

Special Notice N00014-18-SN-04
Special Program Announcement for 2018 Office of Naval Research
Research Opportunity:
“System for Non-Acoustic Control of Signatures (SNACS)”

I. INTRODUCTION

This announcement describes a research thrust entitled, “System for Non-Acoustic Control of Signatures (SNACS)” to be launched under the Office of Naval Research (ONR) Broad Agency Announcement N00014-18-S-B001 entitled, “Long Range Broad Agency Announcement (BAA) for Navy and Marine Corps Science and Technology” which can be found at <https://www.onr.navy.mil/Contracts-Grants/Funding-Opportunities/Broad-Agency-Announcements.aspx>.

The research opportunity described in this announcement currently falls under the following sections of BAA, N00014-18-S-B001: Section IV, entitled, “Appendix 1 “Program Opportunity Description” Section IV “Research Opportunity Description”; the “Sea Warfare and Weapons Department (Code 33)” specific thrusts and focused research areas:

Paragraph 2 entitled, “Survivability”

The submission of proposals, their evaluation and the placement of research contracts will be carried out as described in that BAA.

The purpose of this announcement is to focus attention of the scientific community on (1) the area to be studied, and (2) the planned timetable for the submission of white papers and proposals.

II. Topic Description:

The ONR established the SNACS Future Naval Capability (FNC) program to develop high performance radar absorbing structure (RAS) technology. This FNC seeks to develop RAS that employs manufacturing techniques that are affordable, scalable, durable and customizable to the desired platform (undersea, surface, air and ground). Moreover, the SNACS RAS must be capable of withstanding continuous exposure to external sea pressure up to 1050 pounds per square inch (psi) without mechanical or electrical degradation of the RAS.

The target application for the SNACS FNC is a Navy Program of Record (POR) for the Virginia Class submarines: (1) the Low Profile Photonics Mast (LPPM) managed by the Naval Sea Systems Command (NAVSEA) Submarine Sensor Systems Program Office (PMS-435). The LPPM is a modular non hull-penetrating imaging sensor sited in a telescoping universal modular mast bay that provides submarines with improvements in stealth and survivability.

III NO INDUSTRY DAY EVENTS ARE PLANNED

IV. WHITE PAPER SUBMISSION

Although not required, white papers (up to collateral secret) are strongly encouraged for all offerors seeking funding. Each white paper will be evaluated by the Government to determine whether the technology advancement proposed appears to be of particular value to the Department of the Navy. Initial Government evaluations and feedback will be issued via e-mail notification from the Technical Point of Contact. The initial white paper appraisal is intended to give entities a sense of whether their concepts are likely to be funded.

Detailed Full Proposal (Technical and Cost volumes) will be subsequently encouraged from those Offerors whose proposed technologies have been identified as being of “particular value” to the Government. However, any such encouragement does not assure a subsequent award. Full Proposals may also be submitted by any offeror whose white paper was not identified as being of particular value to the Government or any offeror who did not submit a white paper.

For white papers that propose efforts that are considered of particular value to the Navy but either exceed available budgets or contain certain tasks or applications that are not desired by the Navy, ONR may suggest a full proposal with reduced effort to fit within expected available budgets or an effort that refocuses the tasks or application of the technology to maximize the benefit to the Navy.

White papers should not exceed 8 single-sided pages, exclusive of cover page and resume(s) of principal investigator(s), and should be in 12-point Times New Roman font with margins not less than one inch. White papers shall be in Adobe PDF format (preferred) or in Microsoft Word format compatible with Microsoft Office 2010.

The cover page should be labeled “White Paper” and include BAA Number N00014-18-R-SN04, and include the following information: title of the proposed effort, technical point of contact, telephone number, facsimile number, and E-mail address.

The 8-page body of the white paper should include the following information:

- (1) Principal Investigator;
- (2) Technical objective of the proposed effort;
- (3) Technical approach that will be pursued to meet the objective;
- (4) A summary of recent relevant technical breakthroughs;
- (5) A funding plan showing requested funding per fiscal year;
- (6) Current or pending designs or design approaches with the potential to address the SNAC objectives. The following information is of particular interest:
 - a) Description of the overall RAS system;
 - i) Listing of key enabling technologies that are used, and to the extent practicable, the estimated Technology Readiness Level (TRL) of each component / technology The Technology Readiness Assessment (TRA) Guidance document, dated April 2011 found at the following website

(<http://www.acq.osd.mil/chieftechnologist/publications/docs/TRA2011.pdf>), includes TRL definitions. Use those definitions for identifying the TRL level;

- b) Electromagnetic (EM) characterization estimates of the systems
 - i) Reflectance as a function of incidence angle;
 - ii) Electromagnetic Bandwidth ;
 - iii) Material footprint/dimensions; and
 - iv) Polarization performance (i.e. transverse Magnetic (TM) and transverse electric (TE))
- 7) Hydrostatic pressure performance (if available);
- 8) RAS system fabrication technology, specifically the suitability for application on cylindrical shapes;
- 9) Scalability for production (i.e. manufacturability);

Potential offerors may request classified government furnished information (GFI) as described in Section X below. Resumes of the principal investigator(s), not to exceed 1 page per principal investigator, should also be included after the 8-page body of the paper.

White Papers shall otherwise comply with requirements of the ONR Long Range BAA, N00014-18-S-B001.

To ensure full, timely consideration for funding, white papers should be submitted no later than **10 March 2018**. White papers received after that date will be considered as time and availability of funding permit.

V. FULL PROPOSAL SUBMISSION AND AWARD INFORMATION

Full proposals should be submitted under N00014-18-SN-04 by **10 May 2018**. Full Proposals received after that date will be considered as time and availability of funding permit. Full proposal should be submitted in accordance with the requirements of the FY18 Long Range BAA N00014-18-S-B0001

ONR anticipates that only contracts will be issued for this effort.

Full Proposals should be submitted in accordance with the instructions of the FY18 Long Range BAA. The Technical Proposal/Content shall be single spaced and not exceed 20 pages. The cover page, resumes, bibliographies, and table of contents are excluded in the page count.

For contract proposal submission, two (2) hardcopies and one (1) electronic submission on CD-ROM are requested.

ONR plans to fund two awards with a value of \$1M per year, using research funds. However, lower and higher cost proposals will be considered.

The period of performance for projects may be up to three (3) years.

Although ONR expects the above described program plan to be executed, ONR reserve the right to make changes.

Funding decisions should be made by **10 July 2018**. Selected projects will have an estimated award date of **10 October 2018**.

VI. SIGNIFICANT DATES AND TIMES

Event	Date	Time
White Paper Submission	10 March 2018	1400 Eastern Local Time
Notification of White Paper Valuation*	10 April 2018	Not Applicable
Full Proposal Submission	10 May 2018	1400 Eastern Local Time
Full Proposal Selections*	10 July 2018	Not Applicable
Awards*	10 October 2018	Not Applicable

Note: *These are approximate dates

VII. POINTS OF CONTACT

In addition to the points of contact listed in N00014-18-S-B0001, the specific points of contact for this announcement are listed below:

Technical Point of Contact

Dr. Steve Russell

Program Officer

ONR Code: 331

Email: steven.j.russell@navy.mil

Business Point of Contact:

Anshawn Lewis

ONR Code 0252

Office of Naval Research

875 North Randolph Street, Suite W1275

Arlington, VA 22203-1995

Email: [mailto: anshawn.lewis @navy.mil](mailto:anshawn.lewis@navy.mil)

VIII. ADDRESS FOR THE SUBMISSION OF WHITE PAPERS AND FULL PROPOSALS FOR CONTRACTS

White papers should be submitted via email to steven.russell@navy.mil with a copy to Kevin Heslin at kevin.heslin@navy.mil "White Paper" in the subject line. Files exceeding 10MB in size should not be emailed, but instead transmitted via a file transfer service, for example AMRDEC Safe Site, <https://safe.amrde.army.mil>, or mailed on CD-ROM or DVD.

The DVD or CD-ROM of the Full Proposal including all supporting documentation should be sent to the Office of Naval Research at the following addresses:

Primary Point of Contact	Secondary Point of Contact
Office of Naval Research Attn: Dr. Steve Russell ONR Code 331 875 North Randolph Street Arlington, VA 22203-1995	Office of Naval Research Attn: Mr. Kevin Heslin ONR Code 331 875 North Randolph Street Arlington, VA 22203-1995

Classified Supplement Mailing Instructions:

Classified supplements shall be submitted directly to the attention of ONR's Document Control Unit at the following address:

OUTSIDE ENVELOPE (no classification marking):

Office of Naval Research
Document Control Unit
ONR Code 43
875 North Randolph Street
Arlington, VA 22203-1995

The inner wrapper of the classified supplement should be addressed to the attention of Dr. Steven Russell Code 33 and marked in the following manner:

INNER ENVELOPE (stamped with the overall classification of the material):

“SNACS”
Office of Naval Research
Attn: Dr. Steven Russell
ONR Code: 33
875 North Randolph Street
Arlington, VA 22203-1995

IX. SUBMISSION OF QUESTIONS

Unclassified questions regarding this announcement shall be provided to the Technical Points of Contact and the Business Point of Contact listed above. All questions shall be submitted in writing by electronic mail.

Answers to questions submitted in response to this Special Notice will be addressed in the form of an Amendment and will be posted to the following web pages:

- Federal Business Opportunities (FEDBIZOPPS) Webpage – <https://www.fbo.gov/>
- ONR Special Notice Webpage - <http://www.onr.navy.mil/Contracts-Grants/Funding-Opportunities/Special-Notices.aspx>

Questions regarding **White Papers or Full Proposals** should be submitted no later than two weeks before the dates recommended for receipt of White Papers and/or Full Proposals. Questions after this date may not be answered.

X. DISTRIBUTION OF GOVERNMENT FURNISHED INFORMATION (GFI)

Potential offerors can receive the Government Furnished Information (GFI) listed below (in accordance with Standard Distribution D and above ITAR restrictions) on request to Dr. Steve Russell (steven.j.russell@navy.mil) and Kevin Heslin (kevin.Heslin@navy.mil) with a copy to Anshawn Lewis (Anshawn.Lewis@navy.mil). The request on company letterhead shall include company name, company cage code, company classified mailing address, a current DoD contract number along with the government Point of Contact (POC) for that contract and the contact information for your Joint Certification Program POC. The ONR will use this information to verify eligibility to receive Distribution D, export controlled and classified information. Requests for exceptions to the Distribution D - DoD contractor requirement may also be submitted to Mr. Lewis.

- 1) SNACS Radar Absorption Performance Objectives (Collateral Secret)
- 2) SNACS Mechanical & Environmental Performance Requirements (Unclassified –Distribution D)