

# RESEARCH

The NASTAR Center uses advanced technology to replicate space environments. This is useful to test the limitations of humans and components in a safe, controlled, and fully customizable real-world setting.

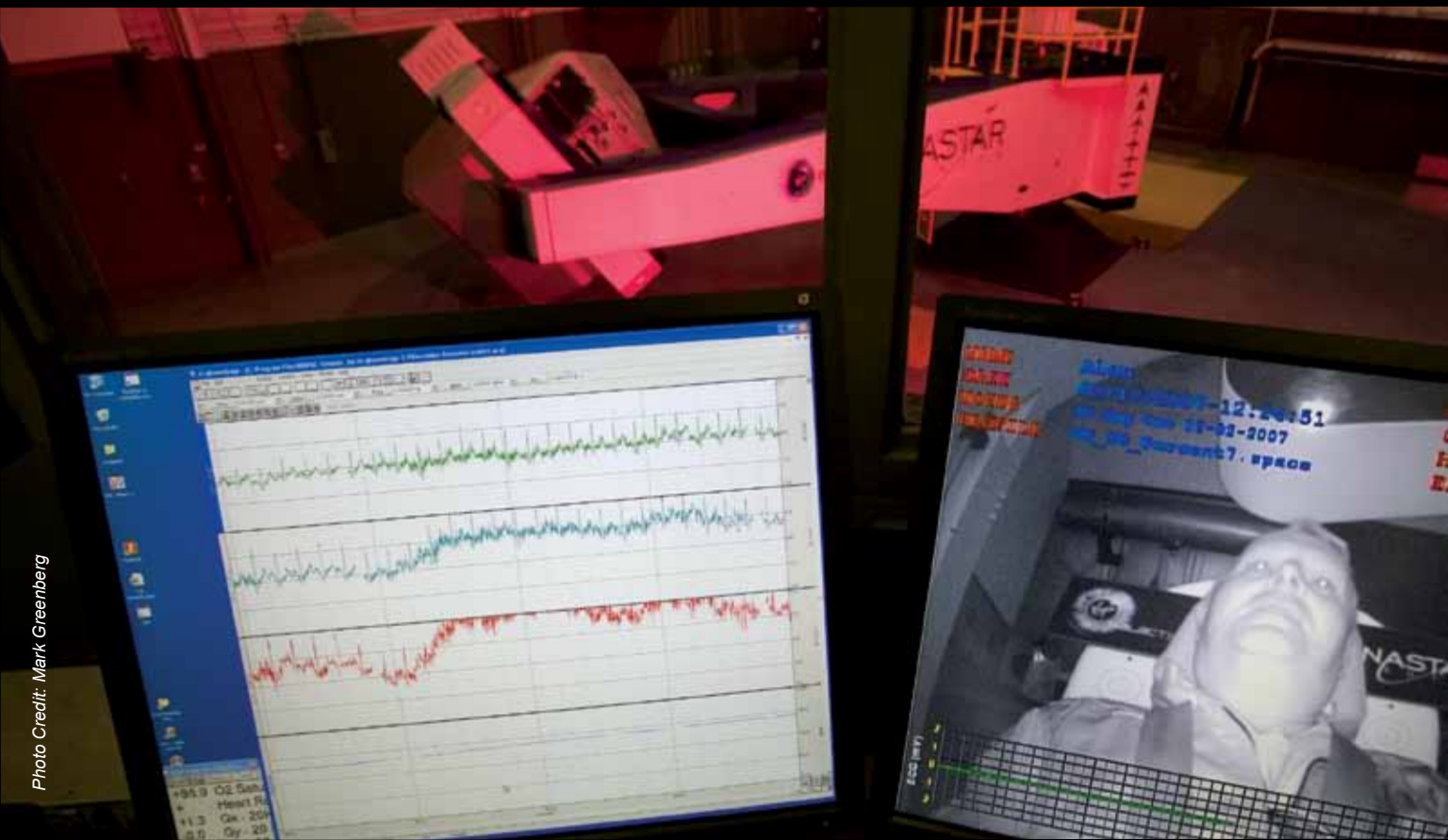
Certified flight physicians, experienced staff, pilots and test subjects, engineering services and an Institutional Review Board (IRB) are available for your service.

## MEDICAL DATA AVAILABLE:

- ECG (12 lead, 3 waveform)
- Heart-Rate & Pulse Oximeter
- Temperature & Galvanic Skin Response (GSR)
- Blood Pressure
- Respiration Pneumograph
- Electro Occulograph (EOG)
- Head Movement & Postural Dynamics Tracking
- Closed Circuit Television (CCTV) Infrared (IR) Video

## FLIGHT DATA AVAILABLE:

- G Level, Acceleration Rate, and Duration
- Gx • Heave
- Gy • Surge
- Gz • Sway
- Flight Kinematics & Aeromodel Data
- Multi-Channel Audio Communication
- Flight Profile & Trajectory
- Feedback/Input Response Rate
- Flight Profile Deviation Measuring





## CENTRIFUGE

Hypo/hyper ( $\pm G$ ) acceleration and vibration flight environment. Replicates flight dynamics, visuals, audio, and cockpits.

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## ALTITUDE CHAMBER

Research hypoxia and rapid decompression (100,000 ft) environment.

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## GYROLAB

Multi-axes (360° pitch, roll, yaw, planetary) upset recovery and spatial disorientation flight environment.

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## GYROFLIGHT

Multi-axes (360° yaw; pitch, roll heave + surge, sway) emergency and spatial disorientation flight environment.

*\*Ejection Seat, Night Vision, Disaster Management, General Aviation, and Tactical Environments also available.*