

## **INTRODUCTION:**

This publication constitutes a Request for Information (RFI) and no formal Request for Proposals (RFP), solicitation, and/or additional information regarding this request will be issued. The Office of Naval Research (ONR) will not issue paper copies of this request.

The responses to this RFI will be considered in the planning and definition of future technology development programs for which later solicitations may play a part.

## **I. GENERAL INFORMATION**

### 1. Agency Name

Office of Naval Research  
800 North Quincy Street  
Arlington, VA 22217-5660

### 2. Research Opportunity Title:

Naval Force Sustainment Science and Technology

### 3. Research Opportunity Number:

### 4. Response Date:

White Papers: Monday, 31 March 2003

### 5. Research Opportunity Description:

The Office of Naval Research, as executive agent for the Littoral Combat and Power Projection, Future Naval Capabilities (FNC) is seeking innovative technology concepts to improve sustainment capabilities within the naval service (i.e., Navy and Marine Corps). Advanced warfighting concepts and the battlefield of the future will require a much more agile, flexible, responsive, robust and affordable logistics/sustainment infrastructure than exists today. Sustainment of naval forces at sea, from the sea, and ashore consumes large quantities of materials that increasingly require greater and greater resources to be applied to operate, transport, store and deliver. Fundamental to increasing the efficiency and effectiveness of sustaining naval forces, is to develop the use of new materials and processes that can extend inventories of such critical elements as fuel and ammunition, thereby reducing the frequency and cost of replenishment. Advanced technology will play an important role in achieving these goals. The mission of the Expeditionary Logistics branch of the Littoral Combat and Power Projection FNC is to develop and demonstrate technology that will improve Naval Force Sustainment (NFS) at both the operational and tactical level of war. Thus, this agency is issuing this RFI in order that industry has an opportunity to submit its best logistics/sustainment technology concepts for review and consideration. This input will be factored into the agency's future program planning and will help ensure that the agency's R&D investments are targeted at the highest payoff technologies. Areas of interest include, but are not limited to; power generation and energy efficiency (i.e., high density fuels, fuel cell technology, battery technology, alternative energy sources, energy harvesting, reduced inventories, power distribution, propellants, etc.), advanced packaging materials and designs, reuse technologies, austere base support and advanced construction materials that could replace traditional materials that are labor and equipment intensive and require

extensive engineer planning to calculate and employ, improved reliability and maintainability including reduced maintenance platforms, field repair kits, "smart" parts, spares, etc., that can increase performance, extend service life and offer reduced storage and handling costs. Responses can cover a variety of technologies to include advanced propulsion systems and components, equipment, energy sources, computer software, materials, and processes that go along with the introduction of new technologies and provide gains in inventory/consumption reduction by changing inefficient business practices. This list is by no means exhaustive, and additional areas are both expected and solicited. Responses must address Navy and Marine Corps requirements for warfighting (i.e., technologies must show military utility/mission payoff and reflect the unique nature of the naval service). Technologies must not be currently available (COTS) products, but require additional R&D to mature. Once developed, the technologies must be capable of demonstration and "transitionable" to the respective Service Acquisition sponsors for final development prior to procurement and fielding. In summary, the Expeditionary Logistics Branch is soliciting ideas that are both revolutionary and affordable. Revolutionary in the sense that a new technology radically improves weapons system support and warfighting sustainment. Affordable in the sense that implementation costs are reasonable and a net decrease in logistics support costs is realized.

6. Point(s) of Contact:

Ms. Kimbra Whittier  
Office of Naval Research  
Industrial & Corporate Programs  
Code: ONR 36A  
BCT 3, Room 628  
800 North Quincy Street  
Arlington, VA 22217-5660  
Telephone: (703) 696-0557  
E-Mail: [whittik@onr.navy.mil](mailto:whittik@onr.navy.mil)

Questions of a technical nature should be directed to the cognizant Technical Point of Contact, as specified below :

Mr. Rick Kelish  
Office of Naval Research  
Marine Corps Warfighting Lab  
Code: CSS Technology  
3255 Meyers Ave.  
Quantico, VA 22134-5121  
Telephone: (703) 784-1088/89  
E-Mail : [kelish@mcwl.quantico.usmc.mil](mailto:kelish@mcwl.quantico.usmc.mil)

Questions of a business nature shall be directed to the Contracting Officer, as specified below :

Mrs. Vera M. Carroll  
Office of Naval Research  
Placement Three Branch  
Code: ONR 0253

BCT 1, Room 720  
800 North Quincy Street  
Arlington, VA 22217-5660  
Telephone: (703) 696-2610  
E-Mail: [carrolv@onr.navy.mil](mailto:carrolv@onr.navy.mil)

## II. **APPLICATION AND SUBMISSION OF INFORMATION**

### 1. Application and Submission Process:

The due date for white papers is no later than 4 p.m. (Local Eastern Time) on Monday, 31 March 2003.

### 2. Content and Format of White Papers:

White paper responses should not exceed 5 pages in length and must use the following format: (1) title, (2) Navy and/or Marine Corps warfighting payoff, (3) objective, (4) targeted end user community (i.e., aviation, ship operation, ground maneuver forces, ammunition handlers, construction forces, etc.), (5) technical approach, (6) technology or product (include picture, if possible), (7) risk(s), and (8) estimated cost and duration (valid range is \$100,000.00/6 months to \$1,000,000.00/3 years). Corporate information, experience, and background may be included in the 5-page technology concept, but are not mandatory.

The white papers submitted in response to this RFI are expected to be unclassified. However, confidential/classified proposals are permitted. The white papers submissions will be protected from unauthorized disclosure in accordance with FAR 15.207, applicable law, and DoD/DoN regulations. Offerors are expected to appropriately mark each page of their submission that contains proprietary information. Responses will not be disclosed outside the Department of the Navy. If the responses are of sufficient quantity and quality, ONR will consider pursuing an actual Broad Agency Announcement (BAA), which may lead to multiple contract awards in the fiscal year (FY) 2004/2005 timeframe.

#### White Paper Format:

- Paper Size – 8.5 x 11 inch paper
- Margins – 1” inch
- Spacing – single or double-spaced
- Font – Times New Roman, 12 point
- Number of Pages – No more than five (5) single-sided pages (excluding cover page). White Papers exceeding the page limit may not be evaluated.
- Copies – one (1) original, 2 copies, and one electronic copy on a 3.5” Diskette or CD-ROM, (in Microsoft® Word or Excel 97 compatible or .PDF format).

#### White Paper Content:

- Cover Page – The cover page shall be labeled “PROPOSAL WHITE PAPER”, and shall include the BAA number, proposed title, Offeror’s administrative and technical points of contact, with telephone numbers, facsimile numbers, and Internet addresses, and shall be signed by an authorized officer.

- Technical Concept – A description of the technology innovation and technical risk areas.
- Operational Naval Concept - A description of the project objectives, the concept of operation for the new capabilities to be delivered, and the expected operational performance improvements.
- Operational Utility Assessment Plan – A plan for demonstrating and evaluating the operational effectiveness of the Offeror's products in Naval exercises, including evaluation metrics.
- Deliverables – A list of any deliverables for the effort.
- Management Plan – Short resumes of the principal investigators and descriptions of partnering arrangements.
- Costs – A one-page summary of costs segregated by tasks.

3. Address for the Submission of White Papers:

Responses will be accepted via commercial mail or via e-mail. Send conventional mail to the following address:

Office of Naval Research  
Ballston Center Tower One  
Attn: Ms. Kimbra Whittier, ONR 36A  
BCT3, Room 628  
800 North Quincy Street  
Arlington, VA 22217-5660  
Telephone Number: (703) 696-0557

Send e-mail responses to the following e-mail address:

[kelish@mcw.l.quantico.usmc.mil](mailto:kelish@mcw.l.quantico.usmc.mil)

NOTE: RESPONSES SENT BY FAX WILL NOT BE CONSIDERED.