EXECUTIVE SUMMARY OF April 2000 LBNL MEETING

LOCAL SUPPORTS

- Max fault pressure: 8 bar_a
- Max operating pressure: 4 bar_a
- Testing pressure: 10 bar for 1 hour

| TASK | WHO | DEADLINE |
|-------------------------------|----------------------|----------|
| 3-5 supports: check stave | Vigeolas | FDR |
| stability with fixed supports | | |
| 3-5 supports: check material | Cuneo, IVW | 15-05 |
| increase | | |
| 3-5 supports: check impact of | Cuneo, Barberis | 15-05 |
| initial stave bowing on | | |
| coverage and clearances | | |
| Define stave C-C specs and | Mora, Cuneo | PRR |
| QC (ultrasonic?) | | |
| Qualification of cooling | Cuneo, Mora, Taylor, | FDR |
| terminations (irradiation, | Anderssen | |
| coolant exposure, pressure | | |
| cycles, actions from supports | | |
| Thermal test on stave backup | Vigeolas | FDR |
| Thermal/pressure cycling of | Vigeolas | FDR |
| stave backup | | |
| Omega QC (leak tightness) | Mora | FDR |
| assessment | | |
| Review stave/sectors specs | Olcese, Gilchrease | 15 May |
| Bare Local supports QC | Cuneo, Gilchrease | FDR |
| protocols | | |
| Disk sector backup thermal | HYTEC | FDR |
| tests | | |
| Impregnation assessement | Mora | FDR |
| | | |
| Coolant corrosion on Al pipe | LBL, Vigeolas | FDR |
| | | |
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GLOBAL SUPPORTS

| TASK | WHO | DEADLINE |
|---------------------------------|----------------------------|-------------|
| Envelope drawing of end | Cuneo | 15/6/00 |
| cone | | |
| Simulation of overall | HYTEC | Global |
| assembly | | support FDR |
| Design of end cone | HYTEC | Global |
| | | support FDR |
| Improve barrel ring | IVW, Cuneo | Global |
| machining accuracy | | support FDR |
| Define a baseline for disk | | 10/00 |
| mounts on frame | | |
| Evaluate a rigid mounting | LBNL, HYTEC | September |
| disk to frame (CTE tests) | | PRR |
| Meet SCT to follow up pixel | Anderssen, Olcese, Tappern | 17 May |
| to SCT interfaces (support, | | |
| thermal barrier, limits to | | |
| differential pressure and | | |
| assembly) | | |
| Prepare a document on Pixel | Anderssen, Olcese | September |
| envelopes and interfaces | | PRR |
| Define services strain relieves | Anderssen, Cuneo | 1/2001 |
| | | |
| | | |
| | | |

MATERIAL

• Stave weight for structural design: 110 g

| TASK | WHO | DEADLINE |
|-----------------------------|-------------------|----------|
| Material update for physics | Rossi | End May |
| simulation | | |
| Module material rebaseline | Rossi, Gilchrease | End May |
| | | |
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SERVICES

| TASK | WHO | DEADLINE |
|--------------------------------|-------------------------|-----------|
| Define Al pigtails envelope | Ockenfels | 15 May |
| Study of impact of Al pigtails | Cuneo | 15 June |
| on routing and fingers | | |
| Setup working group pixel- | Tappern | May |
| SCT on material for pipes and | | |
| connections assessment | | |
| Definition of baseline for | Pixel-SCT working group | End 2000 |
| cooling pipes and connections | | |
| Test of cooling inter-link | Anderssen, Thadome | FDR |
| (sector, stave end) | | |
| Follow up heater thermal | Olcese, Tappern | Cooling |
| design and specifications | | review |
| Feed back on heater control | Kevin | End April |
| system requirements | | |
| Information on LBL service | Anderssen | 15 May |
| mockup to Cuneo | | |
| Barrel services mock-up | Cuneo, Ockenfels | September |
| | | PRR |
| Define services up to PPB1 | Anderssen, Olcese | Global |
| | | supports |
| | | FDR |
| | | |
| | | |

ASSEMBLY AND TEST

- Milano CMM goes to SR building
- Modules cannot be tested without cooling

| TASK | WHO | DEADLINE |
|-------------------------------|-----------------------------|--------------|
| Circulate SR building pixel | Olcese | End of April |
| area layout | | |
| Feedback to ID assembly | Olcese | May IDSG |
| document | | |
| Evaluate cable cost for SR | Anderssen | |
| building | | |
| Check how to perform | Olcese, Cuneo, Vigeolas | June cooling |
| module functionality tests on | | review |
| barrel sub-assemblies with | | |
| cooling | | |
| Need for evaporative system | Gilchrease, Cuneo, Vigeolas | June cooling |
| at assembly sites (size) | | review |
| Check the available survey | Olcese | July |
| features available at CERN | | |
| | | |
| Circulate a first draft | Olcese, Sinervo | July |
| document on pixel survey and | | |
| alignment | | |
| | V:l | |
| Module alternative thermal | Vigeolas | PRR |
| check to IR camera | | |
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B-LAYER INSTALLATION

| TASK | WHO | DEADLINE |
|--------------------------------|-------------------|--------------|
| Define STC end-cap envelope | Olcese, Anderssen | Done |
| Preliminary information on | Anderssen | Given to Ray |
| beam pipe support aperture | | Veness on |
| required for B-layer | | February |
| installation | | |
| Detail layout of how to | Anderssen | Beam pipe |
| assemble the B-layer in the | | review |
| space allocated | | |
| Conceptual design of services | Anderssen | Beam pipe |
| (tubes and cables) supports to | | review |
| rails | | |
| Patch panels: define locations | Anderssen | Beam pipe |
| | | review |
| Access to B-layer installation | TC (Bachy) | End of April |
| area | | |
| | | |

MODULE ASSEMBLY

| TASK | WHO | DEADLINE |
|---|----------------------|-----------|
| Work out assembly and test | Vigeolas, Ockenfels, | FDR |
| sequence of module on stave | Delpierre | |
| Test thermal performances of | LBNL | FDR |
| new sector design with | | |
| impregnated facings | | |
| Collect Kapton properties | Boyd | Asap |
| FEA simulation of module assembly including additional glue ribbon sensor-chips | Cuneo | FDR |
| Circulate final version of module adhesive interfaces qualification plan | Olcese | Next week |
| Test of dummy modules with additional glue ribbon | Polina, Rossi | FDR |

LOCAL SUPPORTS FDR PREPARATION

| TASK | WHO | DEADLINE |
|--------------------------------|-----------------------------|----------|
| Requirements (specifications, | Olcese, Gilchrease | asap |
| layout, material budget) | | |
| Specifications for materials | Specific contributions | 5/6/00 |
| (potential suppliers) | | |
| Specification for assembly | Cuneo, Vigeolas, Gilchrease | 5/6/00 |
| (tools and procedures) | | |
| Design assessement: tests + | Frame prepared by | 5/6/00 |
| simulations showing that | Gilchrease + | |
| specifications can be achieved | Specific contributions | |
| Interface document | Anderssen | 5/6/00 |
| Drawings of parts | Cuneo, LBL | 5/6/00 |
| Drawings of assemblies | Cuneo, LBL | 5/6/00 |
| Presentations (short) | Specific contributions | 5/6/00 |