PACAR Market Research

In December 2009, NAVSEA Undersea Technology Program co-sponsored a conference in Hawaii to brainstorm on emerging technologies that were available to be transitioned to fight the $6 billion/year war on corrosion. This conference was open to all United States based companies engaged in research and development of innovative technologies, and was announced on the World Wide Web at https://sites.google.com/site/ntcaactus/

Congressman Neil Abercrombie (D-Hawaii), senior congressman representing the 1st District of Hawaii welcomed the participants of the Inaugural Summit of the Non Traditional Center for Advanced Anti-Corrosion for Undersea (NT-CAACTUS)/Pacific Coalition for Applied Research (PACCAR) Summit, which will took place at the East-West Center of the University of Hawaii in Manoa on December 1-3, 2009. This was a gathering of scientists, business leaders and government officials to kick off a new program that would expedite the transition of emerging advanced technologies to Federal and Commercial applications using Open Innovation frameworks.

Under the leadership of the United States Naval Sea Systems Command (NAVSEA) Undersea Technology Directorate, a collaborative community of government agencies, universities, industry and innovation companies aim to bridge the “innovation

valley of death" which delays the transition of new innovations to operational deployment. PACAR is the Hawaii node of the a nation-wide Coalition for Applied Research (CAR), which sought to bring together academia, small business, major industry, government laboratories and other research and development establishments into an Open Innovation community to address long standing technological challenges facing the nation. NT-CAACTUS would be the first in a series of Non Traditional Centers of Excellence (NTCE) that will target key technology areas that are critical to the Federal government and industry.

Federal agencies and industry spend billions of dollars every year to battle and control corrosion of important assets. The proposed center would create the opportunity for new anti-corrosion discoveries to be quickly transitioned to operations by providing the infrastructure to support their validation and qualification for operational use. The diversity of the microclimates on the Hawaiian Islands, along with the nationally acclaimed corrosion laboratory at the University of Hawaii Manoa, makes Hawaii a unique choice for the establishment of this center. The summit was co-sponsored by NAVSEA Undersea Technology Directorate, DARPA, US Army Picatinny Arsenal, University of Hawaii, Guide Star Engineering LLC, Oceanit Inc., Pacific Engineering Inc., Epitaxial Technologies Inc., Trex Enterprises, RRM&A LLC, and organized by the American Heritage Defense Corporation (AHDC), a non profit 501(c)3 research and development corporation based in Washington DC.

The inaugural summit was attended by innovation companies, universities, government laboratories, NAVSEA, as well as Pearl Harbor Naval Shipyard personnel. One major outcome of the summit was the creation of an on line forum for continuing the brainstorming, networking and open innovation (http://coalitionforappliedresearch.ning.com). Other outcomes were the following tasking by NAVSEA for AHDC:

1. Coordinate and engage Pearl Harbor Naval Ship Yard (PHNSY) to identify priority needs to be addressed by Coalition for Applied Research/Non Traditional Centers of Excellence (CAR/NTCE) 2010 NAVSEA Undersea Technology Applied Innovation Challenge Contest. (Completed: 29 Jan 2010)
2. Down-select projects that are deemed feasible based on; a) Availability of innovative emerging technologies; b) Cost of staging the demonstration of those technologies as challenge contests; c) Cost to fund contestants to participate in challenge contest; d) Impact on the NAVSEA Undersea Technology Program Objectives. (Completed: 29 Jan 2010)
3. Announce on line, details of Challenge Contest to CAR Innovation companies. (Completed: 05 Feb 2010)
4. Request participation of innovation companies in challenge contest based on technical capabilities and abilities to find technical partners to participate in the challenge. (Completed: 09 Feb 2010)
5. Invite submission of intent synopses (letters) from prospective contestants (including SBIR Phase II recycling and non-SBIR efforts). (Response by 23 Feb 2010)

6. Coordinate formation of government review and adjudication panels. (Completed: 23 Feb 2010)

7. Convene an Industry Day for prospective contestants at PHNSY to discuss the rules of the competition and adjudication. (Two day event at PHNSY: 24-25 Mar 2010)

8. Request Proposals from Contestants; (Deadline for proposals 16 Apr 2010). See Appendix for list of companies and topics.

9. Government Review of Proposals from Contestants. (Completed: 30 Apr 2010)

The outcome of this review process was the selection of the following four companies to participate in the Challenge contest:

a. Oceanit, Inc.;

b. Trex Enterprises;

c. Epitaxial Technologies, Inc.

d. Guide Star Engineering LLC.

Appendix

Proposal #	Title	Company	Contest Topic #
1	Wireless Intercom System	TREX	1
2	Applied Innovation Challenge	PEI	1,2,4
2	Applied Innovation Challenge	PEI	1,2,4 (2)
2	Applied Innovation Challenge	PEI	1,2,4 (4)
3	Advanced Communication System	Oceanit	1
4	Lightweight Audio Communication	Guidestar Engineering	1
5	Proposed Demonstration of Ballast Tank …	Fulcrum	1
6	Submarine & Shipboard Maintenance Comms	Epitaxial Technologies	1
7	Suit Cooling	Guidestar Engineering	2
8	Personal Cooling System Improvements	Oceanit	2
9	Improved PPE and Elimination of SED	CBI Polymers	1,2,3,4,5 (1)
10	Improved BT Refurbishment Lighting Systems	TREX	3
11	Area Lighting Improvements	Oceanit	3
12	Wearable Suit Lighting for Painting and Blasting	Guidestar Engineering	3
9	Improved PPE and Elimination of SED	CBI Polymers	1,2,3,4,5 (2)
9	Improved PPE and Elimination of SED	CBI Polymers	1,2,3,4,5 (3)
9	Improved PPE and Elimination of SED	CBI Polymers	1,2,3,4,5 (4)
9	Improved PPE and Elimination of SED	CBI Polymers	1,2,3,4,5 (5)

1 Communications
2 Cooling Vest
3 Lighting
4 Hose Static Electricity
5 Personal Protective Equipment (PPE)