

### Action Items from RAL Meeting of March 31, 2003

Ed Black

- Clarify properties of retractable flanges in terms of absorber replacement [6/14]
- Explore efficacy of elastomer seals on cryostats [5/23]
- Define how to implement large diameter bellows [5/23]
- Define procedures to replace or repair absorbers consistent with two-week turnaround time [5/23]
- Explain in detail implementation of Ar jacket around experiment, especially at penetrations into the cryostats [6/14]

Wing Lau

- Check dimensions on official MICE CAD drawing to make sure all items are accounted for and that all dimensions are understood [5/23]
- Consider means to protect thin windows during installation and demounting [7/1]
- Evaluate flange thickness needed to safely install screw-type thin window [7/1]
- Develop implementation scheme for “third” safety window [5/23]

Elwyn Baynham

- Calculate longitudinal forces on absorber windows during quench [6/14]
- Evaluate quench effects for off-center absorber [6/14]
- Examine implications of window temperature on safety (in particular, is a two window system safe in the absence of an argon jacket) [5/23]

TBD (Simulation Group)

- Estimate absorber heat load from dark currents at high RF gradient

Mike Green

- Develop jig for holding pipes in end-mounted design [6/14]
- Address weldability of windows and develop criteria to qualify window welds [5/23]
- Define magnetic measurement procedure compatible with each of the three absorber options (warm; cold, if practical) [5/23]
- Determine need for cryogenic field measurements [5/23]
- Verify that end-mounted absorber does not restrict beam aperture, including allowance for transverse and longitudinal misalignment [Complete]

Shigeru Ishimoto

- Develop qualification procedure for bolted window seals (indium or Helicoflex) [5/23]

Mary Anne Cummings

- Determine safety implications of TPG high voltage in proximity to LH<sub>2</sub> absorber [Completed]
- Examine need to run solid absorbers off center [5/23]
- Develop absorber installation scenario [6/13, preliminary]
- Define testing procedure [6/13, preliminary]
- Specify window machining procedures [8/1]

Mike Zisman

- Get nominal Beam-Stay-Clear aperture [6/13]

John Cobb

- Revisit magnet alignment tolerances (displacement; tilt) [8/15]
- Evaluate safety and handling implications of Li and LiH absorbers [5/23]
- Report on what is known about hydrogen embrittlement in aluminum [5/23]

Tom Bradshaw

- Evaluate impact of a hydrogen leak into the helium system [Completed]