3rd Harmonic Monday Meeting Minutes

Date: July 16, 2007 Time: 9:00 A.M. Place: Hermitage

Attendees (P=Present, Ph=attended by phone):

T. Arkan		N. Dhanaraj		T. Khabiboulline	P	N. Solyak	
L. Bellantoni		H. Edwards	P	D. Mitchell	P	Y. Torun	P
H. Carter		M. Foley	P	D. Olis	P	G. Wu	
M. Champion	P	E. Harms		P. Pfund	P	G. Galasso	
L. Cooley	P	A. Hocker		S. Reeves		E. Vogel	
C. Cooper		H. Jiang	P	A. Rowe	P	M. Henning	

Minutes recorded by Dan

Minutes are posted at: http://tdserver1.fnal.gov/dolis/39GHz minutes.html

3.9GHz Project page is: <u>www-a0.fnal.gov</u>

Meeting Minutes

Cavity status

- First weld repair on leaking input coupler for vertical test was poorly done. Second repair weld also looks questionable. It is getting polished today for leak check. If it passes the test, earliest VTS of cavity-6 will be Friday.
- Allan reports that two DI tanks failed recently on A0 ultra-pure water system. System is cleaning up but bacteria counts are still elevated. If tests of cavity-6 show emission, rinse will be repeated. UV lamp in polishing loop will also be replaced soon.
- Mike and Timer have looked at end tubes fabricated from DESY. Mike use right angle scope to get a better look at the F-probe welds.
- Mike reports that the PO to JLAB has been approved to extend contract through September and increase funds by \$10k to get cavity-7 and/or 8 welded at JLAB.
- Discussion of need for single cell cavity master list. Lance reports that Genfa is working on a master list of cavities (both single and 9-cell) and will also present a proposed naming scheme. In the meantime, Mike will try to develop a catalog list of all single cell cavities in hand and on-order
- Lance will soon receive cell blanks for single crystal cavities. Mike will get (2) single cell cavities fabricated with them when he finishes 9-cells. Mike asked if multi-crystal end tubes be used on single cell cavities.

Helium Vessels

- Don reports bellows have a 4-6wk lead time (longest lead item).
- Mike and Don report that Al Buetler has finished design of welding fixtures. They next need to be fabricated.
- Don reports that procurement is still having difficulty finding a shop to prepare titanium vessel welds with nitric and hydrofluoric acid pickling per AWS specification. Don has talked with DESY and JLAB personnel and those labs do not use acid pickling. Helen suggested Don ask P. Hurh in AD if he has a qualified vendor.
- Continued discussion on testing rejected vessels from Valfab. What is the motivation of the test: welding procedure, welder, or weld design qualification? Lance will do the tests but questions the usefulness of the results.

Main Input Couplers

• Further discussion on plan to test coupling between couplers and cavities with trimmed F-probes. We will wait until cavity-6 is tested in VTS to decide which cavity to use for this test. Coupler antenna tips may need to be trimmed, depending on results of this test.

Other Business

- General discussion on codes, welding, etc. of helium vessels and cryomodule vessel and plumbing.
- Allan reports that ANL BCP is progressing well. PLC programming, control wiring is finishing up. Ventilation tests and optimization will soon be done. Allan and Charlie are working on safety documentation and will then work on operating procedures.