

Fiscal Year 2010 Requests for Defense Authorization and Appropriations

30 April 2009

Item: 101st Airborne/Air Assault Injury Prevention & Performance Enhancement Initiative

Request: \$3,500,000

Suggested Recipient: University of Pittsburgh

Suggested Location: Fort Campbell, KY

Purpose: FY 10 funding will permit final implementation of the Elite Tactical Athlete Program into 101st Division physical training program, identification of subsequent reduced injury rates, development of research methods to support the Warrior Transition Unit, develop and validate deployment-specific training programs, and develop in-theater injury tracking mechanisms.

Item: Air Force Minority Leaders Program

Request: \$20,000,000

Suggested Recipient: Competitive Program

Suggested Location: N/A

Purpose: This program will continue research in the disciplines of materials and processing, sensors, and related enabling academic specialties to meet critical defense capabilities, future S&T workforce, and technical program objectives for the United States Air Force with targeted students and professors from Historically Black Colleges and Universities and Minority Institutions.

Item: Cooperative Anti-Submarine Warfare Display

Request: \$4,000,000

Suggested Recipient: Competitive Program

Suggested Location: N/A

Purpose: A Cooperative Anti-Submarine Warfare (ASW) project will develop and demonstrate new processing software and tactical displays on Navy surface combatants to improve aircraft carrier protection from submarine threats. Project results should include a shipboard collaborative display whose ASW tactical picture is generated by a cross-platform 'netted' sensor processing system.

Item Name: Counter Drug Task Force/Appalachia High Intensity Drug Trafficking Area

Request: \$5,000,000

Suggested Recipient: Tennessee National Guard Counter Drug Task Force

Suggested Location: Tennessee State-wide

Purpose: Anti-drug activities of the Tennessee National Guard Counter Drug Task Force have and will continue to create a safer environment for the state and nation. Funding for this project will provide continued military support for the drug stricken areas of Tennessee.

Item: HMMWV Egress Assistance Trainer (HEAT)

Request: \$200,000

Suggested Recipient: Tennessee National Guard

Suggested Location: Nashville, TN

Purpose: Funding would facilitate the procurement of one HEAT to appropriately prepare soldiers for the operational environment.

Item: Initiative to Advance Adaptive Petascale Supercomputing

Request: \$60,000,000

Suggested Recipient: Oak Ridge National Laboratory (ORNL) & National Security Agency (NSA)

Suggested Location: Oak Ridge, TN

Purpose: Funding would continue to expand NSA's partnership and investments in computing facilities, high-end computing systems, advanced technology, and research at ORNL.

Item: Kinetic Energy Enhanced Lethality and Protection Materials

Request: \$2,000,000

Suggested Recipient: Competitive Program

Suggested Location: N/A

Purpose: Funding will support in-depth analysis, testing and demonstration of four leading possibilities for using tungsten as a depleted uranium replacement in Army ammunition: Layered Long Rod Composite; Nanostructures for Severe Plastic Deformation; Steel Jacketed Tungsten Penetrators; and, Infiltrated Solid State Sintered Penetrators.

Item: Low Cost Bismaleimide (BMI) Fabrication Certification

Request: \$1,500,000

Suggested Recipient: Competitive Program

Suggested Location: N/A

Purpose: Funding will qualify a new, lower cost BMI resin system for use on the F-22 and the F-35 Joint Strike Fighter to produce cost savings to the Air Force of up to \$50 million per year for resin costs.

Item: Lung Injury Management

Request: \$3,400,000

Suggested Recipient: Competitive Program

Suggested Location: N/A

Purpose: This research, involving military recruits and combat personnel with lung injury, will collect and evaluate data on the impacts of daily oral supplementation in reducing the incidence of respiratory diseases.

Item: MRAP Virtual Trainer

Request: \$5,000,000

Suggested Recipient: Tennessee National Guard

Suggested Location: Nashville, TN

Purpose: Funding would procure a MRAP Virtual Trainer to support the training requirements of the Tennessee National Guard for convoy operations in the current operating environment.

Item: Partnership for Energy and Automation Technology

Request: \$10,000,000

Suggested Recipient: Competitive Program

Suggested Location: N/A

Purpose: Imaging and automation are needed technologies in many renewable energy processes including: Fermentation and Hydrolysis during the conversion of switch-grass to ethanol; Hydrogen systems: fuel cells, Storage, transportation, and refueling; and, Safety inspection and remote operation of nuclear systems. Funding would support a competitive university program to provide these needs for the military community.

Item: Rapidly Deployable Shelter Systems

Request: \$4,000,000

Suggested Recipient: Tennessee National Guard

Suggested Location: Nashville, TN

Purpose: Funding for this project will be used to acquire newly developed, multi-purpose, rapidly deployed shelter systems for use in meeting immediate disaster preparedness requirements and short term operational needs in combat environments and for training guardsmen in the use and support of such systems.

Item: Renewable Power for Forward Operating Bases

Request: \$6,000,000

Suggested Recipient: Competitive Program

Suggested Location: N/A

Purpose: The purpose of this project is to demonstrate the ability of a Micro Grid system to manage, distribute, and prioritize power at remote sites for the military such as forward operating bases to improve efficiency and reduce energy consumption by up to 50%. A Micro Grid system would greatly reduce fuel costs and reduce the occurrence of convoys to resupply forward bases.

Item: Robust Scramjet Research

Request: \$4,200,000

Suggested Recipient: Competitive Program

Suggested Location: N/A

Purpose: Funding should provide for a low cost, risk reduction effort to support hypersonic flight research activities leading to full flight tests of a Mach-5 powered demonstration vehicle. These funds should also provide risk reduction for technologies to be used in a subsequent joint high speed strike weapon development program.

Item: US Army Operator Driving Simulator

Request: \$350,000

Suggested Recipient: Tennessee National Guard

Suggested Location: Nashville, TN

Purpose: Funding would facilitate the procurement of one US Army Operator Driving Simulator to provide adequate trainer for soldiers operating medium and heavy trucks.