

**NAVY WORKING CAPITAL FUND NARRATIVE
DEPARTMENT OF THE NAVY
RESEARCH AND DEVELOPMENT/NAVAL RESEARCH LABORATORY
FY 2005 PRESIDENT'S BUDGET SUBMISSION**

Activity Group Function

The Naval Research Laboratory (NRL) operates as the Navy's full-spectrum corporate laboratory, conducting a broadly based multidisciplinary program of scientific research and advanced technological development directed toward maritime applications of new and improved materials, techniques, equipment, systems and ocean, atmospheric, and space sciences and related technologies. In fulfillment of this mission, NRL:

- a. Initiates and conducts broad scientific research of a basic and long-range nature in scientific areas of interest to the Navy.
- b. Conducts exploratory and advanced technological development deriving from or appropriate to the scientific program areas.
- c. Within areas of technological expertise, develops prototype systems applicable to specific projects.
- d. Assumes responsibility as the Navy's principal R&D activity in areas of unique professional competence upon designation from appropriate Navy or DoD authority.
- e. Performs scientific research and development for other Navy activities and, where specifically qualified, for other agencies of the Department of Defense and, in defense-related efforts, for other Government agencies.
- f. Serves as the lead Navy activity for space technology and space systems development and support.
- g. Serves as the lead Navy activity for mapping, charting, and geodesy (MC&G) research and development for the National Imagery and Mapping Agency.

NRL, the Navy's single, integrated corporate laboratory, provides the Navy with a broad foundation of in-house expertise from scientific through advanced development activity. Specific leadership responsibilities are assigned in the following areas:

- a. Primary in-house research in the physical, engineering, space, and environmental sciences.
- b. Broadly based exploratory and advanced development program in response to identified and anticipated Navy and Marine Corps needs.
- c. Broad multidisciplinary support to the Naval Warfare Centers.

- d. Space and space systems technology development and support.

Activity Group Composition

In addition to its Washington, D.C. campus of about 131 acres and 100 main buildings, NRL maintains 14 other research sites, including a vessel for fire research and a Flight Support Detachment. The many diverse scientific and technological research and support facilities include the large facility located at the Stennis Space Center in Bay St. Louis, Mississippi; a facility at the Naval Support Activity, Monterey Bay Monterey, California; the Chesapeake Bay Detachment in Maryland; and additional sites located in Maryland, Virginia, Alabama, and Florida.

The Flight Support Detachment, located aboard the Patuxent River Naval Air Station in Lexington Park, Maryland, operates and maintains five uniquely configured P-3 Orion turboprop aircraft as airborne research platforms for worldwide scientific research operations.

The Chesapeake Bay Detachment occupies a 157-acre site near Chesapeake Beach, Maryland, and provides facilities and support services for research in radar, electronic warfare, optical devices, materials, communications, and fire research. Because of its location high above the Chesapeake Bay on the western shore, unique experiments can be performed in conjunction with the Tilghman Island site 16 km across the bay.

The NRL Stennis Space Center (NRL-SSC) is a tenant activity at NASA's Stennis Space Center. Other Navy tenants at the Stennis Space Center include the Naval Meteorology and Oceanography Command and the Naval Oceanographic Office, who are major operational users of the oceanographic and atmospheric research and development performed by the NRL. This unique concentration of operational and research oceanographies makes NRL-SSC the center of naval oceanography and the largest such grouping in the Western world.

The Marine Meteorology Division at Monterey, California, a tenant activity of the Naval Support Activity, Monterey Bay, is collocated with the Fleet Numerical Meteorology and Oceanography Center to support development of numerical atmospheric prediction systems and related user products. This collocation allows easy access to a large vector classified supercomputer mainframe, providing real time as well as archived global atmospheric and oceanographic databases for research at Monterey and at other NRL locations.

	(Dollars in Millions)		
Accumulated Operating Results	FY 2003	FY 2004	FY 2005
Revenue	576.1	595.2	597.9
Cost of Goods Sold	<u>570.9</u>	<u>594.7</u>	<u>608.0</u>
Net Operating Results	5.2	.5	-10.1
CPP Surcharges	-4.4	-4.3	-3.8
Extraordinary Expense	1.1	0.0	0.0
Previous Year AOR Balance	<u>15.8</u>	<u>17.7</u>	<u>13.9</u>
Accumulated Operating Results	<u>17.7</u>	<u>13.9</u>	<u>0</u>

The favorable Accumulated Operating Results (AOR) reflect additional economies and efficiencies effected throughout NRL. The FY 2005 rate is established to achieve an end-of-year AOR of zero in FY 2005.

	(Dollars in Millions)		
Funding	FY 2003	FY 2004	FY 2005
Reimbursable Orders	607.7	589.8	589.4

Major NRL customers include the Office of Naval Research, the Naval Sea Systems Command, the Naval Air Systems Command, the Space and Naval Warfare Systems Command, the Missile Defense Agency, the Defense Advanced Research Projects Agency, Naval Warfare Centers, the Army, the Air Force, other Navy and Department of Defense customers, the Department of Energy, and the National Aeronautics and Space Administration.

	(Dollars in Millions)		
Cost	FY 2003	FY 2004	FY 2005
Direct Costs	443.7	459.7	469.4
Indirect Costs	<u>127.3</u>	<u>135.1</u>	<u>138.6</u>
Total Costs	<u>571.0</u>	<u>594.7</u>	<u>608.0</u>

Direct and indirect costs are relatively steady throughout the budget years.

	(Dollars in Millions)		
Capital Purchase Program (CPP)	FY 2003	FY 2004	FY 2005
Equipment-Non ADPE/TELECOM	12.2	13.2	13.1
ADPE/Telecommunications/Equipment/ Software	3.1	2.2	2.4
Software Development	0.0	0.0	0.0
Minor Construction	<u>2.0</u>	<u>1.9</u>	<u>1.8</u>
TOTAL	<u>17.3</u>	<u>17.3</u>	<u>17.3</u>

This CPP plan provides a modest investment level that allows NRL to acquire needed technology to maintain a state-of-the-art facility to fulfill science and technology mission areas supporting the DoN, DoD, and related customer programs.

Civilian Personnel

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
FTE	2,564	2,511	2,511
End-Strength	2,664	2,618	2,618

Civilian strength levels, measured by both end strength and full-time equivalents, reflect a steady workforce. Effective FY 2004, G&A end strength and FTE decline, the impact of the transfer of responsibility for facility support to the Commander, Naval Installation (CNI) (45 ES/FTE) and other various initiatives.

Military Personnel

Military personnel levels will remain constant at 14 officers and 68 enlisted for a total of 82 billets.

Workload, Direct Labor Hours

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
Current Submission	3,066,058	3,094,701	3,080,693

A conservative and steady workforce profile is projected for FY 2003, FY 2004 and FY 2005 given the relatively consistent customer funding plans. CNI will assume responsibility for Force Protection Services to NRL tenants effective FY2004, reducing direct labor hours by 18,300.

Customer Rate Changes

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
Stabilized Customer Rate	\$101.43	\$102.08	\$105.41
Stabilized Rate Change		+0.64%	+3.26%
Composite Customer Rate Change		+1.06%	+2.29%

The Stabilized Customer Billing Rate consists of direct labor and applied overhead. Unique direct non-labor costs are billed on a reimbursable basis to the benefiting/requiring customer. The Composite Customer Rate Change incorporates both the stabilized costs and the reimbursable costs. The FY 2005 rate change reflects an increase from the previous year mostly due to inflation, net of overhead savings.

Performance Indicators**Unit Cost**

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
Current Submission	\$100.09	\$103.65	\$106.42

The primary performance indicator is unit cost. The Unit Cost is a measurement of total direct labor and overhead costs per direct labor hour. The change in unit cost for FY 2003, FY 2004, and FY 2005 primarily reflects increases for annual inflation/price changes from year to year offset by overhead savings. Other performance indicators are direct labor hours and NOR performance, discussed above.

Cash**Net Outlays**

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
Disbursements	586.5	600.1	613.2
Collections	577.1	585.3	594.0
Net Outlays	9.4	14.8	19.2