

### 3<sup>rd</sup> Harmonic Monday Meeting Minutes

**Date:** August 6, 2007

**Time:** 9:00 A.M.

**Place:** Hermitage

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

T. Arkan	P	H. Edwards	P	D. Olis	P	G. Wu	P
L. Bellantoni		M. Foley	P	P. Pfund	P	John Z.	P
H. Carter		E. Harms	P	S. Reeves	P	E. Vogel	Ph
M. Champion	P	A. Hocker		L. Ristori	P	J. Li	P
L. Cooley		H. Jiang	P	A. Rowe		J. Dwivedi	P
C. Cooper	P	T. Khabiboulline	P	N. Solyak		B. Kephart	P
N. Dhanaraj		D. Mitchell	P	Y. Torun	P		

Minutes recorded by Dan.

Minutes are posted at: [http://tdserver1.fnal.gov/dolis/39GHz\\_minutes.html](http://tdserver1.fnal.gov/dolis/39GHz_minutes.html)

3.9GHz Project page is: [www-a0.fnal.gov](http://www-a0.fnal.gov)

#### Meeting Minutes

##### 9-Cavity status

- Timer reports cavity-6 achieved 22MV/m before quench in bottom HOM. X-rays started at 9.5MV/m. Poor vacuum during test, 2e-8Torr (10<sup>-9</sup>Torr typical). Cold leak seen during warm-up. Leak found in brazed joint of feedthru. Cavity is HPR'd and will be retested late this week.
- Mike reports that he shipped parts for cavity-7 to JLAB last wk. He will arrange for frequency measurements of completed end assemblies between JLAB and Timer. Timer measured end assemblies for cavity-8 and they have already been trimmed.

##### Single cell cavity actions

- Mike will have 1-cell blanks machined in the main shop. Genfa will update single cell R&D test plan table and distribute. Helen says there are (3) 1-cell CKM cavities that may also be used for some tests.
- Genfa reported on vertical test results on single-cell cavity processed by gas cluster ion beam of Argon at TEL-Epion. Baseline measurement done June 1 on cavity with 80micron etch achieved 14MV/m with field emissions starting at 10MV/m. Retest after GCIB on 8/1, cavity experienced much lower Q and quenched at 8MV/m. Genfa is working on getting test results on this cavity from JLAB but believes the results are similar.

##### Helium Vessels

- Mike reports that he is having on-going discussions with R. Hiller in the weld shop re: welder qualification for titanium. More to come.

##### Main Couplers

- Dan presented coupling test and antenna trim plan for Cold End Assemblies. Coupling test is room temperature and without vacuum, and uses spare coupler test stand to hold coupler onto cavity. Cavity-6 will likely be used after next vertical test.
- Timer will look at cavity QC data to understand perpendicularity of coupler flange to cavity center axis.

##### Other Business

- Helen presented a memo from Bernd Petersen dated May 7, 2007 that describes road map to safety approval of 3.9Cryomodule. It contains references to ASME BPV and piping codes.
- Charlie reports that tumbled cavity was baked over the weekend. It needs another light etch before it can be tested.