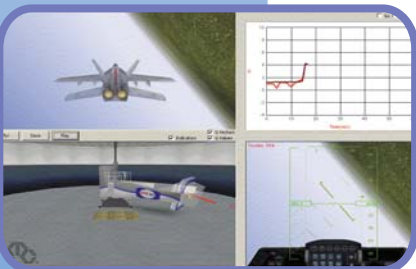




# ATFS-400/STS-400

## HIGH PERFORMANCE HUMAN CENTRIFUGE



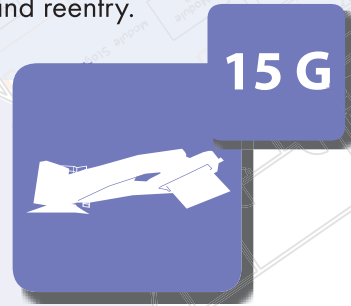
### ATFS-400

The Authentic Tactical Fighting System (ATFS-400) employs the NASTAR<sup>SM</sup> Center's high-performance centrifuge-based motion system to achieve a compellingly realistic tactical flight experience. The ATFS-400's high-fidelity simulation environment generates the flight profile and G forces of the tactical jet fighter to give pilots the most realistic training experience possible, short of actually flying the aircraft. Interchangeable Tactical Aircraft Configuration Modules (TACModules) enable the ATFS-400 to authentically simulate the cockpit, dynamic performance, mission systems and interactive elements of a specific type and model of aircraft in a specific tactical environment.

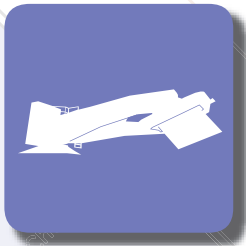
### STS-400

The Space Training Simulator uses the same technology base and configuration capabilities of the ATFS-400 to create an authentic space launch and reentry experience. The STS-400's ability to accurately simulate the flight profiles of many types of spacecraft makes it the ideal platform, for pilots, of mastering the unique challenges of the space launch environment, and for passengers, to become familiar with the novel stresses and experiences of launch and reentry.

15 G

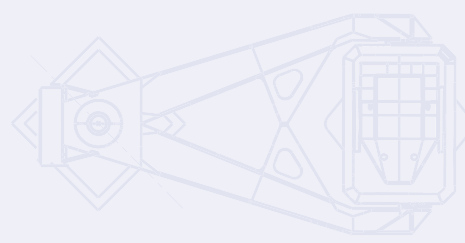


# “PUSH THE ENVELOPE in a SAFE ENVIRONMENT”



## FEATURES OF ATFS-400 AND STS-400

- Interchangeable, Aircraft-Specific Tactical Aircraft Cockpit Modules (TACModules)
- G-Pointing for Real-Time G Feedback during Tactical Maneuvering
- High Fidelity Simulation
- Real-World Visuals
- Virtual Battle Space (ATFS-400)
- Offensive and Defensive Mission Systems (ATFS-400)
- Modeling of Cockpit or Passenger Cabin (STS-400)
- Authentic Spacecraft Maneuverability Modeling (STS-400)
- Data Linking Capability to External TACModules or Other Simulators via HLA



## CAPABILITIES OF THE ATFS-400 AND STS-400

PARAMETER	VALUE
Gz range (along spine)	-8 to 12 Gz
Gx range (through chest)	+/-8 Gx
Gy range (side-to-side)	+/-6 Gy
Max mean G-onset	8 G/sec from 1.4G idle level
Pitch motion range (Forward and backward tilting)	±360° continuous
Roll motion range (side to side tilting)	±360° continuous

## VALUE OF ATFS-400 AND STS-400

- Optimal Learning Transfer to Real Air- or Spacecraft
- Model Present and Future Threats, and Refine Tactics (ATFS-400)
- Conduct Training for Pilots and Passengers that Cannot be Performed in an Actual Spacecraft (STS-400)
- Safely Explore Aircraft Performance Envelope with Various Configurations and Simulated Combat (ATFS-400) or Catastrophic Damage (STS-400)
- Master Skills Needed to Optimally Manage Maneuvering Energy Skills (ATFS-400)
- Master Skills Needed to Optimally Manage Maneuvering in Extreme Conditions (STS-400)
- Lower Training Costs
- Greater Training Opportunities
- Extended Air- or Spacecraft Service Life
- Reduce Risk in Initial and Refresher Training