SPIRE/PACS | Monthly Report – February 2002 | Date: March 1st 2002 (CEA-SBT)

Work Package: Cooler SPIRE-SBT-REP-001201

1. Subsystem Progress Since Project Inception

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.

2. Subsystem Progress This Month

- Brasing phase on cooler heart and heat switches completed
- Closing of cooler heart by EB welding pending : cooler heart delivered to subcontractor, but cannot perform EB operation before mid March
- All structures slightly remachined to accommodate for angle bracket (added to correct deformation)
- All Structures delivered to subcontractor for EB welding of angle bracket: expected back at SBTend of week 10
- STM cooler available as soon as modified structures ready. Vibration tests to follow
- Clean room implantation on going
- Kevlar characterisation campaign: fatigue test on going Curve shaping up
- PACS IBDR held on Feb. 27/28. Status on cooler presented
- Large test cryostat delivered as expected. Wiring and instrumentation in progress

Deformation on structures Solution identified (see above	
Deformation on structures Solution identified (see above	e) – will be qualified March. 02

4. Engineering Activities

Tensiometer: in contact with subcontractor: couple of solutions will be evaluated

To be initiated: following PACS agreement to electrical isolation (consistency with SPIRE) solutions need to be identified and qualified

5. Design Changes

Modification of structure design to avoid deformation for future models (FM, FS) : to be validated following results on CQM/STM structures

6. PA/QA Activities

Inspection, anomalies, etc... – documentation updated - General QA management.

7. Subsystem Management Issues

None

8. Actions Requiring Immediate Attention

SBT documents approval by SPIRE and PACS projects

9. Status of Previous Actions

None

10. Activities Yet to be Achieved

11. Milestones		Status
Winter 00-01	Coolers Detailed Design	Completed
May 17 th 2001	Coolers DDR (PACS & SPIRE)	Completed
June 26 th 2001	Subcontractor selection for machining	Completed
October 2001	Parts Delivery	Completed
Nov/Dec 2001	CQM Coolers assembling	Expected to be done end of Feb. 02
Nov/Dec 2001	STM Coolers Assembling and Vtest	Expected in Feb. 02 – V test in March
Dec 2001	STM Coolers delivery	Delayed, but compatible with projects planning
Winter 01-02	CQM Coolers Qualification	Almost on schedule – expected to end in June
Spring 2002	CQM Coolers Delivery	Expected in July 2002

12. Schedule Changes

See above – slight slippage, but remains compatible with SPIRE and PACS schedules. CQM not expected by projects for delivery before fall 2002

Note: inputs from PACS for SPIRE ECR on cooler (HR-SP-RAL-ECR-022) given on Feb. 15th. Solutions to be evaluated/qualified. Modifications could add delays