

**Mission.** Supports the inspection, surveillance, testing, and analysis of critical components used in safety-arming devices and highly sensitive and novel energetics. Safety critical devices are tested under extreme environmental conditions. Explosive train evaluations are also conducted.

**Unique Features.** The facility has multi-stage dynamic testing capabilities, in addition to environmental explosive operations. Ten operations can be performed concurrently. One of a kind operation and control system allows for expanded capabilities.



**Cost / Time Savings.** Operational architecture supports fewer personnel with better results. For example, a typical lot acceptance test (LAT) in the past would have required a dozen or more personnel to accomplish a standard screening of new fuzes. Using state-of-the-art instrumentation and updated processing capabilities, those same LAT operations are conducted by two to three personnel with improved results.

**RDT&E.** Each piece of test equipment was designed for multiple applications and provides analysis capabilities in support of unique and rapid response missions that are quickly becoming more common in RDT&E programs critical to the Fleet.

**Size / Description / Scope.** 13,000-SF single story facility adjacent to a 2,000-SF environmental test building. **Annual Test Events:** 1,000+. **Year Opened:** 2011. **Plant Value:** \$30M+.

## Main Facilities

Includes five test cells.

- **Test cells 1 and 2**
  - Two Unholtz / Dickie shakers with 30,000-pound sine and 60,000-pound shock capabilities, with vertical and horizontal configuration including a slip table and 3,000 Hz continuous frequency range with 1,000-pound capacity
  - Capable of thermal conditioning with a temperature range of -200 to 475°F
  - Each test cell has a 2,000-pound crane, 16 control and data lines, and a camera monitoring system
- **Test cell 3**
  - One Unholtz / Dickie shaker in vertical configuration only
  - Capable of 15,000-pound sine and 22,000-pound shock, with 5,000 Hz continuous frequency range, a 300-pound load limit, and 16 control data lines
  - A drop shock machine 14-foot high with an 18- x 18-inch table top capable of 30,000-g impact force and 2,000-pound capacity
- **Test cell 4**
  - Centrifuge with a 10-foot diameter, 48-inch swing arm, 200-pound 200-g load capacity, and 108 data lines
- **Test cell 5**
  - Jolt impact machine with four arms and a 15-pound load limit per arm
  - 9-cubic foot (ft<sup>3</sup>) temperature / humidity chamber that conditions to temperatures between -100 and 475°F
  - 27-ft<sup>3</sup> temperature / humidity chamber that conditions to -100 and 475°F
  - Two 8- x 8- x 8-foot steel reinforced intentional detonation chambers with a 25 g, 1.1 NEW limit, five view port holes per chamber, and existing data and firing line capabilities
  - Fine leak chamber with a 10-inch x 12-inch helium bell jar chamber that draws 10<sup>-12</sup> vacuum
  - Centrifuge 8-foot diameter, 36-inch swing arm, 150-pound, 200-g load capacity with 32 data lines



## Equipment

- General Ordnance Automated Tester (GOAT)
- Multi-weapon test set (Harpoon)
- Tomahawk FMU-148 electrical test set
- Mk 51 and 76 Mod 0 arming console
- High-speed Anti-Radiation Missile (HARM) gyro drift table
- 6-axis gyro rate table
- FMU-140 bomb fuze chassis and certified test chamber
- Gator Automated Test Equipment (ATE)
- Thermal transient test system
- Hellfire M820 fuze test set
- AMRAAM FZU-49 S/A fuze test set
- Labview architect work station
- Three Unholtz / Dickie shakers



## Instrumentation

- Multiple data acquisition system capability
- National Instruments LAB VIEW instrumentation architecture including 16-terabyte data storage with expandability to several hundred terabytes
- 28 fixed and pan tilt zoom camera system expandable to 48 cameras
- 6 control seat stations expandable to 23 with capabilities of real-time multiple operations configuration

