

<b>SPIRE/PACS</b> (CEA-SBT)	<b>Monthly Report – June 2002</b>	<b>Date:</b> June 28 <sup>th</sup> , 2002
--------------------------------	-----------------------------------	---

**Work Package: Cooler**

<b>1. Subsystem Progress Since Project Inception</b>		
Detailed design of the coolers (CQM, STM, PFM & FS) done. Manufacturing of 2 CQM + 2 STM done. Manufacturing of new large test cryostat done (“standard” test cryostat available). Product Assurance plan implemented. STM units available		
<b>2. Subsystem Progress This Month</b>		
<ul style="list-style-type: none"> <li>- CQM units : cooler hearts cleaned – now under cleanliness and contamination control. Mounting of thermometers and heaters to follow</li> <li>- Heat switches : samples for titanium/copper brasing being assembled. Results expected week 29. Assembly of heat switches to follow</li> <li>- Heat switches : Following last EB weld campaign, slight modification on switch support asked by subcontractor – qualification of modif. in progress – if successful all switches build to new standard afterward.</li> <li>- Structures : surface treatment on titanium being investigated (to get rid of titanium oxydation and “poor” visual aspect)</li> <li>- Kevlar characterisation campaign : Various tests performed at LN2 – Young’s modulus increases by 50%. Breaking strength increases. Tension increases between room T and LN2 (Young’s modulus compensates for dilatation). But some unexpected creep detected during multiple cycles between room T and LN2 : under investigation (test set-up reviewed).</li> </ul>		
<b>3. Problem Areas</b>	<b>Remedial Action</b>	
<b>4. Engineering Activities</b>		
Tensiometer & electrical isolation		
<b>5. Design Changes</b>		
<b>6. PA/QA Activities</b>		
General QA management.		
<b>7. Subsystem Management Issues</b>		
None		
<b>8. Actions Requiring Immediate Attention</b>		
SBT documents approval by SPIRE and PACS projects		
<b>9. Status of Previous Actions</b>		
None		
<b>10. Activities Yet to be Achieved</b>		
<b>11. Milestones</b>		<b>Status</b>
Winter 00-01	Coolers Detailed Design	Completed
May 17 <sup>th</sup> 2001	Coolers DDR (PACS & SPIRE)	Completed
June 26 <sup>th</sup> 2001	Subcontractor selection for machining	Completed
October 2001	Parts Delivery	Completed
Nov/Dec 2001	CQM Coolers assembling	Pending solution to problem with heat switches
Nov/Dec 2001	STM Coolers Assembling and Vtest	Completed
Dec 2001	STM Coolers delivery	When needed - Available
Winter 01-02	CQM Coolers Qualification	Pending solution to problem with heat switches
Spring 2002	CQM Coolers Delivery	Pending solution to problem with heat switches
<b>12. Schedule Changes</b>		
See above – Pending solution to problem with heat switches		