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[Draft] **White Paper**

**Proposal for Pilot Non Traditional Centers of Excellence at Emerging Research Institutions  
(NTCE/ERI)**

**Primary Objective:** To Engage More Emerging Research Institutions in Applied Research for Support of US Navy Missions

**Secondary Objective:** To Establish more infrastructure within Academia for supporting US Navy Science and Technology efforts.

**Definitions within the context of this proposal:** 1. Emerging Research Institutions: Lower than top-tier academic institutions that award one or more advanced degrees in Science and Engineering and aim to expand their involvement in applied use-directed research in order to achieve top-tier status; 2. Non-Traditional Centers of Excellence: Research centers with SCIF capabilities where one or more academic, industrial, governmental and/or innovation organizations collaborate to share facilities and work jointly on mission directed research and development projects.

**Background:** Top-tier science and engineering academic institutions are distinguished by their involvement in applied mission-directed research efforts in support of national defense agencies such as the United States Navy. All of them host FFRDC's or UARC's with SCIF's that permit their faculty, students and research personnel to engage with program managers at all levels of the R&D funding spectrum. Annual expenditures at these institutions for applied research often exceed the billion-dollar level. Accordingly, their graduates are workforce-ready for making contributions to industry and government agencies, on whose technical challenges they worked during their research studies. This proposal offers an approach that could be considered by the Office of Naval Research for expanding the ranks of institutions capable of making similar contributions to the US Navy Science and Technology enterprise. The approach is an extension of an effort sponsored by NAVSEA 073B between 2009 and 2011, which resulted in the creation of the Coalition for Applied Research (CAR <http://www.coalitionforappliedresearch.ning.com> - see attached brochure and PHNSY Newsletter) which successfully demonstrated the application of Open Innovation approaches to solve a number of technical challenges facing Navy Shipyards in corrosion prevention and maintenance of naval submarines.

**Proposed Tasks:** Task #1 - Organize competition to select one or more pilot ERI to demonstrate the NTCE/ERI program. This will be a multi-step process - 1a) Announce NTCE/ERI program to all institutions that meet the criteria for ERI designation; 1b) Announce NTCE/ERI program to all Navy S&T and R&D program managers, inviting suggestions for candidate technical challenges that could be used for demonstration based on availability of funding; 1c) Select one or more technical challenges as focus for demonstration effort based on the submissions by Navy S&T and R&D program managers; 1d) Organize competition similar to the CAR Applied Innovation Challenge Contest (AICC) but only up to the proposal evaluation stage i.e. 1d-1) Hold Summit to establish ground rules for competition; 1d-2) Solicit proposals from collaborative teams including one or more candidate ERI; 1d-3) Pay site visits to proposing teams to establish capabilities; 1d-4) Evaluate proposals to shortlist candidate ERI for pilot demonstration program. Task #2 - Establish Cooperative Agreement between ONR and pilot ERI/team, consistent with effort proposed in winning proposal(s). Task #3 - Provide Technical Assistance to ONR to coordinate execution and deliverables of pilot NTCE/ERI demonstration effort.

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