

**Amendment 0002  
Solicitation Number ONRBAA13-005  
Electronic Warfare Technology**

**14 JAN 2012**

The purpose of Amendment 0002 is to provide the industry day list of attendees and to provide answers to questions received during industry day.

1. The list of industry attendees is as follows:

	<b>Last</b>	<b>First</b>	<b>Company / Organization</b>
<b>1</b>	<b>Ahmed</b>	<b>Mohiuddin</b>	<b>HRL Laboratories</b>
<b>2</b>	<b>Aman</b>	<b>Ahmad</b>	<b>Applied Physical Sciences Corp</b>
<b>3</b>	<b>Arjona</b>	<b>Talin</b>	<b>CACI/ONR</b>
<b>4</b>	<b>Badami</b>	<b>Robert</b>	<b>Kratos-CTI</b>
<b>5</b>	<b>Bencal</b>	<b>Christopher</b>	<b>Raytheon, Integrated Defense Systems (IDS)</b>
<b>6</b>	<b>Bingold</b>	<b>Joe</b>	<b>Tektronix Component Solutions</b>
<b>7</b>	<b>Bojarski</b>	<b>Gene</b>	<b>Saab Sensis Corporation</b>
<b>8</b>	<b>Boyer</b>	<b>Roger</b>	<b>Applied Research Associates Inc.</b>
<b>9</b>	<b>Chapman</b>	<b>David</b>	<b>Scientific Research Corporation</b>
<b>10</b>	<b>Craig</b>	<b>Pete</b>	<b>ONR</b>
<b>11</b>	<b>Crowe</b>	<b>John</b>	<b>SRI International</b>
<b>12</b>	<b>Dao</b>	<b>Son</b>	<b>HRL Laboratories</b>
<b>13</b>	<b>Davis</b>	<b>Jim</b>	<b>Mercury Systems</b>
<b>14</b>	<b>Davis</b>	<b>Albert</b>	<b>Advanced Technology Labs of Lockheed Martin</b>
<b>15</b>	<b>Dickerson</b>	<b>Roger</b>	<b>Georgia Tech Research Institute</b>
<b>16</b>	<b>Dorsey</b>	<b>David</b>	<b>Advanced Technology Labs of Lockheed Martin</b>
<b>17</b>	<b>Edwards</b>	<b>Armatha</b>	<b>Raytheon</b>
<b>18</b>	<b>Edwards</b>	<b>Steven</b>	<b>Curtiss-Wright Controls Defense Solutions</b>
<b>19</b>	<b>Egri</b>	<b>Robert</b>	<b>Raytheon BBN Technologies</b>
<b>20</b>	<b>Ellis</b>	<b>Ken</b>	<b>Northrop Grumman</b>
<b>21</b>	<b>Espinosa</b>	<b>Ron</b>	<b>Curtiss-Wright Controls Defense Solutions</b>
<b>22</b>	<b>Evans</b>	<b>Keith</b>	<b>Kyma Technologies Inc.</b>
<b>23</b>	<b>Fasenfest</b>	<b>Kathleen</b>	<b>TE Connectivity</b>
<b>24</b>	<b>Filipovic</b>	<b>Dejan</b>	<b>University of Colorado at Boulder</b>
<b>25</b>	<b>Fountain</b>	<b>Tim</b>	<b>Tektronix Component Solutions</b>
<b>26</b>	<b>Fowler</b>	<b>Michael</b>	<b>Virginia Tech</b>
<b>27</b>	<b>Franciose</b>	<b>Randy</b>	<b>Raytheon</b>
<b>28</b>	<b>French</b>	<b>Matthew</b>	<b>University of Southern California</b>

29	Fuchs	Kim	IMPACT Science & Technology
30	Geiler	Anton	Metamagnetics, Inc.
31	Geist	John	Harris Corporation
32	Giliberto	Joseph	L-3 Communication Systems
33	Haigh	Karen	BBN Technologies
34	Harris	Fredrick	Specom, Inc
35	He	Donya	DRS
36	Hilsabeck	Terance	General Atomics
37	Holden	Suzanne	ITT Exelis
38	Horne	David	BAE Systems
39	Huettner	Steve	Nuvotronics, LLC
40	Hunter	Wayne	DRS
41	Jensen	Joseph	HRL Laboratories
42	Jesswein	Tom	CACI/ONR
43	Johnson	Michael	Northrop Grumman
44	Johnson	Peter	Northrop Grumman
45	Juett	Adrienne	Metron Inc.
46	Kalayjian	Zaven	Applied Physical Sciences Corp
47	Karageorgis	Markos	Booz Allen Hamilton
48	King	Oliver	Rockwell Collins
49	Knight	Michael	ITT Exelis
50	Kucera	Chris	Analytical Graphics, Inc.
51	Kusuda	Bob	CACI/ONR
52	Lowdermilk	Robert	Specom, Inc
53	Lyons	Thomas	Harris Corporation
54	Martorana	Marc	ITT Exelis
55	McClure	Mark	Systems & Technology Research
56	McCreary	JD	GTRI
57	Mennell	William	BAE
58	Merkel	Kris	S2 Corporation
59	Moore	Vern	Kratos Defense\Electronic Products Division
60	Murray	Kenneth	SRI International
61	Myers	Cory	BAE Systems Technology Solutions
62	Nguyen	Huan	ITT Exelis, Inc.
63	Normoyle	Robert	Johns Hopkins APL
64	Norris	Alan	Mercury Systems
65	O'Hara	Sean	SRC Inc.
66	O'Keeffe	James	TE Connectivity
67	Olson	Jim	MacAulay Brown, Inc.
68	Orr	Matthew	ITT Exelis
69	Ottaviano	Joseph	Lockheed Martin Maritime Systems & Sensors

70	Paddack	Allan	BAE Systems
71	Prior	Leslie	Rockwell Collins
72	Pucci	Mark	Applied Communication Sciences
73	Quan	Ming	University of Southern California
74	Radway	Matthew	University of Colorado at Boulder
75	Rickenbach	Brent	Advanced Information Systems
76	Ridder	Jeffrey	Raytheon Space & Airborne Systems
77	Robinson	Michael	Raytheon
78	Rosenbluth	David	Lockheed Martin Advanced Technology Labs
79	Ruce	Kevin	L-3 Communication Systems-West
80	Rudd	Kevin	ONR
81	Russon	Marc	L-3 Communications
82	Saultz	James	Lockheed Martin Advanced Technology Labs
83	Shur	David	Applied Communication Sciences
84	Slingerland	Philip	Metron Inc.
85	Smith	Michael	L-3 Communications
86	Sparrow	Mitch	ITT Exelis
87	Spasojevic	Predrag	Rutgers
88	Sputz	Sharon	BAE Systems
89	Stein	Shane	CACI/ONR
90	Stouch	Dan	Charles River Analytics Inc
91	Stover	Patrick	Annapolis Micro Systems, Inc.
92	Straatveit	Nils	SeeSignals LLC
93	Suresh	Raja	General Dynamics Advanced Information Systems
94	Sutphin	Stan	Georgia Tech Research Institute
95	Thornton	Wayne	Charles River Analytics Inc
96	Tilghman	Paul	Lockheed Martin Advanced Technology Labs
97	Waterston	John	SRI International
98	Wigge	Maureen	SRC Inc.
99	Wood	Jerry	Cobham Defense Electronics
100	Woods	Jeffrey	Northrop Grumman
101	Wright	William	Applied Physical Sciences Corp
102	Wu	Ryan	Saab Sensis Corporation
103	Zarnich	Robert	Metron, Inc.

2. Questions and Answers are as follows:

**Question 1: Can Offerors team with Government organizations/agencies, e.g. NASA, when submitting white papers?**

Answer 1: Yes, however, the Offeror must describe how the teaming arrangement will be executed, and which entity has the lead role. Also, we prefer to see a single proposed effort instead of a group of proposals with aligned efforts. If the Government organization is in the position to lead a combined effort then it should be submitted in accordance with the Call for White Papers and not the BAA. The white paper should clearly indicate how the work will be divided among the participants, the roles of each, and recommend a contracting strategy for industry/academic participation (ONR contract (industry) or grant (academia)? Lab contract? Other contract vehicle?). Note that in such a combined effort the Government organization participation should have a clear technical added value and not just act as project manager or as a contracting facilitator.

**Question 2: Are the other Services' S&T organizations co-funding BAA 13-005, and how should Offerors address Service-specific capability needs?**

Answer 2: Offerors are encouraged not to tailor their white papers to meet a Service's specific needs, but should focus instead on the technology itself. The "Operational Naval Concept" section of the white paper provides the military context of the proposed research and relationships to Service-specific needs can be articulated there. Funding or co-funding by the other Services has not been finalized, but they do have an interest in potential solutions that are submitted under this BAA and will be part of the review process. If the other Services are interested in supporting specific white paper topics, then there are several funding options available that can be explored.

**Question 3: Research area D in the BAA, Innovative EW Concepts, is viewed as being lower in priority than the other areas. Is there a priority ranking for research areas A, B, and C?**

Answer 3: No. All three primary research areas (A, B, and C) in the BAA are equally important/ranked.

**Question 4: For research area C in the BAA, is the intent to focus solely on RF emulation, or to have the capability to include threat emulation and being able to test/assess EA techniques?**

Answer 4: The intent of research area C is to create a real-time virtual test environment in which the Government will be able to assess and evaluate the effectiveness of newly developed cognitive and adaptive EA techniques and systems against a range of specific threat targets and threat classes. The environment should allow the Government to incorporate classified databases of threat targets/classes, but the solution itself can remain unclassified. It is not the Government's intent for an Offeror to create/generate threat databases of any kind.

**Question 5: For BAA research area A.2, Spectrum Learning, is an Offeror required to address all of the sub-research topics, i.e. "a" through "h," in a single white paper?**

Answer 5: No. The sub-research areas in A.2 are not meant to be inclusive. An Offeror may submit a white paper that addresses only one or a mixture of the sub-research topics. However, white papers that address greater numbers of the sub-research topics could be viewed as providing greater value to the Government.

**Question 6: What does ONR mean by the term "coloring" with respect to databases? For instance, does the term imply signal degradation based on real-time environmental and/or system effects to simulate realistic scenes instead of using the actual (unaltered) values given in a database?**

Answer 6: ONR's use of the term "coloring" is meant to identify how a signal/information is affected by real world situations/interactions vs. ideal conditions. The implied definition stated in the question is an accurate representation of the Government's intent.

**Question 7: For Offerors who have potential solutions that address aspects of multiple research areas, e.g. A1, A2, A3, and B, how should they submit or categorize their white papers? Should an Offeror submit multiple white papers that cover each research area individually?**

Answer 7: Please decide which is the primary research area from Section 6 of the BAA that you wish to address, but you are free to cite other secondary research areas that also apply. We may assign groups of SME's to review the papers by research area so it is important to specify the area that you feel is best aligned to your technology. Research area D (other innovative EW concepts) should only be used for white papers that don't fit elsewhere. Any Offeror can submit as many white papers as they want to, but each individual proposed effort (with a defined technical objective, approach, and set of deliverables) should be limited to a single 4-page white paper. Each white paper should be able to identify a primary research area (A1/A2/A3/A4, B, C, or D) that it is addressing from Section 6 of the BAA (Research Opportunity Description), but can identify multiple additional secondary areas as well. I would discourage a single company from submitting multiple white papers in which each one develops a separate piece of a system, since it would require all of the efforts to be funded to get a complete product. In general each white paper should stand on its own merits and not be tied to any other white papers.

**Question 8: Are white papers that maximize the effectiveness of stealth technologies within the scope of this BAA?**

Answer 8: If the proposed solution is intended for use on a stealth-only platform, then ONR has limited interest in the white paper. However, if the concept is truly innovative and revolutionary by providing beyond current state-of-the-art stealth capabilities to a multitude of platform classes, then the Offeror is encouraged to submit a white paper under research area D, Innovative EW Concepts.

**Question 9: For research area B, is the intent to focus on developing the front-end components, or the back-end processing technologies?**

Answer 9: The intent of research area B is to focus on back-end processing technologies only. Previously released BAAs are developing the front-end components.

**Question 10: The research areas listed in this BAA appear to provide an opportunity for future component integration into a single system(s). Is it ONR's intent to have the Offerors collaborate to help further component integration?**

Answer 10: Not under this BAA. It is ONR's intent in the future to integrate past, current, and future EW D&I technologies that have been/are being developed under BAAs to create prototype systems that provide new capabilities to the Fleet/Force. For this purpose, ONR intends to issue future BAAs that will encourage past performers who previously developed BA 6.2 technologies to form teams for integrating

these technologies to create innovative EW prototype systems/subsystems. However, the form and schedule of these future collaborations is still under consideration and will not factor into the evaluation of white papers submitted for the current BAA.

**Question 11: Is this BAA targeted to solve generic naval needs, or is it focused on a specific naval operations requirement?**

Answer 11: This BAA is focused on solving broad naval S&T challenges, and is not targeting a specific naval/joint command for transition at this time. Identifying transition opportunities is more applicable to Future Naval Capability programs, which can be supported by the D&I technologies developed under this and prior BAAs.

**Question 12: For research area C, how would you characterize the typical end user for the technologies being developed, e.g. is it being developed for use by laboratory personnel?**

Answer 12: Yes. Solutions under research area C are intended to be used by DoD research laboratory personnel, e.g. the Naval Research Laboratory, for testing and evaluating EA techniques. However, proposals that also consider how a proposed solution could eventually transition to and be used by the warfighter would be favorably viewed as providing additional value.

**Question 13: Is this BAA only focusing on the RF spectrum, or is EO/IR included as well?**

Answer 13: The RF spectrum is the primary area of interest. However, being able to achieve the same capabilities as described in the research areas for the EO/IR portion of the spectrum is also of interest to ONR.

**Question 14: What is ONR's perspective regarding mission timeline, e.g. is it focused on dealing with a single missile engagement, or beyond?**

Answer 14: The appropriate time element is dependent upon the threat(s)/risk being presented to the warfighter. For example, during a missile engagement, solutions need to be fast enough to respond to the immediate threat. However, for situations where signals change slowly over time, e.g. on the order of hours/days, then proposed solutions need to be able to capture and recognize those changes as well.

**Question 15: For research area B, does "reprogramming" mean the ability to reprogram systems on the fly, or being able to provide software updates to the field in a rapid and efficient manner?**

Answer 15: The intent is to reprogram systems on the fly. However, this does not necessarily mean that ONR is looking for solutions that will completely reprogram a multitude of individual components on the fly, e.g. reprogramming down to the FPGA level. However, having such a capability at the component level may be of interest provided the solution does not introduce vulnerabilities to the system/components.