

SX5 Work and Installation Issues

Mu Barrel Technical Board
CMS week September 20th 2005

A. Benvenuti
INFN Bologna

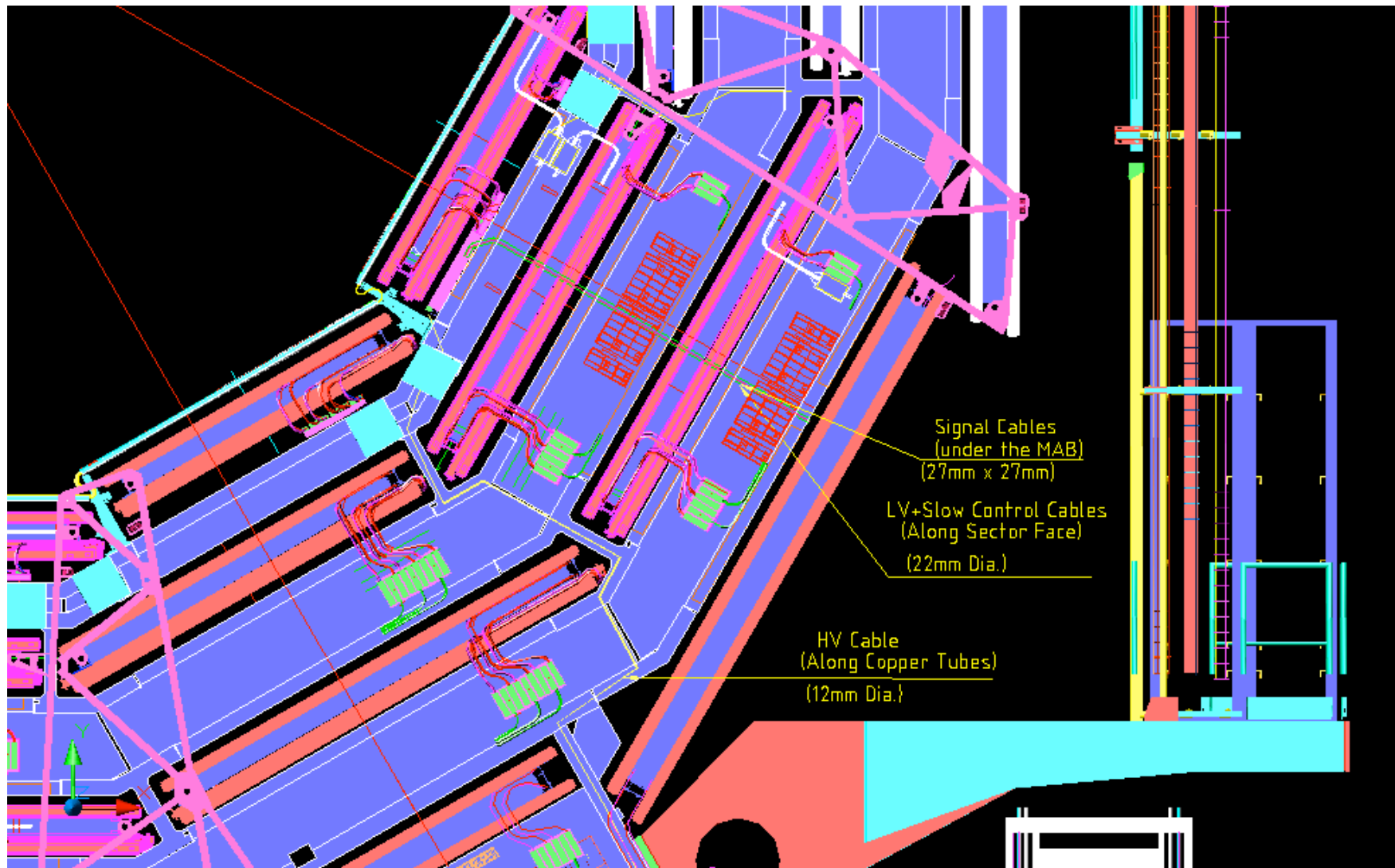
HO Issues

YB0

- Position of support rails for Readout Boxes RBx still to be defined.
- Holes to be drilled before MB1s can be installed. Now in conflict with magnet activities.
- Final drawings and jigs needed before we can negotiate priority for this task. Must be done in the shadow of magnet activities.

YB+1

- Routing of signal cables (fibers), LV, HV DCS cables still to be agreed.
- Installation of RBx likely to interfere (damage) our chambers
- When is HO cabling done?
- Define our preferred solution and negotiate the responsibilities of Mimmo and Fabio



- Baseline: HV along copper pipes; LV and DCS in radial cable trays
- Fibers bunched in two groups either under MABS in S12, S2/S3 or in cable trays in S2 and S12 with extra length looped outside

HO Issues

YB+2

- Cables and RBX at HV side
- Cooling goes across from front-end side. Copper pipes installed last week. Interference with DT access to tide up cabling and connecting to gas racks
- Holes to be drilled for cable supports (to be done also on YB-2)
- Tasks linger around and are done at last minute as decided by Alain.

YB Access

- YB+2 DT work limited to cabling (Martin/Fabio Anna) apart for 2 days this week
- YB+1 DT access needed for MB1 HV connections, SB ground straps connections (this week) and next week in parallel with commissioning for connecting MB4s to HV, LV PP
- Define priority sharing DT/RPC on a weekly basis and negotiate access with HO at SX5 meetings

YB Work

- List of items still to be done on the wheels at SX5 was sent to Austin 2 weeks ago to identify work that can be done by the SX5 team.
- YB0 items that affect chambers installation have top priority
- The assembly and mounting of the MB1 supports takes about 2 weeks/ wheel. I propose to decouple the work of assembly that can be done independently of crane availability and access to the wheels from the installation itself. This task should be done by the same team as for YB+2 and YB+1
- Forgotten in the list is the balance beam assembly still to be completed. **Some parts are missing**

YB Work

Activity Name	Start Date	Finish Date	Oct 05				Nov 05				Dec 05				Jan 06				
			2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22
YB0 Ancillary work																			
Drill holes for HO RBx	10/10/05	10/21/05																	
Drill ground straps holes	10/24/05	10/28/05																	
Mount Radial Trays+rails	10/31/05	11/11/05																	
Mount LV, HV JBx	11/14/05	11/25/05																	
YB-1 Ancillary work.																			
Drill holes for HO RBx rails, MB1 HV PP support rails	10/31/05	11/4/05																	
Mount MB1 Supports..	11/7/05	11/18/05																	
Mount HO RBx rails	11/21/05	11/25/05																	
Mount Radial Trays+rails	11/28/05	12/9/05																	
Mount LV, HV JBx	12/12/05	12/21/05																	
YB-2 Ancillary work																			
Drill holes for HO RBx rails, MB1 HV PP support rails	11/7/05	11/11/05																	
Mount MB1 Supports..	11/21/05	12/2/05																	
Mount HO RBx rails	11/14/05	11/18/05																	
Mount Radial Trays+rails	12/5/05	12/16/05																	
Mount LV, HV JBx	12/19/05	1/13/06																	

- green: done by SX5 staff;
- red: done by special team
- blue: done by home institution/ISR

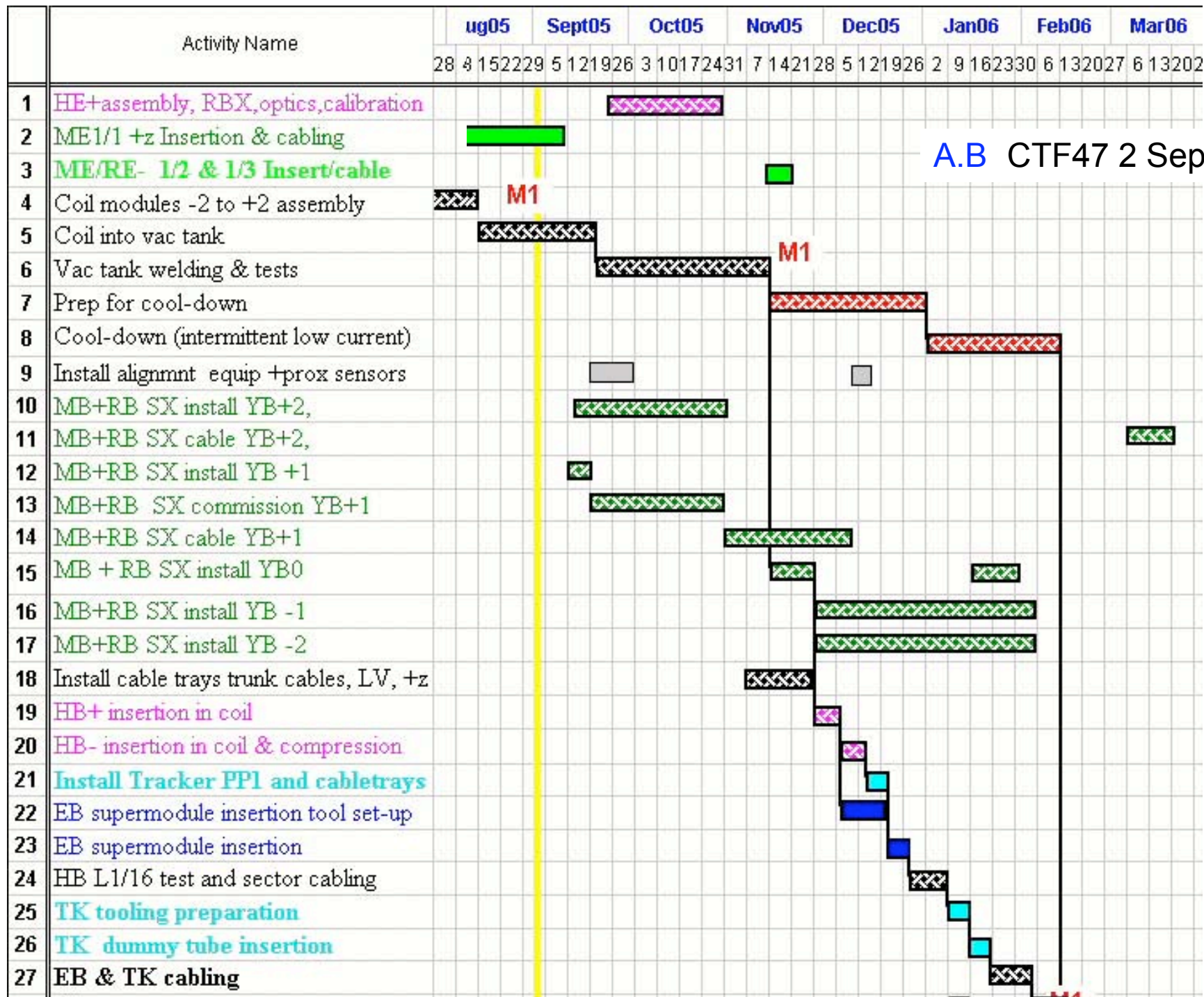
Magnet Test Schedule Update

- The new installation windows are:

YB0 November 14-28 and January 16-30

YB - November 28 to January 30

- I do not have any information on the access sequence in these windows apart for the promised 3 weeks for YB0
- Given the end of the year vacations, the installation plan should be revised in case January 30th looks probable.
- As a fall back scenario we could go back to the original plan of installing YB0+, YB-1, YB-2 and what is possible of YB-0
- if we do not have a realistic plan of the Magnet Test we risk making some costly mistakes



A.B CTF47 2 Sep 05

Cosmic Challenge

- Given the accumulated delays in the CMS schedule we should reconsider the scope of the Cosmic Challenge
- The natural components of the magnet test are: HB, CSC and Barrel MU. They do not introduce any delays
- Adding ECAL and Tracker introduces at least a month delay (more if the EB and tracker cabling goes out of the magnet cool down shadow)
- The EB installation tests could be done with lower priority during the magnet cool down.
- DAQ integration tests and synchronization can be carried out with 3 detectors for the entire period the magnet is closed
- Why do we need a week at nominal field with one EB SM and a piece of tracker?

Magnet Test Schedule Update

