

# **ENVIRONMENTAL TEST LABORATORY** **CLIMATIC CAPABILITIES**

**Walk-In Chamber: 10'W x 12'D x 8'H**



**250°F to -70°F**  
**10% to 95% RH**



**Thermal Shock Chamber: 350°F to -70°F**

**10% to 95% RH**

**Plus several smaller chambers  
with capability up 1300°F**

# **ENVIRONMENTAL TEST LABORATORY** **CLIMATIC CAPABILITIES**



**Altitude Chamber: 5'D x 5'W x 5'H**  
**Temperature: 350°F to -70°F**  
**Altitude: -2000ft to 100,000ft**  
**Vibration Capable**



**Salt Fog Chamber: 4'H x 4'W x 8'L,**  
**Programmable Temperature & Cycle Control**

# **ENVIRONMENTAL TEST LABORATORY** **MECHANICAL CAPABILITIES**



**4 Post Load Frame: 200,000 F-Pounds  
Tension, Compression, Cycle Fatigue  
18" stroke, 7' Specimen**

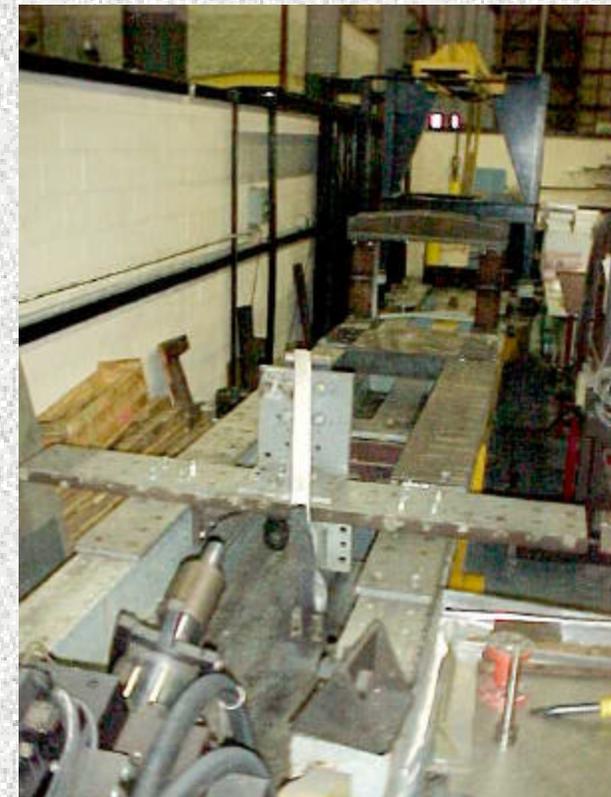


**2 Post Load Frame: 20,000 F-Pounds  
Tension, Compression, Cycle Fatigue  
6" Stroke, 3' Specimen**

# **ENVIRONMENTAL TEST LABORATORY** **MECHANICAL CAPABILITIES**



**Gilmore Load Frame: 400,000 Force Pounds  
24" Stroke, 16' Specimen**



**Horizontal Load Frame: 300,000 F-Pounds  
"Erector Set" Adaptability  
18" Stroke, 12' Specimen Length**

# *ENVIRONMENTAL TEST LABORATORY* *MECHANICAL CAPABILITIES*



**Hydraulic Shaker:  
50,000 Force-Pounds  
6 Inch Stroke  
7,500 Static Load**

**Electro-Dynamic Shaker:  
10,000 Force Pounds  
3,000 Hz**



**ENVIRONMENTAL TEST LABORATORY**  
**MECHANICAL CAPABILITIES**



**Lightweight Shock Machine:  
Performs MIL-S-901 Shipboard  
Shock**

# *ENVIRONMENTAL TEST LABORATORY* *MECHANICAL CAPABILITIES*



**Hydraulic Test Stand: 3,000 PSI @ 60 GPM,  
5,000 PSI @ 15 GPM  
10,000 PSI Static Pressure  
Hydraulic Cycle Fatigue: 35,000 PSI, 20 in<sup>3</sup>**

# **ENVIRONMENTAL TEST LABORATORY** **CUSTOM TEST CAPABILITIES**



**Capacity Selector Valve (CSV) Tester:  
Performs Acceptance Test on Critical  
Catapult Components.**

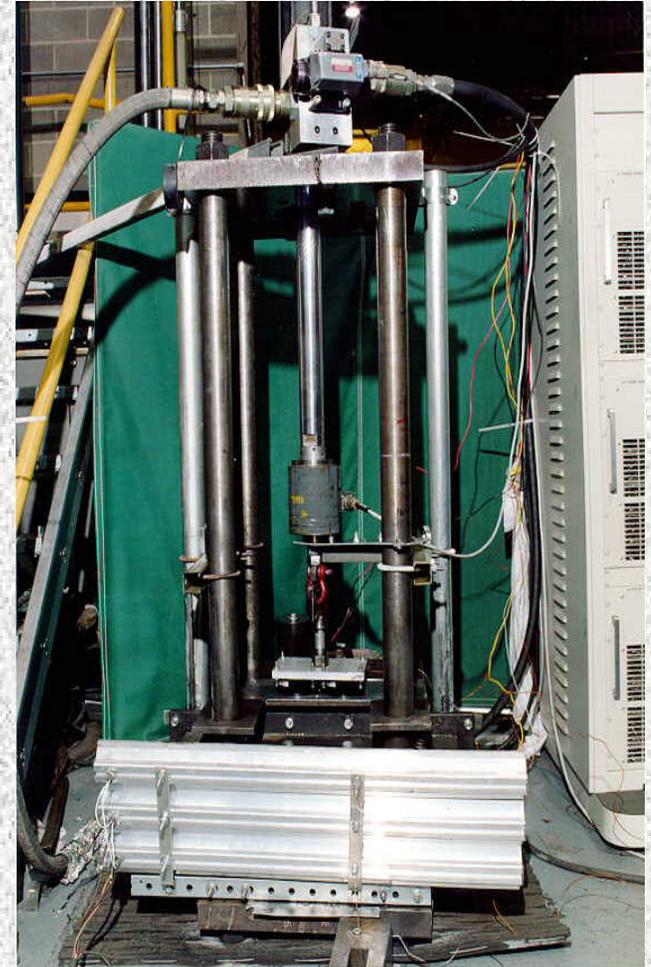
**Soft Stop Test: 300°F, 2.5 ft/Sec Vel,  
5,000 Force-Pounds. Measured  
Energy Absorbed for Lot Acceptance  
Test.**



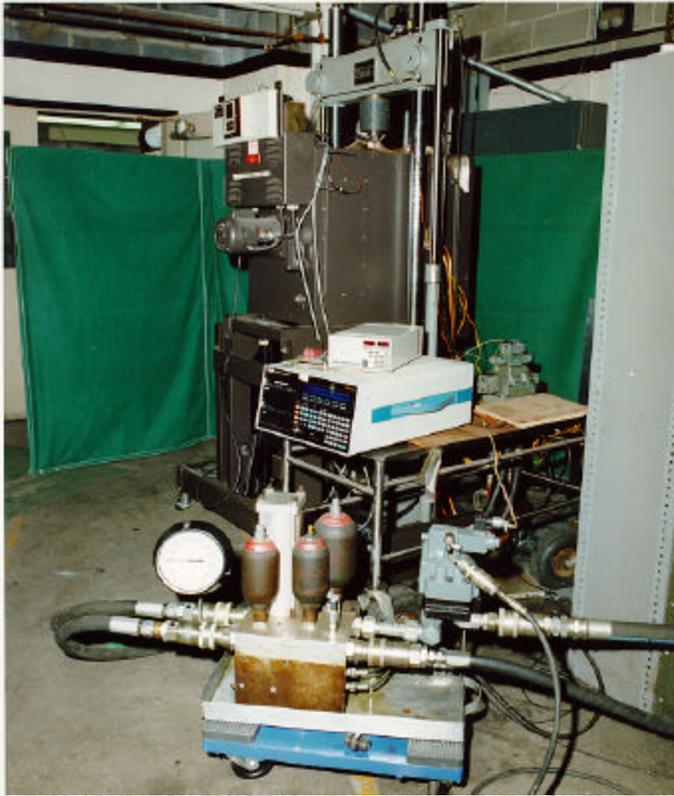
# *ENVIRONMENTAL TEST LABORATORY* *CUSTOM TEST CAPABILITIES*



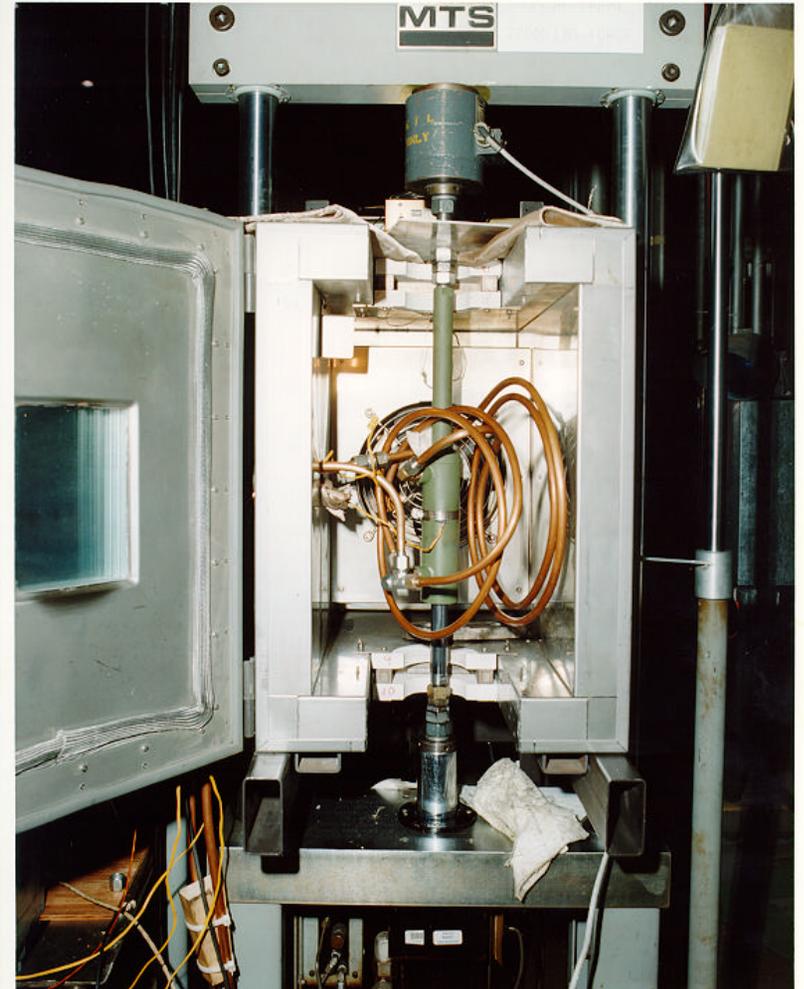
**EMALS Magnet Shock Test: 135°C  
25,453 Shock Pulses, 75 G's, 16.5 mSec**



# *ENVIRONMENTAL TEST LABORATORY* *CUSTOM TEST CAPABILITIES*



**Hydraulic Steering Cylinder: 180°F,  
120,000 Cycles, 1,000 PSI,  
2,900 Force Pounds**



**ENVIRONMENTAL TEST LABORATORY**  
**CUSTOM TEST CAPABILITIES**



**A/G Sheave Rapid Side Load:  
18,000 Force Pounds, 1,000 Cycles  
in Tension, Compression**

# **ENVIRONMENTAL TEST LABORATORY**

## **MIL-STD TESTS**

- **MIL- STD-810: Climatic, Shock, Vibration**
- **MIL- T-28800: Climatic, Shock, Vibration, Electrical, ESS**
- **MIL- STD-167: Shipboard Vibration**
- **MIL- S-901: Shipboard Shock**
- **MIL- STD-1399: Shipboard Electric Power**
- **MIL- STD-202: Electronic Components**
- **MIL- E - 5400: Electronic Equipment**
- **MIL- L - 6363: Aircraft Lamps (ETL is Tri-Service QPL)**