

REQUEST FOR INFORMATION (RFI)
ONR RFI Announcement # 14-RFI-0002
Title: Non-conventional 3-dimensional mobility

I. DISCLAIMER:

This announcement constitutes a Request for Information (RFI) for the purpose of determining market capability of sources or obtaining information. It does not constitute a Request for Proposals (RFP), a Request for Quote (RFQ) or an indication that the Government will contract for any of the items and/or services discussed in this notice. Any formal solicitation that may subsequently be issued will be announced separately through Federal Business Opportunities (FedBizOpps). Information on the specific topics of interest is provided in the following sections of this announcement. Neither ONR nor any other part of the federal government will be responsible for any cost incurred by responders in furnishing this information.

II. BACKGROUND:

The Office of Naval Research (ONR) Expeditionary Maneuver Warfare and Combating Terrorism department (Code 30) Maneuver Thrust Area funds research and advanced technology development to increase the capabilities and effectiveness of the Marine Corps Air Ground Task Force (MAGTF), Naval Special Warfare, Naval Expeditionary Combat Forces, and Marine Special Operations Forces and aids in the execution of the Global War on Terrorism. Innovative technologies are pursued that address the entire fleet of Naval ground assets in the areas of survivability, mobility, fuel efficiency and ground autonomy. Specifically, there is interest in scientific research and technologies in far-reaching innovative concepts or technologies that would lead to leap-ahead gains in survivability or mobility of USMC or Navy ground assets and dismounted Marines or Sailors.

The Vision: Expeditionary forces of the future will be significantly more agile, lethal, mobile and survivable. Technologies will be developed to increase the warfighting capabilities and effectiveness of the Marine Air-Ground Task Force (MAGTF) with emphasis on improving survivability, providing enhanced mobility, and providing autonomous systems for Distributed Operations and Asymmetric/Irregular Warfare.

III. SPECIFIC INFORMATION OF INTEREST:

1. In its pursuit of enhanced and unmatched agility, lethality, mobility, and survivability for the future expeditionary forces, ONR Code 30 is seeking information from US and non-US sources to identify new concepts, areas of research and approaches to provide non-conventional 3-dimensional mobility of a Marine during Military Operations in Urban Terrain (MOUT), conventional theaters of operation, open field terrain, and littoral areas. There is a need for new and novel transportation concepts to provide the warfighter with superior combat and tactical mobility in three-dimensions (2D-planar and vertical) with which to gain access to restricted or denied areas and terrain. The concepts of interest are those that currently do not

exist as a system or technique, but rather are new phenomenon or technological advances that may produce new 3-D mobility capabilities in 2 to 10 years. Concepts do not necessarily need to be complete systems. They may be discoveries or research that has the potential of overcoming the challenges of three-dimensional mobility for vehicle systems. The concepts that enable this capability can include, but are not limited to, non air powered vertical lift and propulsion methods, advanced lightweight materials, and high power dense systems. The concepts that enable this capability should focus on three-dimensional mobility of 1 to 2 Marines per mechanism.

2. ONR 30 is also seeking information from US and non-US sources to identify new concepts, areas of research and approaches to increasing dismounted Marine mobility in a 2D-planar or 3-D mission environment. There is a need for new and novel mobility concepts to provide the warfighter with superior combat and tactical mobility in dismounted environments. The concepts of interest are those that currently do not exist as a system or technique, but rather are new phenomenon or technological advances that may produce revolutionary dismounted mobility capabilities in 2 to 10 years. The concepts that enable this capability can include, but are not limited to, managing warfighter material loads, providing environmental protection and conditioning, enhancing warfighter traversing speeds and/or agility, power, and computing capabilities, and may be in the form of an exoskeleton. These concepts should focus on serving one Marine per mechanism.

IV. SUBMISSION INSTRUCTIONS and FORMATTING REQUIREMENTS

a. Responses are requested no later than **24 January 2014 at 4:00PM Eastern Standard Time (EST)**. Any response received after this date will also be considered but may not be included in initial reporting or assessments.

b. All responses should be in PDF format and emailed to the technical point of contact: **Dale Martin (dale.martin20.civ@mail.mil)**. The subject line of the email should read as follows “RFI: Non-conventional 3-dimensional mobility”.

c. All responses must be unclassified. No classified responses will be accepted under this RFI. All information received in response to this RFI that is marked proprietary will be handled accordingly. Responses to this notice will not be returned.

d. Recommended content and submission organization as follows:

1. Cover Sheet – RFI number, company name and address, technical point of contact, printed name, title and email address and date.
2. Table of Contents with page numbers.
3. Technical data to include an assessment paper (marked proprietary in nature) discussing the technical challenges and the available solutions to each of those challenges.

Evidence to validate each solution should be provided. If possible, this paper should not exceed 15 pages including charts/graphs/illustrations.

No cost or pricing information should be provided. Any received will be deleted and destroyed.

e. Small Business Concerns, Historically Underutilized Business Zone (HUBZone) Concerns, Service-Disabled Veteran-Owned Small Business (SDVOSB) Concerns, Small Disadvantaged Business (SDB) Concerns, Women-Owned Small Business (WOSB) Concerns and Veteran-Owned Small Business (VOSB) Concerns are all highly encouraged to respond to this RFI.

V. QUESTIONS AND POINT OF CONTACT

Questions of a technical nature regarding this RFI may be sent to the following Technical Point of Contact:

Name: Dale Martin

Title: Program Officer

Office of Naval Research

Division Code: 30

Address: 6501 E. 11 Mile Road, Warren, MI, 48092

Email Address: dale.r.martin20.civ@mail.mil