I. INTRODUCTION

The purpose of this announcement is to notify interested parties of an Office of Naval Research (ONR) industry day on Wednesday, July 15, 2015. The purpose of this event is to inform industry about areas of research for Fiscal Year (FY) 2017 Quality Metal Additive Manufacturing (QUALITY MADE) Future Naval Capability (FNC). ONR is planning to issue a formal Broad Agency Announcement (BAA) in support of this effort in FY 2015.

II. TOPIC DESCRIPTION

Additive Manufacturing (AM) is a disruptive manufacturing process that will enable reliable and cost effective low-volume manufacturing to increase Fleet readiness. While AM is currently being used or explored across the Naval Enterprise, technology development is still necessary to accelerate the use of additively manufactured metallic components. In particular, technology development is required to reduce the time and cost of associated with deploying qualified/certified AM metallic components for use in Naval Air, Sea, and Ground platforms.

The focus of this effort is to develop and integrate the suite of AM software and hardware tools required to ensure that critical metallic components can be consistently produced and rapidly qualified in a cost effective manner. The tool set envisioned would include (i) Integrated Computational Materials Engineering (ICME) based Modeling and Simulation (M&S) design tools, (ii) in situ process/inspection sensors, and (iii) AM process control system. The intent of the QUALITY MADE program is to advance the technological maturity of this integrated tool set from a Technology Readiness Level (TRL) 3/4 to TRL 6. An important aspect of this program is that these tools be installed and demonstrated on AM equipment owned/operated in at least two (2) Navy Warfare Centers/Organic Maintenance Facilities.

The tool set developed will be demonstrated by producing parts using two (2) alloys and two (2) AM processes. Two (2) alloys of high Navy interest are the AM analogs of Ti-6Al-4V and Al-Mg-Si for castings; the processes of interest to the Navy include (i) the powder bed and (ii) directed energy AM systems. Note: if funding permits, the Navy will also pursue a third alloy, e.g., 304 or 316L stainless steel.

III. INDUSTRY DAY

ONR will hold an Industry Day on July 15, 2015. There is no registration fee for participation.
ADVANCED REGISTRATION IS REQUIRED.

The QUALITY MADE Industry Day will be held at the following location:

Stonegate 2 Conference Center  
15052 Conference Center Drive  
Chantilly, VA 20151

Check-in will begin at 8:00AM Eastern Standard Time (EST) and the meeting will begin at 9:00AM EST. Details concerning registration for this event are available at the following website:

https://www.onlineregistrationcenter.com/register.asp?m=4269&c=113

Note: The website will close for registration at 1700 EST, Friday, July 10th, 2015 but will remain available for access to presented materials.

* All briefings will be unclassified. A formal agenda will be provided to confirmed attendees. No time will be allocated for industry briefings at this venue; however, there will be time allocated for questions and answers.

IV. SIGNIFICANT DATES AND TIMES

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<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Time</th>
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<tbody>
<tr>
<td>QUALITY MADE Industry Day</td>
<td>July 15, 2015</td>
<td>8:00 AM</td>
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V. POINTS OF CONTACT

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