



Assembly Issues

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Block Pivoter Developments

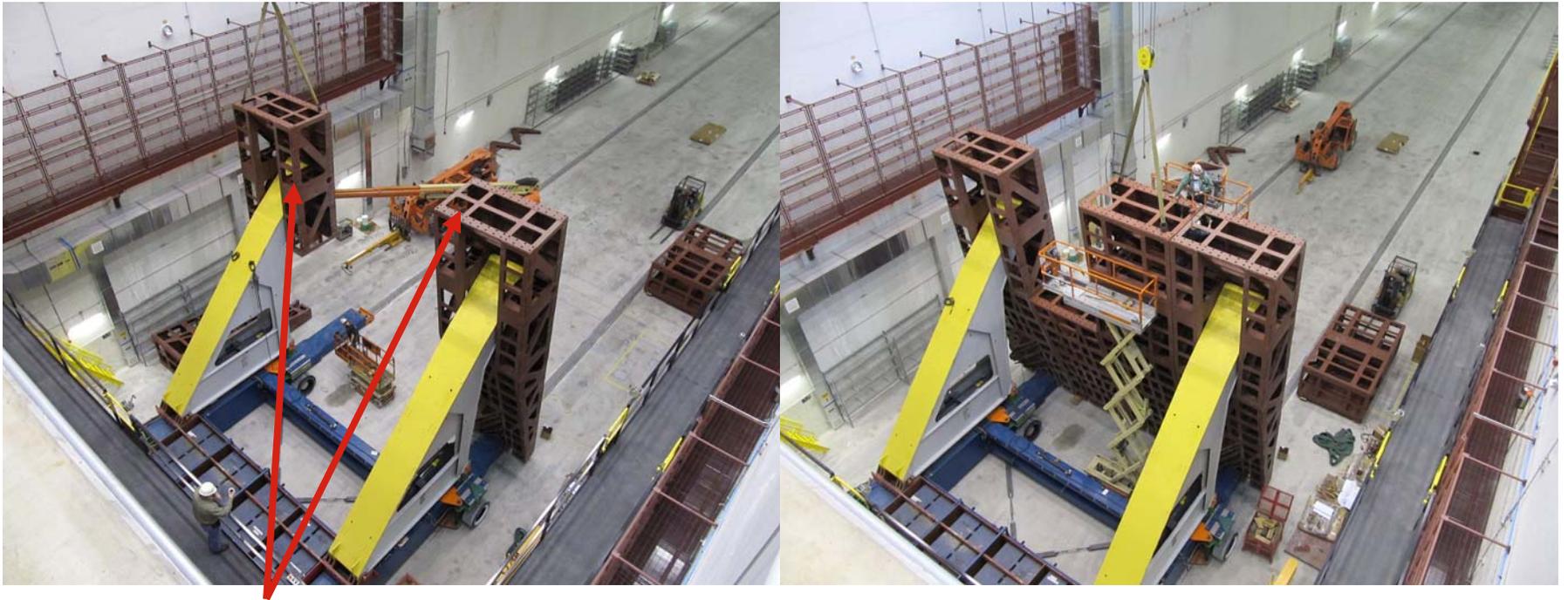
- Last month, we were recovering from a design error in the pivoting table top sections.
 - Modified parts were done incorrectly
- Table sections were shipped back to FNAL
- Parts were replaced and installed
- Back at Ash River 8 days later.





Block Pivoter Developments

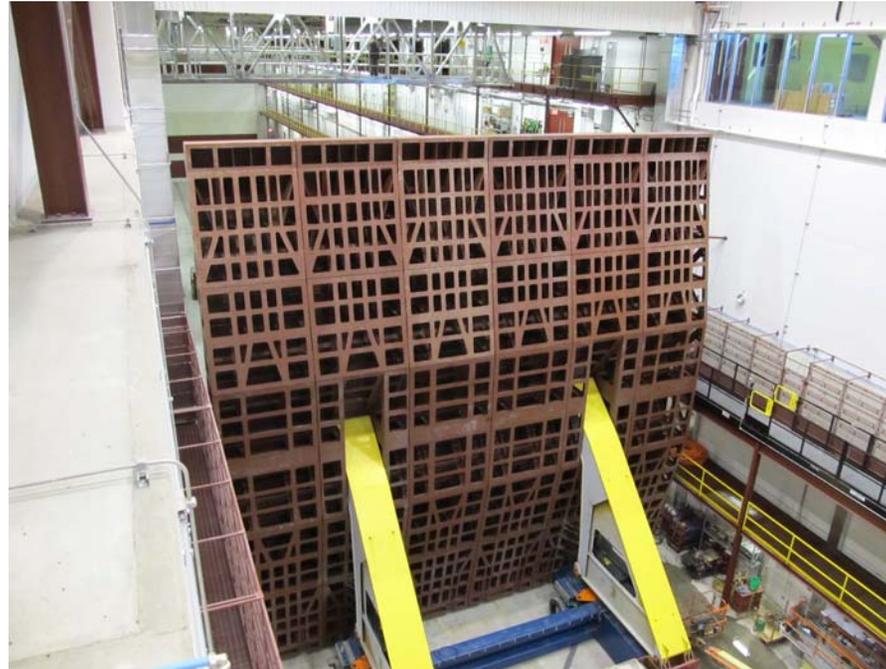
- Pivoter assembly resumed immediately
 - 6 March



Repaired "A" sections



Block Pivoter Developments

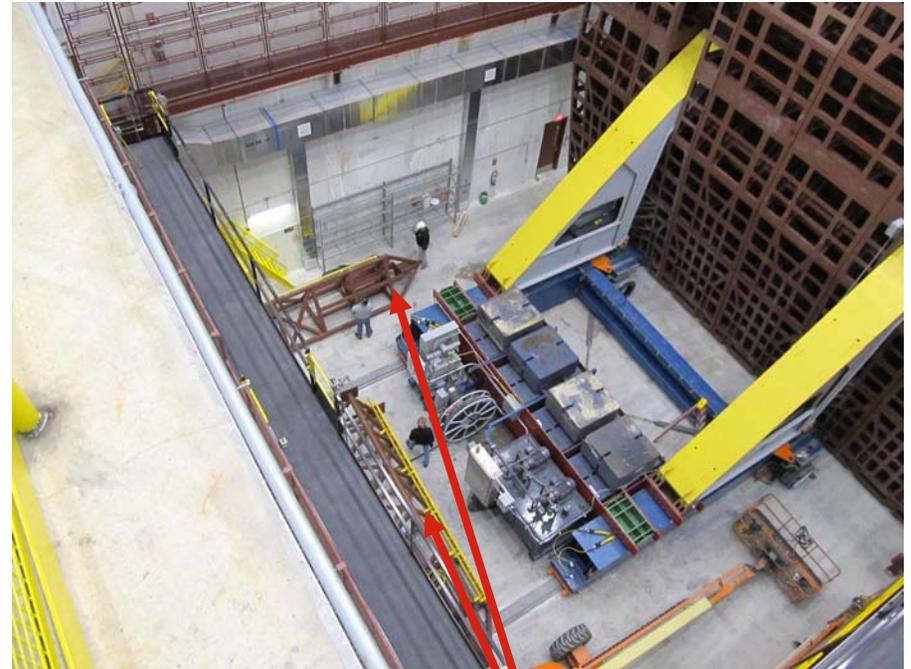


- By 23 March, all sections had been installed
- All 3300 bolts are torqued to specification.



Current Activity

- Next steps (this week)
- Towers will be installed
 - These take the table load when horizontal, hydraulics deenergized.
- Pivot cylinders exercised
- Table top being surveyed.



Towers



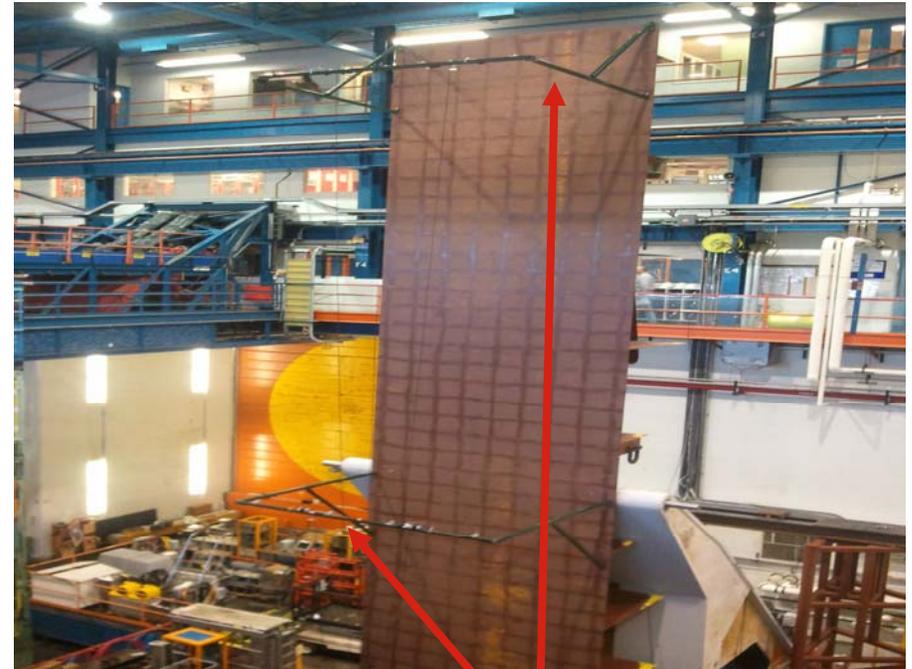
Remaining Block Pivoter Work

- Mechanical work remaining
 - Tower installation
 - Alignment fixture installation
 - Reinforcement plates added to the uprights
 - These parts have not been fabricated
 - Some welds to be increased
- Safety review work
 - Update the analysis of the tabletop and towers
- This will be completed in April.



Pivoter Commissioning Plans

- We plan a “Pseudo-block” exercise as soon as the pivoter is fully operational
 - Similar one was done on the prototype
 - Define block volume with something simple.
 - Test clearances and positioning against the south wall.

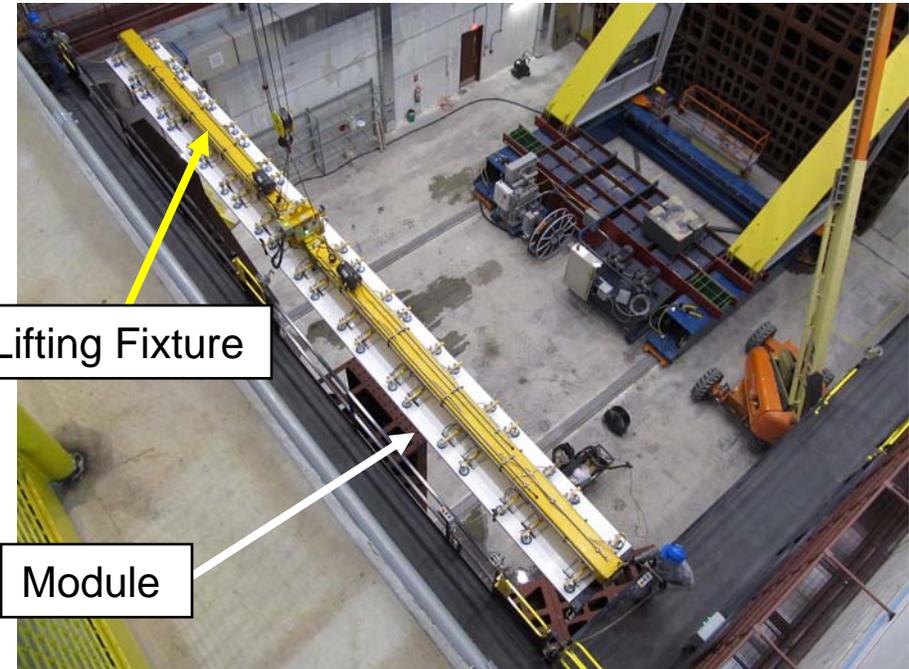


Unistrut mockups on the prototype table



Other Assembly Equipment

- Three lifting fixtures are being assembled.
- The first is at Ash river and is ready for assembly
 - Sufficient for assembly to begin
- The second will be shipped in April



Lifting Fixture

Module

Lowering a module



Adhesive Dispenser

- The adhesive dispenser has been in place for a couple of months
- Pumps and drive motors have been commissioned
- Module rotation working

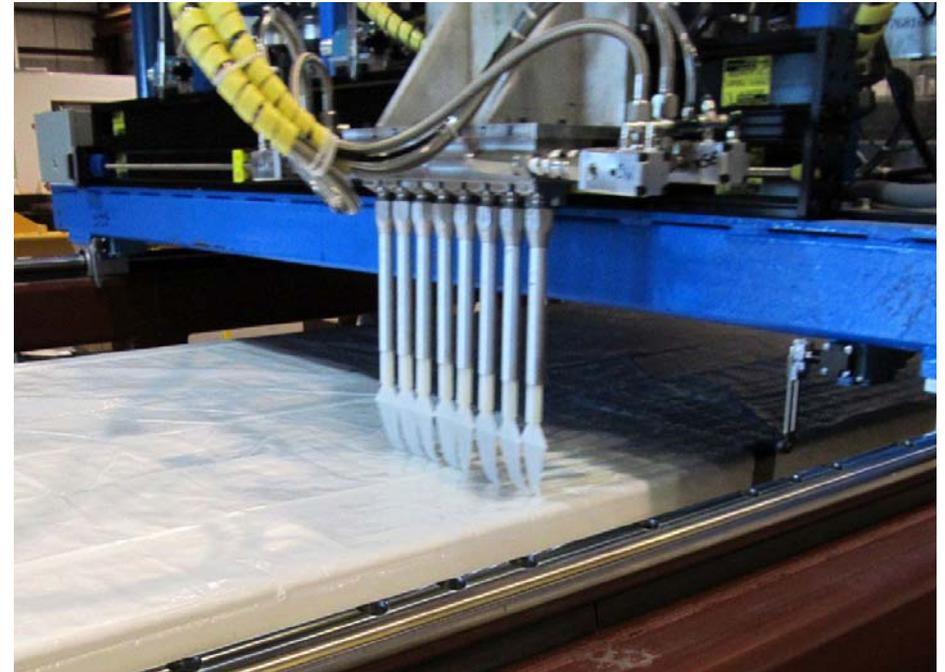


- Module being rotated within the dispenser



Adhesive Dispenser

- Last week, vapor level tests were performed
 - UM Ind. Hygiene in attendance
 - MMA and %LEL measurements were taken
- Results were same as tests at ANL
 - %LEL barely measureable
 - No special fire response is needed.
 - MMA levels at 1-2 ppm
 - 50 is our threshold



- Adhesive dispensing
 - 8 simultaneous beads
 - 4 passes per module

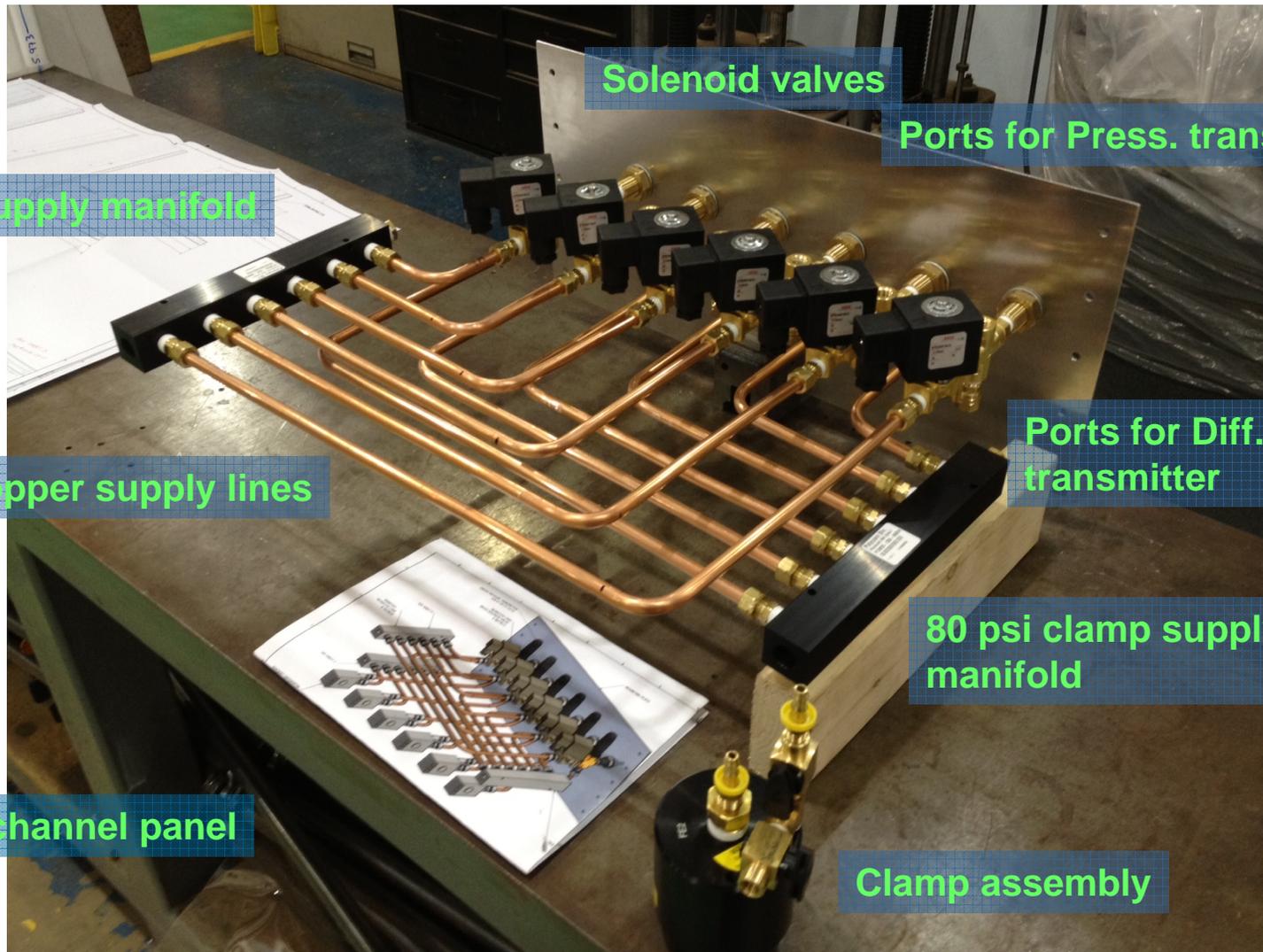


Leak Tester

- Modules will be tested for leaks when they arrive
 - Looking for shipping damage
- Compressed air will be used
 - Plan for low pressure, 1.5 psi
- Tester is being designed and built at ANL
 - Commercial parts, gauges, software.
- Last parts arrived last week
 - Delivery to Ash River is planned for week of 9 April.



Leak Tester 6 Channel Subassembly



Solenoid valves

Ports for Press. transmitter

Module supply manifold

Copper supply lines

Ports for Diff. Press. transmitter

80 psi clamp supply manifold

6-channel panel

Clamp assembly



Operational Readiness

- Equipment review status
 - Pivoter – before the committee now
 - We have engineering questions to answer
 - Adhesive dispenser – documentation with the committee
 - Bumped priority for the pivoter, tour of ANL prototype next week
 - Lifting fixture
 - Treated as standard below the hook device, followed FESHM 5022
 - Leak Tester
 - Documentation in progress



Assembly Training

- As soon as practical, assembly exercises will begin
- A “dry stack” of 2-4 layers will be done.
 - Check alignment, time the process, practice the survey
 - This will help train the crew, refine the details of our procedure.
- Our goal is to have 2 layers in position by 27 April.