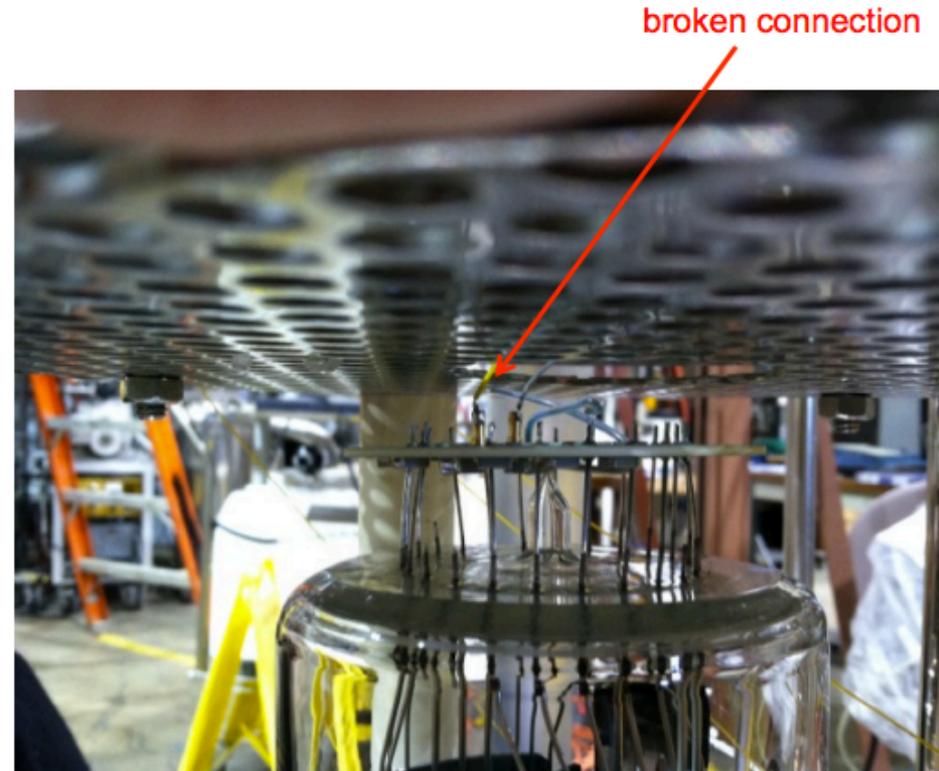


Bo VST Update

12/3/12

Cabling

- As described in ADWG, we found the source of the PMT2 problem to be a disconnected cable internal to Bo
- As such we changed the cable and connection mechanism – now RG316 soldered directly to the PMT base
- This cable has different capacitance and impedance, so Bo will be a good test of its effect on signal properties
- If acceptable motivates a us to move fully to 50Ohm cable – discuss.

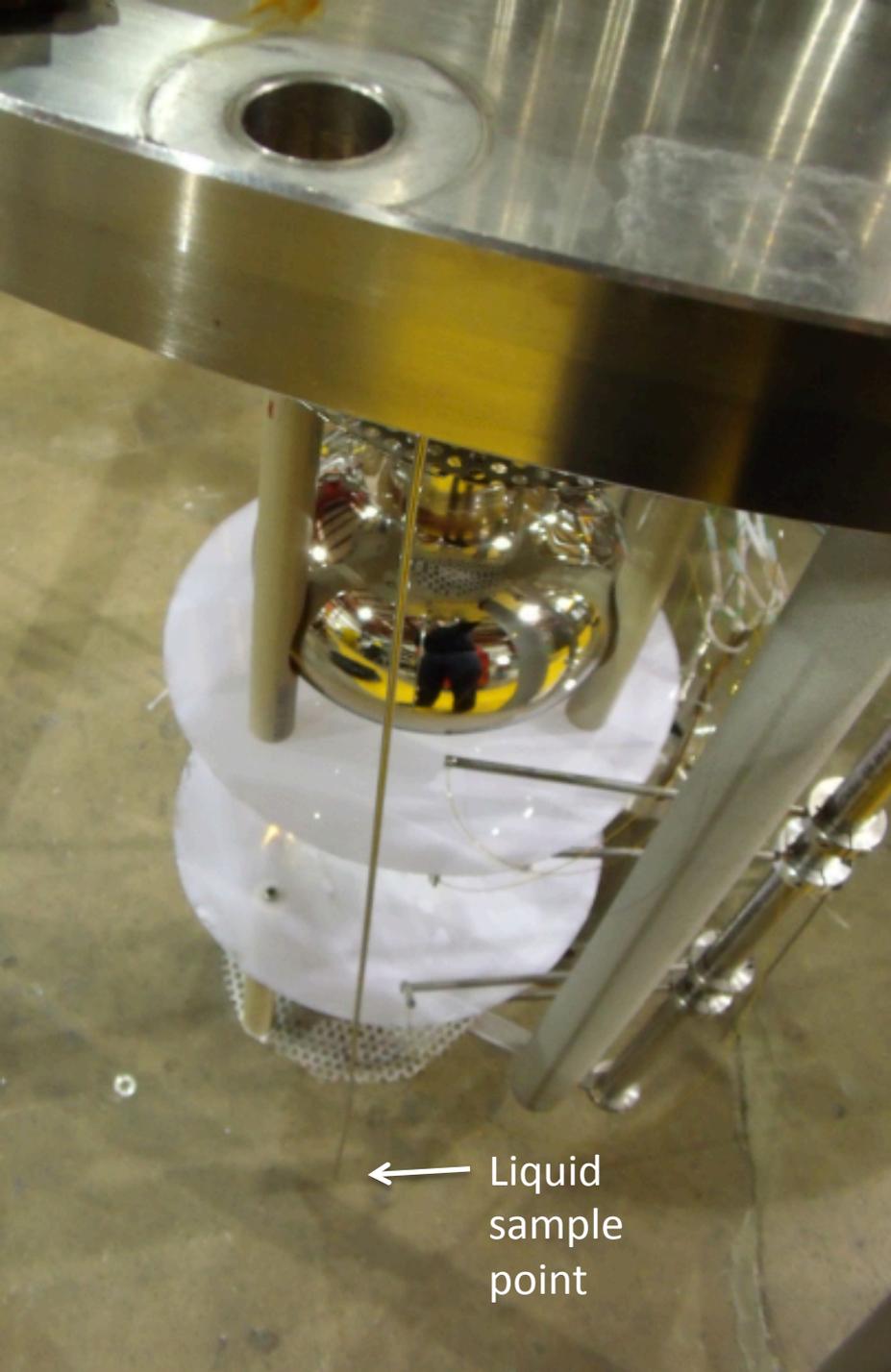


HV Issue

- Finally we are getting to the bottom of the HV interlock problem
- With ~2 days of black-box analysis, sending bit strings to the VME chip and watching output resistors, we identified a hardware fault
- Hardware bug randomly flips TripMX bit on startup, leading to unpredictable tripping behaviour for interlock
- Geoff thinks this can be fixed with software, sending a command to set the errant bit on startup
- We plan to install hit patch today / tomorrow.

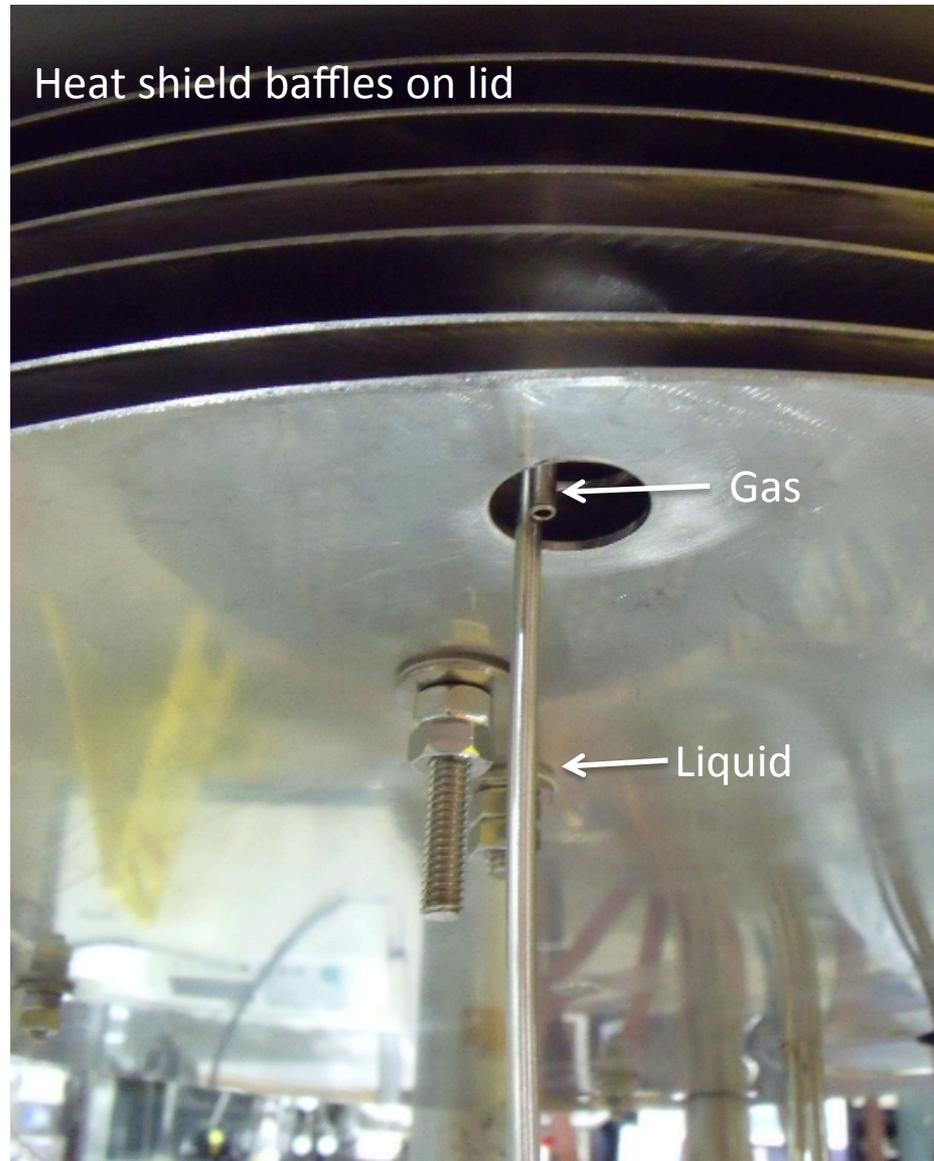
Nitrogen Injection / Sampling

- Nitrogen injection and sampling lines coming together – much hard work by Bill Miner and Ron Davis.
- Photos in next few slides show progress



← Liquid sample point

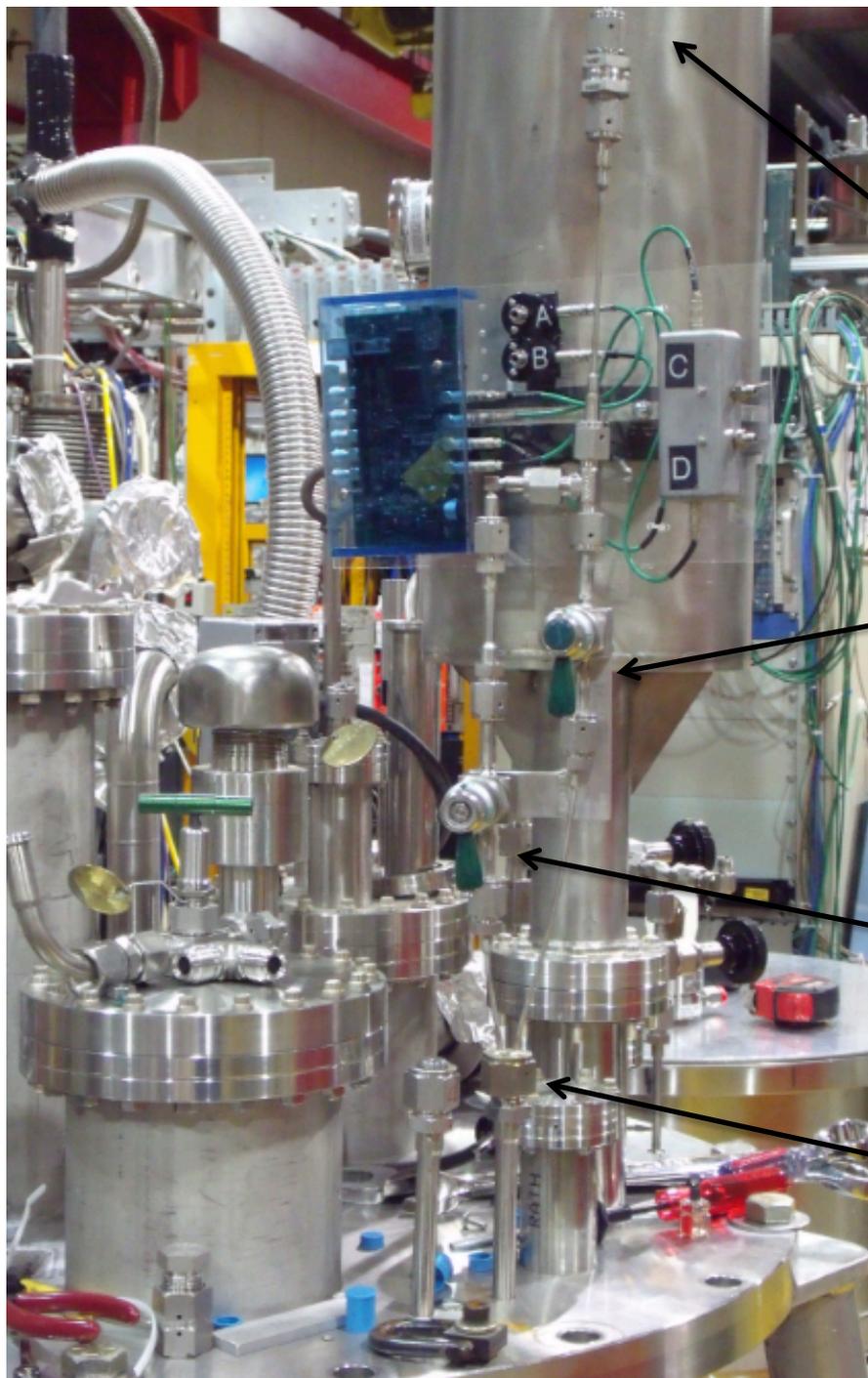
Liquid and gas sample capillary lines



Heat shield baffles on lid

← Gas

← Liquid



External sampling
valves

To nitrogen monitor

Gas sample
valve

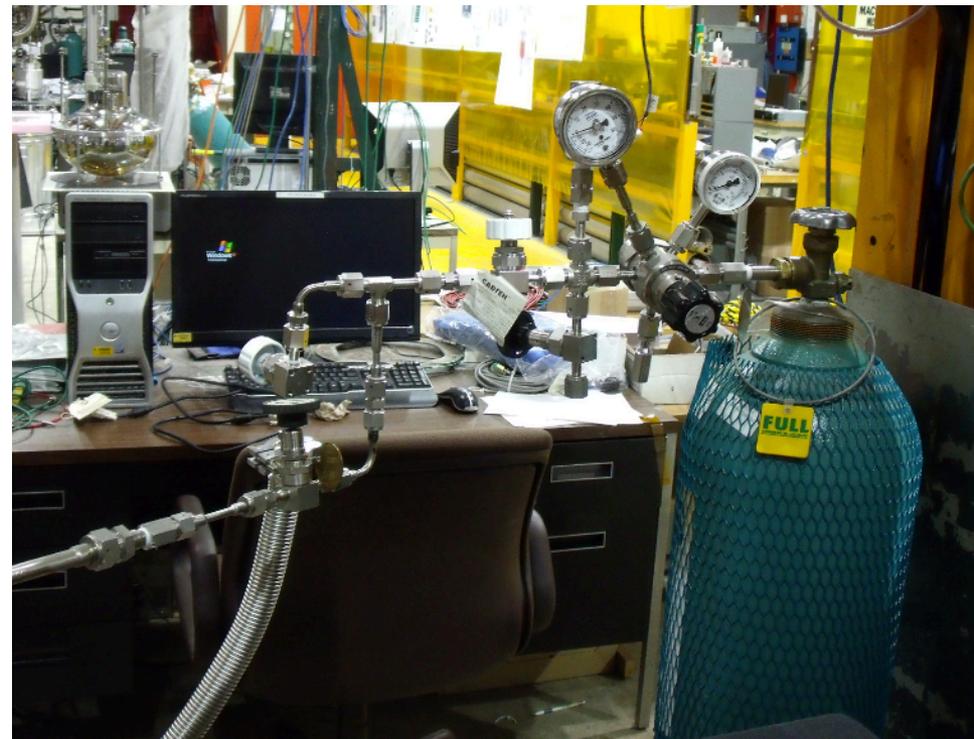
Liquid sample
valve

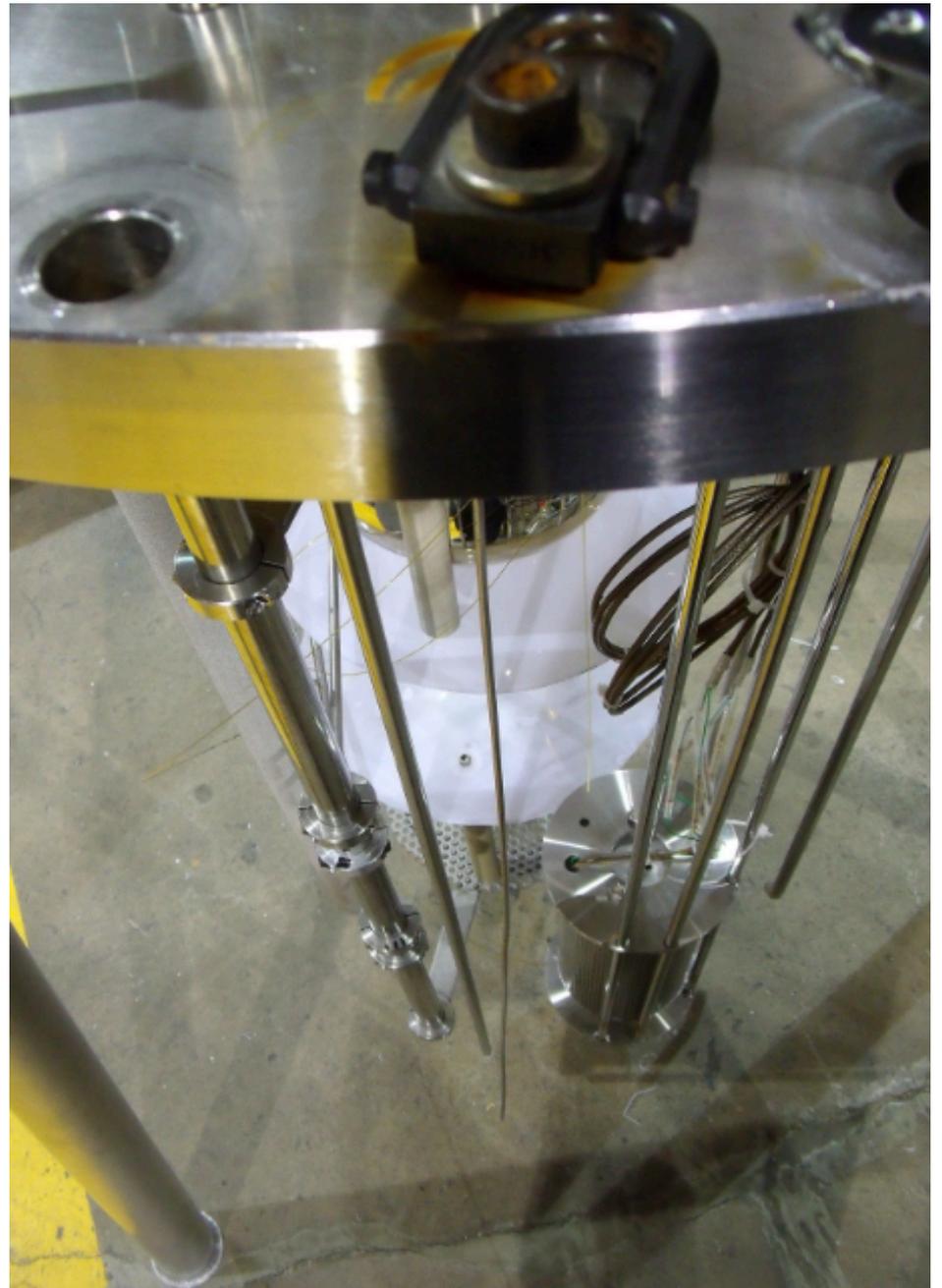
Capillary
feedthrough

Nitrogen injection system

Injection canister

Pre-mix bottle regulators, etc

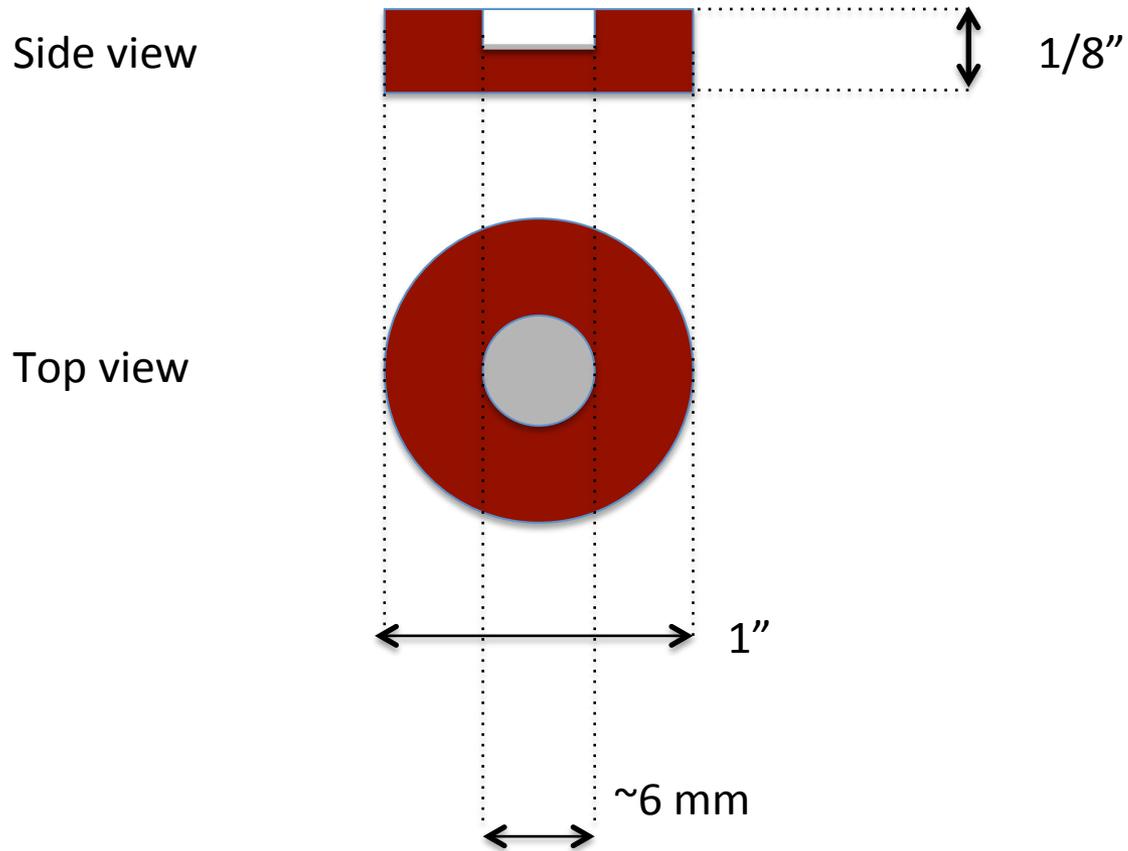




Alpha Source Installation

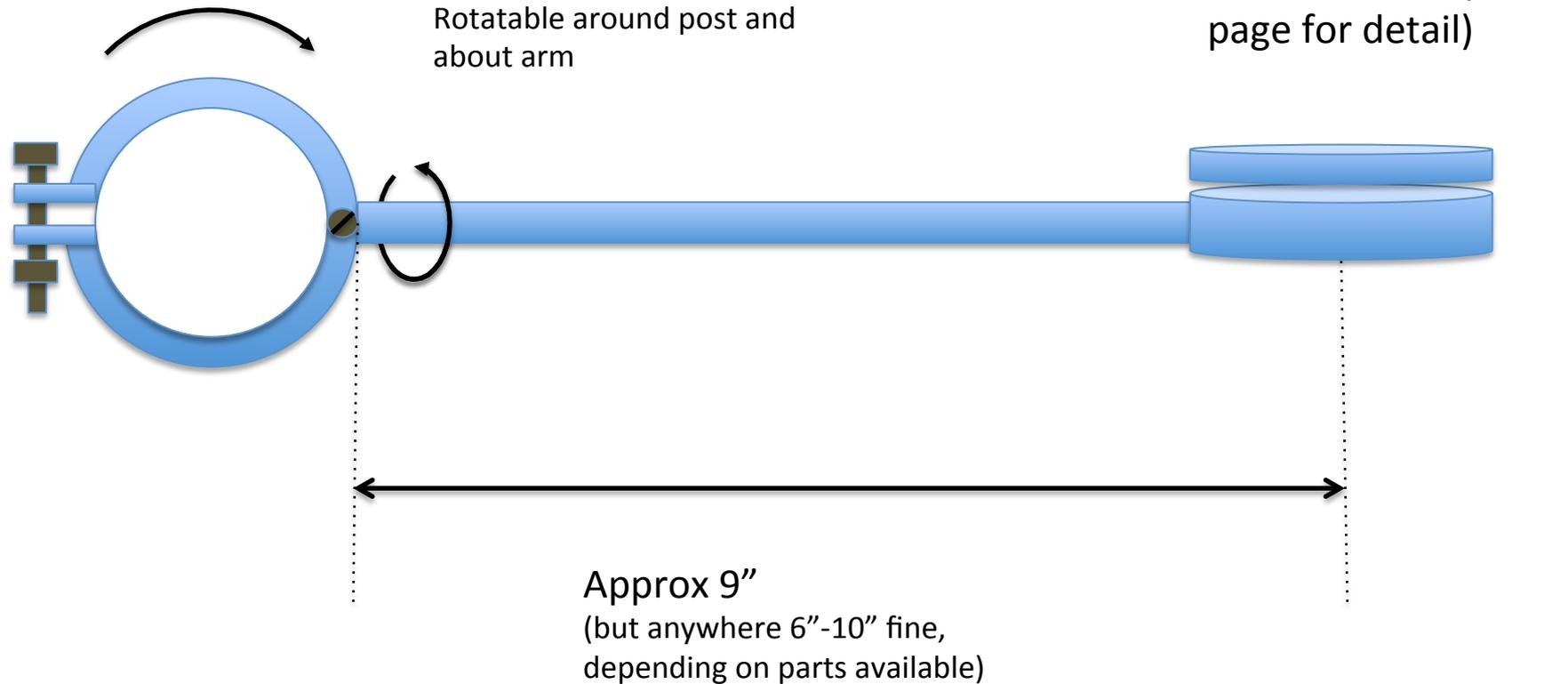
- Disc source has now arrived at PAB
- I submitted drawings of a source holder to PAB techs for manufacture
- They are working on this now
- Three will be made, one for now and two more for a future attenuation length measurement
- Design based on already existing fiber holders
- Allows source to be configured in many possible orientations to give maximum flexibility.

Source Dimensions

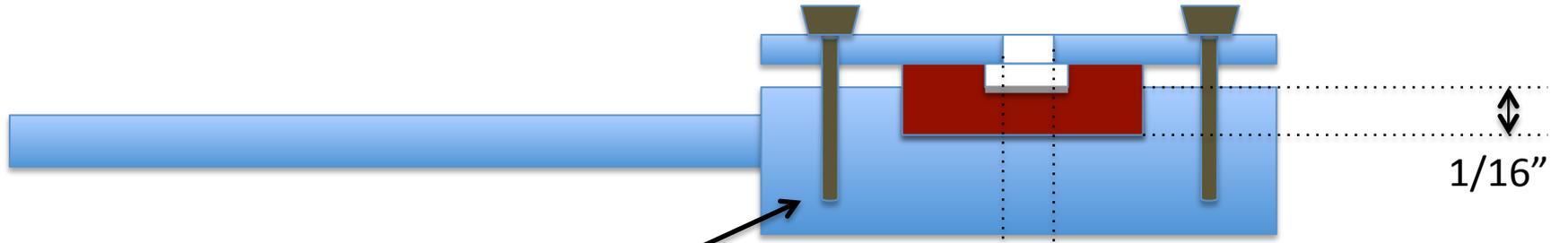


Source Holder Arm

Collar
(as for fiber holders)



Side view



Screws

Top view

