Report on construction of the LP2 spaceframe endplate, 2012-03-08

Last report was 12-January, 8 weeks

procured replacement (angled) strut mounts
procured additional securing fixtures
solved problems of available screw length

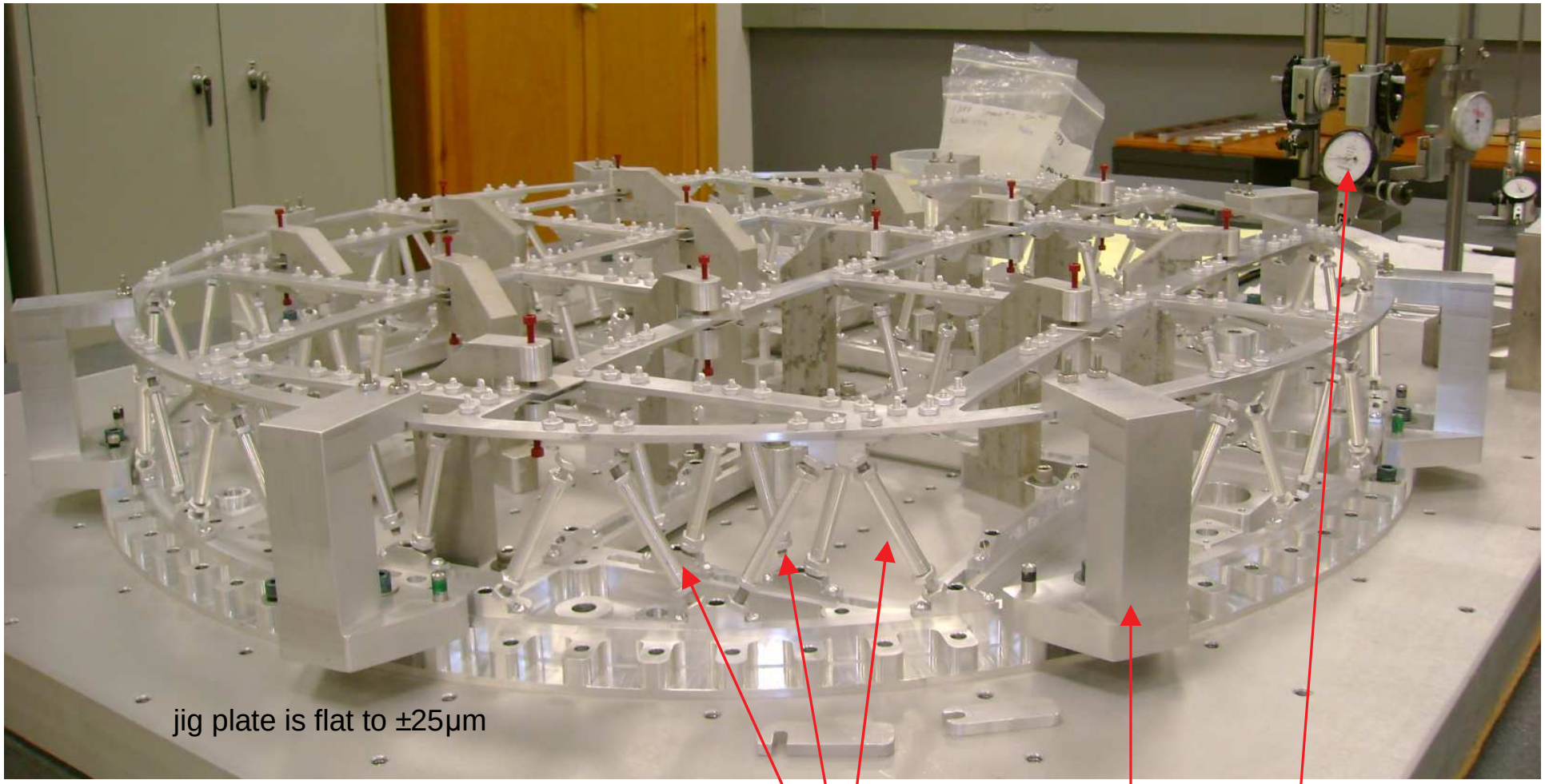
Significant time is demanded by the x-ray Beam Size Monitor,
a detector for the Cesr Test Accelerator,
which is relevant to the ILC damping rings.

progress at this time:

installed replacement strut mounts
including setting torque of all screws

reassembled and aligned inner and outer plates

installed outer perimeter struts

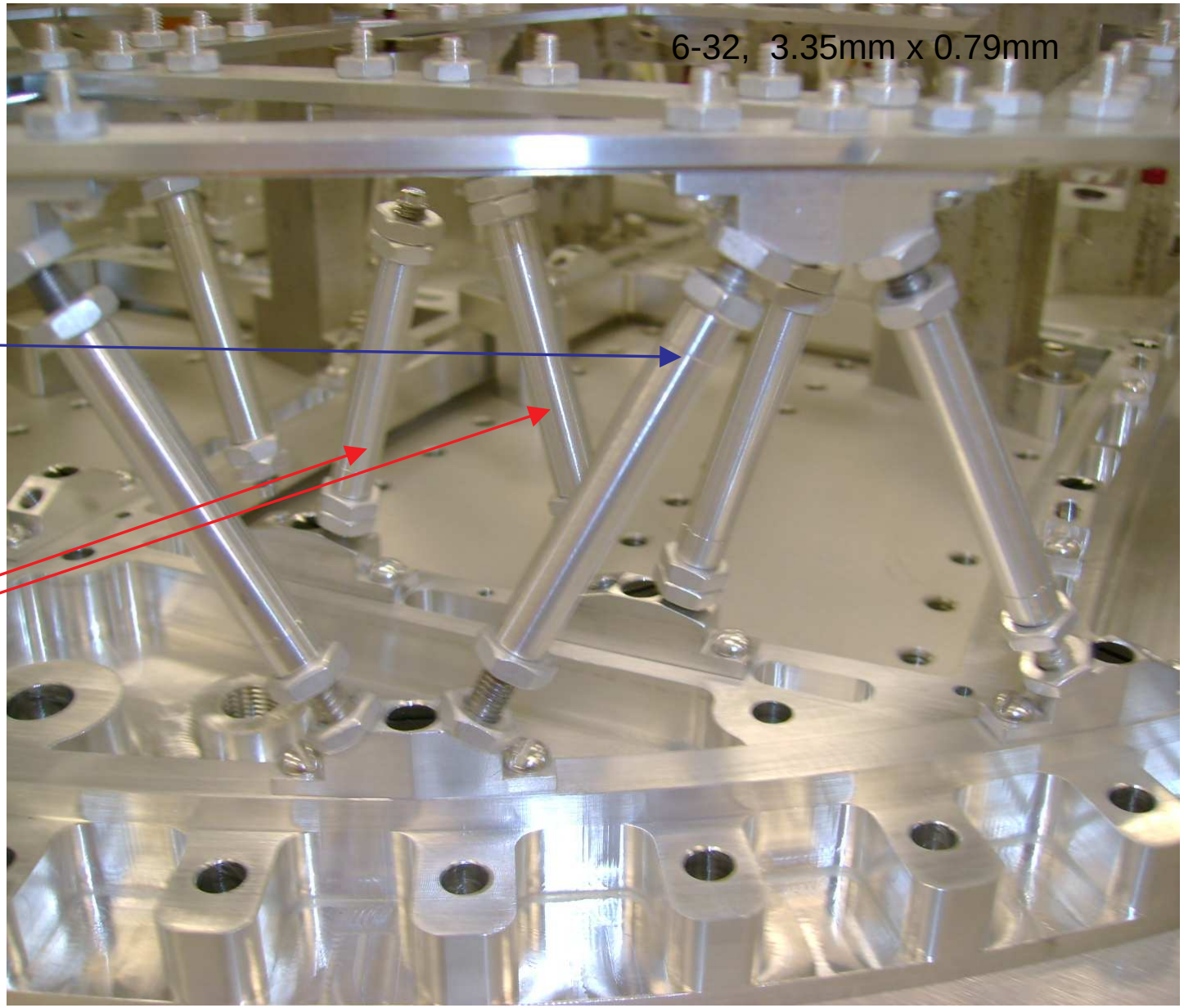


Photograph shows the installed outer struts
(except in location of interference with the alignment brackets)

Height is monitored during strut installation with gauges.

Outer Perimeter struts
are mounted.

In-Row struts
are assembled
but
mounted only on
coarse thread end.



Coarse: 10-24
4.88mm x 1.06mm

Fine: 10-32
4.88mm x 0.79mm

difference: 0.26mm/turn

total height: 100mm

next steps:

check and reset the heights at all locations,

brackets in the rows,
struts in the outer perimeter, lock the struts, (figure, next page)

install the “in-row” struts,

reset all heights again, lock the in-row struts,

install “above row” struts,

remove alignment brackets,
install 16 outer perimeter struts at bracket locations

There are 132 struts in the endplate, requiring ~ 10 minutes/strut: 22 hours.
not too bad,
becoming faster, have learned more efficient starting conditions,

This endplate is becoming a reality.

Yet another CesrTA run for 2 weeks in April.