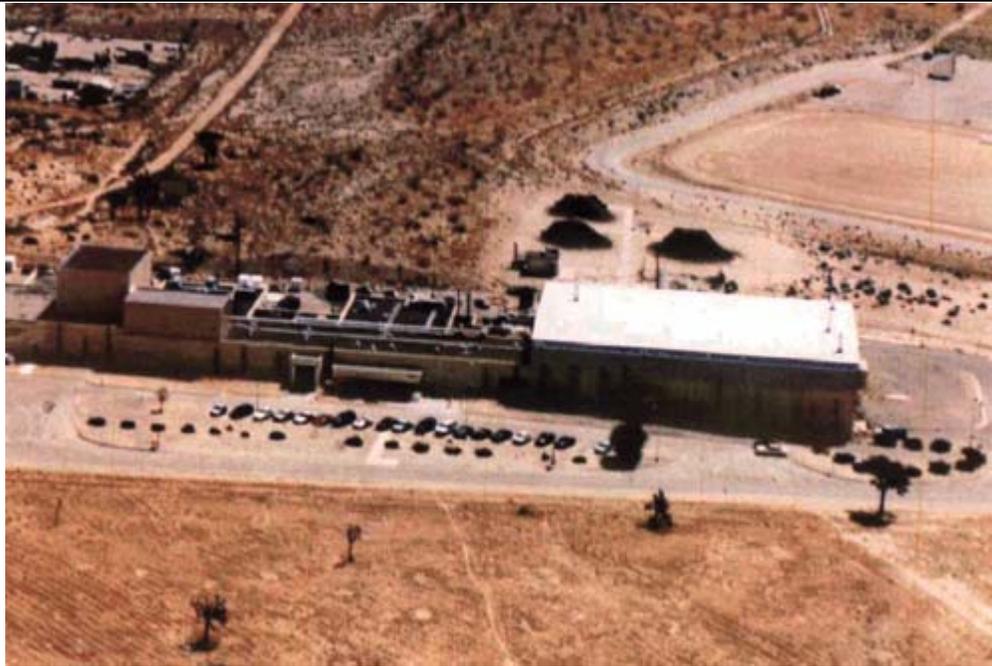


Physical Sciences Laboratory (Area 1-60)



Description: Area 1-60 consists of two large interconnected high bay laboratories, 25 smaller but distinct laboratories, six explosion resistant laboratory cells, offices, and various storage areas. The Combustion Research Laboratory is located approximately 6/10 of a mile northeast of the main entrance of the AFRL, Edwards Air Force Base, in the northern 1/3 of Building 8451. The Chemical Sciences Laboratory is located

approximately 6/10 of a mile east of the main entrance of the AFRL, in the Building 8455 and the southern 1/3 of the Building 8451.

Purpose:

Provide bench-scale experiment stations for the conduct of basic and applied research.

Develop methodology for chemical analysis and to conduct physical-chemical studies of liquid and solid propellants to determine properties, provide engineering data, conduct feasibility studies in propellant synthesis, metallurgical studies, and physical, environmental and chemical compatibility.

Bench-scale experiments, enabled by contemporary analytical capability, are much cheaper methods for obtaining data on rocket system performance than the much larger and more expensive pad-scale experimentation.

Products:

Chemical and Physical Property Measurement

Materials Compatibility Studies

Changes to Military Specifications and Standards

Development of New Rocket Propellants/Ingredients

Thermoanalysis

Thermogravimetry

Thermochemical Analysis

Propellant Combustion Experiments

Availability:

U.S. Government agency use, DoD contractors and dual use/defense conversion use-limited on an as available basis.

Contact POC for additional information.