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2013

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SPONSORED PROGRAMS RESEARCH

FISCAL YEAR ANNUAL REPORT

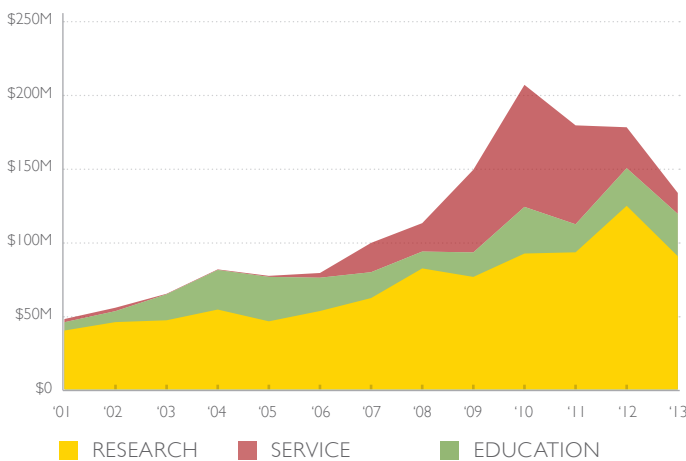
2013



PROGRAM OVERVIEW

The Naval Postgraduate School (NPS) has strong sponsored research and education programs that work to provide the faculty, staff, and equipment needed for a strong, viable graduate school. In FY13, NPS had available over \$139.4M (not including carryover funds from prior years) in sponsored program funding. Total expenditures in FY13 exceeded \$137.3M.

SPONSORED PROGRAM PROFILE FY 2001-2013 (FUNDS EXPENDED)



Sponsored programs (research, education, and professional development) are integral to the Naval Postgraduate School mission. The research programs support graduate education by providing militarily relevant thesis topics that address issues from the current needs of the Fleet and Joint Forces to the science and technology required to sustain long-term superiority of the Navy/DoD. Research varies from the very fundamental to the very applied and covers all levels of classification. Sponsored research includes:

- Basic and Applied Research
- Individual and Interdisciplinary Group Projects
- Fleet Support
- Cooperative Research and Development Agreements

Sponsored education programs include Integrated graduate education and research in space systems, total-ship systems engineering, combat systems, systems engineering and homeland security and defense, supplemented by off-campus graduate and certificate programs.

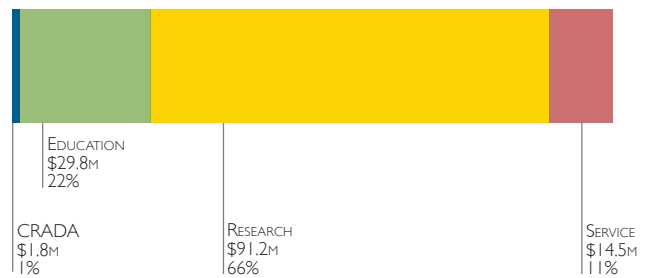
Professional development programs utilize NPS faculty expertise and student experience to support various communities within the Navy and DoD through short courses and web-based services.

SPONSORED PROGRAM EXPENDITURES

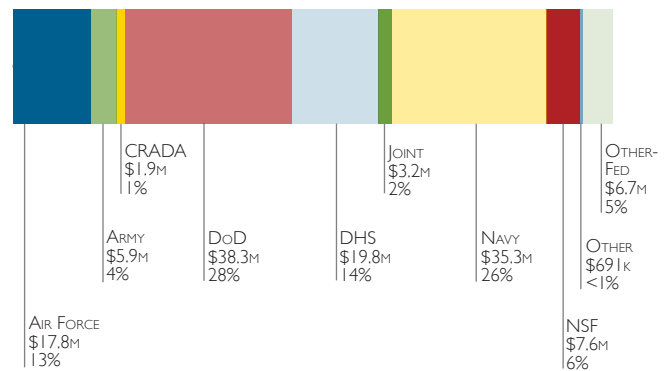
1 October 2012–30 September 2013

Total Expenditures: \$137.3M

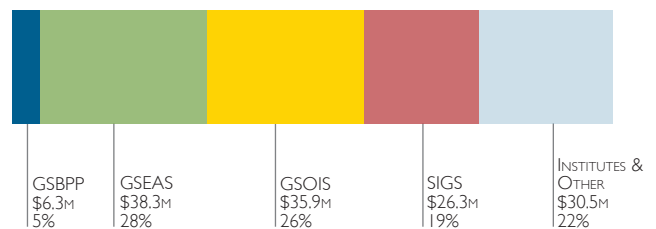
BY TYPE OF ACTIVITY.....



BY SPONSOR



BY NPS ORGANIZATION



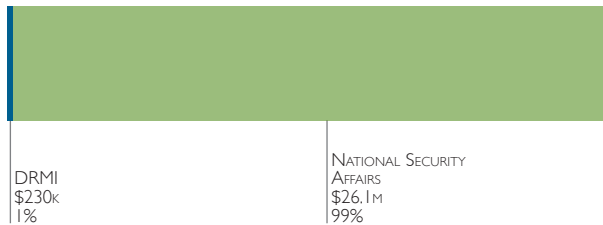
SCHOOL OF INTERNATIONAL GRADUATE STUDIES

The School of International Graduate Studies (SIGS) specializes in research and graduate education focused on security studies, international relations, regional security and area studies, international political economy, and U.S. security policy. Programs identify and address security challenges, develop civilian and military interagency alliances, and strengthen multilateral and bilateral defense cooperation between the U.S. and other nations.

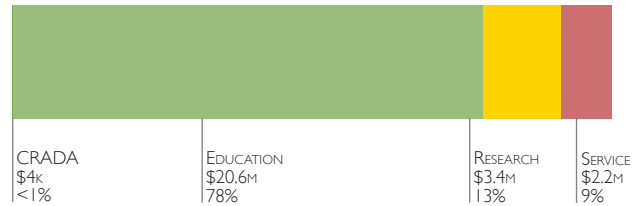
SIGS components include the department of National Security Affairs, The Global Center for Security Cooperation, and Center for CivilMilitary Relations. Statistics shown are for National Security Affairs only, which includes the Center for Homeland Defense and Security.

TOTAL EXPENDITURES: \$26.3M

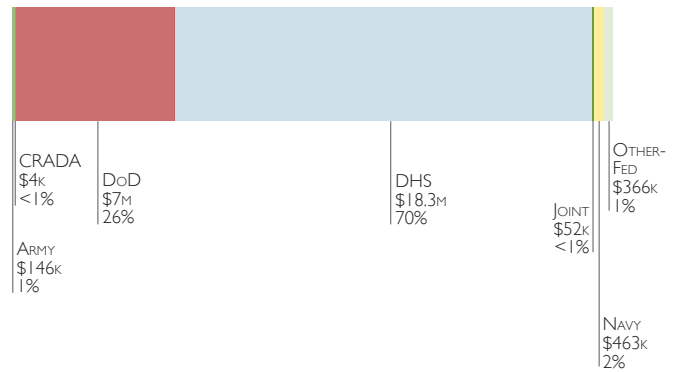
BY DEPARTMENT



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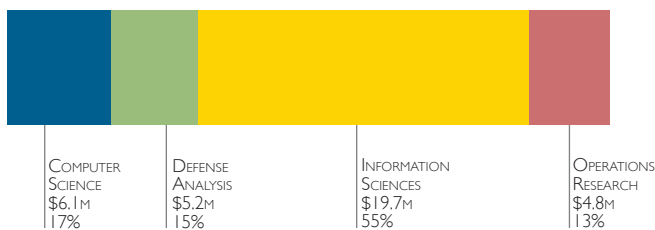


GRADUATE SCHOOL OF OPERATIONAL AND INFORMATION SCIENCES

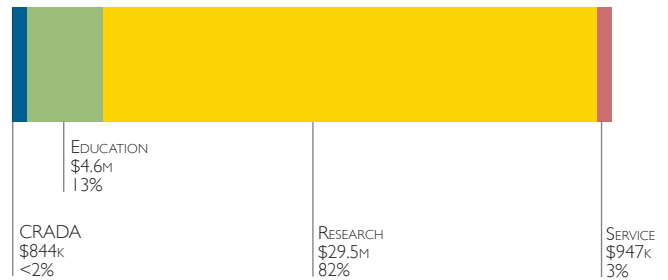
GSOIS resident programs consist of sixteen technical curricula and award master of science and Ph.D. degrees across four academic departments. Responding to the needs of naval and military customers, graduate education and research are focused in six military important domains: information science and technology; computer science; operations analysis and operational logistics; human-systems integration; systems engineering analysis; and special operations and related defense analyses. The emphasis of sponsored research and studies activities is on the development, integration, and application of mathematical, scientific, and technical skills that contribute to advances and improvement in military systems and operations, and related areas of national defense and security.

TOTAL EXPENDITURES: \$35.9M

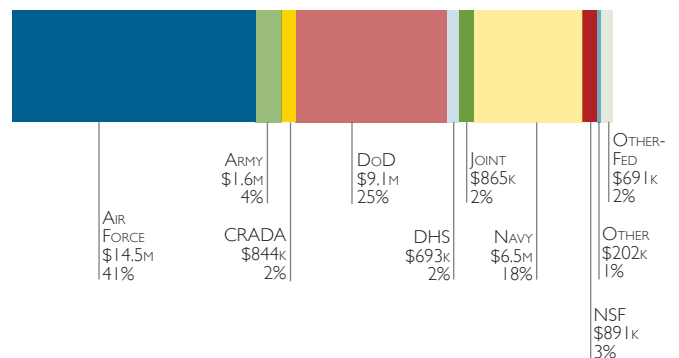
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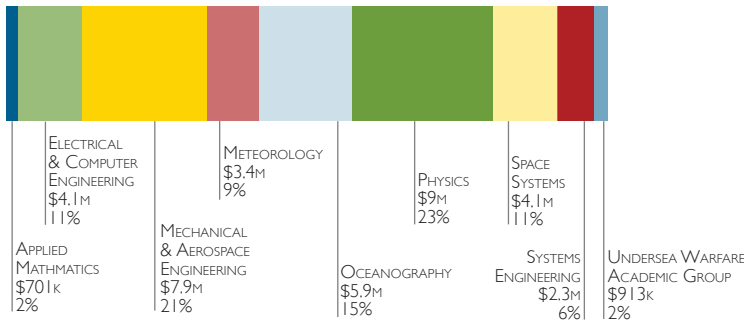


GRADUATE SCHOOL OF ENGINEERING AND APPLIED SCIENCES

GSEAS education leads to the master of science, engineer, and doctor of philosophy degrees and contains seven technical academic departments (applied math, electrical and computer engineering, mechanical and aerospace engineering, meteorology, physics, oceanography, systems engineering) and two interdisciplinary academic groups (space systems and undersea warfare). These entities offer degree programs tailored to the Navy and defense community, while providing technical foundations for student theses and interdisciplinary faculty and student projects. Research centers and unique laboratory facilities (e.g., unmanned and autonomous vehicles, robotics, free-electron lasers, spacecraft research and design, remote sensing, rockets and combustion, signal enhancement, ocean acoustics, interactive digital environment analysis, secure space-systems research, secure computer networks, materials research, cyber warfare and directed energy) add rigor to the resident academic and sponsored programs.

TOTAL EXPENDITURES: \$38.3M

BY DEPARTMENT



GRADUATE SCHOOL OF BUSINESS AND PUBLIC POLICY

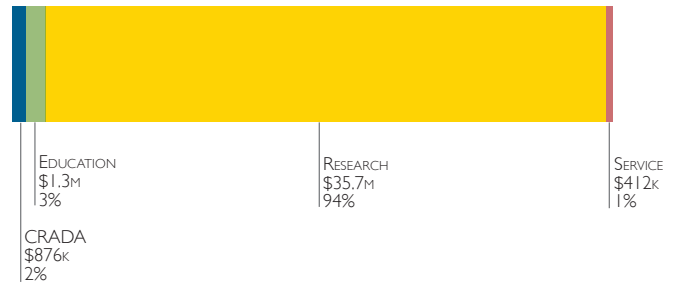
The Graduate School of Business and Public Policy (GSBPP) offers unique residential defense-focused MBA and Master of Science in Management programs, plus master's degrees in four other DoD-relevant areas. Faculty research is an important component of the school and strives to support military decision making, problem solving, and policy setting; improve administrative processes and organizational effectiveness; contribute knowledge to academic disciplines; and advance the mission of graduate education.

The research program is fully integrated into the educational process. Curriculum sponsors and other DoD organizations fund faculty research; students participate in these faculty projects, and faculty research results are incorporated into classroom instruction.

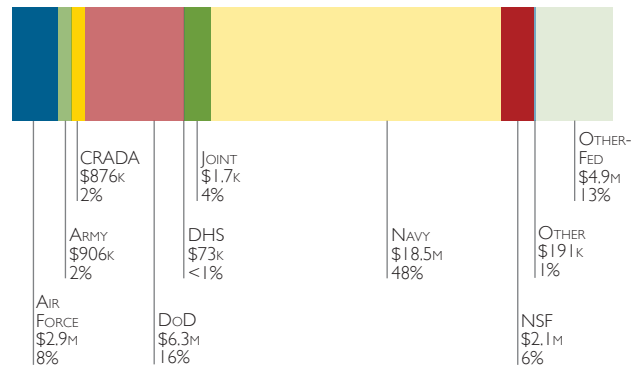
Topics and issues can be grouped into five broad functional areas: acquisition and contracting; budgeting and financial management; operations and logistics management; manpower-systems analysis; and policy formulation, analysis, and management.

TOTAL EXPENDITURES: \$6.3M

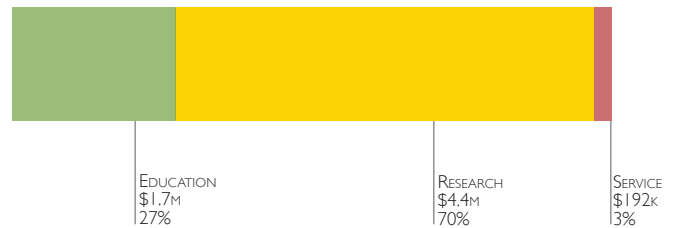
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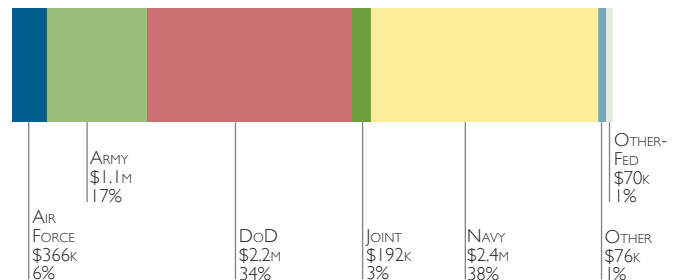
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BY TYPE OF ACTIVITY



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RESEARCH AND EDUCATION INSTITUTES AND CENTERS

NPS's research and education institutes and centers apply interdisciplinary research to military challenges, they facilitate degree programs, and they deliver executive and continuing education. Research centers, in particular, emphasize practical application of their results.

The Cebrowski Institute is a hub of innovation for the information revolution in military and security affairs for the Navy, DoD and nation. The CI helps generate ideas for information strategy and tactics and supports the information entrepreneurs who champion these ideas, promoting them in the Navy and DOD and working with leaders and networks to bring them into practice.

The MOVES Institute investigates modeling, virtual environments, and simulation, with projects in 3D visual simulation, networked VE, computer-generated autonomy, computational cognition, human-performance engineering, immersive technologies, gamebased simulation, combat modeling and analysis, and medical modeling and simulation.

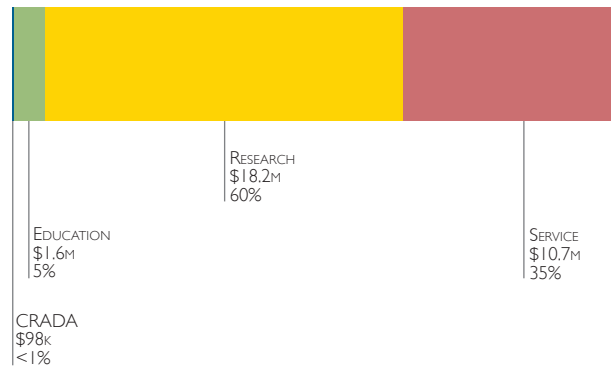
The Center for Interdisciplinary Remotely Piloted Aircraft Studies (CIRPAS) provides manned aircraft, remotely piloted aircraft and ground based radars for scientific research, especially that based on atmospheric and oceanographic observations, payload integration, CONOPS development, flight-safety reviews, logistics, and flight support.

The Joint Interagency Field Experimentation Program explores specialized solutions for capability gaps, provides a venue to assess, develop, counter, and exploit emerging capabilities, and examines dual capabilities for homeland security, stabilization, reconstruction, and disaster/humanitarian assistance.

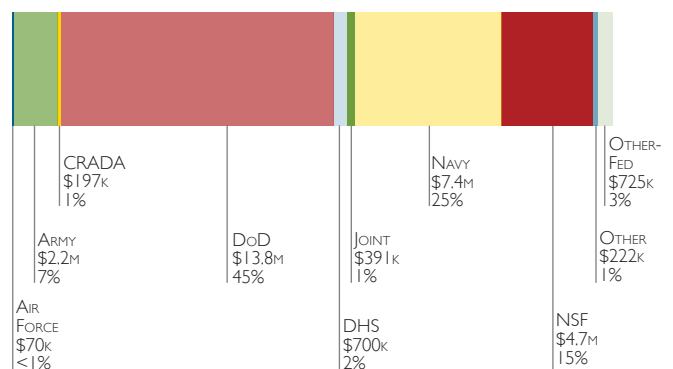
TOTAL EXPENDITURES: \$30.5M



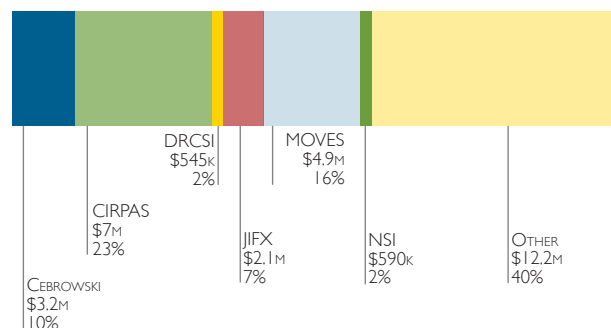
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BY INSTITUTE/CENTER



ADDITIONAL RESEARCH FACTS FOR FY13

24 new Cooperative Research and Development Agreements (CRADAs) or Limited-Purpose CRADAs were executed. Partners were Arcturus UAV, LLC., Electric Boat Corporation, GeoEye, Inc., Huntington Ingalls Incorporated, Infinite Z, Inc., Korea Institute of Atmospheric Prediction Systems, L-3 Communications Integrated Systems, Limited Partnership, Mission Integration Division (L-3), Lockheed Martin Corporation Acting By and Through Advanced Technologies Laboratories, NexGen Communications, LLC., Northern Lights Applied Science, NTT IT Corporation, Onvo, LLC., Perceptronics, Inc., Physical Sciences, Inc., Quinetiq North America, Inc. Technology Solutions Group, ReconRobotics, Inc., RnR Products, Inc., The City

of San Diego, The MITRE Corporation, TrustComm, Inc., University of Maryland, and University of Texas at Austin.

1,373 degrees were conferred, including:

27 Advanced Degrees (Ph.D., Engineer) 786 Masters of Science
241 Masters of Business Administration 265 Masters of Arts
54 Masters

- Ten Space and Naval Warfare Systems Center Fellowships were awarded to NPS students.
- 28 National Research Council Research Associates were on tenure at NPS.
- Five visiting faculty members from the Engineer and Scientist Exchange program were hosted.
- Ten patents were issued, 14 patent applications were filed.