Office of Naval Research Global
2018 Recruiting Brief

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The Office of Naval Research
The S&T Provider for the Navy and Marine Corps

- 4,000+ People
- 23 Locations
- $2.1B / year
- >1,000 Partners

Discover → Develop → Deliver → Technological Advantage
ONR is part of the NR&DE, Providing Full-Spectrum RDT&E

<table>
<thead>
<tr>
<th>RDT&amp;E Budget (6.1-6.7)</th>
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<tr>
<td><strong>S&amp;T Budget (6.1-6.3)</strong></td>
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Naval R&D Establishment (ONR, SYSCOMs and their Warfare Centers, PEOs)

Office of Naval Research
ONR Global Mission

To serve as the preeminent external network facilitator for ONR and the greater NRE by ensuring quality/relevant connections between the international S&T community, naval fleet/force, and NRE regarding both current execution and developing long-range strategic efforts. To remain always focused on the current and future needs of our Sailors, Marines, naval service and international partners.
ONR Global Objectives

**Discover the Best Science and Technology Worldwide**
- Identify and support innovative research that aligns with Naval needs
- Leverage complimentary research investments
- Link S&T push (disruptors) and pull (technology gaps) to the fleet

**Maintain Global Technical Awareness**
- Inform allocation of resources to prevent technological surprise
- Scout international technology for the Naval Research Enterprise
- Identify emerging high impact global technology trends

**Science & Technology Partnerships and Collaborations**
- Facilitate collaboration to accelerate S&T advancement
- Foster mutually beneficial S&T research
- Build capability and interoperability with international S&T partners
ONR Global Technical Functions

Science Advisors
Embedded in Navy and Marine Corps staffs to connect the warfighter and the Naval Research & Development Establishment

Science Directors
Finding and connecting the best science back to the Naval Research Enterprise from six offices worldwide

Int’l S&T Engagement Advisors
Developing and maintaining US Navy military to military science & technology relationships

US Navy Fleet
Academia and Labs
S&T Mil to Mil Bi-lat
Why You Should Consider an ONR Global Assignment

• **Enhance** your Fleet/Force Awareness
• **Be an integral part** of Flag/General Officer-level decision making
• **Experience** unique professional development and travel opportunities
• **Expand** your peer collaboration network opportunities and establish friendships that will last a lifetime
• **Strengthen** ties to international peers in your area of expertise
• **Take your personal and professional growth to the next level**
Science Advisors Strive To

**Articulate** Fleet Force S&T needs and requirements to ONR, NRL, NR&DE

**Communicate** Command issues to CNR, ONR leadership and Program Officers

**Serve** as ONR on site rep during Fleet Force exercises and demonstrations

**Lead** S&T planning & experimentation processes to focus on meeting critical needs, then assist in transition of key technologies to the Warfighter

*ONR’s S&T Ambassadors to the Fleet!*
Science Advisor Requirements/Attributes

**Required**
- Have a working knowledge of ONR, NRE and DoD Acquisition Process
- Provide an Endorsement Letter from your “Home” Command
- TS SCI Clearance eligible
- Strong communication skills
- Self-starter, highly motivated, agent of change and positive attitude
- Customize your resume to address SA unique attributes

**Preferred**
- Experience interacting/briefing Flag/General Officers and SES
- Over 10 years of practical experience working on Fleet Force Systems and Processes
- Maintain a sense of humor under high stress situations

Program Description

The Technology: TALONS is a system developed to lift and tow a variety of payloads 1000+ feet in the air behind ships, underneath flexible parafoil wings, as an artificial mast in the sky.

Objective: Conduct several experiments to determine the suitability of TALONS to current naval vessels and operations, to answer key Fleet-implementation related questions, and introduce TALONS capabilities into the Fleet.

Key Metrics: Wind envelopes, launch and recovery times, officer of the deck and ship impacts, robustness of power and communication options, compatibility with emergency procedures

S&T to Demonstrate:
- Payload effectiveness from TALONS system hardware and flight environment
- Minimal Manning and operator training for launch, flight, and recovery
- Maximum and minimum wind speeds when towing TALONS system
- Minimum launch and recovery times
- Off-axis launch, flight, and recovery
- Rugged and reliable power and signal tether operations
- Emergency procedures

Major goals/Schedule:
- Ship wake field testing – December 2015
- 26ft boat testing – January 2016
- 60ft boat testing – June 2016
- 4th Fleet testing (Spring)
- 6th Fleet testing (Summer)
- Completion – October 2016

Value to Fleet:
Leveraging previous DARPA funding and development work, C6F and C4F Science Advisors requested ONR Experimentation funds to experiment with TALONS based on their theater requirements.

TALONS lifts payloads from any ship to altitudes by towing them under a parafoil wing. Possible payloads include EO/IR systems, radar, communications relay / RF antennas, and more. TALONS increases the situational awareness of large or small ships. Simple battery-operated configurations are available as well as long-endurance systems with power and signal embedded in the tow tether.

Partners: 4th and 6th Fleet, NSWC Carderock, PEO-IWS, NAVSEA, NAVAIR, DARPA

Transition Sponsor: USFF, 4th and 6th Fleet
Science Advisors and the ONRG Reserve Component led the U.S. effort for Exercise UNMANNED WARRIOR 16 which was conducted in conjunction with the Royal Navy's Exercise JOINT WARRIOR 162 to:

- Experiment with the tactical employment of unmanned and autonomous systems in maritime and littoral environments
- Mature credible capability choices for mainstream utilization of UxS
- Demonstrate, and gather evidence as to how well UxS can deliver a range of capabilities.

The event consisted of 50 Unmanned systems, 6500 warfighters, 31 ships and 67 aircraft from across 18 NATO nations and it allowed the US to:

- ACCELERATE technical and operational learning about autonomy and intelligent systems to advance naval warfighting advantage.
- INNOVATE with other world-class experts and allied navies expanded the horizons of autonomous systems.
- COLLABORATE with experts from allied navies, international partners and diverse S&T leaders to accelerate UxV development learning while enhancing the Fleet training experience
Science Directors Strive To

**Act** as a tech broker linking ONR, NRL, and the NRE with International S&T

**Identify** disruptive S&T in order to avoid Naval technical surprise

**Gain** enhanced awareness of S&T through direct, regular contact with international colleagues

**Initiate** and manage grants to provide tangible links between foreign scientists and their US Naval counterparts

**Provide** ONR forward presence with global innovators and technologists

*ONR’s Global S&T Scouts!*
Science Director
Requirements/Attributes

**Required**
- Masters Degree in technical field
- In-depth experience in performing basic or applied research
- Ability to network/interface in a tech broker role
- US citizenship
- Ability to travel extensively

**Preferred**
- PhD in relevant field
- Experience with ONR/NRE
- Foreign language capability
- International S&T experience

- Position announcements are posted on ONR Global external website
Project Southern Star with NRL

- Working with NRL researchers to establish Ionospheric and thermospheric weather sensors at 2 Universities in Chile
- Ionospheric and thermospheric weather data
- Costs for installation and maintenance would be paid for by NRL
- Data would be shared with local universities for future NICOP project

Measurements and Computations of the Temperature Variations during Collapse of Cavitation Bubbles

Lille Mechanique Laboratoire, France

- Novel method for measuring fine-scale temperature fields inside a cavitation bubble using tiny cold-wire thermometer and IR radiation.
- Enables modeling of erosion due to bubble collapse
International S&T Engagement Advisors
Strive To

Engage with US Program Officers and foreign defense organizations to identify & develop collaborative projects that solve Naval capability gaps

Interface throughout ONR & NRL; NR&DE

Gain exposure across the S&T portfolio

Serve as the action officer to coordinate & manage government to government S&T partnerships

Connect across USG (OPNAV, NIPO, AF/Army/DARPA, OSD, DOS, OSTP, etc)

ONR’s Government to Government Partnership Builders!
## International S&T Engagement Advisor

### Requirements/Attributes

**Required**
- Strong technical credentials
- Interest in technical broker role
- Ability to network/interface
- Strong Communication Skills
- Self-Starter, Highly Motivated, High Energy, Positive Attitude
- Provide an Endorsement Letter from your “Home” Command
- Must be eligible for TS SCI Clearance

**Preferred**
- Experience Interacting and Briefing Flag/General Officers and SES
- Experience with ONR/NRE
- International S&T experience

Potential Vacancies
Summer 2018*

Science Advisor:
- USFFC (Norfolk, VA)
- II MEF (Camp Lejeune, NC)
- III MEF (Okinawa, JP)
- NAVSURFOR (San Diego, CA)
- COMPACFLT (Hawaii)
- NWDC (Norfolk, VA)
- MARFORCOM (Norfolk, VA)
- FLTCYBERCOM/C10F (Fort Mead, MD)

Science Director:
- Quantum Science (London)
- Interdisciplinary Science; Middle East (London)
- Interdisciplinary Science; S. America (Santiago)
- Interdisciplinary Science; S. America (São Paulo)
- Warfighter Supremacy (Tokyo)
- Information, Cyber & Spectrum Superiority (London)

International S&T Engagement Office:
- (2) International S&T Engagement Advisors - (Arlington, VA)

* Tentative projection of positions
Vacancy announcement (VA) opens-closes
CERT & endorsement letters received by Science Advisor Program Director
Candidate packages reviewed, 3 to 5 are selected for interviews for each position
ONR HQ Interviews Conducted
Candidates referred to Commands for follow on interview
Command down selects or approves candidate
Candidate is officially notified of selection, pre orientation packet sent to candidate
General On-boarding and GT&C processing
New SA One Week Orientation Conducted at ONR Arlington, VA
New SAs prepares for Assignment, Logistics Finalized
New Science Advisors 2 week transition with existing SA
New ONR SA on board serving the Command

These dates projected as of 22 August 2017
### FY18 SD Selection Schedule

<table>
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<tr>
<th>Event</th>
<th>Dates</th>
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<tbody>
<tr>
<td>Vacancy announcement (VA) opens-closes</td>
<td>Oct-Nov</td>
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<tr>
<td>Resumes / CERT received by Directors</td>
<td></td>
</tr>
<tr>
<td>Candidate packages reviewed, 3 to 5 are selected for interviews for each position</td>
<td>Dec-Feb</td>
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<tr>
<td>ONR Interviews Conducted</td>
<td>Mar-May</td>
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<tr>
<td>Candidate is notified of selection, pre orientation packet sent to candidate</td>
<td>Jun-Aug</td>
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<tr>
<td>General On-boarding and RWO processing</td>
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<tr>
<td>New Employee One Week Orientation Conducted at ONR Arlington, VA</td>
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<tr>
<td>New Employee prepares for Assignment, Logistics Finalized</td>
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<tr>
<td>New SD / ISTO begins transition with existing staff</td>
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</tr>
<tr>
<td>New SD / ISTO arrives to Duty location</td>
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These dates projected as of August 2017
These dates projected as of September 2017
Potential Vacancies
Summer 2019*

Science Advisor:
• I MEF (Camp Pendleton, CA)
• NECC (Little Creek, VA)
• NAVAIRFOR (San Diego, CA)
• NSMWDC (San Diego, CA)
• C3F (San Diego, CA)
• NAVIFOR (Suffolk, VA)

Science Director:
• Air Platforms (Hyderabad)
• Sea Platforms (London)
• Undersea Battlespace and Maritime Domain Access (London)
• Sea Platforms (Tokyo)
• Amphibious Expeditionary Maneuver (Tokyo)
• Information, Cyber and Spectrum Superiority (Tokyo)

* Tentative projection of positions
Summary

• Globally dispersed, agile workforce

• Focused on facilitating NR&DE access to international S&T community

• Connecting U.S. S&T networks to our international S&T partners.
Points of Contact

Science Director Positions
Dr. Patricia Gruber
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International S&T Engagement Positions
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Science Advisor Positions
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If you have any questions, please email the Talent Manager at onrg.talentmanager@mail.mil
Backups
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