

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

**Date:** March 12, 2007

**Time:** 9:30 A.M.

**Place:** Hermitage

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

C. Antoine		N. Dhanaraj		D. Olis	P	G. Wu	P
T. Arkan	P	H. Edwards	P	P. Pfund		A. Hocker	P
L. Bellantoni	P	M. Foley	P	S. Reeves		J. Li	
H. Carter		E. Harms	P	M. Ross			
M. Champion	P	T. Khabiboulline	P	A. Rowe	P		
C. Cooper		D. Mitchell	P	N. Solyak	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

Cavity-4 (JLAB fab'd, original HOM design but with trimmed F-probe tip)

- Allan reports outside etch will occur Tuesday, inside etch scheduled for Thursday. Inside etch will be done with acid flow in one direction only to save time. Any differential etching can be tuned out by Timer. E. Hahn will prepare vacuum oven for bake of cavity to start on Friday.
- Earliest possible cold test is end of next week or the following Monday.

End Groups

- Mike reports that welding of HOM can to end groups was successful. He now has (4) end tube sets awaiting F-probes. They will next go to the shop to machine prep's for F-probes.
- His test welds between formteil and can were unsuccessful due to splatter of niobium into end group interiors. He is trying an annular weld on probe posts similar to DESY weld procedure to limit total heating to control grain growth. Original Fermi weld procedure for these pieces results in nice looking welds but also large grains which may weaken part and provide possible leak path.
- Allan will let Mike know when he is available to etch more material for further tests.

He Vessel and Cavity-1

- Cavity-1 is slated for test of procedure to weld helium vessels to cavities. Don and Mike will look at cavity to make sure it can accept the vessel. Allan will meet with Mike Reynolds this week to work out any tooling needs. Plan is to implement a lazy Susan turntable that is hand rotated per Mike R's suggestion.
- Test of weld procedure will include field flatness measurements between steps.

Main Coupler

- Dan reports CPI has provided a promise date of return for Outer Conductors with plating issues in (4)wks for first item and (6)wks for second item. The quote for repair for a spare (seventh) Outer Conductor was rec'd (\$7565, 7wk delivery) and a requisition has been submitted.

Main Coupler Test Stand

- Elvin reports John Reid had to remedy sparking seen in klystron last week. Coupler processing should continue tomorrow.
- Dan reports machined parts for a second RF volume rec'd last week. They will first be cleaned by A0 personnel and then given to B. Smith for brazing.

HOM Couplers

- Elvin reports that (2) more couplers were rec'd from Omley. Both passed leak check and will be RF tested by Timer. Coupler rec'd last week passed Timer's RF test.

Other Business

- Allan reports A0 water system was sanitized last week (annual maintenance).

- Don reports that TD buyers have rec'd a number of 'no quotes' on the cryomodule heat shields. They'll take the requisition to Fermi procurement to find more vendors.