers
- Reviewed BCP procedure

Frequency measurement at Jefferson lab – coupler setup I

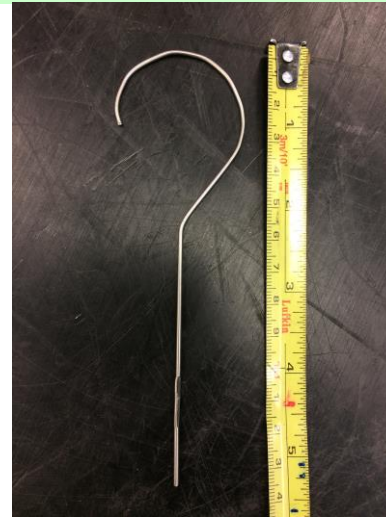


- 3d printed hook inserted into FPC port
- PoP cavity hook inserted into HOM1 port

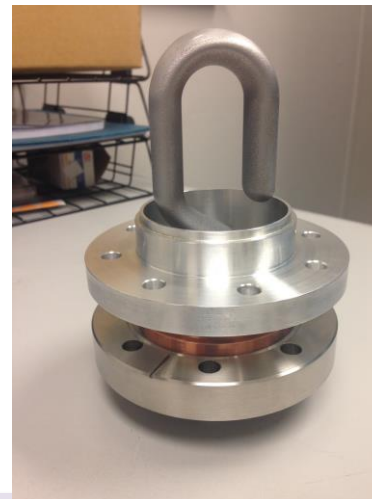
Frequency measurement at Jefferson lab – coupler setup II



- 3d printed hook inserted into FPC port (tried other couplers too)
- antenna inserted into beam pipe



PoP hook



23 cm-long antenna for beam pipe

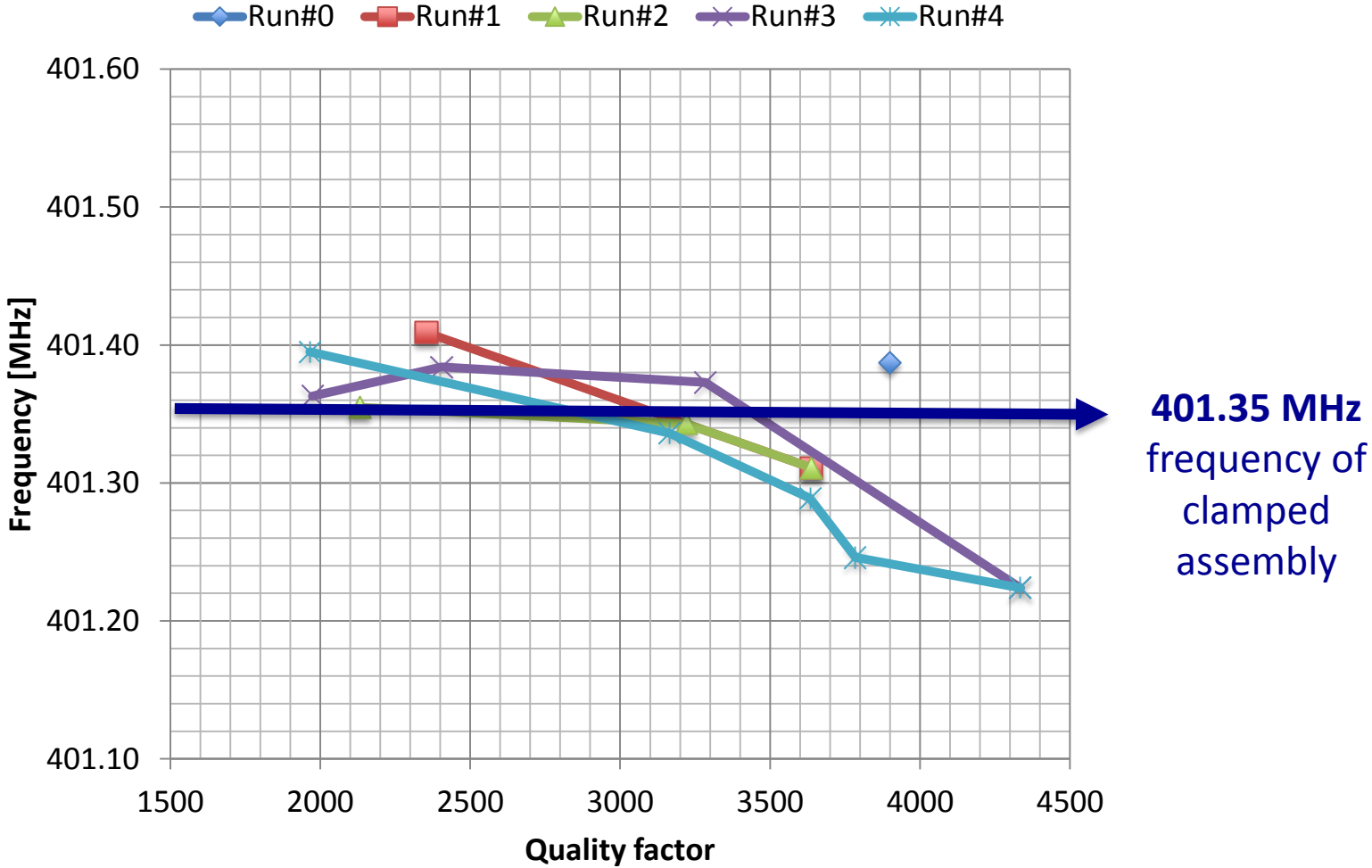
Good edge matching – *bottom to center subassemblies*



Good edge matching –*top to center subassemblies*



Frequency measurements



S_{21} signal

