

# **NAVAL RESEARCH LABORATORIES**

## **NRL's Research Facilities**

In support of the various research areas, NRL operates a number of unique facilities which may be accessed by private companies for special testing.

The NRL Major Facilities Handbook is a complete description of available facilities, their capabilities, and points of contact.

For more information regarding NRL's facilities, please send an email to [techtran@utopia.nrl.navy.mil](mailto:techtran@utopia.nrl.navy.mil)

<http://www.nrl.navy.mil/content.php?P=FACILITIES>

## **Facilities:**

Facilities – NRL could not accomplish its mission without a wide collection of state-of-the-art facilities. Published only electronically, the NRL Facilities book showcases its scientific resources of major work areas.

### **Executive Directorate**

Code 1600 – Patuxent River Flight Support Detachment

- Flight Support Detachment

### **Business Directorate**

Code 3000 – Business Operations Directorate

- Chesapeake Bay Detachment

### **Systems Directorate**

Code 5200 – Technical Information Division

- Video Teleconferencing • NRL Auditoriums • Ruth H. Hooker Research Library

Code 5300 – Radar Division

- Millimeter Wave Radar Facility • Radar Imaging Facility • Radar Signature Calculation Facility • Airborne Early Warning Radar Facility • Compact Range Facility • Airborne Surveillance Command and Control Research Platform • Radar Test Facility • Microwave Microscope • Advanced Technology Chamber

Code 5500 – Information Technology Division

- Robot Laboratory • Fleet Information Systems Security Technology Lab • Navy Shipboard Communications System Testbed • Virtual Reality Laboratory • Ship Motion Simulator Facility • Distributed Collaborative Engineering Environment Laboratory • NEWAVE Research Center • Motion Imagery Laboratory • Distributed Center for High Performance Computing • Scientific Visualization Laboratory

Code 5600 – Optical Sciences Division

• Fiber Fabrication Facility for Non-Oxide and Specialty Glasses • Nanochannel Glass Technology Facility • Infrared Range Facility • IRCM Techniques Laboratory • Missile Warning System Facility • Focal Plane Array Evaluation Facility • Fiber Optic Optical-Microwave Laboratory • Fiber-Optic Sensor Facility • Oxide Optical Fiber Fabrication Facility

Code 5700 – Tactical Electronic Warfare Division

• Visualization Laboratory • Off-Board Test Platform • Transportable Radar Cross Section Measurement Radar • Vehicle Development Laboratory • Advanced Tactical Electronic Warfare Environment Simulator • Mobile ESM Laboratory • Compact Antenna Range Facility • Isolation Measurement Chamber Facility • Millimeter Wave Anechoic Chamber Facility • Low-Power Anechoic Chamber • Search Radar ECM/EA Simulator • Electro-Optics Mobile Laboratory • Infrared/Electro-Optical Calibration and Characterization Laboratory • Infrared Missile Simulator and Development Laboratory • Scale Model Analysis Facility • Secure Supercomputing Facility • Central Target Simulator Facility • Flying Electronic Warfare Laboratory

Materials Science and Component Technology Division

Code 6030 – Laboratory for the Structure of Matter

• Automatic X-ray Diffractometers • Atomic Force Microscope

Code 6100 – Chemistry Division

• Chemical Analysis Facility • Corrosion Engineering and Coatings Characterization Facilities • Marine Corrosion Facility • Nanometer Characterization/Fabrication Facility • Synchrotron Radiation Facility • Ex-USS Shadwell Advanced Fire Research Ship • Fire Research Enclosure • Fire Research Test Bed • Large-Scale Damage Control Facility

Code 6300 – Materials Science and Technology Division

• Computer-Controlled Universal Material Test System • Materials Processing Facility • Mechanical and Thermal Experimental Facilities • High-Power Microwave Facility • Ion Implantation Facility • 3-MV Tandem Van de Graff Accelerator

Code 6400 – Laboratory for Computational Physics and Fluid Dynamics

• Parallel High Performance Computer Graphics Facility

Code 6700 – Plasma Physics Division

• Nike KrF Laser Facility • Electra Laser Facility • Large Area Plasma Processing Systems • Space Physics Simulation Chamber • Gamble II • Hawk • Long Pulse Accelerator Laboratory • High-Frequency Microwave Processing of Materials Laboratory • Pharos Laser System • T-Cubed Laser System

Code 6800 – Electronics Science and Technology Division

- Nanoelectronics Processing Facility • Ultrafast Laser Facility • Space Solar Cell Characterization Laboratory • Vacuum Electronics Fabrication Facility • Compound Semiconductor Processing Facility • The MOCVD Laboratory • Epicenter for Advanced Materials Growth and Characterization

Code 6900 – Center for Biomolecular Science and Engineering

- Advanced Microscopy Facility • Liquid Crystal Fabrication Facility

Ocean and Atmospheric Science and Technology Directorate

Code 7100 – Acoustics Division

- Acoustic Communications Measurement System • Instrumentation Suite for Making Measurements of Acoustic Propagation in Complex Shallow Water • Structural Acoustics In-Air Facility • Laboratory for Structural Acoustics • Shallow Water Acoustic Laboratory • Multichannel Acoustic Data Processing Laboratory • Autonomous Acoustic Receiver System • Salt Water Tank Facility • Tactical Oceanography Simulation Laboratory and Wide Area Network • Shallow-Water High-Frequency Measurement Systems

Code 7200 – Remote Sensing Division

- Optical Spectral Measurements Facility • Naval Prototype Optical Interferometer (NPOI) • Free Surface Hydrodynamics Laboratory

Code 7300 – Oceanography Division

- Environmental Microscopy Facility • Ocean Dynamics and Prediction Network • Visualization Laboratory • Littoral Current Measurement Facility • Scanning Slope Sensing and Wave Gauge Array Buoy • Salinity Temperature and Roughness Remote Scanner • Ocean Color Facility • Ocean Optics Instrumentation Systems

Code 7400 – Marine Geosciences Division

- Electron Microscopy Center • Sediment Physical and Geoacoustic Properties and Sediment Biogeochemistry Laboratories • Moving-Map Composer Facility

Code 7500 – Marine Meteorology Division

- Satellite Data Ingest and Processing System • Meteorological Computing and Archival Facility • John B. Hovermale Modeling, Database, and Visualization Laboratory

Code 7600 – Space Science Division

- Cryogenic Sensor Test Facility • Vacuum Ultraviolet Calibration/Testing Facility • Solid-State Position-Sensitive Detector Evaluation Facility • Large Angle and Spectrometric COronagraph • Rocket Assembly and Checkout Facility • Solar Coronagraph Optical Test Chamber • Space Instrument Test Facility

Naval Center for Space Technology

Code 8100 – Space Systems Development Department

• Precision Radio Frequency Anechoic Chamber Facility • Satellite Mission Analysis Facility • Radio Frequency Anechoic Chamber Facility • Midway Research Center • Precision Spacecraft Calibration Facility • Blossom Point Satellite Tracking and Command Station • Precision Clock Evaluation Facility

Code 8200 – Spacecraft Engineering Department

• Modal Survey Test Facility • Static Loads Test Facility • Spacecraft Vibration Test Facility • Payload Processing Facility • Thermal Vacuum Test Facility • Spacecraft Acoustic Reverberation Chamber Test Facility • Spacecraft Spin Test Facility • Reshape Facility • Spacecraft Thermal Analysis, Fabrication, and Test Facility • NCST Composite Materials Laboratory • Spacecraft Robotics Engineering and Controls Laboratory • Class 100 Clean Room Facility