

# **TEST CAPABILITIES**

#### **Test Environments**

- Altitude & high pressure
- Blowing wind & rain
- Hail, snow & ice
- Thermal cycling
- Solar & UV exposure
- Sand & dust
- Corrosives & salt fog
- Flammability
- Fungus\*
- Explosive Atmosphere\*
- Explosive and rapid decompression
- Acceleration\*
- Classical shock (drop)
- Spectrum shock (pyrotechnic or shaker synthesized)\*
- Combinations of these environments

#### Dynamic/Seismic - 901D Shock Testing

Currently installing Shock & Vibration capabilities to include:

- MIL-S-901D certified shipboard shock
- Vibration (electrohydraulic Phase II Bldg., electrodynamic and mechanical)
- Seismic (including biaxial & triaxial)

# **Fluids Testing**

From steam to cryogenics

- High Flow
- High Pressure
- Gases, Liquids, Slurries, Gels
- Multi-Phase Flow

# **Electromagnetic Compatibility**

- Interference/emissions\*
- Susceptibility\*

# **Reliability Testing**

- Large capacity test chambers
- Simultaneous temperature, humidity, vibration & voltage
- Environmental stress screening (ESS) programs
- HALT/HASS\*

### **Acoustics Testing**

- Reverberant chambers to 165 dB\*
- Progressive wave facilities to 182 dB\*
- Field measurement services
- Airborne and structureborne measurements
- Noise control consulting\*

#### **Structural Testing & Analysis**

- Fatigue & endurance tests
- In-house computer modeling
- Static, dynamic, modal studies
- Life-cycle and risk/hazards analyses
- Field Services (on-site)

#### **Jet & Rocket Engine/Propulsion**

- Indoor Testing
- 30,000 Lbf Jet Engine Thrust
- 20,000 Lbf Rocket Engine Thrust
- Jet-A Fuel, RP-1, LOX, LCH4, TEA/TAB
- Cryogenic, High Pressure Flow
- Valve Testing, Regulators, Relief Valves

# **Support Services**

- Test Planning and Design
- Instrumentation Design and Installation
- Computer-Aided Design (CAD)
- Prototyping

#### **Custom Test Setup**

Unique test fixture design & fabrication

\*Teaming capabilitiy

Above capabilities listing is a reference guide only and does not reflect Kelly Space & Technology, Inc.'s entire capabilities. Please contact us for specific capabilities. All inquiries welcome.

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