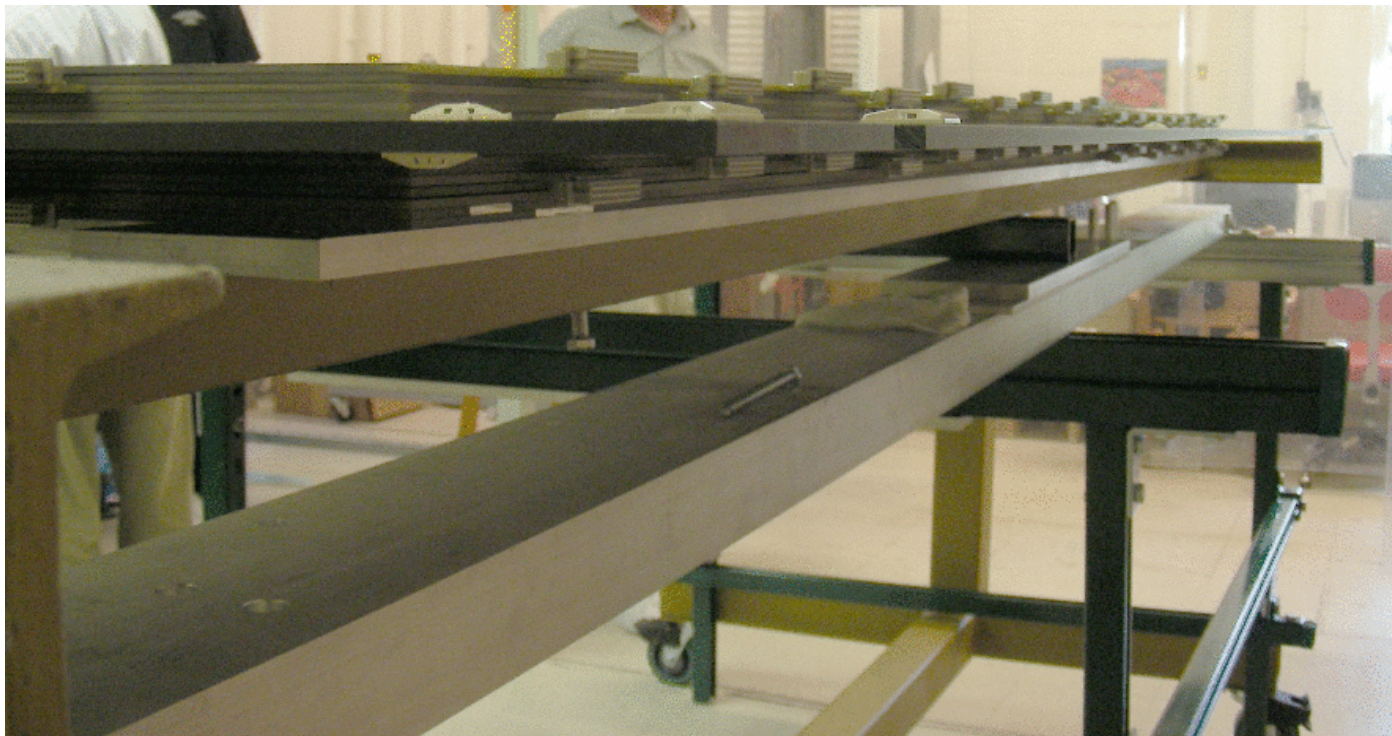# MWDC Preparation and Schedule

- Chamber 2 ("half-chamber") had three additional planes added
  - ➡ it's now identical to Chamber 3
  - ➡ transported on-site in late-September, installed in electron stack for post-move tests
  - ➡ currently our only fully-functioning chamber (assuming no problems introduced during transport from UVa)
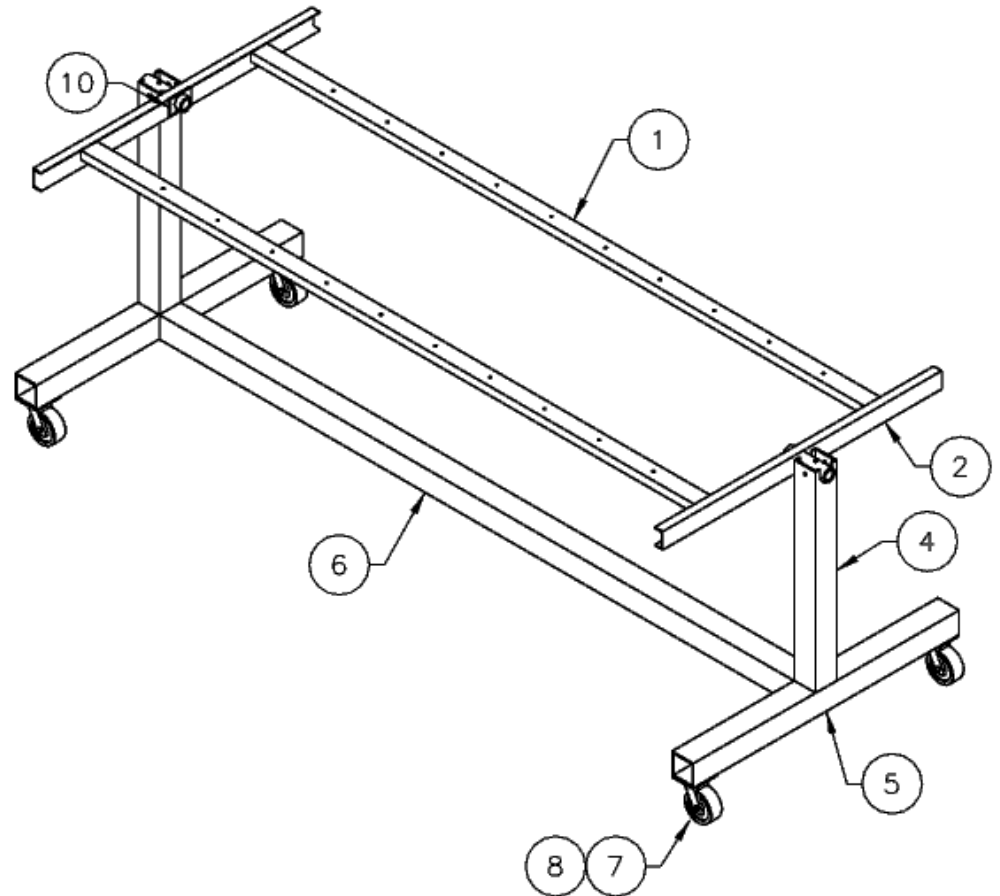   - ⮱ Xin *et al.* finishing the hook-up this week

MWDC Preparation and Schedule

- Chambers 1 & 3 both show symptoms of a broken/sagging wire

- Repairs will be done at JLab rather than at UVa
  - ➡ eliminate hassle and risk of transporting chambers
  - ➡ faster turn-around
  - ➡ establish a repair station here before experiments start

- Clean room tent in EEL 124 has been allocated to us
  - ➡ was used for VDC assembly
  - ➡ a little smaller than UVa space, but workable
  - ➡ space is cleaned out and ready for the chambers
    - ⬇ uni-strut hanger rack for the planes is assembled
  - ➡ Mitra, Nilanga, Brad will oversee the repairs
    - ⬇ we will need at least one or two helpers during disassembly/reassembly stages
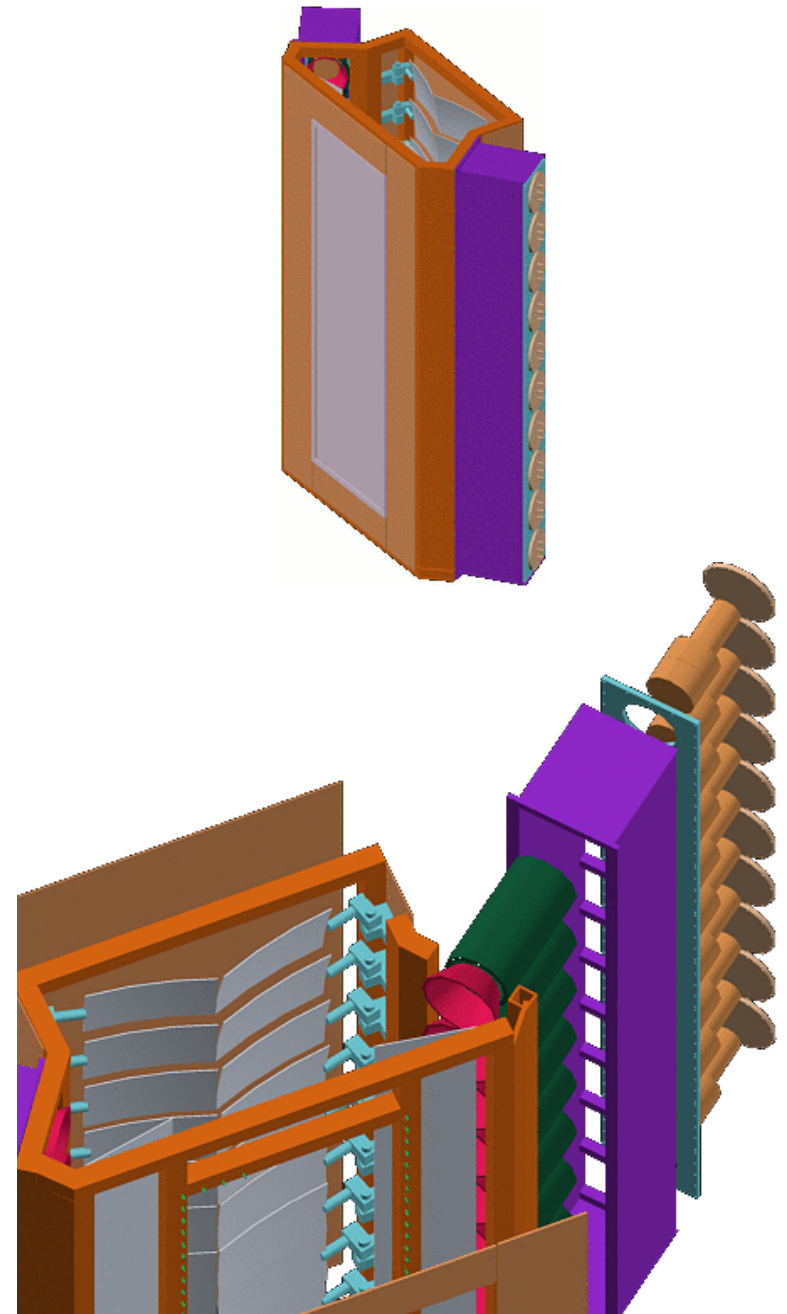   - − I'll be in touch...

MWDC Preparation and Schedule

- Start with Chamber 3 (big chamber)
  - ➡ waiting for stiffeners to be welded to long horizontal supports ① on transport frame
    - ⤷ needed to eliminate a slight sag when chamber is horizontal (worked around at UVa using additional I-beam jacked up under the transport frame)
    - ⤷ should be done this week or early next week
- Plan to start work on Chamber 3 late next week
  - ➡ hard to judge how long it will take to fix... minimum 3—4 days
- Will start on Chamber 1 after 3 is done
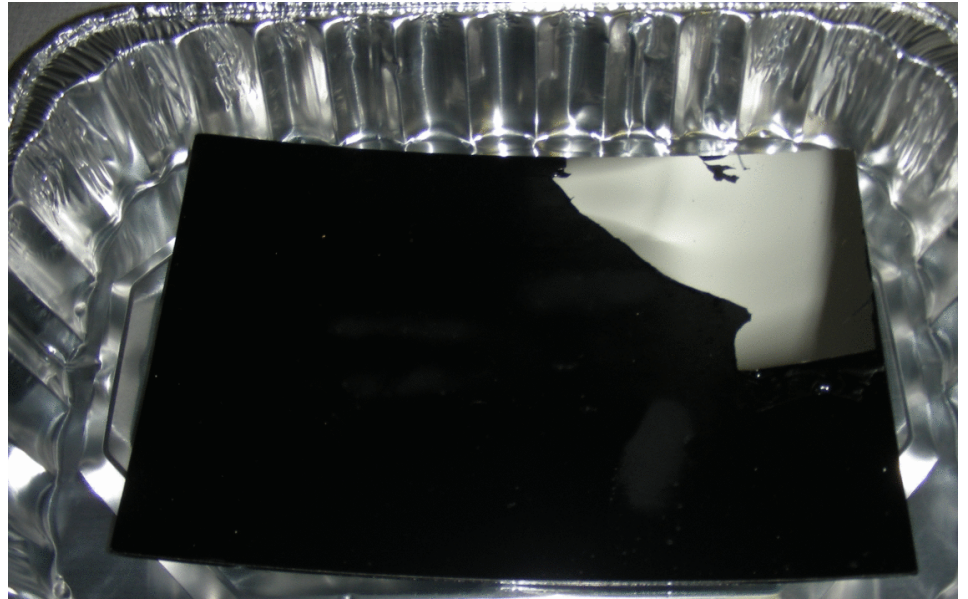
Cerenkov Tank Status

- Tank went out to the vendors for fabrication at beginning of September
  - ➡ ~8 week fabrication time
    - ↳ done end of October/early November

- All parts will be shipped to JLab (since it's a JLab procurement)
  - ➡ prefer to assemble here if we can locate the space (EEL 124?)
  - ➡ backup plan: load parts into a U-Haul and drive them up to Temple for assembly and initial tests

Cerenkov Mirrors

- **Flat mirrors** (coated) have arrived
  - ➡ looks good

- **Spherical mirrors** arrived 2 weeks ago
  - ➡ not good
  - ➡ black "protective paint" had been applied over the reflective coating and could not be removed
  - ➡ mirrors shipped back to Cosmo Optics for repair
    - ↳ "They will make it right."
    - ↳ are working on it now, will know how it went by end of week

- **Conical mirror** blanks complete
  - ➡ some minor issues with the surface quality of the blanks as delivered by Model Optics
  - ➡ working with Cosmo+Model Optics to resolve this issue

Cerenkov Miscellanea

- Cerenkov trigger logic assembled and cabled up
- EDT monitoring system roughed in for BB shower+preshower and Cerenkov trigger logic (working with Kalyan to complete)
  - ➡ will also be used as a simulated trigger to test coincidence timing
- Gas system parts-list delivered to Jack
  - ➡ he's been swamped with work in the Hall but hasn't forgotten about us
- HV and signal cables located and stock-piled
  - ➡ need 29 ~550ns delay spools for Cerenkov ADC (20 PMT + 9 group sums)
    - ⮧ will just use a subset of the pi0 delay cables rather than order extra
- PMTs (24) and bases (24) on-site and tested

- Still needed:
  - ➡ ~20 250ns cables to run from the F.E. rack —> weldment racks
  - ➡ 1—2 spare remotely adj. discriminator NIM modules (modified P706)
  - ➡ C_4F_{10} order should be submitted soon
    - ⮧ not used until early 2008 since we will do all tests with CO_2 and N_2

Cerenkov Timeline Summary

Item   ### Est. Completion Date

- Tank fabrication: late-Oct/early-Nov
- Mirrors
  - ➡ flat mirrors: completed
  - ➡ spherical mirrors: 2—12 weeks(?)   mid-Nov /
    - ↳ worst case: refab blanks *and* re-coat   Jan08
  - ➡ conical mirrors: late-Oct/early-Nov
- Electron stack frame modifications   late-Nov(?)

- Assembly and leak checking can be done before the end of December
  - ➡ if spherical mirrors can be salvaged then we can also do alignment and begin cosmics testing too...
    - ↳ if not, then that will have to wait until Jan. 2008