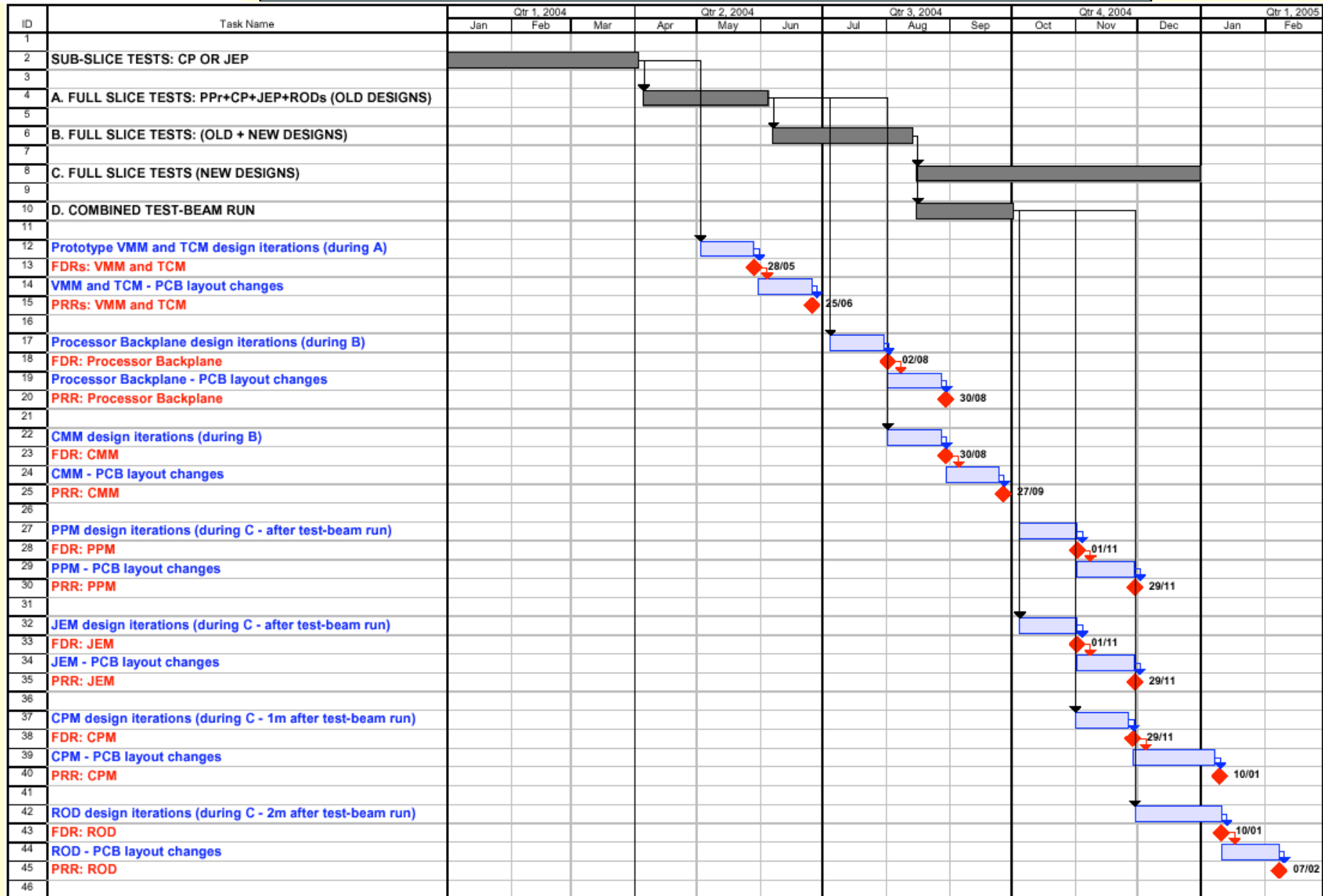


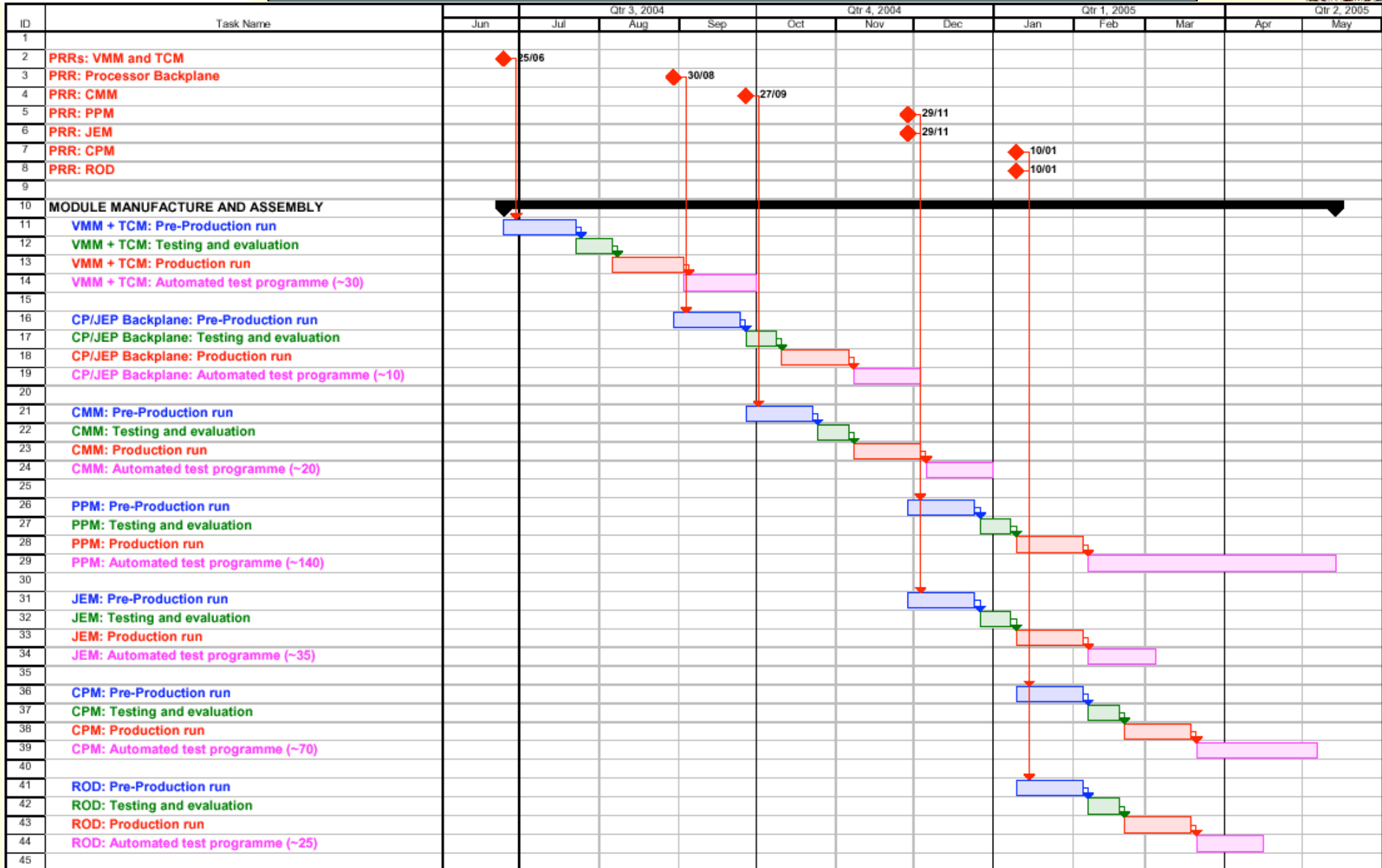
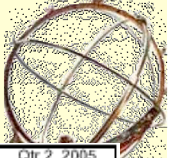
# ***Hardware Schedule + Milestones***

***Tony Gillman***

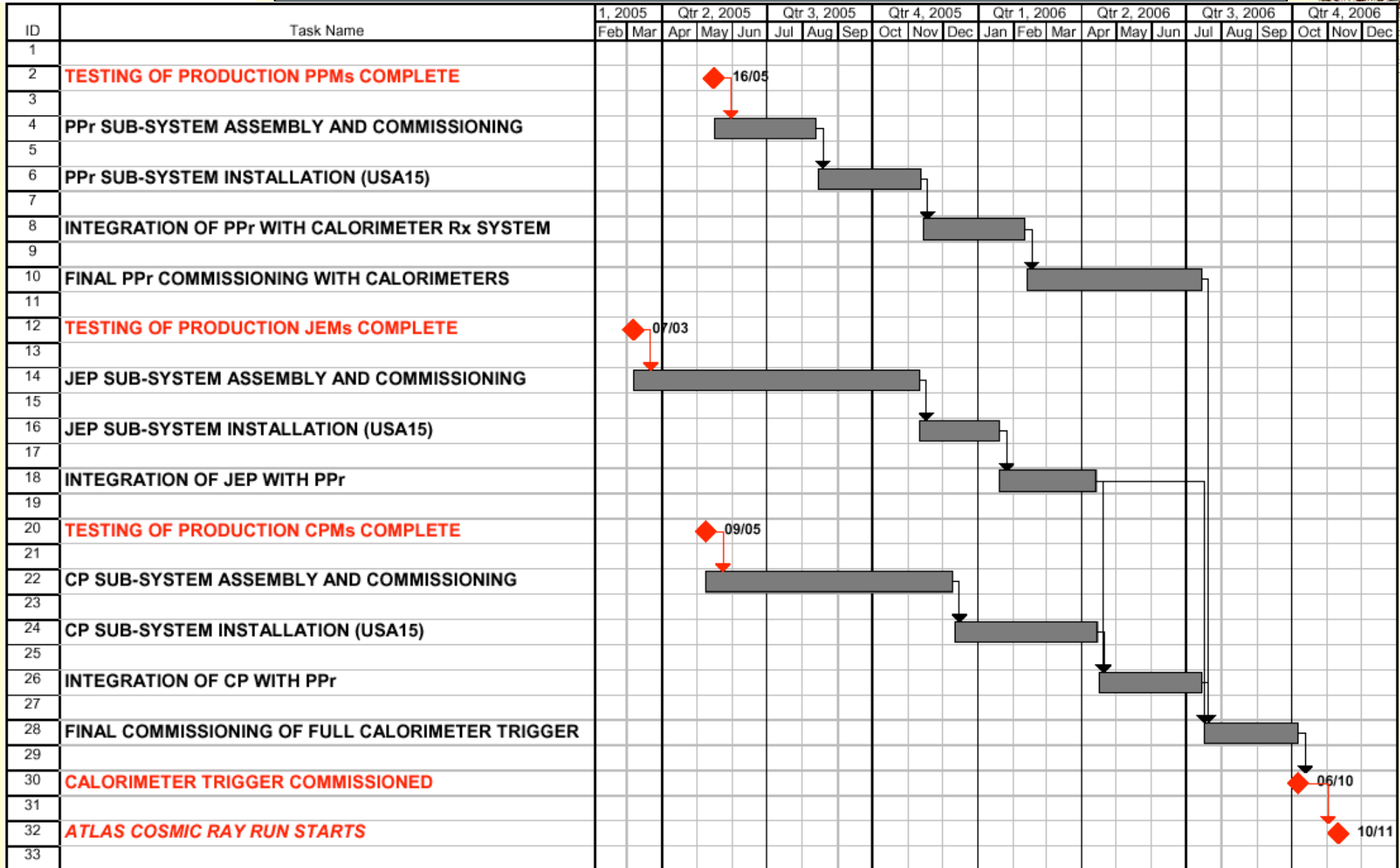
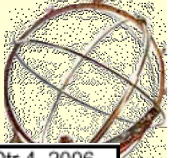
# FDR-PRR Phase



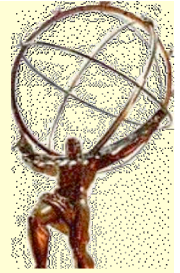
# Module Production Phase



# Installation/Commissioning Phase



# Milestones – Joint Meeting 11/2003



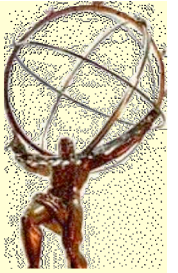
<b>Milestone</b>	<b>Date</b>	<b>“Official”</b>
FDR for JEM1	Dec 2002	(Oct 2002)
Start CP/JEP sub-system tests	May 2003	(Oct 2002)
PDR for 9U ROD	July 2003	(Mar 2003)
FDR for Lar/TileCal Receiver	Nov 2003	
PRR for Lar/TileCal Receiver	Jan 2004	
Start Phase 1 Slice Tests	Feb 2004	(Mar 2003)
PRR for PPr ASIC/MCM	Mar 2004	(Oct/Nov 2003)
Phase 1 Slice Tests complete	April 2004	(Jul 2003)
FDR for PB ( <i>Processor Backplane</i> )	June 2004	(Jan 2004)
FDR for PPM	June 2004	(Feb 2004)
Phase 2 Slice Tests complete	July 2004	(Dec 2003)
FDR for CMM	July 2004	(Apr 2004)
FDR for TCM	July 2004	(Feb 2004)
FDR for CPM	Aug 2004	(Feb 2004)
FDR for JEM	Aug 2004	(Mar 2004)
FDR for ROD	Sept 2004	(Apr 2004)

# Milestones – Joint Meeting 11/2003



<b>Milestone</b>	<b>Date</b>	<b>“Official”</b>
PRR for PB	July 2004	(Feb 2004)
PRR for PPM	July 2004	(Feb 2004)
PRR for CMM	Aug 2004	(May 2004)
PRR for TCM	Aug 2004	(Feb 2004)
PRR for CPM	Sept 2004	(Feb 2004)
PRR for JEM	Sept 2004	(Apr 2004)
PRR for ROD	Oct 2004	(May 2004)
Sub-systems production complete	Mar 2005	(Oct 2004)
PPr RMI-1 for TileCal Barrel integration	Jan 2005	
PPr RMI-2 for TileCal Extended Barrel integration	Feb 2005	
PPr RMI-3 for LAr Barrels integration	Mar 2005	
PPr RMI-4 for LAr End-Caps integration	May 2005	
Finish PPr test programme	May 2005	(Apr 2005)
Finish CP/JEP test programmes	Mar 2006	(Oct 2005)
Finish PPr-Calorimeters integration	July 2006	(Oct 2005)
<i>Calorimeter trigger available in situ</i>	<i>Oct 2006</i>	<i>(Apr 2006)</i>

# Milestones I – 04/2004



<u>Milestone</u>	<u>11/2003</u>	<u>Current</u>
PRR for Lar/TileCal Receiver	Jan 2004 _	Mar 2004
Start Slice Tests ( <i>with PPM</i> )	Feb 2004 _	May 2004
PRR for PPr ASIC/MCM	Mar 2004 _	June 2004?
FDR for VMM and TCM	July 2004 _	June 2004
PRR for VMM and TCM	Aug 2004 _	July 2004
FDR for PB ( <i>Processor Backplane</i> )	June 2004 _	Aug 2004
PRR for PB	July 2004 _	Sept 2004
FDR for CMM	July 2004 _	Aug 2004
PRR for CMM	Aug 2004 _	Sept 2004
FDR for PPM	June 2004 _	Nov 2004
PRR for PPM	July 2004 _	Dec 2004
FDR for JEM1	Aug 2004 _	Nov 2004
PRR for JEM1	Sept 2004 _	Dec 2004

# Milestones II – 04/2004



<u>Milestone</u>	<u>11/2003</u>	<u>Current</u>
FDR for CPM1.5	Aug 2004 _	Dec 2004
PRR for CPM1.5	Sept 2004 _	Jan 2005
FDR for ROD	Sept 2004 _	Jan 2005
PRR for ROD	Oct 2004 _	Feb 2005
Complete production and test of all sub-system modules	Mar 2005 _	May 2005
Begin full installation of PPr sub-system in USA15	May 2005 _	Aug 2005
Begin installation of JEP sub-system in USA15	Mar 2006 _	Nov 2005
Begin installation of CP sub-system in USA15	Mar 2006 _	Dec 2005
Complete integration of PPr with Calorimeter Receivers		Feb 2006
Complete integration of PPr with JEP		Apr 2006
Complete integration of PPr with CP		July 2006
Complete commissioning of PPr with Calorimeters		July 2006
<i>Calorimeter trigger available in situ</i>	<i>Oct 2006 _</i>	<i>Oct 2006</i>



# Summary (and concerns)



- ! As suggested by Miikka Kotamaki, the Milestones have been radically modified to reflect “reality” – *i.e.* the 3-month Combined Test-Beam running (*effectively July-October*)
- ! These new dates will be presented to the ATLAS EB on May 7<sup>th</sup>
- ! Less than 3 months remain before the Test-Beam phase – when and where will the long-term “soak tests” of the Slice Test take place? *We don’t yet have any PPMs ...*
- ! Can any of the systematic Slice Test work be effectively carried out at the Test-Beam? *If not, much of the work will be delayed until >October ...*
- ! *Could we regard the Test-Beam phase as an “adequate” Slice Test to go into FDRs and PRRs, or is much more required?*