

## LHC RF Meeting

27<sup>th</sup> August 2003

**Present:** Andy Butterworth, Edmond Ciapala, Roberto Losito, Wolfgang Höfle.

**Excused/Absent:** Luca Arnaudon, Thomas Bohl, Philippe Baudrenghien, Olivier Brunner, Elena Chapochnikova, Trevor Linnecar, Eric Montesinos, Joachim Tückmantel, Volker Rödel, Daniel Valuch.

### **Agenda:**

- 1) SM18 - Modules and assembly
- 2) SM18 - Equipment installation status
- 3) ADT news
- 4) Integration
- 5) Ongoing work: Coupler activities, APW Pick-up, Radiation studies, Low level RF & Controls.
- 6) Other follow up from last meeting
- 7) AoB (Design report...)

### **1) SM18 - Modules and assembly (Roberto)**

- Module 3 is ready for the clean room. The clean room compressor will be repaired in week 36. The couplers can then be mounted, leak testing done and the couplers baked out - probably one at a time. The module should be in the bunker by the end of September for power tests
- Retuning of modules. Robert presented the overall status. Module 1 will be re-measured after cycling. Module 2 however has one cavity which remains 80 kHz too high after the retuning. A larger deformation will now be applied. This would be good time to review the history of all retuned modules.

### **2) SM18 - Equipment installation status (Roberto)**

- The 300 kW load has been returned by AFT. The Power Converter is being tested and RF tests will start soon.
  - Software: Basic software adapted from H112 can be used for klystron and HV control. However for module testing there are additional requirements to be defined and implemented.
- (Action: Andy Roberto)**

### **3) ADT news (Wolfgang)**

- Power Converters: Following the Specification Committee, tender documents for Ug1 and Ug2 supplies will be sent to 7 firms. The specifications have to be completed this week. The specification committee for the "A1" Anode supplies will be held on 25th October.
- ADT Kicker Tanks. Initial tests found both kickers leak-tight. However after bakeout a leak had occurred on a weld in one kicker.
- Main Feedthroughs: The reply for date DO-21434 has been extended to 3<sup>rd</sup> September.
- Cooling water: J-F Malo is looking at recuperable LEP material in ISR.
- Driver amplifier. The contract has been finally signed, ready for countersigning by CERN. A technical point concerning feasibility of rapid of switch on after a power interlock has to be looked at.

### **4) Integration (Ed/Roberto)**

- UX45 Tunnel Ventilation Layout: This has been changed back such that the inlet duct for the roof-mounted ventilation unit again passes along the tunnel wall and through the chicane, rather than through an opening in the wall.
  - Warm recovery line: The connection to this will be further away from the cavities than originally foreseen. Positioning of flanges has to be decided with W. Hess.
- (Action: Roberto, L. Serio)**
- Crash barriers: Installing these for both ACS cavities and ADT kickers to be looked at.
- (Action: Volker, C. Ruivet)**

**5) Ongoing work:**

- Coupler: postpone to future meeting in absence of Eric.
- APW Pick Up: same in absence of Thomas.
- Radiation Studies: Some results are available and will be presented at the next meeting
- Low level RF and Controls: The tuner card is now with the design office.

**6) Other follow-up from last meeting**

- No additional points discussed. However, Controls for second SM18 bunker, Planning, Earthing in UX45 are still to be followed up

**7) AoB**

- EVM: The recent cost savings have left our spares PV much lower than before. We should re-check that some bigger spares items are included.
- LHC Design report: A first draft of the complete RF chapter will be sent out by the end of the week.

**Next Meeting:**

Friday 5<sup>th</sup> September 2003

E. Ciapala, 2<sup>nd</sup> September 2003