



Office of Naval Research



800 N. Quincy St., Arlington, VA 22217-5660

MAGLEV INC.[®]



ONR Contract No.:

N00014-00-C-0388

ONR Project No.:

00PR07077-01

Office of
Naval Research



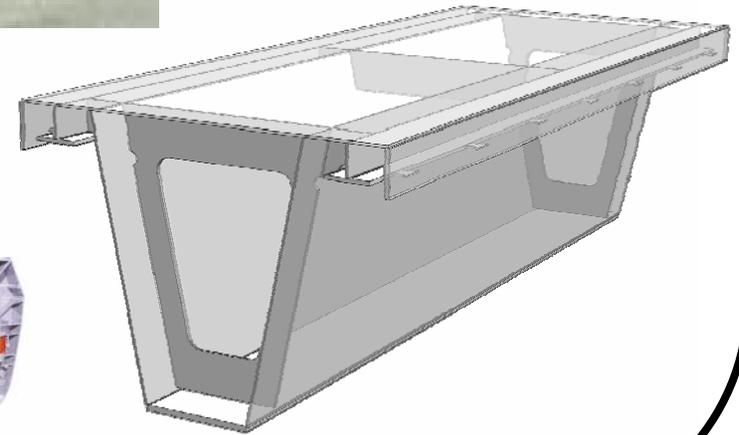
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Quality Analysis and Registration of the Control Network

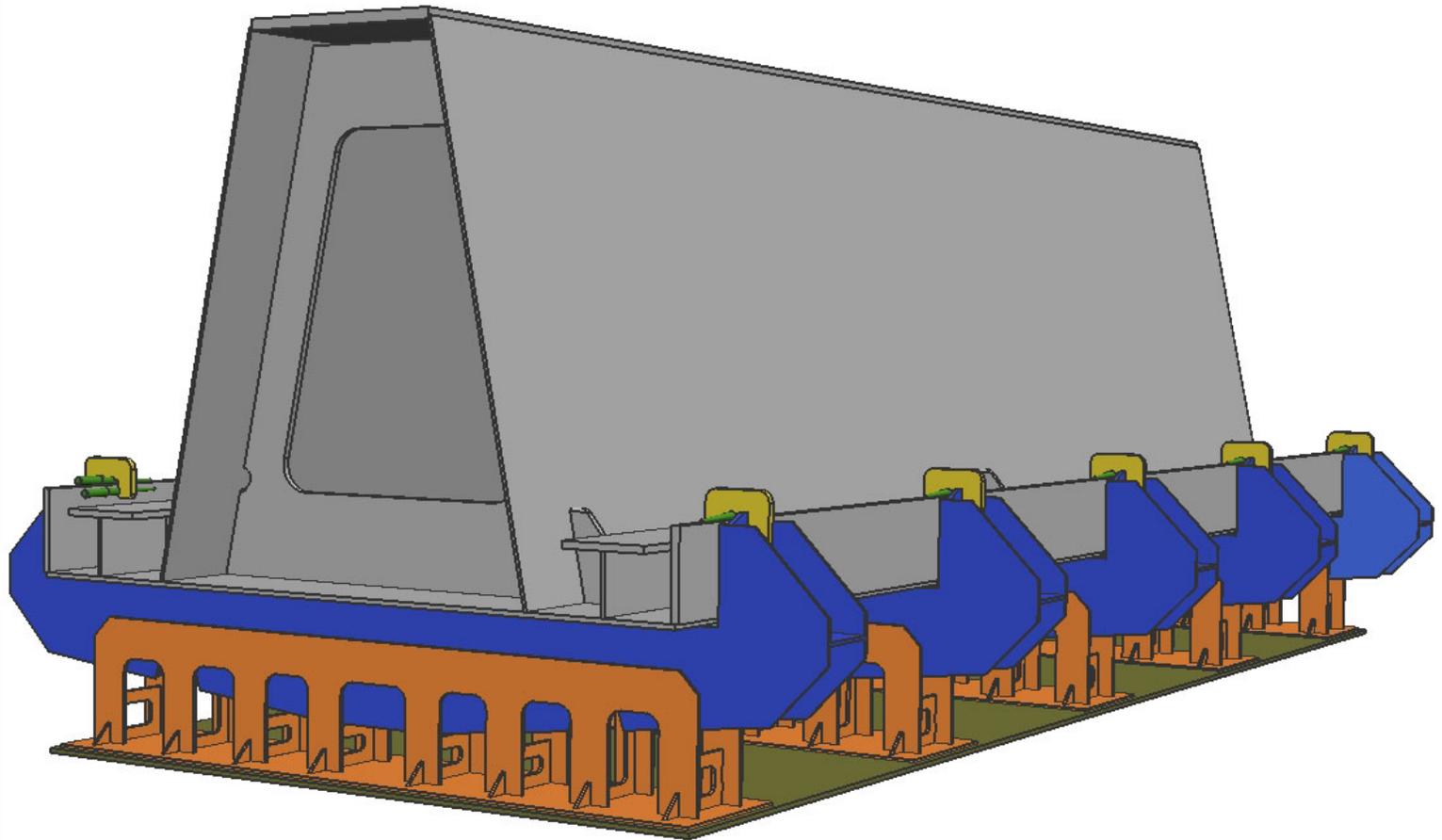
NIST Workshop

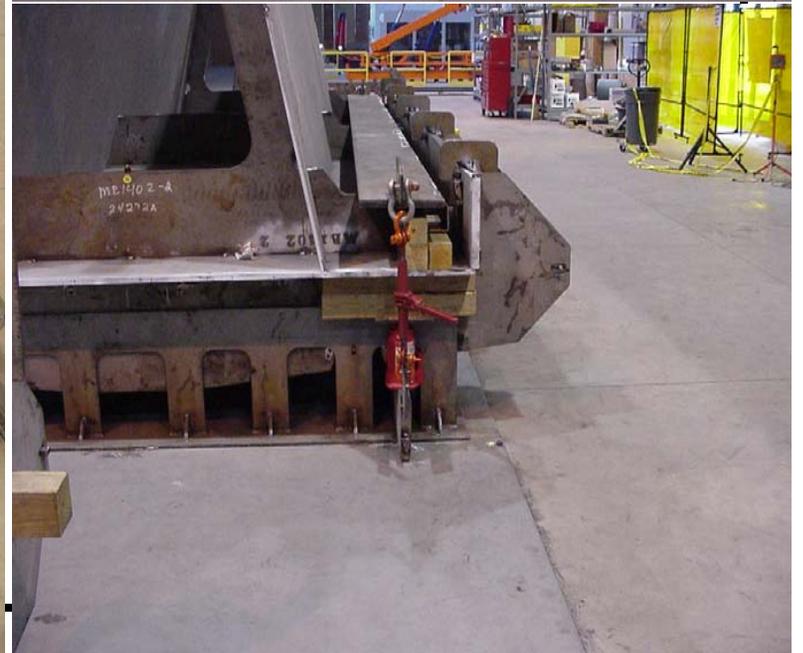
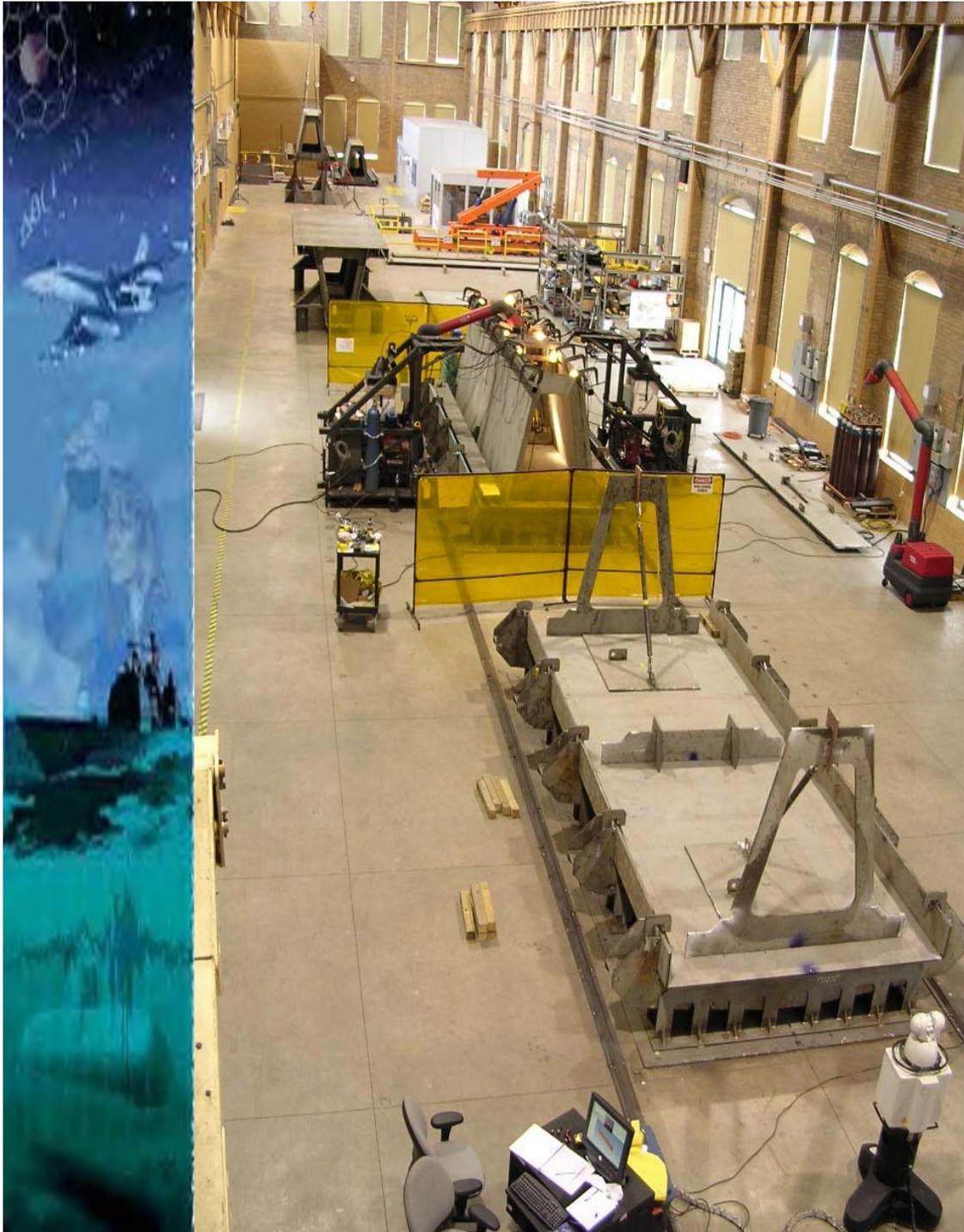
March 3rd, 2006



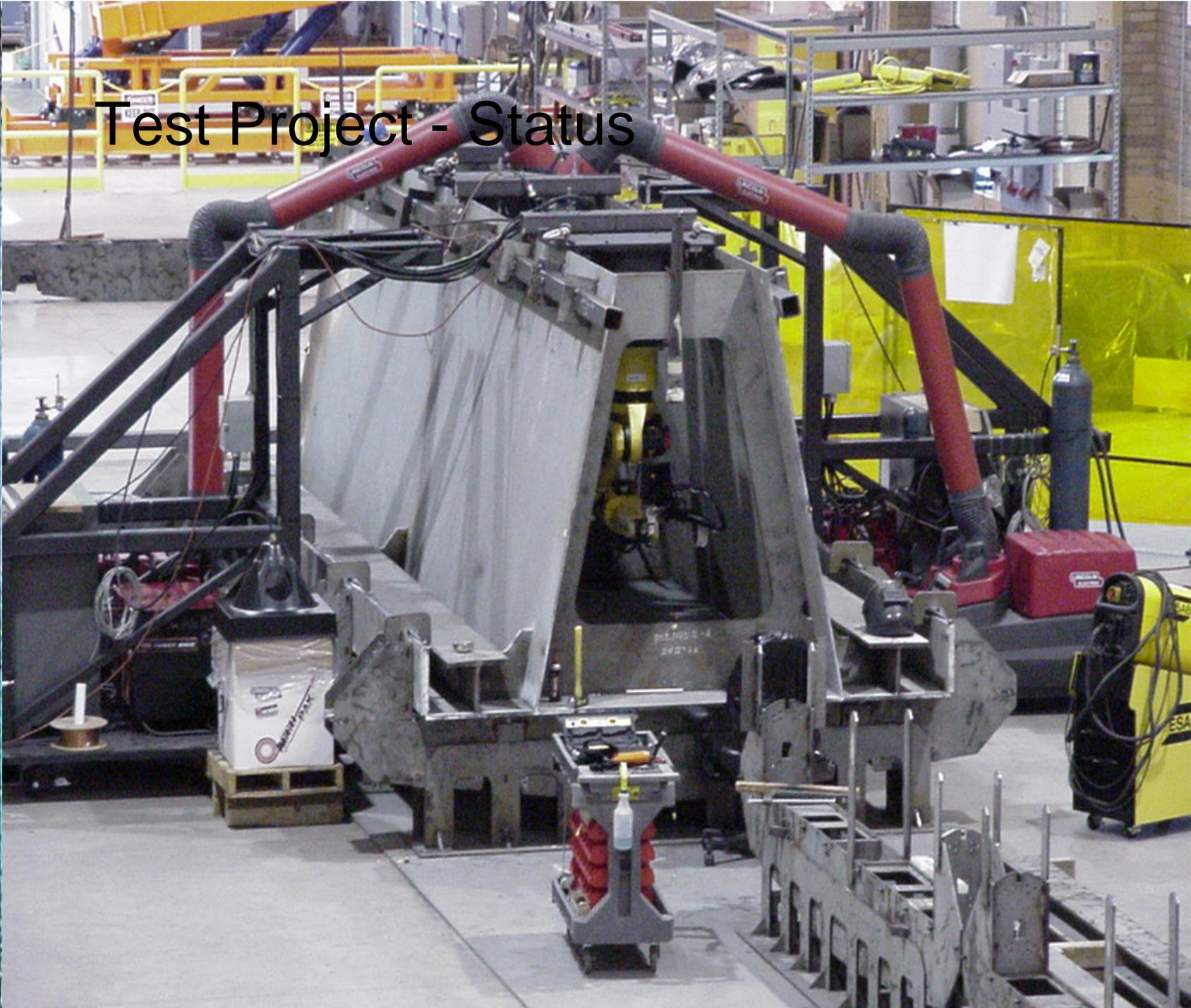


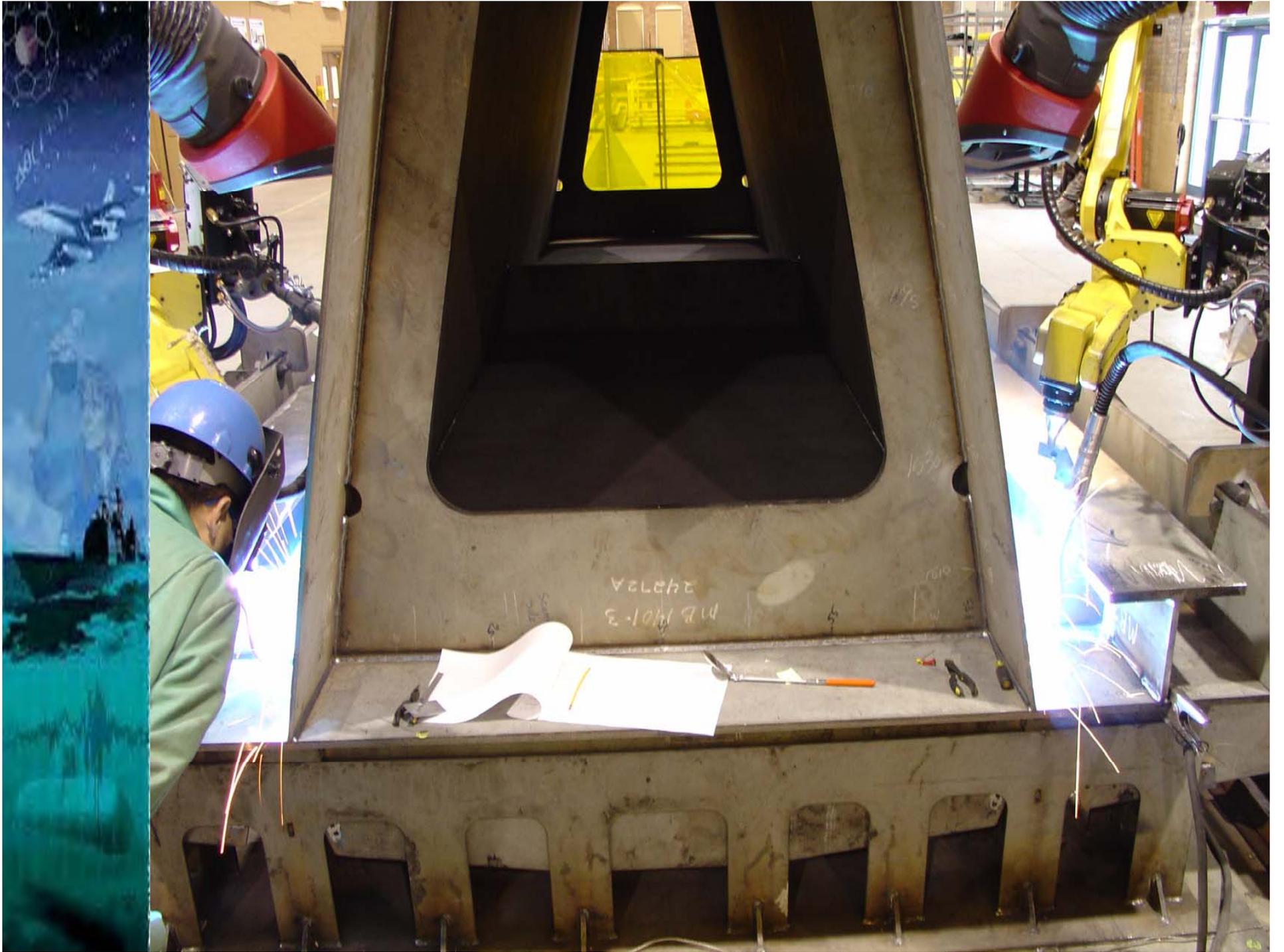
Test Project

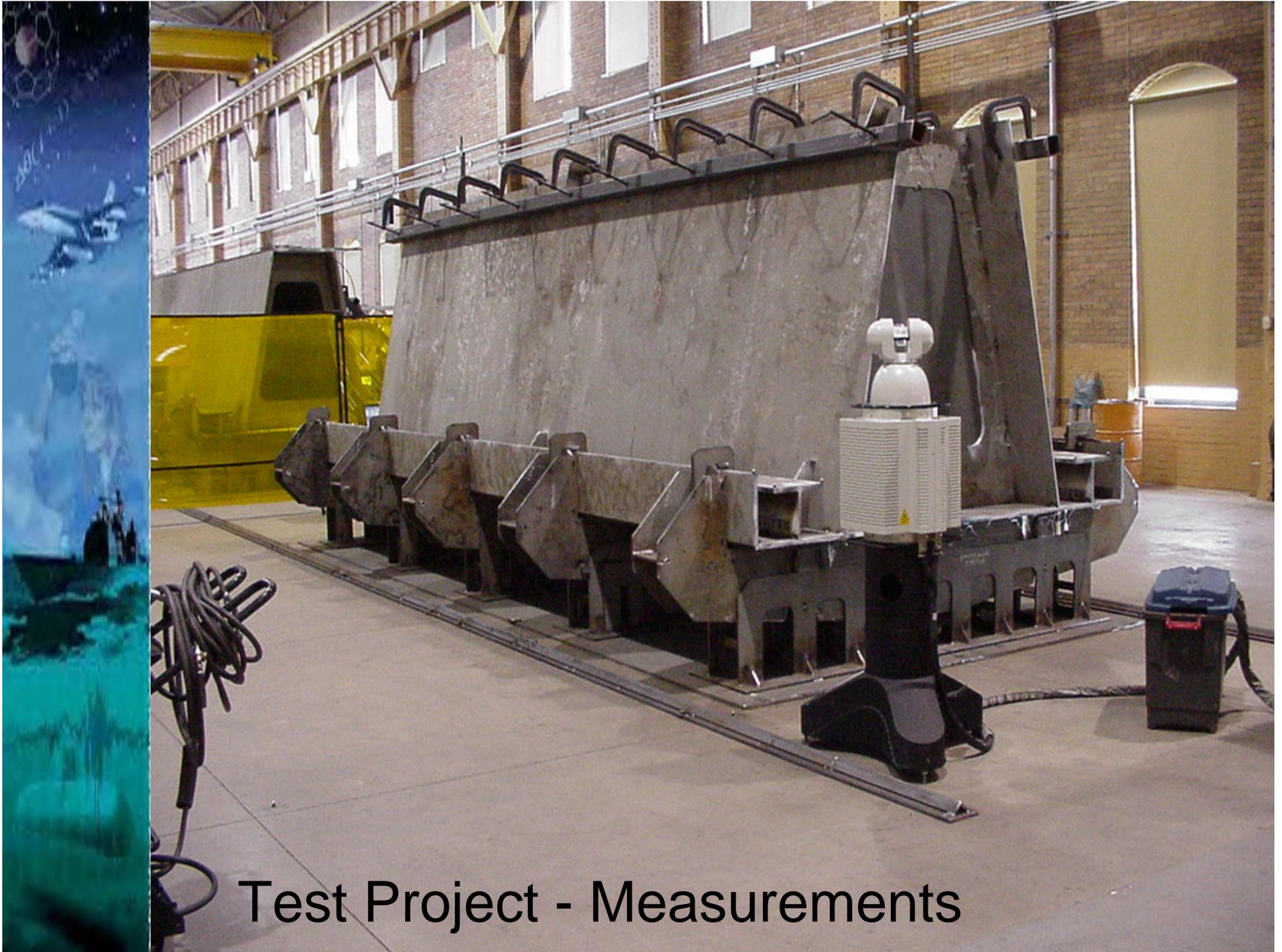




Test Project - Status

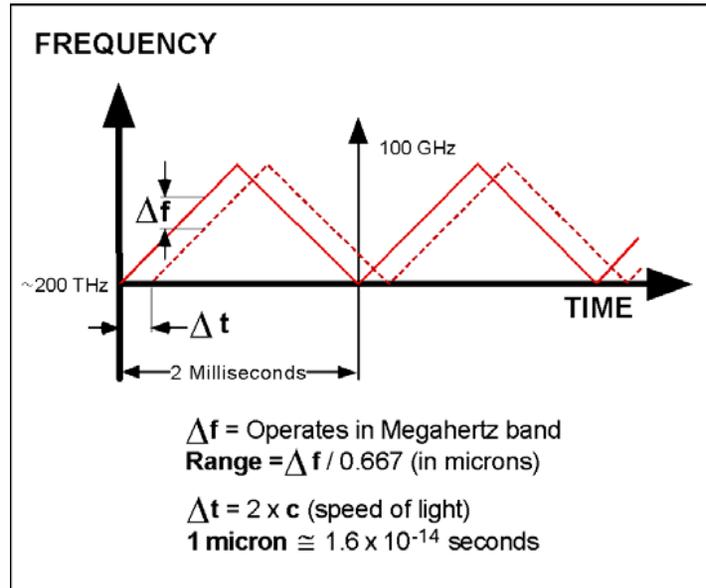






Test Project - Measurements

Test Project - Measurements



Coherent Laser Radar (CLR)

Leica LR-200 (Metris MV-200)

Performs both Single Point and Scanning Measurements

Uncertainty at 2 Sigma = ± 50 Microns [± 0.002 in.]

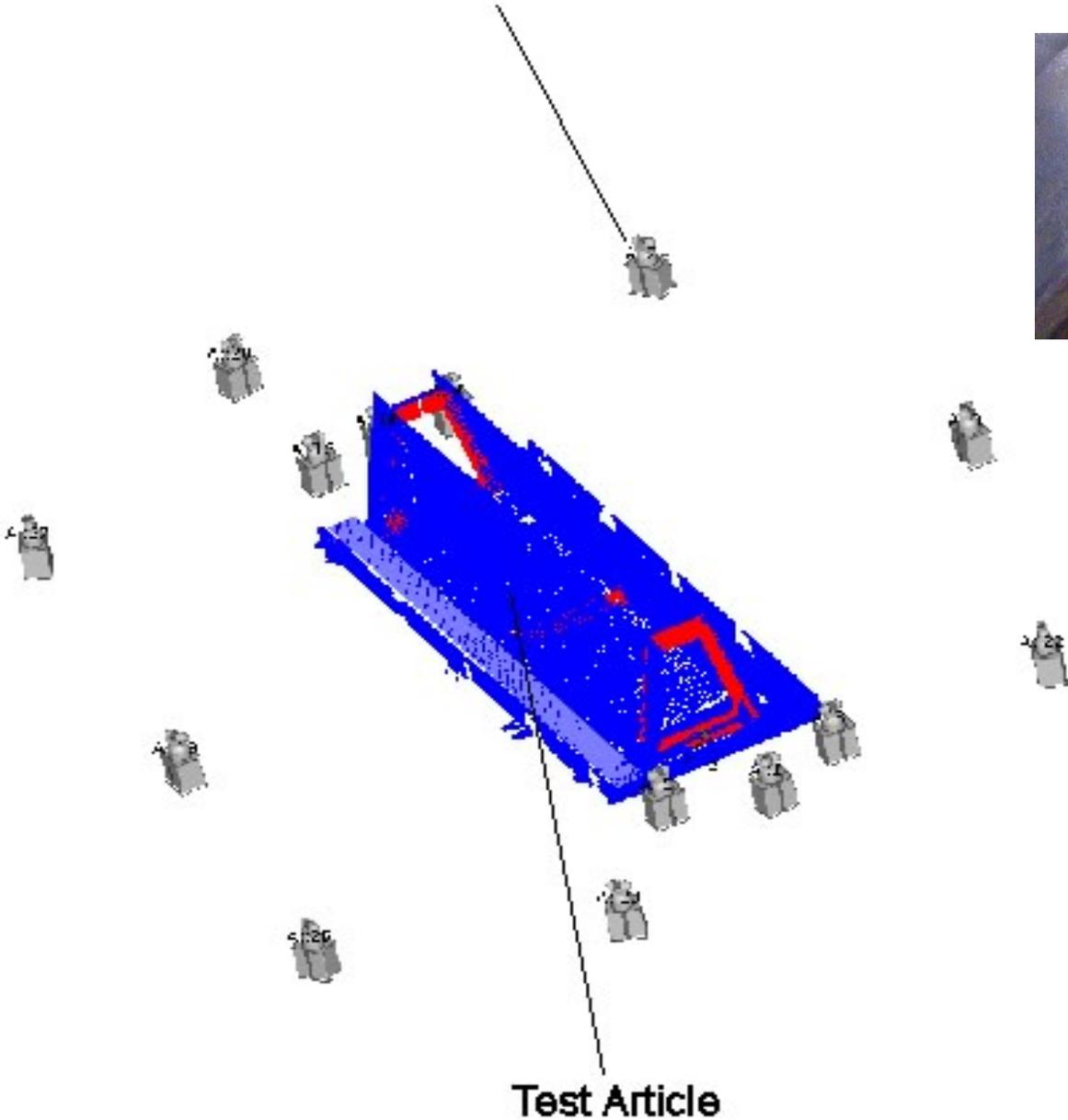
At Range 24 meters

Operating Software: Spatial Analyzer™

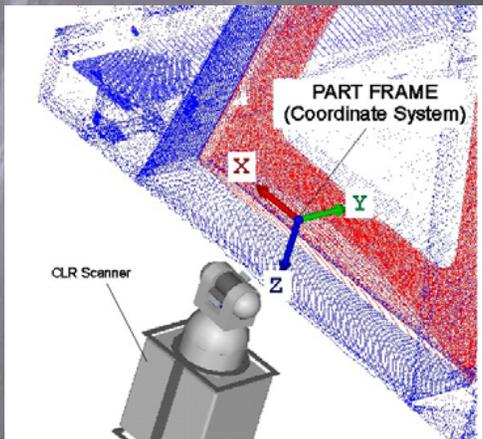
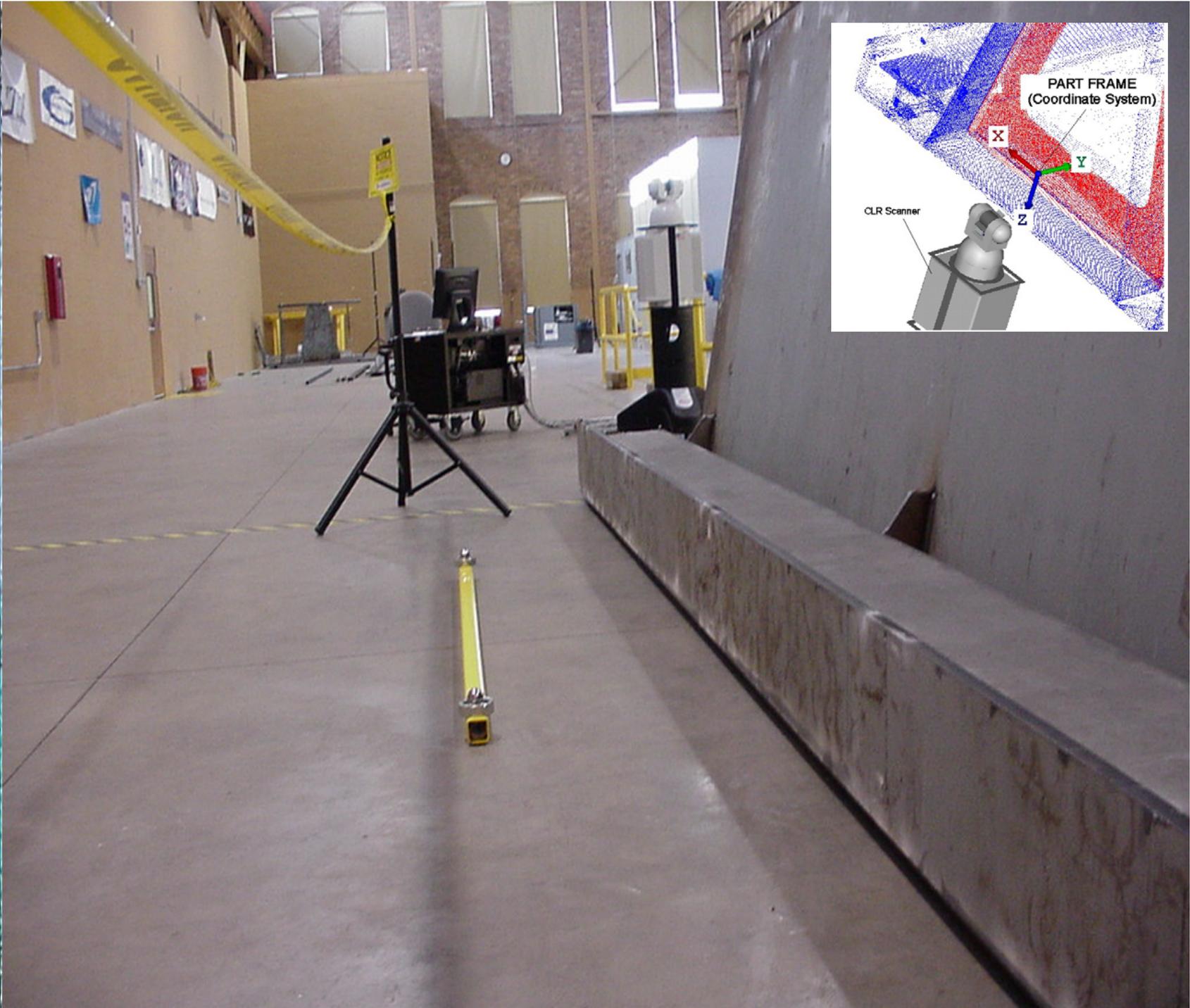
Processing Software: Polyworks™



CLR Scanner Instrument Location (Typical)



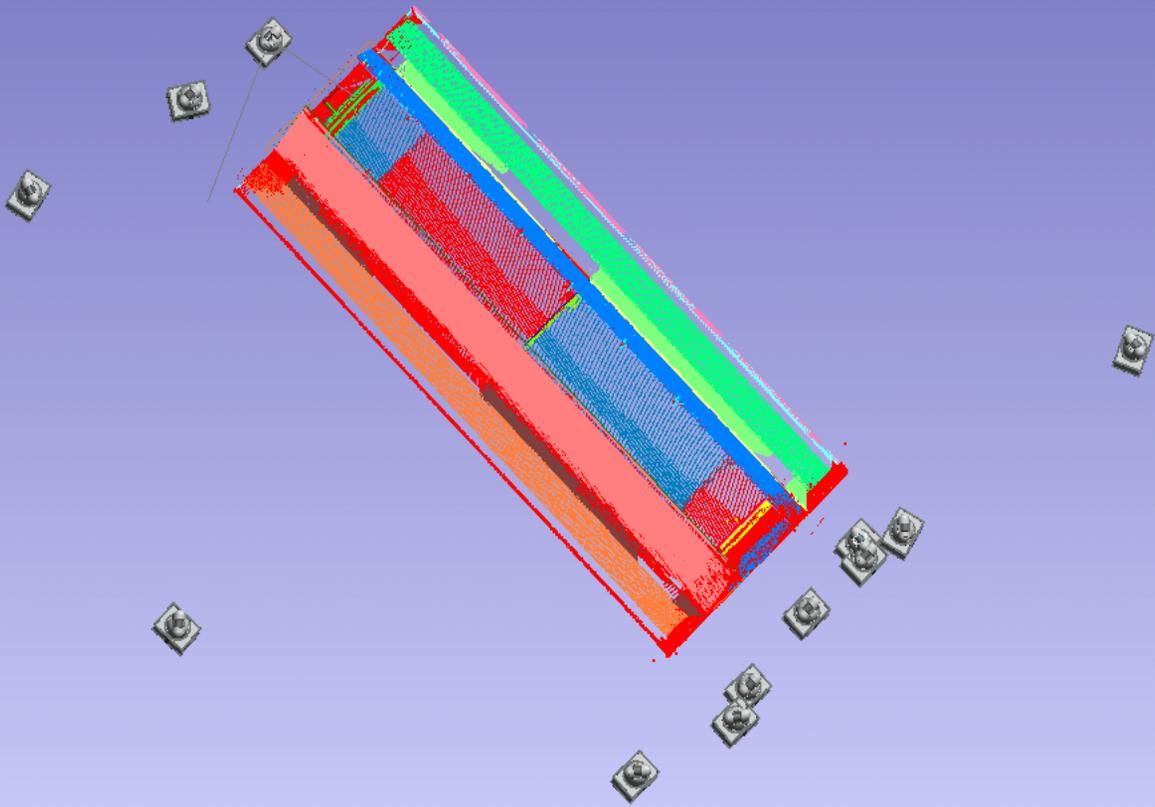
Test Project - Measurements

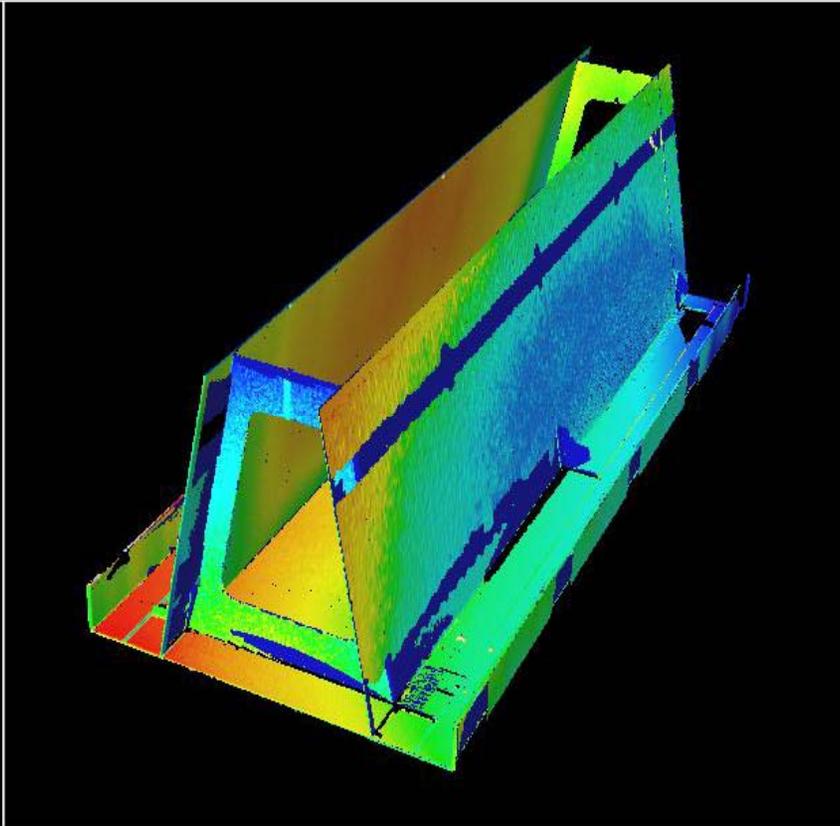
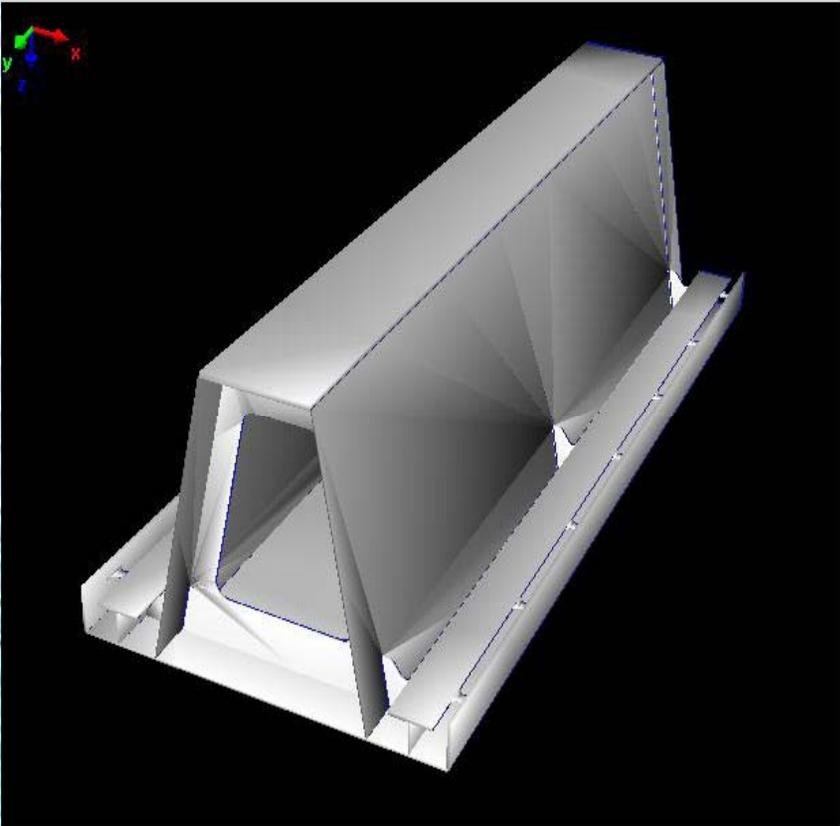


SA TreeBar

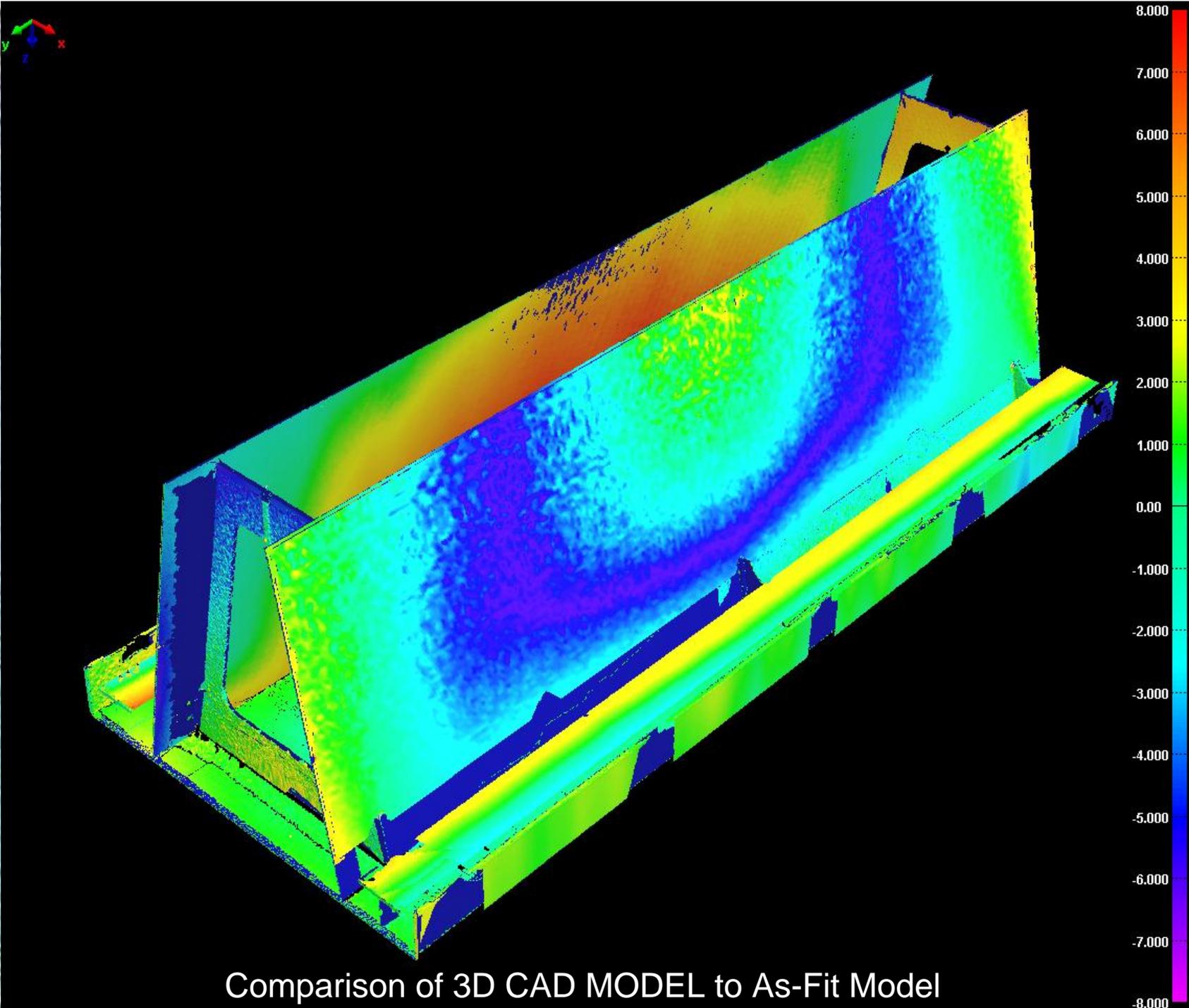
- Instrument
 - 0-M
 - 1-M
 - 2-M
 - 3-M
 - 4-M
 - 5-M
 - 6-M
 - 7-M
 - 8-M
 - 9-M
 - 10-M
 - 11-M
 - 12-M
- Point G
 - Loc
 - CN
 - Loc
 - Loc
 - Drill
 - Loc
 - WE
 - WE
 - Drill
 - Loc
 - Loc
 - CN
 - Per
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 - Loc
 - Per
 - Loc
 - Loc
 - Drill
 - clo
 - Loc
 - Per
 - Per
 - Drill
 - Loc
 - Loc
 - Per
 - Loc
- Frames
- Point C
 - 12_
 - 13_
 - 14_
 - 15_
 - 15_
 - 17_
 - 17_

Test Project - Measurements

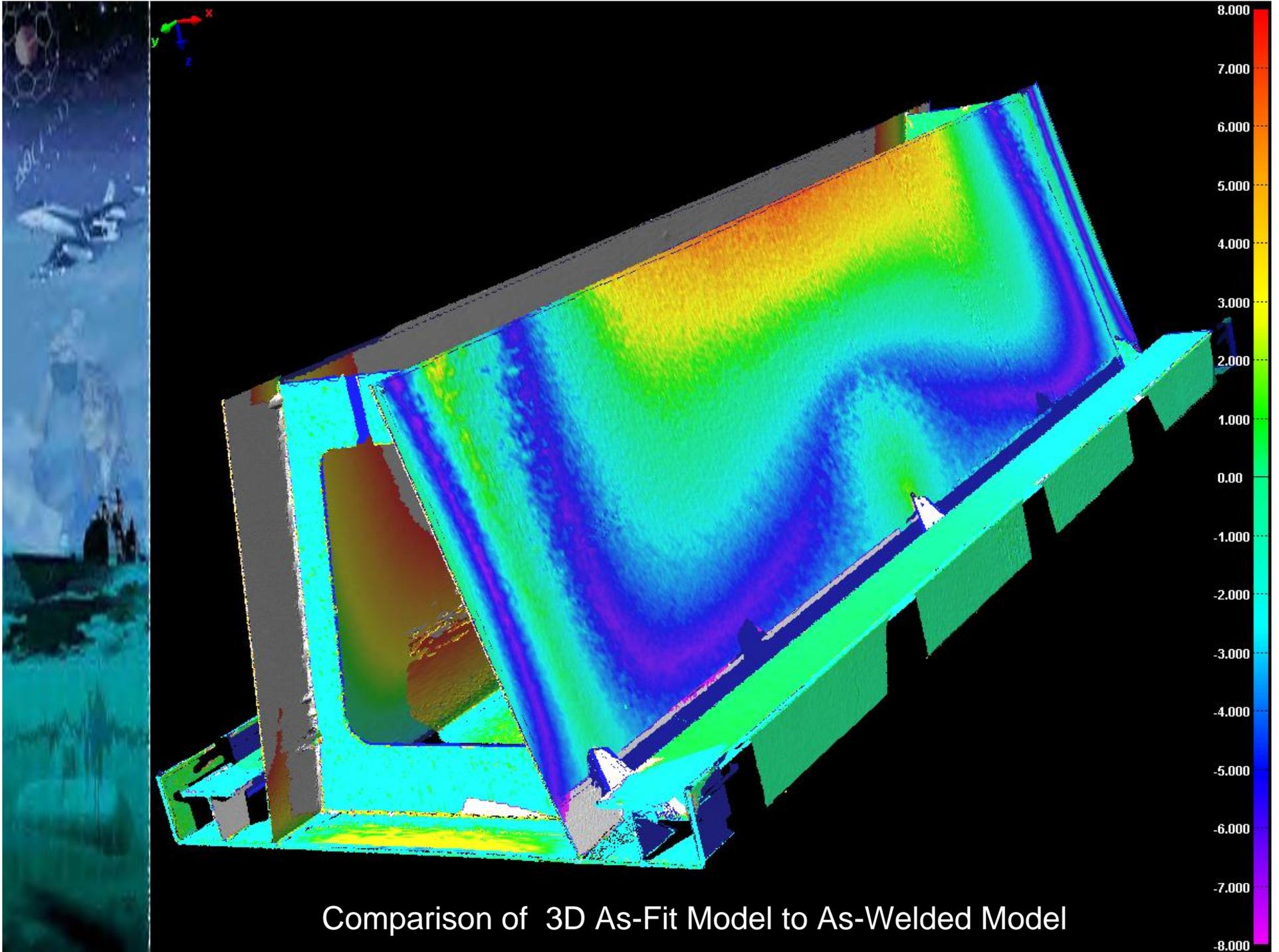




Best-Fit 3D CAD to "As-Fit" Measured Data Model



Comparison of 3D CAD MODEL to As-Fit Model



Comparison of 3D As-Fit Model to As-Welded Model

