

# Minutes and Actions of Site Qualification Task Force

Phone Conference – 19<sup>th</sup> of May 2005

*Present:* J.C. Clemens, G. Darbo, K. Einsweiler, M. Garcia-Sciveres, P. Gerlach, D. Giugni, (C. Glitza), F. Hügging, (V. Kostyukhin), (P. Mattig), (L. Rossi), (M. Zdrzil).

*Excused:* E. Vigeolas.

## **Agenda.**

1. Discussion on the action items from the visit to the stave loading Sites.
2. New phone meeting: Module Loading Feedback
3. Status of production.
4. Stave delamination (moved to Friday, May 20)

## **Action items from Sites review.**

Giovanni and Maurice visited last week the 4 sites where staves are loaded/tested: Marseilles, Bonn, Wuppertal and Genova. We want to thank here the members of the 4 laboratories that showed how loading happen, how tests are performed and also explained many details of all the aspect involved in the production chain.

A document has been prepared: “Stave Loading Site Review Notes”. This document has been circulated to the SQTf before the phone conference. The note, in its first version, is available at:

[http://www.ge.infn.it/ATLAS/SQTf/Minutes/Minutes\\_05-05-19\\_aux/Site-review-notes-V2.pdf](http://www.ge.infn.it/ATLAS/SQTf/Minutes/Minutes_05-05-19_aux/Site-review-notes-V2.pdf)

As result of the visit also an action list have been prepared:

[http://www.ge.infn.it/ATLAS/SQTf/Minutes/Minutes\\_05-05-19\\_aux/Action-items-V2.pdf](http://www.ge.infn.it/ATLAS/SQTf/Minutes/Minutes_05-05-19_aux/Action-items-V2.pdf)

In the phone conference the main actions have been presented by Maurice and discussed:

- 1) Thermal cycling of stave 4079 in CPPM system test setup. This stave made for system test and supposed to go to Paolo, will be thermally cycled both with standard chiller and evaporative cooling to see the effect on the MCC wirebonds.
- 2) Stave storage. In general the safety of stave storage needs to be improved at all sites. Each stave should be stored in its own closed box that provides mechanical protection (that is, box can be picked up by hand without worry and can have items fall on it without worry), box must be ESD safe and free of significant dirt/contamination. Boxes with staves should be stored in dry air or inert gas.
- 3) Standardization of loaded stave shipping and storage box. There are two temporary supports, cradle and box. Given the inertia at the loading sites it is probably too inefficient to try to force a single common solution. There should therefore be two accepted standard solutions. One for use in Genova and CPPM (identical in both sites) and another for Bonn and Wuppertal (identical in both sites). All designs presently in use will need some evolution to reach the standard suggested here.
- 4) Stave cooling fitting. A stave cooling fitting design exists (made by CPPM). The idea was to have this fitting put in place before loading the stave with modules

and keep it until bi-stave is assembled. This fitting is made by a bolt that goes to the stave cooling pipe and is followed by a flexible pipe. The original design need modification of the bolt from aluminium to plastic material and the use of more flexible tube (silicone). It must be verified compatibility of the fitting with the all production chain. Eric will send few samples to Genova an Wuppertal. Also the aluminium caps used to transport and storage of bare staves must be replaced by plastic caps. Eric again will look for available parts. Danilo wants to have the fitting checked by helium leak tester. Leak testers are not available in the labs.

- 5) Stave module information receiving and data analysis checklist. A check list will be prepared by Giovanni.

### ***Module Loading Feedback Meeting***

In the visit it was found that there is missing feedback between the labs where modules are loaded on stave and the places where the modules are assembled. It has been decided to have a new weekly module loading feedback meeting. This meeting will be held weekly on Thursdays from 17:00-17:30. The sole agenda for this meeting is for one person from each stave/sector loading/test lab (Bonn, CPPM, Genova, LBL, Wuppertal) plus one person from CERN cabling/bistave. The feedback must be taken away from a person of each module assembly lab (Bonn, Dortmund, Genova, LBL and Siegen). The meeting will be chaired by Giovanni.

### ***MCC rework traveller***

Maurice prepared a traveller to use when MCC is reworked (as it is happening for the German MCC that are re-potted). The traveller in its version 1 is available at:

[http://www.ge.infn.it/ATLAS/SQTF/Minutes/Minutes\\_05-05-19\\_aux/stave-MCC-rework-v.1.0.xls](http://www.ge.infn.it/ATLAS/SQTF/Minutes/Minutes_05-05-19_aux/stave-MCC-rework-v.1.0.xls)

### ***Status of production***

The stave production is stopped until delamination problem is better understood and fixed. A special meeting is scheduled for Friday, May 20. Giovanni has updated the SQTF WEB sites with production plots for both staves and sectors. They are available at:

<http://www.ge.infn.it/ATLAS/SQTF/>

(follow link 'Stave Production' or 'Sector Production')

*Next phone-conference: Friday 3<sup>rd</sup> of June at 17:30.*