

Monday Morning Meeting January 25th, 2010

09:00–09:20 Third-Harmonic

Agenda per Helen, Elvin and Mike

09:20–10:20 SRF Operations and Integration

1. Nine-cell cavity coordinator report – Ginsburg

(from Camille's email)

TB9ACC013(dressed) was installed at HTS. Warm coupler conditioning was done last week. Expect cooldown and ~3 weeks of cold testing starting this week.

TB9ACC016(@JLab) got optical inspection at a T-map-verified quench location, but no defect was observed. Cavity was tuned, wall thickness measured, and cavity received 25 um EP. First assembly expected today, then final assembly, 120C bake. RF test next week.

TB9AES007 to get 10 um internal BCP this week. Bulk EP, 800C furnace treatment next week, with tuning and light EP to follow.

TB9RI026 was optically inspected last week with typical surface quality observed and no major concerns. It was returned to ANL for bulk EP which is scheduled to start tomorrow. It then goes to JLab for 800C heat treatment.

TB9RI018 completed incoming inspection, and will go to JLab for the full process/test cycle pending confirmation from JLab that they can receive it, and resolution of optical inspection advisability.

TB9RI023 has a weld void in the transition ring and has been put aside pending a plan for repair; we expect to have a plan by the end of this week. The missing "9" was inserted into the serial number (both locations).

TB9RI024 completed incoming inspection. It will go for optical inspection as soon as reasonable. Incoming inspection will start on more new cavities.

AES003 (spot polished at KEK) final gradient confirmed 30 MV/m (quench/FE present). Thermometry indicated no hot spots in the previous localized heating location, so it appears the grinding was proven successful from the test perspective. After the vertical test, the cavity went to ANL for the two-times HPR returning to IB1 last Friday, where it has been 120C baked. It will go in the dewar today for test tomorrow.

ACCEL7 looked good in optical inspection. It will get a light EP after the ANL EP facility is done with TB9RI026 bulk-EP. Then VTS prep, 120C bake, and re-test.

TB9ACC010 (@ Cornell, vertically EP'd) will be optically inspected and another 10 um vertical EP in early Feb.

LG1 was sent to KEK for spot polishing. Time scale is months.

2. Single-cell cavity coordinator report – Wu

TE1ACC004 was tested again with T-map and the quench location identified. It was found that the quench location is different above and below lambda point. TE1ACC003 was tested and it reached 39.5 MV/m.

NR-1, tested with Q-disease measurement, no Q-disease, no performance degradation
NR-4 baking at A0 finished this morning, RF test pending.

3. HTS status – Harms, Hocker

AES4 was tested again on Thursday with single cell detectors to get the quench location. It was found that the quench location was moving spontaneously. Elvin talked to Hassan about this and he suggested moving the thermometry. Allan wanted to know if the movement was in the transducers or RTD's. He was informed that the movement was in both and it correlated.

ACC13 is in HTS, there were some issues in getting the coupler on and leak tight. Turning the knobs under vacuum was difficult. The installation pictures were send to DESY and they observed that the bellows were not completely removed.

4. ANL CPF status – Rowe

Allan informed members that we are short on single cell hardware. It is on order but will take time. He also mentioned that they are trying new optimized cathode and will start EP tomorrow.

Allan informed member about a proposal for the Argonne facility. He talked about having BCP capabilities in existing EP room and EP in other room with quarter rig to accommodate the 650MHz cavities. It was suggested that we should have a presentation on the proposal in coming meetings.

5. S1-Global update-Arkan

Tug informed members that the string assembly was completed in 5 days. The 2 phase piping welding will start from Monday. Serena and 3 INFN colleagues will be going to KEK on Feb 4th to assemble magnetic shielding tuners. He informed Camille that we need to provide some missing information to KEK. Camille said that she'll check what is required and send the information.

Tug mentioned that he could give a presentation on the S1 global next week.

6. Open discussion - all

Timer presented some slides on the ACC14 repair. Mike talked about some concerns from the technicians at MP9 about the labeling system.

10:20–11:20 SRF Special Topics

Genfa talked about the recent progress in the repair of cavity defects via laser re-melting and the performance of the ANL vacuum furnace for hydrogen degassing.