FY 2011 Defense Authorization Requests

Project: Autonomous Unmanned Surface Vessel (AUSV)
Request: $5.7 million
Budget Account: RDT&E (Navy)
Suggested Recipient: Harbor Wing Technologies, Inc.
Suggested Location of Performance: Pearl Harbor, HI
Description: Allow the development wind-powered, Autonomous Unmanned Surface Vessel (AUSV) as a cost-effective, high-endurance reconnaissance and persistent surveillance system providing situational awareness to decision makers in support of numerous military and Homeland Security ISR requirements.

Project: Communications Support Environment – State (CSE State)
Request: $10 million
Budget Account: OPAF
Suggested Recipient: JFHQ-HI
Suggested Location of Performance: Various locations
Description: Allow the develop and deployment of a communications capability to enable National Guard Joint Forces Headquarters-States (NG JFHQ-States) to coordinate with primary interagency partners and command and control military forces during all stages of National Guard Civil Support operations. The impact of the CSE-State program will provide documented guidance usable by other entities to develop their own CSE to significantly increase their capability to respond to state emergencies for virtually all envisioned scenarios.

Project: COSITE INTERFERENCE MITIGATION SUITE (CSIMS)
Request: $2.0 million
Budget Account: RDT&E (Navy)
Suggested Recipient: Terasys Technologies LLC
Suggested Location of Performance: Honolulu HI
Description: Allow the development of an electronic filter technology to allow deployed Warfighters to use their radio communications and counter-IED devices simultaneously. Frequently, the Warfighter has been forced to choose between operating the CREW system or the Blue Force radios since both cannot be operated simultaneously. Includes Test & Evaluation (T&E) and Independent Validation and Verification (IV&V) in preparation to install these components on fielded systems.

Project: Counterdrug Operations and Drug Demand Reduction (HICSO)
Request: $3 million
Suggested Recipient: JFHQ-HI
Suggested Location of Performance: Various locations
Description: Allow for the increased support of a very successful anti-drug campaign. In FY 09, the program was involved in the eradication of over 63,000 cultivated marijuana plants and over 8.5 tons of processed marijuana. In addition, 3.5 tons of Methamphetamine, Cocaine, Heroine, and Ecstasy were also seized. This would also increase support to the more than 50 community based organizations and other drug demand reduction (DDR) efforts.

Project: Covert Sensing and Tagging System (CSTS)
Request: $3.6 million
Budget Account: RDT&E (Office of Secretary of Defense)
Suggested Recipient: Progeny Systems Corporation (Hawaii)
Suggested Location of Performance: Pearl Harbor, HI
Description: Allow the continued development a covert unattended sensing and tagging system that exploits vehicle radiated acoustic energy in a jungle riverine and desert environments, and provides acoustic detection and localization and tracking of targets of interest with real-time reporting.

Project: Detection, Tracking, and Identification for ISRTE (Intelligence, Surveillance, Reconnaissance, Targeting and Engagement) of Mobile and Asymmetric Targets
Request: $3.8 million
Budget Account: RDT&E (Navy)
Suggested Recipient: Pukoa Scientific
Suggested Location of Performance: Honolulu, HI
Description: Allow the development of components to support multiple, simultaneous detections, tracking, identification and targeting of asymmetric and mobile threats in Intelligence, Surveillance, Reconnaissance, Targeting and Engagement (ISRTE) operations. Algorithms for the engagement of asymmetric and moving threats in a more complex environment will also be developed.

Project: Eagle Vision Program
Request: $8.1 million
Budget Account: RDAFRA
Suggested Recipient: Hawaii Air National Guard
Suggested Location of Performance: Various locations
Description: Allow the upgrade of Eagle Vision 5 to incorporate a higher resolution U.S. satellite into the system. It is a mobile commercial satellite imagery collection and processing system that is used as a wartime resource in the war on terrorism, as well as a Homeland Security asset. A proven FEMA asset during natural disasters for Hurricane Katrina and Rita, California Fires, Midwest Flooding and every hurricane response sense 2001. This upgrade provides the processors and other associated technical equipment.

Project: Immersive Group Simulation Virtual Training System (IGS-VTS) for the Hawaii Army National Guard
Request: $6.0 million
Budget Account: Other Procurement, Army
Suggested Recipient: Atlantis Cyberspace, Inc.
Suggested Location of Performance: Honolulu HI
Description: Allow the development of a fully immersive, interactive virtual reality simulation platform that provides training opportunities for Hawaii National Guard troops. This type of platform helps keep the readiness of our troops at high levels. The system allows trainers to place groups of soldiers into synthetic training environments that replicate real world conditions, stress reactive and decision-making capabilities, train on appropriate tactics and techniques, and make mistakes in a non-lethal environment.

Project: Internet-Based Installation Environmental Management Information System
Request: $3.0 million
Budget Account: RDT&E (Navy)
Suggested Recipient: Enviance
Suggested Location of Performance: Various Hawaii locations
Description: Allow the demonstration of utility and performance of Enviance's Environmental Management Information System (EMIS) for the Marine Corps. The system will resolve many of the challenges associated with ever-increasing needs to reduce energy use, prevent pollution, and minimize the Marine Corps contribution to greenhouse gas emissions while balancing the need to train the warfighter and pursue the Marine Corps mission. This is a commercial off-the-shelf application that has already been deployed around the world as an established as Industry best practice. Successful demonstrations at Army installations have led to funds being included in the FY 2010 and FY 2011 budgets and POMs. In addition to saving millions of dollars if eventually deployed service-wide, the centralized nature of a system like the Enviance EMIS would provide the Marine Corps for the first time with a single standardized approach to compliance.

Project: Management and Control of a Former Weapons Range
Request: $2.3 million
Budget Account: O&M (Navy)
Suggested Recipient: Kaho`olawe Island Reserve Commission
Suggested Location of Performance: Wailuku HI
Description: Allow the Reserve to provide and a round-the-clock presence. In order for KIRC's program activities to be conducted effectively, strict procedures and protocols relating to UXO safety and avoidance must be followed. Following the 2003 completion of a ten-year UXO clean-up project managed by the Navy, only ten percent of the island was Tier II cleared and only 65 percent was Tier I cleared, leaving 25 percent of the island, plus all of its waters, uncleared of UXO. Therefore, much of the island is off-limits or has controlled and limited access.

Project: Managing and Extending DoD Asset Lifecycles (MEDAL)
Request: $4.0 million
Budget Account: RDT&E (Navy)
Suggested Recipient: Referentia Systems Incorporated
Suggested Location of Performance: Honolulu HI
Description: Allow the development of new netcentric-ready asset health management capabilities and corrosion abatement technologies to maintain helicopter, aircraft, and unmanned systems Mission Capability Readiness (MCR). Decreasing budgets and increasing OPTEMPOs have compounded challenges for the warfighter's Mission Capability Readiness (MCR). The limited availability of asset lifecycle support systems and the need to extend the life of aging platforms is further increasing these challenges. The proposed program will investigate and develop technology concepts aimed at improving the reliability and operational lifespan of equipment essential to the warfighter.

Project: Multiple-Target-Tracking Optical Sensor-Array Technology (MOST)
Request: $5.0 million
Budget Account: RDT&E (Missile Defense Agency)
Suggested Recipient: Oceanit
Suggested Location of Performance: Honolulu HI
Description: Allow the development of the MOST system which will extend capabilities for Assessment of Engagement Success (AES). The MOST system is used during Missile Defense Agency (MDA) test flights to provide valuable mission data to program managers. MOST has demonstrated unique capabilities for AES with both airborne and ground-based live fire missile testing, primarily under the Aegis program.

Project: Reconnaissance and Data Exploitation (REX) System
Request: $7 million
Budget Account: Navy (RDT&E)
Suggested Recipient: Nova-sol
Suggested Location of Performance: Honolulu, HI
Description: Allow the development of improved intelligence, reconnaissance and surveillance (ISR) tools. The Reconnaissance and Data Exploitation (REX) System will enable the implementation of fused HyperSpectral Imaging (HIS) and other Electro Optic (EO) sensors with integrated real time target detection. Combined with state of the art tactical free space laser communications for data transfer and exfiltration, the REX system will provide the inherent benefits of spectral sensing to the modern day warfighter. REX is a benefit to taxpayers because it will leverage existing developed technology into a transitional program for immediate deployment opportunities and warfighter impact.

Project: Resource Assurance
Request: $8.0 million
Budget Account: RDT&E (NGA)
Suggested Recipient: University of Hawaii
Suggested Location of Performance: Honolulu, HI
Description: Allow the capability to support Phase Zero COCOM planning. The Resource Assurance initiative directly supports Phase Zero by providing a global model to fill critical information gaps with a common operating picture and information sharing environment to support accurate and timely policy, technology application and infrastructure project decisions for energy, water and waste processing. The model leverages advancements in visualization science, sensor integration, data collection, communication networks, and high performance computing provided by the unique capabilities of the University of Hawaii, Mississippi State University and a National Laboratory team lead by Oak Ridge National Laboratory. The initiative fills a vital unmet need within the DOD, DOS and DOE by providing a collaborative framework to structure resource strategy development, planning and to provide state of the art resource analysis tools.

Project: STARBASE Hawaii, Annual Operating Allocation
Request: $.3 million
Budget Account:
Suggested Recipient: Hawaii Air National Guard
Suggested Location of Performance: Various locations
Description: Allows the continuation of this outstanding community outreach program. STARBASE Hawaii held its first class in September 2008 and has since completed sessions in 12 schools in the Kea'au / Ka'u / Pahoa Complex and Hilo Districts on the island of Hawaii. The program has now reached over 1,200 mostly 5th grade students. STARBASE Hawaii provides opportunities to help develop a strong foundation of personal direction, self-esteem, teamwork and socialization skills for these disadvantaged students.

Project: STARBASE Academy on the Island of Maui, Hawaii
Request: $.3 million
Budget Account:
Suggested Recipient: HIANG
Suggested Location of Performance: Maui, Hawaii
Description: Allows the expansion of this outstanding community outreach program to Maui. STARBASE HAWAII held its first class in September 2008 and has since completed sessions in 12 schools in the Kea'au / Ka'u / Pahoa Complex and Hilo Districts on the island of Hawaii. The program has now reached over 1,200 mostly 5th grade students. STARBASE Hawaii provides opportunities to help develop a strong foundation of personal direction, self-esteem, teamwork and socialization skills for these disadvantaged students.

Project: Tactical Lighted Rescue Streamer (TLRS) Program
Request: $2.5 million
Budget Account: RDT&E (Navy)
Suggested Recipient: Rescue Technologies Corporation
Suggested Location of Performance: Aiea HI
Description: The Tactical Lighted Rescue Streamer (TLRS) program will leverage the past success and deployment of rescue streamers to develop a multi-functional, personal carry, land and sea signaling device. FY2011 funding is being requested to design, develop, test and evaluate a TLRS product based on the requirements and specifications of the Navy and Army's search and rescue, signaling, vectoring and extraction mission scenarios.

Project: Vigilance Assistance in Screening, Surveillance, and Reconnaissance (VAISSAR)
Request: $6.0 million
Budget Account: RDT&E (Air Force)
Suggested Recipient: Archinoetics, LLC
Suggested Location of Performance: Honolulu HI
Description: Intelligence, Surveillance, and Reconnaissance (ISR) and security systems where humans are required to make decisions using real-time video and platforms that use Remotely Piloted Aircraft (RPA) control, such as the Predator, have no inherent capabilities for assessing the vigilance or awareness state of their operators. Yet, fundamentally, these platforms and systems rely on acute human vigilance to maintain acceptable performance. Given the pervasiveness and diversified application of these systems, it is considered unacceptable and cost prohibitive to require re-engineering these systems to include an internal component for vigilance assessment/assistance. VAISSAR seeks to develop a standalone system to augment these existing systems and meet those systems' needs for vigilance-assistance.

Project: VIRONA (Virtual On-Board Analyst)
Request: $4.0 million
Budget Account: RDT&E (Navy)
Suggested Recipient: BAE Systems
Suggested Location of Performance: Honolulu, HI
Description: Current remote sensing systems have limited ability to adapt in real time to changing missions conditions, such as threats, environment and sensor performance. Effective utilization of multi-sensor systems with autonomous onboard processing requires the adaptive knowledge-based fusion provided by VIRONA, including "scene understanding" algorithms using learning-based and principle-based data fusion techniques, employing intelligent expert analyst-based tenets. VIRONA will also demonstrate the utility of current modeling, simulation, visualization and analysis (MSVA) tools to provide a synthetic environment for effective training and testing in complex scenarios. The development of end-to-end models for the environments and sensors using open-architecture, modular software is a critical component of the VIRONA effort.