



# MEBT MEETING AGENDA

August 30, 2001

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## Mechanical Systems Update

1. **Raft 3 Assembly Status**
  - PM4 & Anti-Chopper Beambox installed ([photos](#))
  - Quad locational measurements ([CMM results](#))
  - Quad repeatability measurements ([R&R CMM results](#))
  
2. **Fabrication and Procurement Update**
  - Raft weldments
  - Profile Monitor Beamboxes
    - Welding of PM4 & PM5 complete
    - Welding or remaining beamboxes underway
  - Beampipe welding underway
  - Other fabrications underway:
    - flanges for remaining beampipes, BZ Engineering
    - Rebuncher Fiducialization Stand, Main Shop
  
3. **Design Status ([MEBT](#))**
  - Beampipe welding drawings underway
  - Beambox welding drawings underway
  - Rebuncher Cavity mounting hardware redesign complete

## Electrical Systems Update

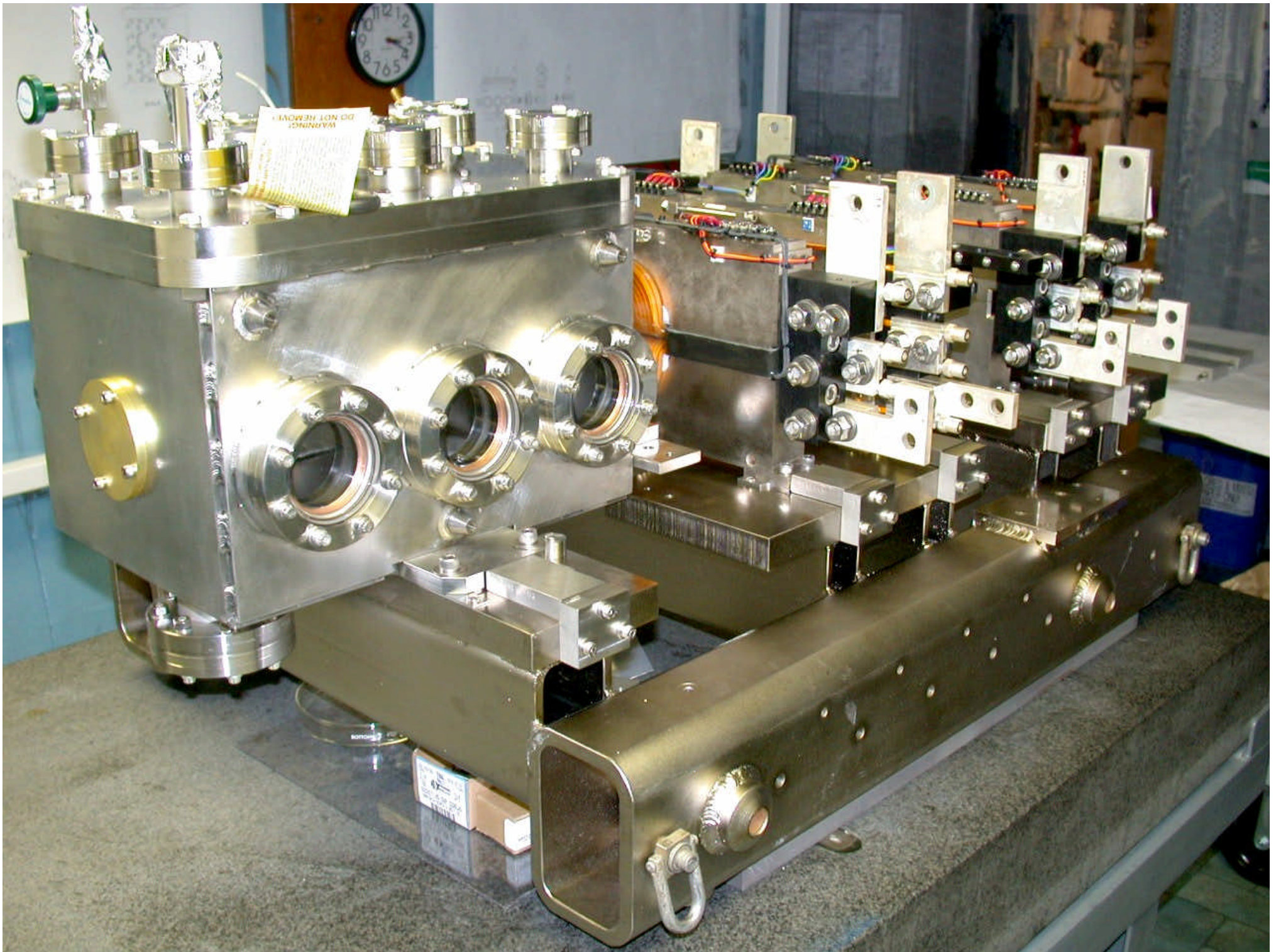
1. **Low Level RF**
2. **Rebuncher System**
3. **Beam Diagnostics ([Laser PM Hardware](#))**

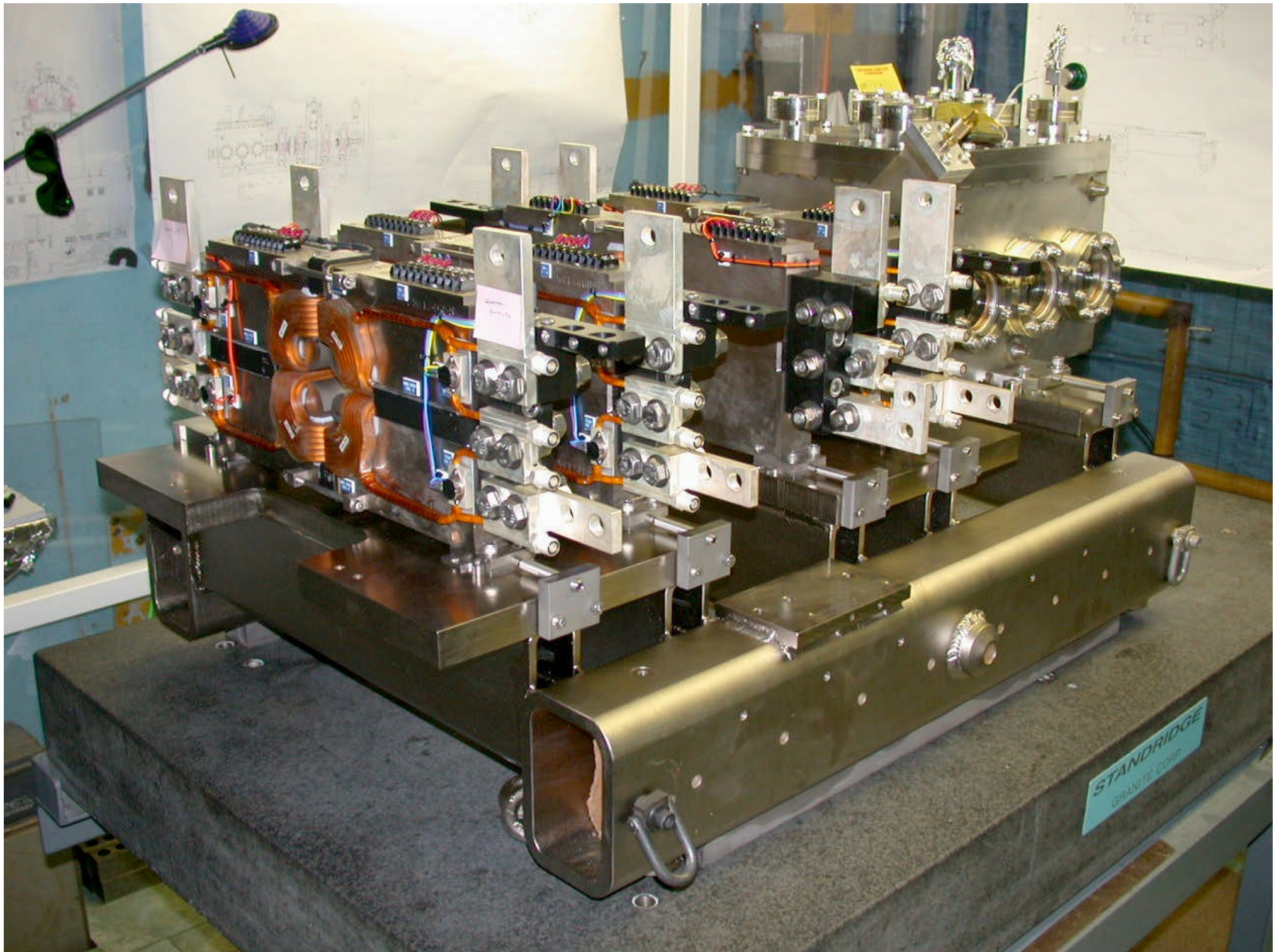
## System Integration / Installation

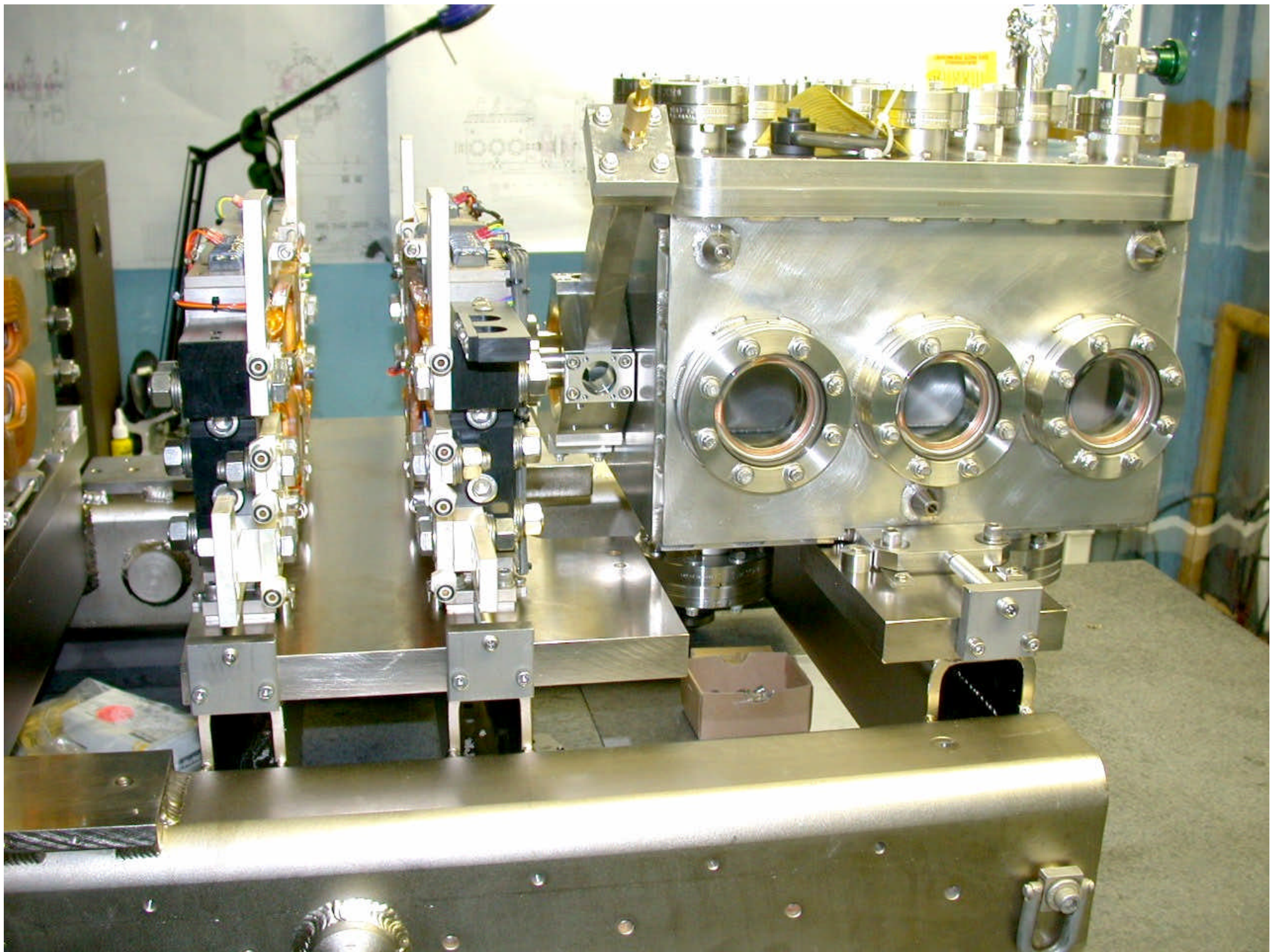
### Upcoming Tasks and Milestones

- |                                       |            |
|---------------------------------------|------------|
| ◆ Raft and Support Structure Complete | 5/31/01 OR |
| ◆ Rebuncher Cavity #2-4 Received      | 6/30/01    |
| ◆ Profile Monitor all complete        | 7/31/01    |
| ◆ MEBT Raft 3 assembly complete       | 9/30/01    |

*Next Meeting: Thursday, 9/13/01, 10 AM*

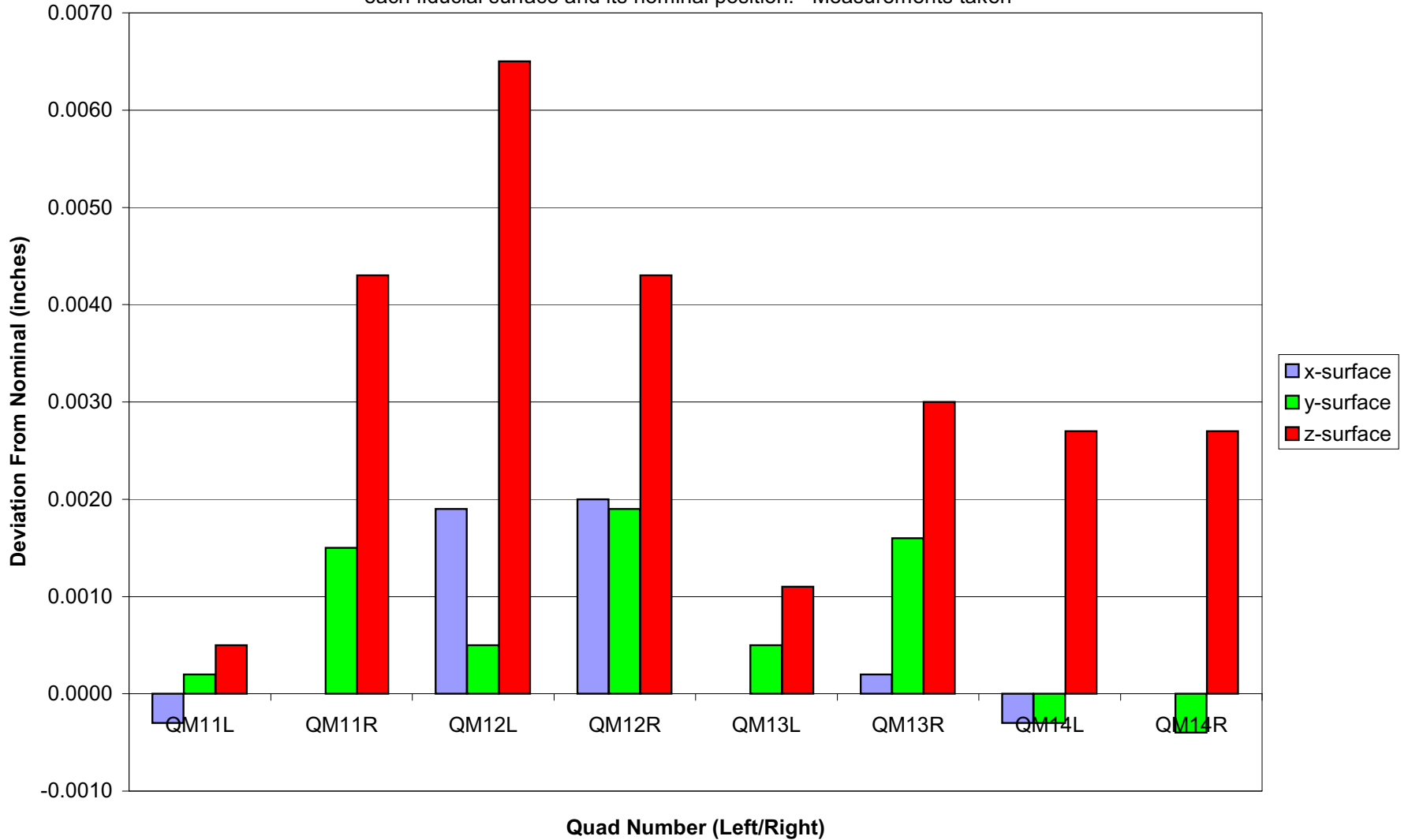






### Raft3 Quad Locational Deviations

Deviation values: the difference between the measured position of each fiducial surface and its nominal position. Measurements taken



# Raft #3/QM 14 CMM Data Summary

## Mounting Test: QM14 onto Raft

Inspection Description Part Name	Pitch Torque Test Raft 3			
Torque Value	Loose	60 in-lb	80 in-lb	100 in-lb
PLANE QM14_XL	18.5244	18.5245	18.5245	18.5245
PLANE QM14_YL	8.0442	8.0438	8.0438	8.0438
PLANE QM14_YR	8.0427	8.0425	8.0425	8.0425
PLANE QM14_XR	3.2709	3.2710	3.2710	3.2710
POINT QM14_Z1R	2.6150	2.6163	2.6162	2.6162
POINT QM14_Z2R	2.6144	2.6147	2.6147	2.6147
POINT QM14_Z1L	2.6103	2.6122	2.6122	2.6123
POINT QM14_Z2L	2.6128	2.6134	6.1340	2.6134

Inspection Description Part Name	On/Off Test Raft 3		
Mount Conditions Torque Value	Before Move 100 in-lb	After Move 100 in-lb	Difference
PLANE QM14_XL	18.5246	18.5247	-0.0001
PLANE QM14_YL	8.0439	8.0438	0.0001
PLANE QM14_YR	8.0426	8.0425	0.0001
PLANE QM14_XR	3.2711	3.2711	0.0000
POINT QM14_Z1R	2.6164	2.6162	0.0002
POINT QM14_Z2R	2.6148	2.6149	-0.0001
POINT QM14_Z1L	2.6123	2.6122	0.0001
POINT QM14_Z2L	2.6135	2.6133	0.0002

Inspection Description Part Name	Split Test Raft 3		
Mount Conditions Torque Value	Before Move/Split 100 in-lb	After Move/Split 100 in-lb	Difference
PLANE QM14_XL	18.5248	18.5248	0.0000
PLANE QM14_YL	8.0439	8.0439	0.0000
PLANE QM14_YR	8.0426	8.0426	0.0000
PLANE QM14_XR	3.2712	3.2710	0.0002
POINT QM14_Z1R	2.6164	2.6166	-0.0002
POINT QM14_Z2R	2.6148	2.6149	-0.0001
POINT QM14_Z1L	2.6123	2.6127	-0.0004
POINT QM14_Z2L	2.6135	2.6137	-0.0002

## MEBT Raft #3 Schedule June/July/August

Monday	Tuesday	Wednesday	Thursday	Friday
<b>June 25</b> All parts for rafts 1, 2 and 3 are cut and preliminary machine work finished on raft #3.	<b>June 26</b> Start Raft #3 assembly and tack weld the parts together	<b>June 27</b> Raft #3 is tack welded together.	<b>June 28</b> Pre-weld inspection. Completely weld Raft #3.	<b>June 29</b> Raft #3 sent off site for stress relieving.
<b>July 2</b> Raft #3 sent off site for stress relieving. <b>Charlie Bremmer</b> out, therefore may be no inspection of raft 2 and 1 parts before tack welding.	<b>July 3</b> Raft #3 sent off site for stress relieving. <b>Charlie Bremmer</b> out, therefore may be no inspection of raft 2 and 1 parts before tack welding.	<b>July 4</b> <b>Holiday</b>	<b>July 5</b> Light Sandblast of Raft #3 to remove stress relief oven scale. Charlie Bremmer inspection of raft 2 and 1 parts before tack welding. <b>Waiting for quote from grinder!</b>	<b>July 6</b> Machine edges of Raft #3 mounting plates.
<b>July 9</b> Raft #3 sent off site for grinding? <b>NO!</b>	<b>July 10</b> Raft #3 sent off site for grinding? <b>NO!</b> Start welding raft #2. <b>YES!</b>	<b>July 11</b> Raft #3 sent off site for grinding. <b>NO!</b>	<b>July 12</b> Raft #3 sent off site for grinding. <b>NO!</b> Start welding raft #1? <b>Yes</b>	<b>July 13</b> Raft #3 sent off site for grinding. <b>NO!</b>
<b>July 16</b> Raft #3 sent off site for grinding. <b>NO!</b>	<b>July 17</b> Raft #3 sent off site for grinding. <b>NO!</b>	<b>July 18</b> Raft #3 sent off site (overnight shipping) for grinding.	<b>July 19</b> Raft #3 sent off site for grinding.	<b>July 20</b> Raft #3 sent off site for grinding.
<b>July 23</b> Raft #3 sent off site for grinding.	<b>July 24</b> Raft #3 arrives back from grinding.	<b>July 25</b> Inspection of the grinding of Raft #3. Clean first?	<b>July 26</b> Begin machining of the top plates of raft #3	<b>July 27</b> Continue machining of the top plates of raft #3.
<b>July 30</b> Machine work done. Inspection of the drilled and tapped holes of Raft #3.	<b>July 31</b> Inspection of the drilled and tapped holes of Raft #3.	<b>August 1</b> Re-Machine dowel pin holes.	<b>August 2</b> Inspection of the dowel pin holes of Raft #3.	<b>August 3</b> Sand Blast and clean out tapped holes.
<b>August 6</b> Send Raft #3 to platers for electroless nickel plating.	<b>August 7</b> Raft #3 at platers.	<b>August 8</b> Raft #3 at platers.	<b>August 9</b> Raft #3 returns from platers. Final inspection.	<b>August 10</b> Deliver to SNS building 71
<b>August 13</b>	<b>August 14</b>	<b>August 15</b>	<b>August 16</b>	<b>August 17</b>

# SNS - FES MEBT Raft Fabrication Schedule

	May							June														July														August																																		
	May 17	May 18	May 21	May 22	May 23	May 24	May 25	May 28	May 29	May 30	May 31	June 1	June 4	June 6	June 7	June 8	June 11	June 12	June 13	June 14	June 15	June 18	June 19	June 20	June 21	June 22	June 25	June 26	June 27	June 28	June 29	July 2	July 3	July 4	July 5	July 6	July 9	July 10	July 11	July 12	July 13	July 16	July 17	July 18	July 19	July 20	July 23	July 24	July 25	July 26	July 27	July 30	July 31	August 1	August 2	August 3	August 6	August 7	August 8	August 9	August 10	August 13	August 14	August 15	August 16	August 17	August 20	August 21	August 22	August 23
<b>RAFT #3</b>																																																																						
Rev B WJO released to the approver																																																																						
Problem finding 2" x 5" tubing. Revise the drawings to change tube size.																																																																						
Rev C WJO released to the approver																																																																						
Procure Material																																																																						
Cut and preliminary machine work of all parts for rafts 1, 2 and 3.																																																																						
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<b>RAFT #2</b>																																																																						
Rev B WJO released to the approver																																																																						
Problem finding 2" x 5" tubing. Revise the drawings to change tube size.																																																																						
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Procure Material																																																																						
Cut and preliminary machine work of all parts for rafts 1, 2 and 3.																																																																						
Inspect parts (pre-weld)																																																																						
Start Raft #2 assembly and tack weld the parts together.																																																																						
Pre-weld inspection. Completely weld Raft #2. Start building raft #1.																																																																						
Machine edges of Raft #2 mounting plates.																																																																						
Raft #2 wait for Raft #1 to be sent off site for stress relieving.																																																																						
Light Sandblast of Raft #2 to remove stress relief oven scale.																																																																						
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