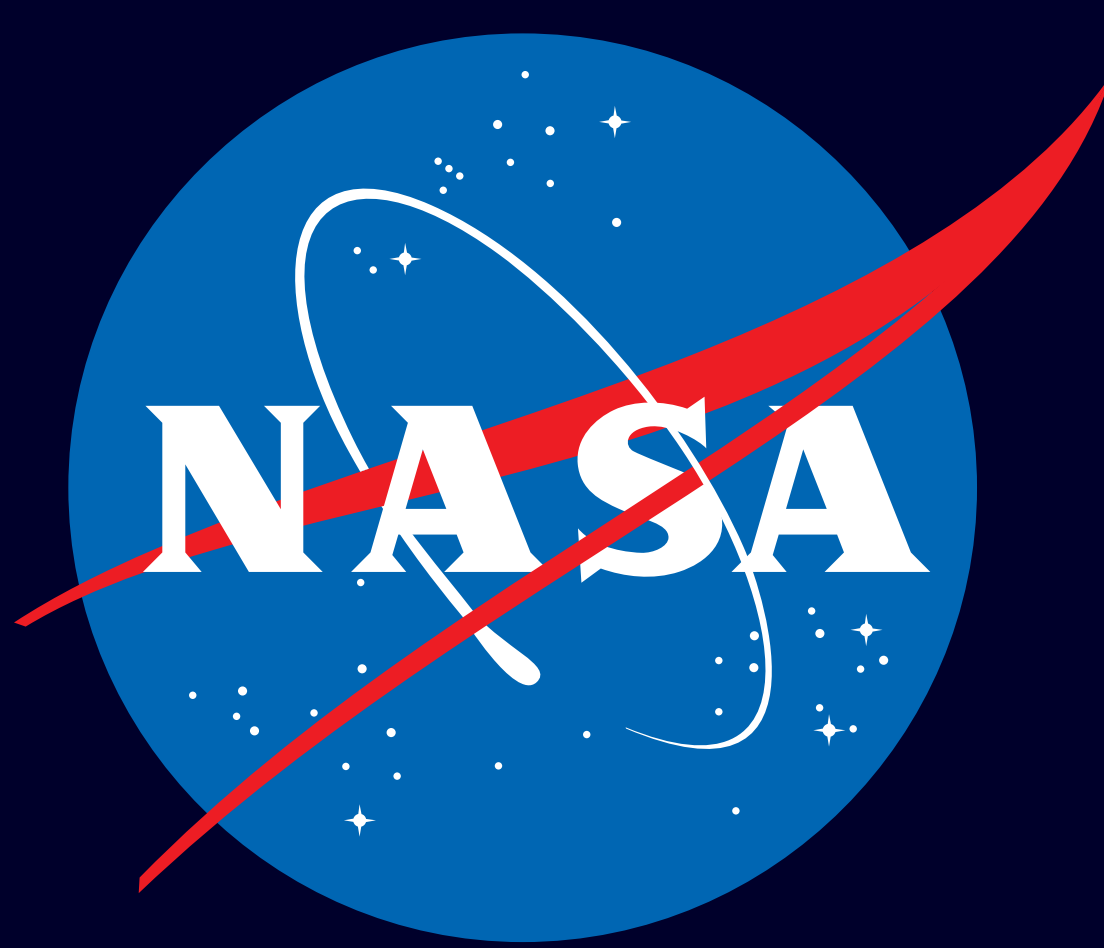




Marshall Space Flight Center

Test Laboratory

Engineering Solutions for Space Science and Exploration

Marshall’s Test Laboratory encompasses a wide range of specialized capabilities that NASA uses to conduct testing for space flight hardware research, development, qualification, acceptance, and anomaly resolution.

Capabilities

- Propulsion Testing
- Environmental Testing
- Structural Strength Testing
- Structural Dynamics Testing
- Structural Test Equipment Design and Fabrication

Benefits

- Full life-cycle testing and evaluation capabilities from materials development and proof-of-concept articles up to qualification of integrated systems.
- Budget analysis and risk management available in-house.
- Workforce and facility flexibility to meet customer needs.

Environmental Testing



Aerodynamic Research Facility 14" Tunnel



Inducer Test Loop in Water Flow Facility



Sunspot Thermal Vacuum Chamber w/ Clean Room in ETF

Structural Dynamic Testing

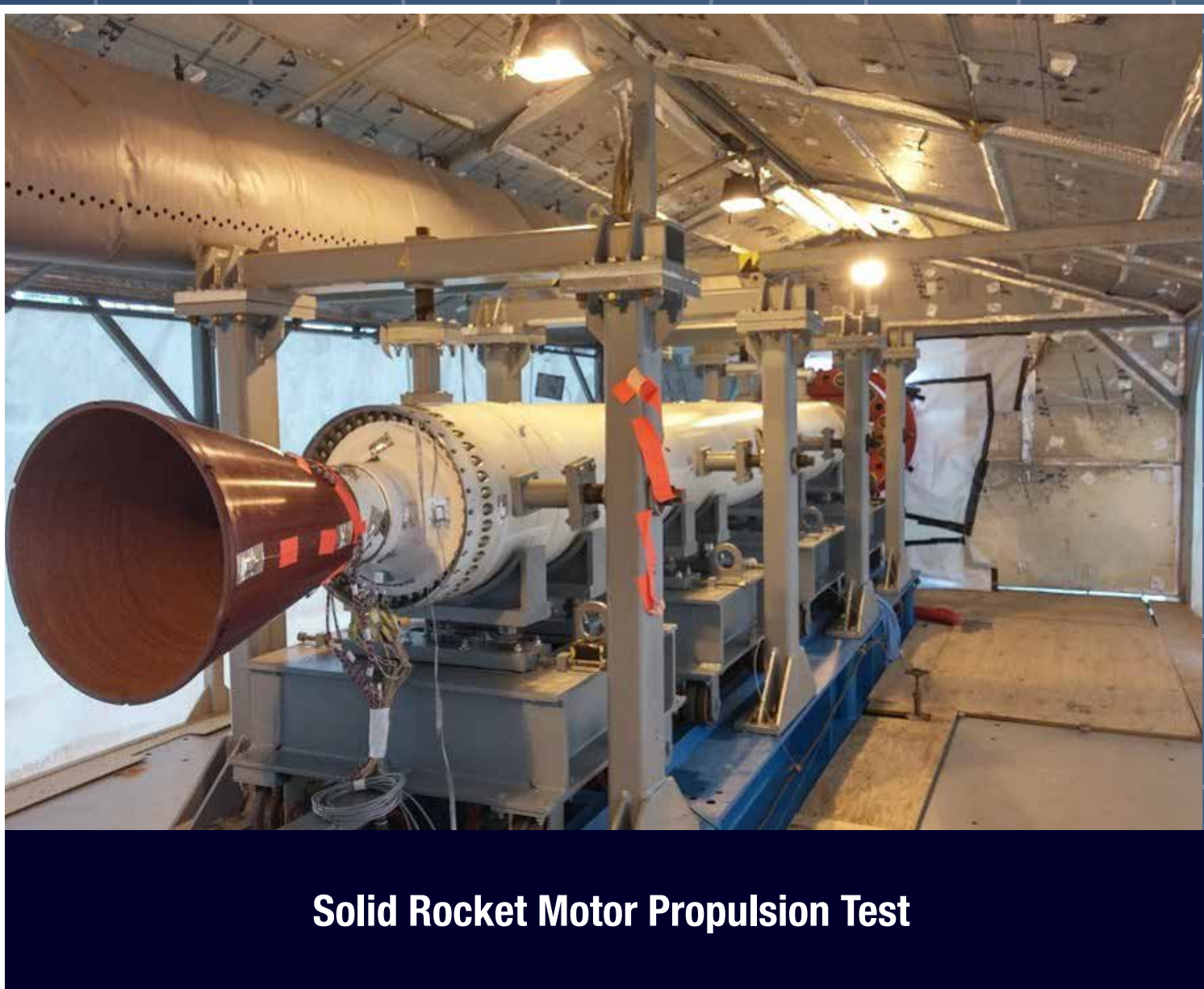


SLS Core Stage Modal Test

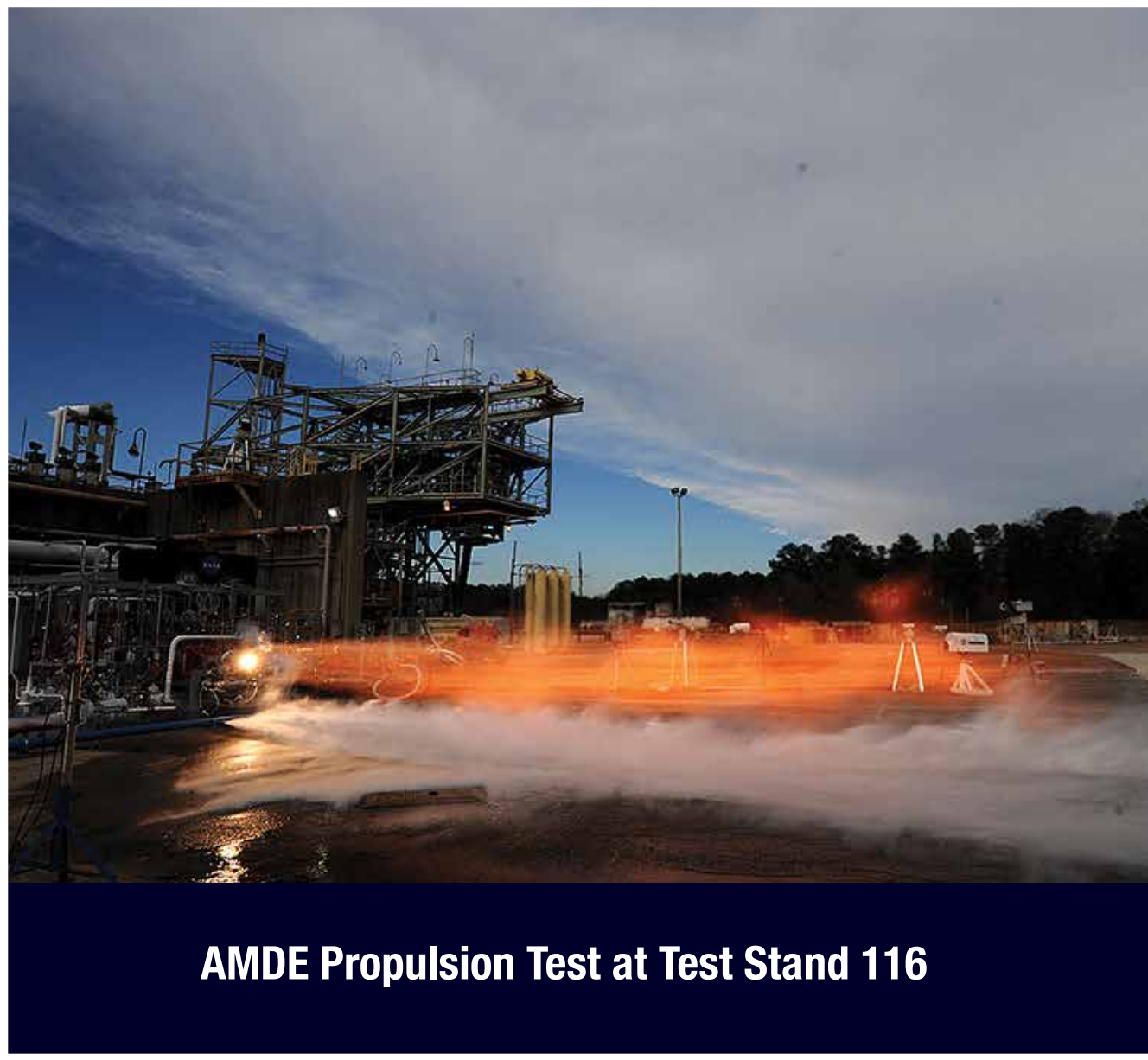
Propulsion Testing



SLS 5% Scale Model Acoustic Test at Test Stand 116



Solid Rocket Motor Propulsion Test



AMDE Propulsion Test at Test Stand 116

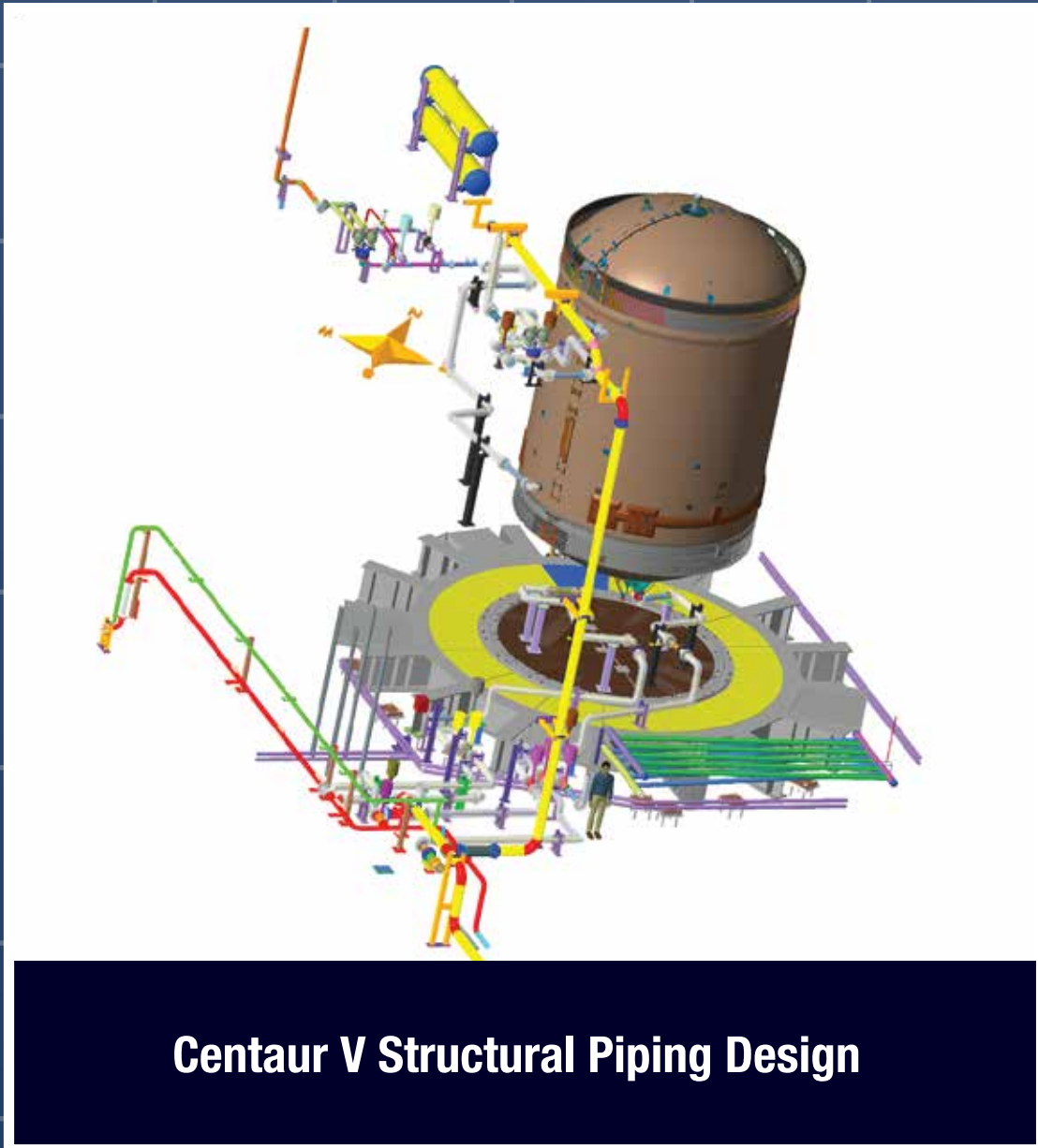


Pneumatic Shock Machine with CSB

STE Design & Analysis



SLS PLA GSE Design Model



Centaur V Structural Piping Design

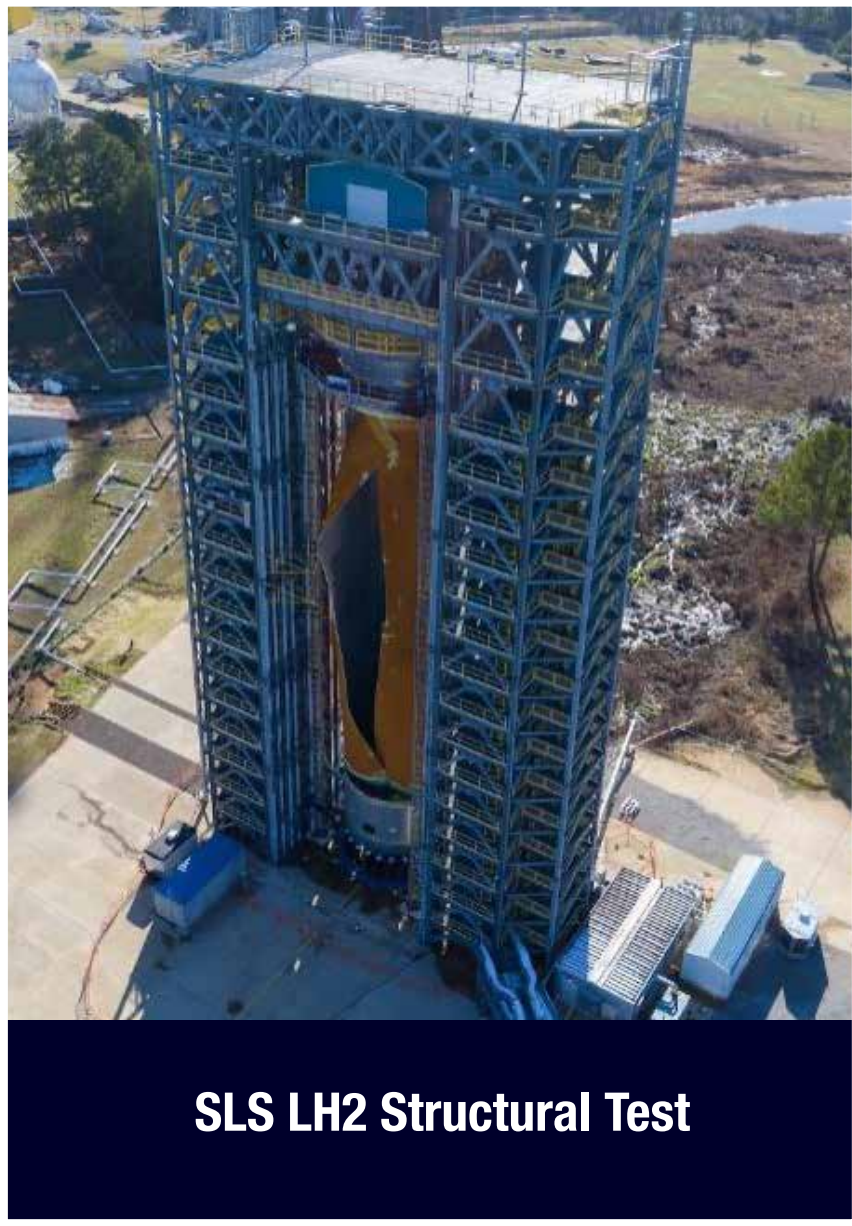


EUS Structural Test Design Model



NASA Docking System Vibration Test

Structural Strength Testing



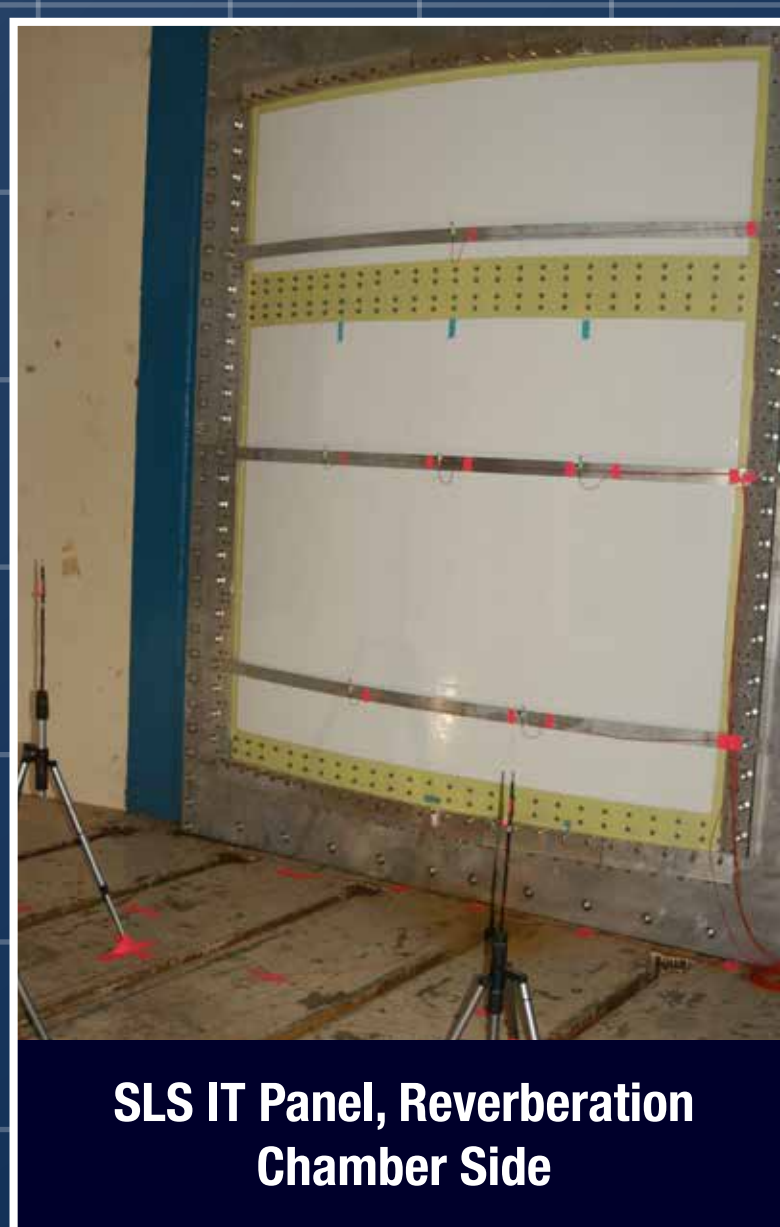
SLS LH2 Structural Test



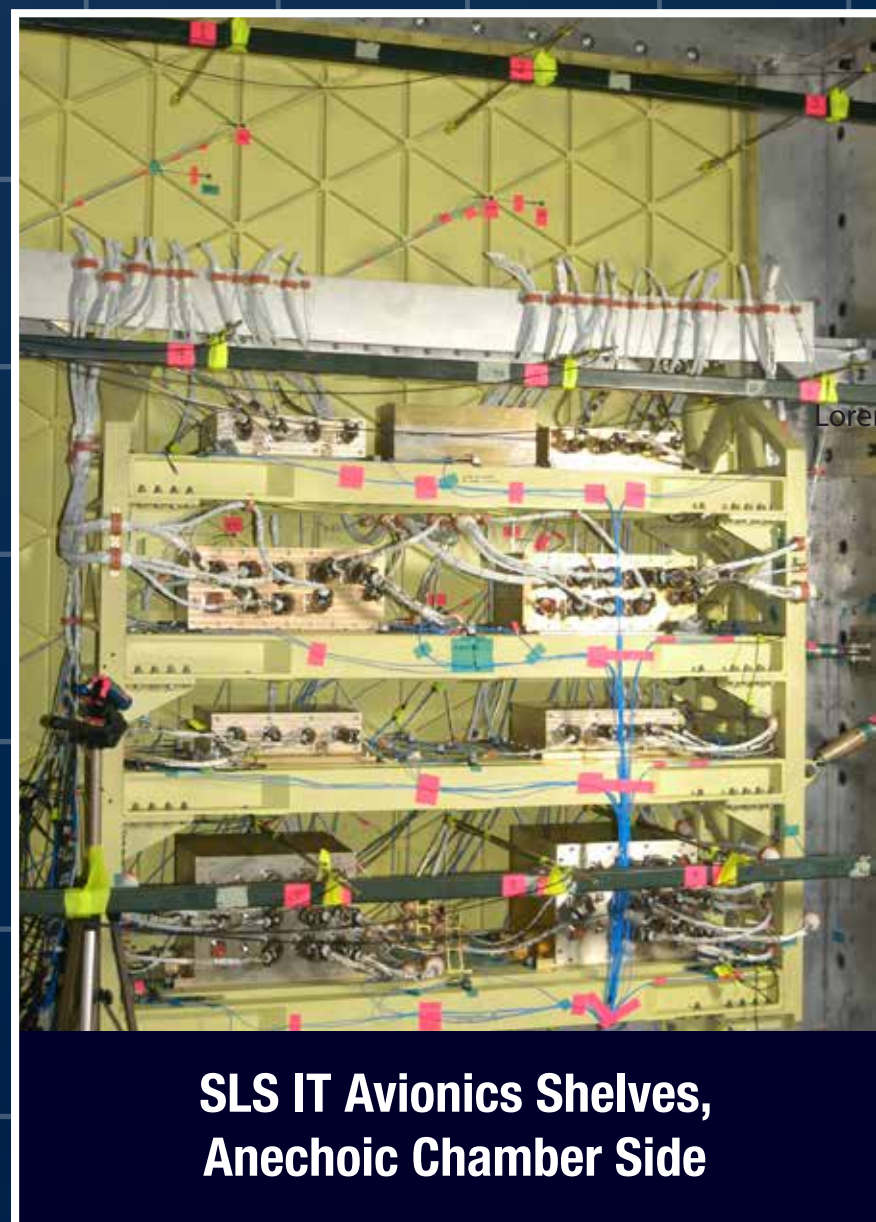
SLS IT in Load Test Annex



SLS Engine Section Test Stand



SLS IT Panel, Reverberation Chamber Side



SLS IT Avionics Shelves, Anechoic Chamber Side

Government, Commercial, and Academia Support

