



Office of Senator Chris Dodd

The following projects were submitted for consideration in the fiscal year 2010 Defense Appropriations bill. Projects are listed alphabetically:

Item Name: ACES 5 Ejection Seat

Request: \$7,000,000

Account: Research, Development, Test & Evaluation, Air Force

Employment: 50

Intended Recipient: Goodrich Corporation

Suggested Location of Performance (major portion of the work): South Windsor, CT

Purpose/Project Description:

This project has been funded since 2005 to continue advancement of the Advanced Common Ejection Seat (ACES) found in almost every Air Force aircraft, including the F-22, F-15, F-16, F-117, A-10, B-1 and B-2. FY2010 funding will complete testing and qualification of the seat so it can be used in the F-35. This project supports the only domestic supplier of military ejection seats and its modular system will save tens of millions of dollars in acquisition, maintenance and pyro costs for the government. Most importantly, the supplier has proven reliability and performance in its decades of experience building ejection seats for the United States Air Force.

Item Name: Advanced Affordable Turbine Engine Program

Request: \$6,000,000

Account: Research, Development, Test & Evaluation, Army

Employment: 20

Intended Recipient: Pratt & Whitney

Suggested Location of Performance (major portion of the work): Middletown, CT

Purpose/Project Description:

Continued funding for this project would advance the research, development, test and evaluation of the Advanced Affordable Turbine Engine Program for the next generation utility and attack helicopter engine. This program is designed to reduce development and procurement costs and increase horsepower, fuel efficiency and reliability of the engine.

Item Name: Advanced Logistics Fuel Reformer for Fuel Cells

Request: \$5,200,000

Account: Research, Development, Test & Evaluation, Navy

Employment: 29

Intended Recipient: Precision Combustion Incorporated

Suggested Location of Performance (major portion of the work): North Haven, CT

Purpose/Project Description:

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FY2010 funding would complete the final Phase 2 activities to develop a highly efficient, compact, liquid fuel reformer system. This system is necessary to reform fuel into hydrogen reformat to be used in fuel cells being developed for Navy power applications. This technology will enable Auxiliary Power Units to provide electrical power to a variety of shipboard systems with the ability to use a wide range of logistics fuels while operating at a much higher energy efficiency.

Item Name: ANG Block 42 F-16 Engine Upgrade

Request: \$54,300,000

Account: Procurement, Air Force

Employment: 60

Intended Recipient: Pratt & Whitney

Suggested Location of Performance (major portion of the work): Middletown, CT

Purpose/Project Description:

This project provides an immediate, improved combat capability to the Air National Guard Block 42 aircraft which were deployed to Afghanistan and Iraq. This upgrade would make these units fully compatible in combat operations with their Air Expeditionary Force F-16 active duty counterparts. FY2010 funding will bring the upgrade project to 80% completion.

Item Name: Biometrics Identity Management Applications Toolset

Request: \$3,000,000

Account: Research, Development, Test & Evaluation, Defense Wide

Employment: 100

Intended Recipient: L-1 Identity Solutions

Suggested Location of Performance (major portion of the work): Stamford, CT

Purpose/Project Description:

This project supports military requirements for a portable, stand-off, face and iris recognition-at-a-distance portable Biometric Identity Management Applications (BIMA) Toolset. Funding will develop data collection techniques, enterprise-level data sharing, identity management, and the mobile identification and detection of human targets. In order to enlarge the domestic industrial base for this technology, the Department of Defense could use its authority under Title III of the Defense Production Act to ensure this capability meets our military demand.

Item Name: Broad Spectrum Therapeutic Countermeasure to OP Nerve Agents

Request: \$6,500,000

Account: Research, Development, Test & Evaluation, Defense Wide

Employment: 8

Intended Recipient: Biomedisyn Corporation

Suggested Location of Performance (major portion of the work): Woodbridge, CT

Purpose/Project Description:

This project would develop a new pharmaceutical defense against nerve agents, which will satisfy an unmet Department of Defense requirement. FDA mandated animal model testing has already demonstrated the proof of concept and safety of this product.

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Item Name: C-17
Request: \$3,000,000,000
Account: Procurement, Air Force
Line: 5
PE: N/A
Intended Recipient: Pratt & Whitney
Suggested Location of Performance (major portion of the work): Middletown, CT
Purpose/Project Description:

This project would procure 12 C-17 Globemaster III aircraft to increase U.S. airlift capabilities. While C-17s comprise only 60% of the Air Force's strategic airlift fleet, they are flying 80% of all worldwide strategic airlift missions. The alternative to fully modernize and re-engine the aging C-5 fleet is more costly and less effective. In a recent report, the GAO concluded, "It will take seven fully modernized C-5s at a cost of \$132M each to attain the equivalent capability achieved from buying one additional C-17 at a cost of \$276M." In other words, it would cost \$924M to modernize seven C-5s to get the same capability of one C-17 costing \$276M. Additionally, the C-17 sustains more than 30,000 jobs from more than 650 suppliers across 43 states. The aircraft is the only remaining wide-body assembly line in the U.S. If the Air Force does not procure additional C-17s, the supplier base will begin to shutdown this year and the production line will close in 2011.

Item Name: Cogeneration of Power and Air Conditioning
Request: \$3,000,000
Account: Research, Development, Test & Evaluation, Army
Employment: 10
Intended Recipient: DRS Technologies
Suggested Location of Performance (major portion of the work): Bridgeport, CT
Purpose/Project Description:

This project is developing an energy source to replace Army tactical generators. The proposed system would offer up to 29.5% better fuel efficiency and would be 32.7% lighter than the current generator sets, providing better efficiency and a smaller footprint.

Item Name: Common Command and Control System Module
Request: \$9,000,000
Account: Research, Development, Test & Evaluation, Navy
Employment: 65
Intended Recipient: Electric Boat
Suggested Location of Performance (major portion of the work): Groton, CT
Purpose/Project Description:

This project would define and design a Common Command and Control System (CCCS) Module for use on Virginia Class submarines (Block IV/V), SSGN, and the Ohio replacement ships, based on experience gained from earlier Virginia Class ships, US/UK Common Missile Compartment designs and the SSGN Battle management designs. This common module will facilitate rapid reconfiguration of mission equipment, more efficient allocation of watch standers, and mission specific tasking. This new Module will streamline technology refresh and insertion upgrades, and utilize an integrated Life Cycle

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Management Plan across multiple ship classes, thereby reducing Total Ownership Costs.

Item Name: Complete Molten Carbonate Fuel Cell Demonstrator

Request: \$4,500,000

Account: Research, Development, Test & Evaluation, Navy

Employment: 10

Intended Recipient: FuelCell Energy

Suggested Location of Performance (major portion of the work): Torrington and Groton, CT

Purpose/Project Description:

Requested funding would provide a demonstration of the stationary fuel cell's ability to provide electrical power in a grid-independent, highly-efficient, environmentally clean, and cost-effective manner at Naval Submarine Base New London. Once this program is effectively employed, this technology would enable the Defense Department to drastically cut its energy costs.

Item Name: Composite Small Main Rotor Blades

Request: \$4,000,000

Account: Research, Development, Test & Evaluation, Army

Employment: 2

Intended Recipient: Kaman Corporation

Suggested Location of Performance (major portion of the work): Bloomfield, CT

Purpose/Project Description:

This project would provide a replacement composite helicopter blade that would improve the safety, reliability, performance and survivability of existing "Little Bird" aircraft, as well as reduce costs and maintenance hours due to blade replacement.

Item Name: Continuous Active Sonar for Torpedo Detection, Classification and Localization (DCL) Systems

Request: \$5,000,000

Account: Research, Development, Test & Evaluation, Navy

Employment: 70

Intended Recipient: Alion Science and Technology

Suggested Location of Performance (major portion of the work): Mystic, CT

Purpose/Project Description:

In response to the priority need for advanced torpedo defense, and as a result of a series of highly successful demonstrations as part of NAVSEA PMS415's FY07 Torpedo Detection Classification and Localization (TDCL) Demo, the U.S. Navy is moving forward establishing the Anti-torpedo torpedo defensive system (ATTDS) program. Central to the success of the prior TDCL Demo was the application of active sonar technology developed by Alion Science and Technology to PMS415's TDCL Demo System. This system produced the most successful in water DCL system test results to date. This project would leverage these proven technologies and, once combined, have the potential to enable previously unachievable self-defense capability against high threat torpedoes.

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Item Name: DDG-1000 Zumwalt-Class Destroyer Program

Request: President's Budget

Account: Research, Development, Test & Evaluation, Navy

Employment: 600

Intended Recipient: TTM Technologies

Suggested Location of Performance (major portion of the work): Stafford, CT

Purpose/Project Description:

Support the President's budget to complete the design and construction of the third DDG 1000 Zumwalt-class destroyer.

Item Name: DDG-1000 Zumwalt-Class Destroyer Program

Request: President's Budget

Account: Shipbuilding and Conversion, Navy

Employment: 600

Intended Recipient: TTM Technologies

Suggested Location of Performance (major portion of the work): Stafford, CT

Purpose/Project Description:

Support the President's budget to complete the design and construction of the third DDG 1000 Zumwalt-class destroyer.

Item Name: Development of a Long Life Sealed Silver Zinc Electrochemical Cell for Use in Department of Defense Battery Applications Where High Energy and Safety Are Essential.

Request: \$4,800,000

Account: Research, Development, Test & Evaluation, Navy

Employment: 35

Intended Recipient: BST Systems

Suggested Location of Performance (major portion of the work): Plainville, CT

Purpose/Project Description:

This project addresses the Defense Department requirement for rechargeable battery systems for manned and unmanned undersea vehicles. FY2010 funding would provide a sealed, silver zinc battery system capable of providing safe propulsion and auxiliary power to the Navy's underwater vehicles with potential to provide technology for future Lunar and Martian manned missions.

Item Name: Diagnosing and Treating Skeletal Muscular Injuries in Soldiers

Request: \$3,500,000

Account: Research, Development, Test & Evaluation, Army

Intended Recipient: University of Connecticut

Suggested Location of Performance (major portion of the work): Storrs, CT

Purpose/Project Description:

This project continues research on skeletal muscle damage from exertion, blunt trauma and ischemia/reperfusion to identify those at risk for injury and to test the method and target at ameliorating muscle injury.

Item Name: Domestic Production Source for Gun Hard Inertial Measurement Unit

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(IMU)

Request: \$8,000,000

Account: Research, Development, Test & Evaluation, Army

Employment: 20

Intended Recipient: Atlantic Inertial Systems

Suggested Location of Performance (major portion of the work): Cheshire, CT

Purpose/Project Description:

One year of funding supplied in the FY2010 budget would establish a domestic manufacturing capability for gun-hardened Inertial Measurement Units (IMU) within the United States. Currently the Defense Department outsources these products to the United Kingdom. Establishing this capability in Connecticut will provide the Defense Department with a cost effective supply of these precision munitions, which are critical for engaging selected targets at extended ranges with minimum collateral damage.

Item Name: Enabling Optimization of Reactive Armor

Request: \$3,000,000

Account: Research, Development, Test & Evaluation, Army

Employment: 250

Intended Recipient: Ensign Bickford Aerospace and Defense

Suggested Location of Performance (major portion of the work): Simsbury, CT

Purpose/Project Description:

This project would optimize the current Reactive Armor solutions to reduce weight, defeat emerging threats, and develop multi-threat capability enhancements for U.S. Military vehicle survivability programs. This technology will help protect the lives of our troops against enemy attacks such as Improvised Explosive Device (IED) explosions and Rocket Propelled Grenade (RPG) attacks.

Item Name: Experimental Research Transformational Submersible, S201

Request: \$5,000,000

Account: Research, Development, Test & Evaluation, Navy

Employment: 11

Intended Recipient: ProMare, Inc.

Suggested Location of Performance (major portion of the work): Chester and Groton, CT

Purpose/Project Description:

The S201 is an existing, commercial asset which the Navy is using for research, development, testing and evaluation of underwater systems. This project would leverage previous NASA research to adapt a proven hybrid lithium-ion battery/fuel cell power system from the space shuttle orbiter program for underwater vehicle use.

Item Name: F-22

Request: \$3,200,000,000

Account: Procurement, Air Force

Employment: 3,000

Intended Recipient: Pratt & Whitney

Suggested Location of Performance (major portion of the work): Middletown, CT

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Purpose/Project Description:

This project would procure 16 F-22 Raptors to increase U.S. Air Superiority capabilities and ensure a sufficient Attrition Reserve is provided to maintain seven fully equipped squadrons at all times.

Item: F-35

Request: President's Budget

Account: Procurement, Air Force

Employment: 3000

Intended Recipient: Pratt & Whitney

Suggested Location of Performance (major portion of the work): Middletown, CT

Purpose/Project Description:

Support the President's budget for procurement of the F-25 Joint Strike Fighter.

Item Name: F-35 Engine Interchangeability

Request: Report Language

Account: Research, Development, Test & Evaluation, Air Force

Intended Recipient: None

Suggested Location of Performance (major portion of the work): None

Purpose/Project Description:

The FY2010 President's budget did not include the "Alternate Engine" program for the F-35 Joint Strike Fighter, which was under PE 0604800F, Line 80. I respectfully request that this project is not added to the budget this year since it only duplicates an existing capability. The Joint Program Office recently announced that an additional \$5 billion of federal funding would be required to complete this project. This funding could be better used to promote technology that will develop and expand our military arsenal and protect the lives of our troops.

Item Name: Fan Coil Assembly of the Future (FCAF)

Request: \$3,400,000

Account: Research, Development, Test & Evaluation, Navy

Employment: 3

Intended Recipient: DRS Power Technology Inc.

Suggested Location of Performance (major portion of the work): Bridgeport, CT

Purpose/Project Description:

This project would design, build, and test of a variable speed Fan Coil Assembly for Navy Ships. The design would replace outdated equipment from the 1970's. Development of the fan coil assembly would increase cooling capacity, reduce weight, reduce equipment acquisition costs and reduce noise levels.

Item Name: Field Deployable Fleet Hydrogen Fueling

Request: \$4,000,000

Account: Research, Development, Test & Evaluation, Army

Employment: 70

Intended Recipient: Proton Energy Systems, Inc.

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Suggested Location of Performance (major portion of the work): Wallingford, CT

Purpose/Project Description:

This project would develop a 65-100 kg/day hydrogen generator for vehicle fueling. Funding would provide a one-year demonstration to test the optimized system, thereby promoting technology to reduce military reliance on diesel fuel.

Item Name: Fuel Catalyst Heating Plant Retrofit

Request: \$9,900,000

Account: Procurement, Army

Employment: 5

Intended Recipient: Advanced Power Systems International (APSI)

Suggested Location of Performance (major portion of the work): Lakeville, CT

Purpose/Project Description:

APSI would install Fitch Fuel Catalyst devices on existing Army boilers, which will result in reduced fuel usage, lower maintenance cost, and improved emissions with a savings estimated at \$15,000,000 per year for 3 to 4 years. This project will become self sustainable if fully funded this year.

Item Name: Future Dry Dock Shelter (DDS)

Request: \$9,800,000

Account: Research, Development, Test & Evaluation, Defense Wide

Employment: 80

Intended Recipient: Electric Boat

Suggested Location of Performance (major portion of the work): Groton, CT

Purpose/Project Description:

Current Dry Deck Shelters (DDS) carry a Swimmer Delivery Vehicle (SDV) for Special Operations Forces (SOF) personnel to deploy from submarines, but DDSs are approaching end of life. Future DDSs need to be designed to carry a larger Seal Delivery Vehicle and other payloads, like UUVs and UAVs to be delivered from submarines. This program will support systems engineering and concept design for a next generation DDS to support future larger Seal Delivery Vehicles and other payloads. The number of submarines that can deploy Special Operations Forces is increasing, but current DDS capability is limiting the ability to fully utilize this covert national asset. A next - generation DDS is needed now to support a larger SDV, which is in development. A next -generation DDS will allow a larger number of submarines to be able to deploy these vital forces and other tactical payloads, and provide a significant operational capability to Component Commanders.

Item Name: Future Medical Shelter System

Request: \$9,500,000

Account: Procurement, Army

Employment: 37

Intended Recipient: Oxley, Inc.

Suggested Location of Performance (major portion of the work): Branford, CT

Purpose/Project Description:

This project would provide four 21st Century Military Hospital System field

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hospitals. Continued funding would support testing in theater and sustain forward hospital operations, while confirming specifications prior to large scale procurement decisions.

Item Name: Goodrich Terahertz spectrometer

Request: \$5,800,000

Account: Procurement, Defense Wide

Employment: 75

Intended Recipient: Goodrich Electro-Optical Systems

Suggested Location of Performance (major portion of the work): Danbury, CT

Purpose/Project Description:

This project continues development of a highly accurate detection system for hazardous materials such as explosives, chemical agents and biological warfare agents. This project is ideal for use in embassies as well as combat environments. As the sole domestic source of this type of technology, the Department of Defense could use its authority under Title III of the Defense Production Act to achieve full rate production within two years.

Item Name: Hemostatic Combat Gauze

Request: \$6,900,000

Account: Operations & Maintenance, Marine Corps

Employment: 40

Intended Recipient: Z-Medica Corporation

Suggested Location of Performance (major portion of the work): Wallingford, CT

Purpose/Project Description:

This project would outfit each Marine and Marine Reserve unit with life-saving hemostatic (blood-clotting) gauze. Already in use, this product can prevent death and serious injury as result of traumatic bleeding, the number one cause of preventable death in combat.

Item Name: Hybrid Bearing

Request: \$1,000,000

Account: Research, Development, Test & Evaluation, Air Force

Employment: 200

Intended Recipient: Timken Company

Suggested Location of Performance (major portion of the work): Manchester, CT

Purpose/Project Description:

This project would develop bearings for the Joint Strike Fighter that adequately meet the high speeds and temperatures of the expanding mission requirements. This new technology is a hybrid of various materials and coating technologies to be incorporated into the F-35 as result of previous years funding. The project will be completed if fully funded in 2010.

Item Name: Hi-Tech Design for Light Alloy Aerospace and Automotive Parts (HDLAAAP)

Request: \$1,000,000

[Type text]

Account: Research, Development, Test & Evaluation, Air Force

Employment: Various Companies

Intended Recipient: Consortium comprised of Sikorsky, Deformation Control Technology, Boeing, Metal Improvement Company, Allison Transmission and Bell Helicopter.

Suggested Location of Performance (major portion of the work): Stratford, CT

Purpose/Project Description:

This project would develop advanced surface and heat treatment processes for aluminum used by military aircraft, specifically the C-130, C-141, KC-135, and P-3. This will prevent corrosion, creep and creep fractures, thereby reducing maintenance costs and the risk of loss of life to military personnel.

Item Name: Innovative Copper Applications Initiative

Request: \$11,250,000

Account: Research, Development, Test & Evaluation, Army

Employment: Various Companies

Intended Recipient: Copper Development Association

Suggested Location of Performance (major portion of the work): Technology would be utilized by all six companies at their various locations in CT, NY, PA, IA, and IL.

Purpose/Project Description:

Copper and copper alloys are vital in military systems, to include munitions, structural components and electronic equipment. This program would accelerate the development and transfer of copper-related technologies to improve military readiness, energy efficiency and manufacturing sustainability with reduced costs, added value and optimized applications.

Item Name: Integrated Ship and Motion Control Systems

Request: \$4,400,000

Account: Research, Development, Test & Evaluation, Navy

Employment: 15

Intended Recipient: Mystic Innovations Group

Suggested Location of Performance (major portion of the work): Groton, CT

Purpose/Project Description:

This project would improve the design and operation of critical electrical alternatives to hydraulic control elements, increasing the effectiveness of these vessels in Navy and Homeland Security missions.

Item Name: Legacy Aerospace Gear Drive Re-Engineering Initiative

Request: \$2,000,000

Account: Research, Development, Test & Evaluation, Army

Employment: 115

Intended Recipient: AeroGear

Suggested Location of Performance (major portion of the work): Windsor, CT

Purpose/Project Description:

A final year of funding for this project would “launch” this re-engineering technology to design and produce gear and gear boxes for legacy aircraft. When many of

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the suppliers have gone out of business, AeroGear is able to provide these parts to the military at a lower cost and with increased reliability and performance.

Item Name: Lithium Ion Domestic Materials Development

Request: \$4,000,000

Account: Research, Development, Test & Evaluation, Air Force

Employment: 155

Intended Recipient: Yardney Technical Products

Suggested Location of Performance (major portion of the work): Pawcatuck, CT

Purpose/Project Description:

This program would develop and test domestic raw materials required for the production of DOD Lithium Ion Batteries. This will save significant weight and volume while also providing more power and energy in a given space.

Item Name: Man Portable GC-TMS for Chemical Threat Detection and Identification

Request: \$3,000,000

Account: Research, Development, Test & Evaluation, Defense Wide

Employment: 60

Intended Recipient: Smiths Detection

Suggested Location of Performance (major portion of the work): Danbury, CT

Purpose/Project Description:

This project would develop a small, lightweight system that can both detect and identify the full range of chemical warfare agents. The device would be used in rugged, remote locations to identify sources of potential threats in force protection considerations and in homeland security applications.

Item Name: Metals Affordability Initiative

Request: \$10,000,000

Account: Research, Development, Test & Evaluation, Air Force

Employment: 8 Companies from CT

Intended Recipient: Metals Affordability Initiative

Suggested Location of Performance (major portion of the work): Middletown, CT

Purpose/Project Description:

This project funds the MAI, a consortium led by the AFRL intended to maintain leadership in the strategic aerospace metals industrial sector by using technology innovation to increase industrial competitiveness and affordability of weapons systems.

Item Name: Micro-Isotope Power System

Request: \$4,000,000

Account: Research, Development, Test & Evaluation, Air Force

Employment: 4

Intended Recipient: General Atomics

Suggested Location of Performance (major portion of the work): Oxford, CT

Purpose/Project Description:

This project would develop a small battery for ground sensors utilized by intelligence agencies that last up to ten years. These unattended ground sensors are

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critical in gathering covert information regarding the activity and identify of enemy personnel and vehicles and frequently replacing the batteries impedes our data collection and places American lives at risk.

Item Name: Mobile Power Electric Power Distribution Replacement (MEPDIS-R)

Request: President's Budget

Account: Procurement, Marine Corps

Employment: 107

Intended Recipient: Lex Products Corp

Suggested Location of Performance (major portion of the work): Stamford, CT

Purpose/Project Description:

Project is part of the \$40 million Blanket Purchase Agreement with the Marine Corps to replace aging tactical generators and power distribution equipment.

Item Name: Multi-Platform Radar Technology (MP-RTIP) Improvement Program
Integration and Test on Joint Surveillance Target Attack Radar System

Request: \$92,000,000

Account: Research, Development, Test & Evaluation, Air Force

Employment: 500

Intended Recipient: Norden Systems

Suggested Location of Performance (major portion of the work): Norwalk, CT

Purpose/Project Description:

This project supports the continued development of the Wide Area Surveillance MP-RTIP radar system to provide the warfighter with an unsurpassed battlespace management capability able to track targets on the ground and incoming cruise missiles.

In addition, I request the following report language be included:

“The Committee notes that there has been continued discussion of terminating MP-RTIP, in spite of this program’s potential capabilities to produce essential battle management technology and to track in-coming cruise missiles and other low-flying rockets threatening U.S. forces and their allies. With no proposed follow-on platform to the JSTARS, the Committee remains deeply concerned that if the MP-RTIP technology is not transitioned to the JSTARS or another platform, our military would be left without a critical surveillance program. Further, the Committee is concerned that without an active battle management radar program, the ability to reconstitute such a program at a later date will be greatly hindered once the industrial base has dissipated. Therefore, the Committee authorizes \$92,000,000 for the continued develop of this technology.”

Item Name: National Center for Intergraded Civilian-Military Domestic Disaster
Medical Response (YNHHS)

Request: \$7,500,000

Account: Operations and Maintenance, Air Force

Employment: 22

Intended Recipient: Yale New Haven Health System (YNHHS)

[Type text]

Suggested Location of Performance (major portion of the work): New Haven, CT

Purpose/Project Description:

Continued funding of this project will continue development and implementation of integrated civilian-military medical emergency response models across the nation.

Item Name: National Optimal Healing Environments Evaluation Program

Request: \$2,500,000

Account: Research, Development, Test & Evaluation, Army

Employment: 6

Intended Recipient: Saint Francis Hospital and Medical Center

Suggested Location of Performance (major portion of the work): Hartford, CT

Purpose/Project Description:

This project integrates family-centered care, enhanced team practice, personalized electronic health records, and practice redesigns, such as continuous care, open access appointments and holistic and integrated medicine, to treat injured and sick service members.

Item Name: NP2000 Eight Bladed Propeller System, Air National Guard Special Missions C-130

Request: \$18,500,000

Account: Procurement, Air Force

Employment: 40

Intended Recipient: Hamilton Sundstrand

Suggested Location of Performance (major portion of the work): Windsor Locks, CT

Purpose/Project Description:

This project will complete technical data and begin the procurement of NP2000 propeller systems for nine NY LC-130 aircraft, thereby improving performance, reducing costs and increasing reliability/maintainability.

Item Name: Ohio Class Replacement Submarine

Request: President's Budget

Account: Research, Development, Test & Evaluation, Navy

Employment: 7500

Intended Recipient: Electric Boat

Suggested Location of Performance (major portion of the work): Groton, CT

Purpose/Project Description:

Support the President's budget for research and design work for the Ohio class replacement submarine.

Item Name: Open Source Intelligence for Force Protection and Intelligence Analysis

Request: \$3,200,000

Account: Research, Development, Test & Evaluation, Army

Intended Recipient: University of New Haven

Suggested Location of Performance (major portion of the work): West Haven, CT

Purpose/Project Description:

Project expands open source collection/analysis efforts and training for various

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agencies to provide up-to-date information on criminal and extremist activities and trends in Mexico and the United States. The developed database is a comprehensive unclassified database of violence activity along the US/Mexico border to be used by U.S officials.

Item Name: Operationally Responsive EO ISR Satellites

Request: \$42,400,000

Account: Research, Development, Test & Evaluation, Air Force

Employment: 130

Intended Recipient: Goodrich Electro-Optical Systems

Suggested Location of Performance (major portion of the work): Danbury, CT

Purpose/Project Description:

Continued funding will develop the adaptation of mature, field-proven, high-altitude airborne subsystems for Operationally Responsive Space (ORS) applications. The project offers enormous potential for providing enhanced mission capabilities with short development schedules and low life-cycle cost.

Item Name: Optical Fiber Assembly Manufacturing

Request: \$1,000,000

Account: Procurement, Navy

Employment: 110

Intended Recipient: Fiberoptics Technology Inc.

Suggested Location of Performance (major portion of the work): Pompret, CT

Purpose/Project Description:

This project would develop fiberoptic components necessary for the Distributed Aperture Semi-Active Laser Seeker (DASALS) used in the APKWS II low-cost laser-guided munition. Taking into consideration the Full Rate Production volume for APKWS II of 10,000 units per year, full integration of this technology would yield more than a one million dollar savings each year for the Defense Department.

Item Name: Radar Product Support System

Request: \$3,000,000

Account: Procurement, Navy

Employment: 5

Intended Recipient: ASG Information Technologies, Inc.

Suggested Location of Performance (major portion of the work): Wallingford, CT

Purpose/Project Description:

Project would improve the lifecycle planning and increase business process efficiencies associated with the AN/SPS-48E radar upgrades aboard naval surface vessels. The program uses commercially available technology to create a single, integrated and interoperable system that will continually create a common data view for all in-service logistics and engineering processes. This technology will reduce the number of errors and increase logistics effectiveness.

Item Name: Regenerative Fuel Cell Back-up Power

Request: \$1,700,000

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Account: Research, Development, Test & Development, Navy

Employment: 7

Intended Recipient: Infinity Fuel Cells

Suggested Location of Performance (major portion of the work): Windsor, CT

Purpose/Project Description:

This project would continue the development of a solar-powered, modular, grid-independent Regenerative Fuel Cell power generation system for the Naval Air Warfare Center/China Lake. Funding would enable the delivery, testing and evaluation of two prototypes.

Item Name: Resistance-Proof Anti-Viral Treatment-Focus Dengue

Request: \$2,000,000

Account: Research, Development, Test & Evaluation, Army

Employment: 6

Intended Recipient: NanoViricides, Inc.

Suggested Location of Performance (major portion of the work): West Haven, CT

Purpose/Project Description:

This project would conduct research on Dengue Fever in collaboration with the United States Army Medical Research Institute for Infectious Diseases. Because it could take years to develop a vaccine or treatment for Dengue, this anti-viral approach will reduce the opportunity for others to be infected and may prevent progression to the deadlier forms of the disease.

Item Name: Robotics Innovation and Education

Request: \$2,600,000

Account: Research, Development, Test & Evaluation, Army

Intended Recipient: Central Connecticut State University

Suggested Location of Performance (major portion of the work): Hartford, CT

Purpose/Project Description:

This project would improve the maneuverability of remotely operated robotic platforms in difficult and possibly Global Precision System-occluded environments such as alleys, stairwells and building interiors. These robots will protect the lives of service members while operating in urban terrain.

Item Name: Smart Modular Regenerative Off-Grid Hydrogen Fuel Cell

Request: \$2,500,000

Account: Research, Development, Test & Evaluation, Defense Wide

Employment: 7

Intended Recipient: Infinity Fuel Cells

Suggested Location of Performance (major portion of the work): Windsor, CT

Purpose/Project Description:

This project would develop a system of ruggedized modular regenerative hydrogen fuel cells; each composed of separate units in the range of 1 kilowatt to 5 kilowatt output, which can be configured in systems of up to 50 kilowatt or more.

Item Name: Soldier Climate Control

[Type text]

Request: \$5,000,000

Account: Research, Development, Test & Evaluation, Army

Employment: 10

Intended Recipient: United Technologies Research Center

Suggested Location of Performance (major portion of the work): East Hartford, CT

Purpose/Project Description:

This project would expound upon a recently completed DARPA funded activity completed in conjunction with the Army Natick Soldier Systems Center which has developed a thermoelectric climate control system for dismounted soldiers. FY2010 funding would develop and deploy this life-saving technology.

Item Name: Split Discharge Variable Delivery Pump for Military Aircraft

Request: \$5,000,000

Account: Research, Development, Test & Development, Air Force

Employment: 180

Intended Recipient: Goodrich Pump and Engine Control Systems

Suggested Location of Performance (major portion of the work): West Hartford, CT

Purpose/Project Description:

This technology would significantly increase mission time and fuel efficiency in military aircraft, to include Unmanned Aerial Vehicles. It will prevent additional heat rise, creating a safer condition for relatively high concentrations of electronic equipment, and will also save millions of dollars through improved fuel efficiency.

Item Name: TB-33 Thinline Towed Array Production

Request: \$4,000,000

Account: Procurement, Navy

Employment: 35

Intended Recipient: L-3 Chesapeake Sciences Corporation

Suggested Location of Performance (major portion of the work): Stonington, CT

Purpose/Project Description:

This program would provide increased sensor capabilities to maintain acoustic superiority and to meet the U.S. Navy's objectives outlined in Sea Power 21. Funding would procure submarine systems and equipment for installation on all classes of submarines to maintain clear acoustical, tactical and operational superiority in both littoral and open ocean environments.

Item Name: Terahertz Technology for IED Detection

Request: \$2,900,000

Account: Research, Development, Test & Evaluation, Army

Employment: 75

Intended Recipient: Goodrich Electro-Optical Systems

Suggested Location of Performance (major portion of the work): Danbury, CT

Purpose/Project Description:

This project would develop existing technology that can detect explosives by absorbing emitted energy. Improvised Explosive Devices (IED) have killed hundreds of coalition forces in Iraq and Afghanistan and this technology would be critical in helping to

[Type text]

protect the lives of our troops.

Item Name: Tracking the Health of Soldiers with Advanced Implantable Nano-Sensors

Request: \$2,500,000

Account: Research, Development, Test & Evaluation, Army

Intended Recipient: University of Connecticut

Suggested Location of Performance (major portion of the work): Storrs, CT

Purpose/Project Description:

Continued funding of this project would expand the University's work with the Army Medical Research and Materiel Command at Fort Detrick, MD. FY2010 funding would begin the animal-test series of the advanced implantable nano-sensors. These sensors can track a variety of physiological metabolites related to the service members' health, alertness and ultimately their protection.

Item Name: Ultra-compact JP8-to-electrons Kilowatt-scale Army fuel cell system

Request: \$4,500,000

Account: Research, Development, Test & Evaluation, Army

Employment: 29

Intended Recipient: Precision Combustion Incorporated

Suggested Location of Performance (major portion of the work): North Haven, CT

Purpose/Project Description:

This project would design, develop, and begin integrated testing of the multi-kilowatt fuel cell system for vehicle auxiliary electric power generation. Because it is also capable of using logistics fuels, this unique technology is more flexible than other comparable projects.

Item Name: Universal Control - FADEC

Request: \$9,000,000

Account: Research, Development, Test & Evaluation, Army

Employment: 180

Intended Recipient: Goodrich Pump and Engine Control Systems

Suggested Location of Performance (major portion of the work): West Hartford, CT

Purpose/Project Description:

This project develops software/hardware and executes flight testing to ensure that Universal Control Technology covers all present Army helicopters and selected Air Force and Navy applications as well as helping in operations in Iraq and Afghanistan.

Item Name: Unmanned Aerial Vehicle Resupply (UAVR) - BURRO

Request: \$4,800,000

Account: Research, Development, Test & Evaluation, Army

Employment: 10

Intended Recipient: Kaman Corporation

Suggested Location of Performance (major portion of the work): Bloomfield, CT

Purpose/Project Description:

This project would continue the development of the UAV Resupply, an unmanned helicopter capable of carrying 6,000 pounds of cargo. This UAV is designed to deliver

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critical supplies to forces operating in areas for which conventional re-supply schemes are ill-suited due to hostile action, environmental conditions, geographic factors and/or heavy tasking of manned assets.

Item Name: Unmanned Hybrid Projectiles

Request: \$3,000,000

Account: Research, Development, Test & Evaluation, Army

Employment: 30

Intended Recipient: University of Hartford

Suggested Location of Performance (major portion of the work): Hartford, CT

Purpose/Project Description:

This project would develop and test a hybrid unmanned aerial system projectile. This unique munition is being designed to meet the Army's requirement of a low-cost projectile with guidance capabilities to hit targets with low collateral damage from line-of-sight and beyond line-of-sight.

Item Name: VEMSO Approved Fuel Catalyst Vehicle Retrofit Program

Request: \$4,100,000

Account: Operations and Maintenance, Air Force

Employment: 5

Intended Recipient: Advanced Power Systems International (APSI)

Suggested Location of Performance (major portion of the work): Torrington, CT

Purpose/Project Description:

This funding would allow for the installation of the Fitch Fuel Catalyst on a fleet of 14,000 vehicles within the Air National Guard. These vehicles consume approximately 16 million gallons of fuel annually. The Fitch Fuel Catalyst will improve the vehicle fuel economy by as much as 10%, saving the government \$4.65 million annually.

Item Name: Virginia Class Submarine Procurement

Request: President's Budget

Account: Procurement, Navy

Employment: 7500

Intended Recipient: Electric Boat

Suggested Location of Performance (major portion of the work): Groton, CT

Purpose/Project Description:

Support the President's budget for production of the Virginia Class submarine.

Item Name: Virtual Maintenance Engineering Platform (VMEP) Implementation for SSGN Voyage Repair

Request: \$2,640,000

Account: Research, Development, Test & Evaluation, Navy

Employment: 100

Intended Recipient: General Physics Corporation

Suggested Location of Performance (major portion of the work): Mystic, CT

Purpose/Project Description:

[Type text]

This project would provide remote repair capabilities to Ohio class submarines by using video and reconfigurable chassis to interface with shipboard equipment. The Virtual Maintenance Engineering Platform that General Physics Corporation has created over the past seven years is currently operational. Funding this year would ensure the system is Information Assurance compliant and tested by the Navy.