

NML/RFCA002 Status

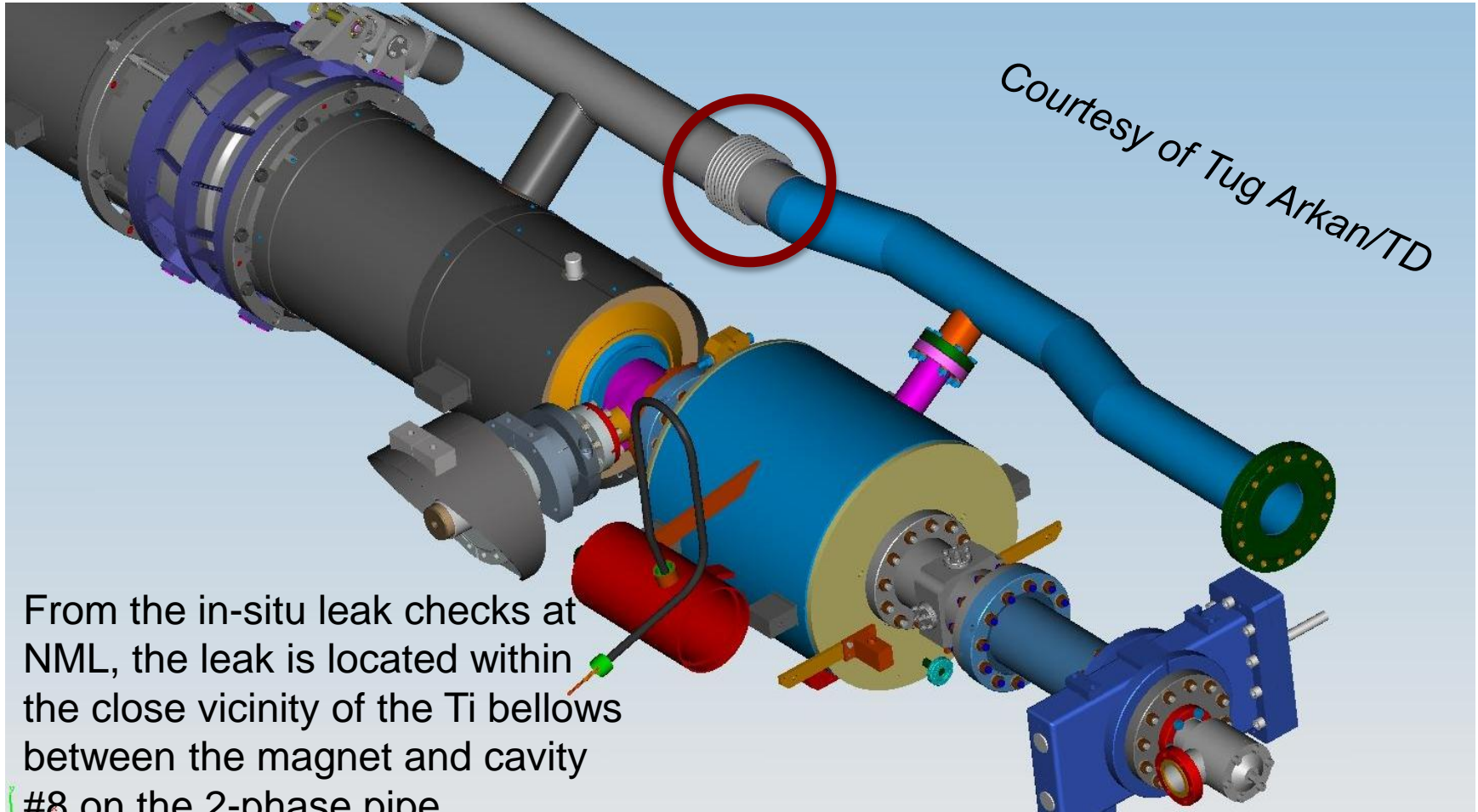


ILC Cryomodule meeting
3 July 2012
E. Harms

Status

- Couplers installed
 - <1 week from beginning warm conditioning
 - Couplers under vacuum
 - Warm RF measurements completed, coupler motion verified
- All signal connections made and verified
- Vacuum leak discovered on 2ϕ circuit during final leak check at NML

2 ϕ leak



Repair Options

Courtesy of Tug Arkan/TD

1. In-situ in the NML cave – not feasible due to tight space and reachability limit (~1 meter inside from downstream end) to the area to locate the exact location of the leak
2. In-situ at NML floor – does not seem feasible due to reachability limit to the area for any kind of repair even we can locate the exact location of the leak
3. At CAF-ICB (partial cold mass disassembly)
4. At CAF-ICB and CAF-MP((full cold mass disassembly)

Repair Plan

- CM-2 prepared for removal and transport including leak checks on all circuits – *no other leaks found*
- Transport from NML to ICB – *completed 26 June*
 - Max. quad acceleration = 0.23 g (vertical)
 - Max. isolation fixture acceleration = 0.2 g (vertical)
 - Max. base frame acceleration = 0.45 g (vertical)
- Diagnosis, repair, and full checkout – *estimate 7-9 weeks*
 - RF checks and cable disconnects in progress
 - Plan for disassembly prepared by Tug
 - Estimate 2 weeks to extract cold mass assembly
 - Diagnosis and repair to follow

Meanwhile...

- Photoinjector Gun installed and aligned on girder
 - Initial checks in progress
 - First RF soon (July)

Thank you for your attention