

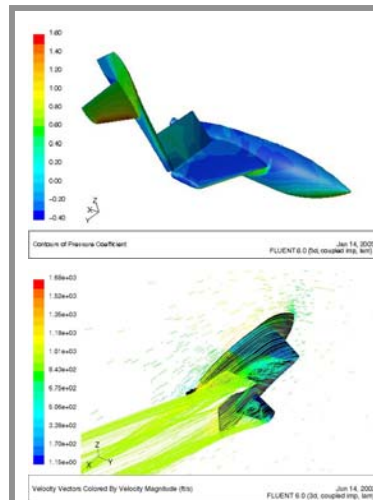
Simulator



Simulator Uses

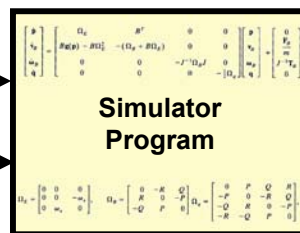
- Pilot-in-the-loop Flying Qualities Development
- Flight Hardware & Software Verification
- Procedures Training
- Performance Analysis
- Ground Crew Training

The SpaceShipOne simulator is a full mission, 6 degree of freedom, non-linear, hardware-in-the-loop tool. The simulator utilizes a flight representative cockpit with an accurate pilot interface. This interface drives a sophisticated flight model which determines vehicle position and inputs expected by the avionics. The vehicle's position and attitude are sent over a network to 12 display computers which utilize commercial graphic software to generate outside views. These views are displayed on 11 monitors and 1 projector screen positioned around the cabin. Before SpaceShipOne flies the pilots will have seen the stars of space and the deserts of Mojave.



Aero Model

Control Inputs



Vehicle Position & Attitude

Simulated Sensor Signals

Avionics

12 Display Computers

