Office of Naval Research Global
Overview Brief

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To search the globe for promising, emerging scientific research and advanced technologies to enable the Office of Naval Research to effectively address current needs of the Fleet and Force and to investigate and assess revolutionary, high-payoff technologies for future Naval missions and capabilities.
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* Principals report direct to CNR.
ONRG Organizational Chart

CNR

Commanding Officer
Singapore

Technical Director
London

Executive Officer
London

Grants Admin

Asia-Pacific
Regional Director/OIC
Tokyo

Europe / Africa / Middle East / Russia
Regional Director/OIC
London

Americas
Regional Director
Santiago

Director International Liaison Office
Washington

Fleet Forces
Division Director

Science Advisors*

Associate Directors*

* Denotes Administrative Chain of Command

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ONR has a long-term focus but is responsive to near-term Naval needs.
ONR-Global Networking: Roles & Areas of Interest

Journey from Idea to Program of Record and the Fleet/Force

6.1 BASIC RESEARCH
GAIN FUNDAMENTAL KNOWLEDGE

6.2 EXPLORATORY DEVELOPMENT
APPLIED RESEARCH DETERMINE NAVY UTILITY

6.3 ADVANCED TECHNOLOGY DEVELOPMENT
"PROTOTYPING" OF NEW CONCEPTS/SUBSYSTEMS

6.4 DEMONSTRATION AND VALIDATION (DEM/VAL)
DEVELOPMENT OF HARDWARE LEADING TO SYSTEM ACQUISITION

6.5 ENGINEERING & MANUFACTURING DEVELOPMENT (EMD)
PROGRAMS IN FULL SCALE DEVELOPMENT; AWAITING APPROVAL FOR PRODUCTION

6.6 RDT & E MANAGEMENT & SUPPORT
OPERATIONAL SYSTEMS DEVELOPMENT
DEVELOPMENT FOR SYSTEMS APPROVED FOR PRODUCTION

6.7 OPERATIONAL SYSTEMS DEVELOPMENT

BASIC
ONR Direct Funding
S&I Research
SYSCOM Funding
APPLIED

Associate Directors
Science Advisors
Visibility Curve

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### Naval S&T Strategic Focus Areas

**Naval S&T Focus Area** | **Naval Warfighting and Support Functions**
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**Power & Energy** | • Power Generation and Storage • Assured energy sources • Man Portable & Lightweight • High-Density Power

**Operational Environments** | • Oceanography & Survey (Ocean/Hydro/River) • Meteorology • Space Environmental Effects

**Maritime Domain Awareness** | • ISR collection & integration • CBRNE (Explosives & WMD Detection) • Port/Base Security • Swimmer Detection • Wide Area & Battlespace Surveillance • Social/Cultural Understanding • MIO Sensing • HLS Ship Tracking

**Asymmetric & Irregular Warfare** | • Operational Adaptation • Maritime/Riverine Interception Operations • Expeditionary Security • Boat/Vehicle Disabling (Apply Non-Lethal Systems & Effects) • Forensic Site Exploration • Tactical Evidence Collection • Counter IED/Snipers • Riverine Operations • Regional Domain Awareness • Homogeneous Cultural Integration of Forces • Tactical Tagging and Tracking

**Information Superiority and Communication** | • Assured and Secure Communications • Electronic Warfare • Computer Network Ops • Operations Security • Military Deception • Cross Cultural Communications • Threat Intent Determination • C4

**Power Projection** | • Rapid Tactical Precision Targeting • Time-sensitive strike • Neutralization (lethal/non-lethal) • Effects-scaled weapons • Integration & Control of Naval fires • Maneuver

**Assure Access and Hold at Risk** | • Persistent Surveillance & Monitoring • Tagging/Tracking & Locating • Shaping and Information Operations • Strategic Target ID/Tracking • Information Verification • Vessel/vehicle-stopping • MIO/Boarding • ASW & MCM • Spoof/Decoy

**Distributed Operations** | • Distributed Logistics • Small Unit ISR/Intelligence Collection/Dissemination/Fusion & Engagement • Tactical Maneuver & Mobility • Control of Integrated Fires • Training Operations in Urban/Extreme Environments • Large target lethality with reduced combat loads • Control Collateral Damage

**Naval Warrior Performance** | • Personal Protection • Endurance • Decision-Making Tools • Decision/Training Tools • Casualty Prevention/Care • Undersea Medicine • Enhanced Human Performance • Operating in Extreme/Austere Environments • Expeditionary Security • Training Operations in Urban Environments

**Survivability and Self-Defense** | • Missile Defense • Torpedo Defense • LO/CLO • Tactical EW • Damage Control/Prevention • Force Protection • Time-Critical Terminal Defense

**Platform Mobility** | • Platform Performance & Agility • Power-Dense Propulsion • Operational Adaptation • Tactical Maneuver Mobility

**Fleet/Force Sustainment** | • Seabasing • Operational Logistics • Maneuver

**Total Ownership Cost** | • Increased warfighting capacity • Reduced logistics cost optimization • Reduced failure rates • Automate Naval engineering • Aircraft Propulsion Design • Reduce Manning • M&S Automation • Reduce Upgrade Costs

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ONR-Global Science Program Tools

Conference Support Program (CSP)
- Support foreign or international workshops and conferences of Naval interest

Liaison Visits
- ONRG technical staff visit international institutions to develop access and discover cutting edge S&T

Visiting Scientist Program (VSP)
- Support travel of foreign scientists to the US to socialize new S&T ideas or findings with the NRE

Naval International Cooperative Opportunities Programs (NICOP)
- Support the insertion of innovative, international S&T into core ONR and NRE Programs

Small invests early leads to significant results