

Defense Appropriations FY 2011

Item Name: 210K Fuel Storage Bladder

Request: \$30,000,000

Location: Picayune, MS

Intended Recipient: Applied Geo Technologies, Inc.

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Manufacturing of 210K fuel storage bladders under production contract from US Army Tank Automotive Command.

Item Name: 3080F Halvorsen 25k Loader

Request: \$9,700,000

Location: Tupelo, MS

Intended Recipient: JBT Corporation (FMC Technologies is subcontractor in Tupelo, MS)

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Continue production of Halvorsen 25k Loader for USAF.

Item Name: Advanced Integrated Microsystems for Military Systems (AIMMS)

Request: \$8,000,000

Location: Starkville, MS

Intended Recipient: Camgian Microsystems Corporation

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: The AFRL AIMMS program is a follow-on effort that is developing next generation semiconductor technologies that have demonstrated the potential to radically improve the size, weight, power consumption and cost of critical USAF intelligence, surveillance.

Item Name: Advanced Materials Design for Nano Devices

Request: \$2,230,000

Location: Starkville, MS

Intended Recipient: Mississippi State University

Benefit to Taxpayer: This project leverages university efforts to support national defense.

Project Purpose: The purpose of this project is to develop unique and innovative materials and magnetic memory elements for high-density nanoscale memory devices and nanosensors for chemical warfare agents.

Item Name: Advanced Novel Drug Development for the Warfighter

Request: \$3,750,000

Location: Starkville, MS

Intended Recipient: Cenomed Research LLC/MSU Project

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: A unique multi-disciplinary program between industry, academia and USG. The goal is to employ novel strategies to discover/identify compounds that can be developed to aid in brain injury (PTSD, Chem warfare, TBI etc).

Item Name: Advanced, Long Endurance Unattended Ground Sensor Technologies

Request: \$8,000,000

Location: Starkville, MS

Intended Recipient: Mississippi State University

Benefit to Taxpayer: This project leverages university efforts to support national defense.

Project Purpose: The project will develop a compact, covert, low power radar, aiming at a radar-on-a-chip, for intelligence surveillance and reconnaissance missions for use in UGS, UAV and other portable, low power applications.

Item Name: Air National Guard (ANG) Joint Threat Emitter (JTE) - Procurement

Request: \$7,500,000

Location: Gulfport, MS

Intended Recipient: Northrop Grumman Corporation (NGC)

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: The JTE System simulates combat signals and is designed to provide realistic electronic warfare training for pilots and aircrew members. The Joint Threat Emitter will replace several older, harder-to-sustain and cost prohibitive threat emitters.

Item Name: Aircraft Active Corrosion Protection Compounds

Request: \$2,000,000

Location: Tupelo, MS

Intended Recipient: Rite-Kem, Incorporated

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Rite-Kem and MSU are commercializing novel compounds into a product which will provide for the first time active corrosion protection and help address the upwards of \$20B corrosion cost to the DoD.

Item Name: Antimicrobial Army Mobile Medical Facilities

Request: \$4,100,000

Location: Grenada, MS

Intended Recipient: Luvata Grenada

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Develop and construct a full-scale adaptation of an Army mobile medical treatment facility for a demonstration of utilizing equipment proven to be antimicrobial in order to reduce warfighter susceptibility to opportunistic infections from the field.

Item Name: Army Responsive Tactical Space (ARTS)

Request: \$8,000,000

Location: Iuka, MS

Intended Recipient: Miltec

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: This effort is a follow-on to the successful SMDC-ONE spacecraft development completed 2009, and scheduled for demonstration flight in May 2010. The request will fund operational support of 3 additional SMDC-ONE nanosatellite launch opportunity.

Item Name: ASW Littoral Environmental Remote Tag (ALERT)

Request: \$5,000,000

Location: Long Beach, MS

Intended Recipient: QinetiQ-North America

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: ALERT is SONAR designed to provide persistent surveillance/intelligence data collection and dissemination in shallow-water environments for missions lasting from several months to a year.

Item Name: Automated Picoliter Digital Nucleic Acid Analysis

Request: \$11,450,000

Location: Tupelo, MS

Intended Recipient: QuantaLife Incorporated

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: This program will provide the DoD with a critically needed capability to evaluate an ultra-rapid biologic detection and diagnostic system which is portable, highly accurate, and cost effective.

Item Name: Blast and Impact Resistant Composite Structures for Navy Ships

Request: \$3,000,000

Location: Oxford, MS

Intended Recipient: The University of Mississippi

Benefit to Taxpayer: This project leverages university efforts to support national defense.

Project Purpose: To use the latest technologies in modeling analysis, fabrication and testing of blast, shock, ballistic and impact resistant composite structures for the new generation navy ships for better mobility, survivability, stealth, and safety at lower cost.

Item Name: Center for Intelligence and Security Studies (CISS)

Request: \$3,000,000

Location: Oxford, MS

Intended Recipient: The University of Mississippi

Benefit to Taxpayer: This project leverages university efforts to support national defense.

Project Purpose: The Center for Intelligence and Security Studies at The University of Mississippi offers an academic program in intelligence analysis. The program also conducts outreaches through a consortium and contributes research in intelligence studies.

Item Name: Chemical Materials and Environmental Modeling Project

Request: \$2,800,000

Location: Jackson, MS

Intended Recipient: Jackson State University

Benefit to Taxpayer: This project leverages university efforts to support national defense.

Project Purpose: This initiative will establish a collaborative, multi-disciplined and integrated research and education strategy focusing on biomolecular and computational studies of warfare agents and structurally-related compounds.

Item Name: Civil & Coalition Imagery Dissemination System

Request: \$3,000,000

Location: Gulfport, MS (Stennis Space Ctr)

Intended Recipient: Rockwell Collins Intelligence Solutions

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: To allow unclassified imagery to be received real time with U.S. civil agencies, as well as with coalition military partners.

Item Name: Civil Support Radios for MSARNG CH-47 Aircraft

Request: \$700,000

Location: Jackson, MS

Intended Recipient: Cobham Corporate North America

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Project is to add civil support radios to MS ARNG CH-47 Chinook aircraft to enable aircrews to directly communicate with first responders when responding to the full spectrum of state emergency missions.

Item Name: Civil Support Radios for MSARNG UH-60 Aircraft

Request: \$2,100,000

Location: Jackson, MS

Intended Recipient: Cobham Corporate North America

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Project is to add civil support radios to MS ARNG UH-60 Black Hawk aircraft to enable aircrews to directly communicate with first responders when responding to the full spectrum of state emergency missions.

Item Name: Composite Air Cushioned Vehicle (CACV) Bouyancy Box

Request: \$1,050,000

Location: Pascagoula, MS

Intended Recipient: Northrop Grumman Shipbuilding Gulf Coast

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Design and Construct a buoyancy box for a CACV Capable of fulfilling the ship to shore connector (SSC) missions. Demonstrate composite material selection feasibility for SSC to increase utility of this next generation landing craft.

Item Name: Composite Deckhouse Detailed Design for DDG 51 Class Ships

Request: \$24,300,000

Location: Pascagoula, MS

Intended Recipient: Northrop Grumman Shipbuilding Gulf Coast

Benefit to Taxpayer:

Project Purpose: Develop a composite deckhouse detail design for DDG 51 class ships to substantially increase both displacement and stability margins. Future incorporation of Advanced Missile Defense Radars and other potential growth areas.

Item Name: Corrosion Control, Prevention, and Prediction through Polymer R & D

Request: \$6,000,000

Location: Hattiesburg, MS

Intended Recipient: University of Southern Mississippi

Benefit to Taxpayer: This project leverages university efforts to support national defense.

Project Purpose: The overall goal is to develop adequate screening protocols for early detection and characterization of corrosion failure through real and model coatings systems, novel materials, and real versus accelerated weathering.

Item Name: Cyber Security/Intelligence Academic Initiative

Request: \$1,000,000

Location: Hattiesburg, MS

Intended Recipient: University of Southern Mississippi

Benefit to Taxpayer: This project leverages university efforts to support national defense.

Project Purpose: The US Air Force and US Navy have announced the stand up of their respective Cyber Security Commands and have selected Keesler Air Force Base (KAFB) and NAS Pensacola (NASP) as schoolhouses for training and education to support those service commands.

Item Name: DDG-51 Hybrid Drive System

Request: \$10,000,000

Location: Shannon, MS

Intended Recipient: General Atomics

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: The purpose of this project is to continue development of a low-speed hybrid drive propulsion alternative system for the DDG-51 class of ships using advanced motor technologies and power electronics.

Item Name: Development of Improved Radiotherapy Treatment of Lung Cancer

Request: \$2,800,000

Location: Tupelo, MS

Intended Recipient: North Mississippi Health System

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Test and evaluate new technology that track breathing rates to increase radiation therapy accuracy.

Item Name: Development of standard electro-thermal models for high-power SiC base

Request: \$9,000,000

Location: Starkville, MS

Intended Recipient: SemiSouth Laboratories, Inc.

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: High-power SiC based modules are needed in hybrid electric ground transport and combat vehicles. This project develops accurate, common platform electrothermal computer models of SiC power semiconductor components.

Item Name: Directional Spectral Wave Generator Upgrade

Request: \$3,000,000

Location: Vicksburg, MS

Intended Recipient: MTS Systems Corporation

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Request is to replace the digital controls, software, motors and drives of the existing Directional Spectral Wave Generator system at the ERDC Coastal and Hydraulic Laboratory in Vicksburg, MS to enhance the performance capabilities.

Item Name: DoD Simulation Based Reliability and Safety (SimBRS) Program

Request: \$5,000,000

Location: MS State, MS

Intended Recipient: Mississippi State University

Benefit to Taxpayer: This project leverages university efforts to support national defense.

Project Purpose: The SimBRS program provides a relationship with other universities/corporate entities in research to develop experimentally validated cradle-to-grave modeling/simulation to optimize reliability in vehicular components/systems to decrease weight/cost.

Item Name: Enhanced Reading Capability of Passive RFID Tags on SeaVan Containers

Request: \$3,400,000

Location: Ridgeland, MS

Intended Recipient: WCS Industries

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: To demonstrate the implementation of enhanced reading capability of reusable SeaVan containers used in transporting goods by utilizing the container as an enhanced antenna mechanism for asset ID, location, and tracking for mission critical goods.

Item Name: Extremely Large, Domestic Expendable and Reusable Structures Manufact

Request: \$14,160,000

Location: Iuka, MS

Intended Recipient: ATK Mission Systems - Aerospace Structures Division

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: To scale-up domestic composites manufacturing/processing capacity, including evaluation, modification, qualification & acquisition of automated production equipment & facilities, all to meet emerging & critical military space access requirements.

Item Name: F-15E Radar Common Data Link (RCDL) Demo

Request: \$12,600,000

Location: Forest, MS

Intended Recipient: Raytheon Company

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Leverage completed development efforts on the Air Force's F-15C APG-63(V)3 radar onto the Air Force's F-15E APG-82(V)1 radar.

Item Name: Field Portable Analytical Equipment

Request: \$3,000,000

Location: Starkville, MS

Intended Recipient: Seacoast Science, Inc.

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: To complete testing and development of a field portable analytical equipment for environmental monitoring, site investigations, site remediation, dredging operations, water quality investigations and operations.

Item Name: Four Dimensional Geospatial Visualization for DoD Intelligence Comm.

Request: \$3,000,000

Location: Starkville, MS

Intended Recipient: Mississippi State University

Benefit to Taxpayer: This project leverages university efforts to support national defense.

Project Purpose: Provide senior decision makers, combatant commanders, and field commanders a clearer understanding of critical intelligence information.

Item Name: Geospatial Intelligence, Information, and Analysis (GIIA)

Request: \$1,000,000

Location: Hattiesburg, MS

Intended Recipient: University of Southern Mississippi

Benefit to Taxpayer: This project leverages university efforts to support national defense.

Project Purpose: New program for the training of Geospatial intelligence professionals. The program will provide academic curriculum, research, teaching and interpretation laboratories, and training in global intelligence data collection and analysis.

Item Name: Gulf Coast Land Based Test Facility (LBTF)

Request: \$40,000,000

Location: Pascagoula, MS

Intended Recipient: Northrop Grumman Shipbuilding Gulf Coast

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Test facility to ensure multiple, integrated interfaces perform flawlessly requires: modeling; planning; and component, equipment, and system level pre-assembly; integration; and incremental testing prior to shipboard installation.

Item Name: HBCU Applied Research Incubator (HARI)

Request: \$8,700,000

Location: Jackson, MS

Intended Recipient: Jackson State University

Benefit to Taxpayer: This project leverages university efforts to support national defense.

Project Purpose: HARI addresses the continued opportunities and challenges associated with meeting emerging DoD applied research requests, and the engagement of a new cache of American engineers equipped with the skills needed to meet these requirements.

Item Name: Heron TP UAS

Request: \$15,000,000

Location: Columbus, MS

Intended Recipient: Stark Aerospace, Inc.

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Additional ISR is a top priority for OSD and the COCOMs. Conduct an OPEVAL of the Heron TP ISR UAS capabilities to combat terrorism at home and abroad.

Item Name: High Performance Computational Design of Novel Materials

Request: \$4,000,000

Location: Jackson, MS

Intended Recipient: Jackson State University

Benefit to Taxpayer: This project leverages university efforts to support national defense.

Project Purpose: This initiative will implement studies of novel materials that represent the potential for applications as sensors, coatings and electronic elements and lead to better understanding of chemical reactivity, structures and properties of new materials.

Item Name: High Performance Military Aircraft Noise

Request: \$4,000,000

Location: Oxford, MS

Intended Recipient: The University of Mississippi

Benefit to Taxpayer: This project leverages university efforts to support national defense.

Project Purpose: U.S. Government has spent billions on hearing loss for military personnel. The university has developed a noise reduction concept that does not affect aero-performance using a simple retrofit part.

Item Name: High Performance Polymers for Weapons and Munitions Technology

Request: \$4,300,000

Location: Hattiesburg, MS

Intended Recipient: University of Southern Mississippi

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: ARDEC is collaborating with USM's School of Polymers and high Performance Materials to develop lightweight, high-performance composites, very low-friction surfaces, corrosion reduction and energetic polymers.

Item Name: High Temperature Polymers for Missile System Applications

Request: \$5,500,000

Location: Hattiesburg, MS

Intended Recipient: University of Southern Mississippi

Benefit to Taxpayer: This project leverages university efforts to support national defense.

Project Purpose: To support the development of lighter, more robust materials. High temperature polymers are required for next generation missile systems applications. USM proposes to research, develop, experiment, test, and production of these materials.

Item Name: High-Speed, High-Efficiency, Permanent Magnet Motor/Generator Dev.

Request: \$9,000,000

Location: Shannon, MS

Intended Recipient: General Atomics

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: With anti-ship missile threats evolving, the Navy has an urgent need to increase shipboard power generation to enable advanced radar/weapons to counter them. GA seeks to develop an efficient and compact energy source to upgrade existing ships.

Item Name: Hybrid Multi-Functional Composites for Submarine Structures

Request: \$4,000,000

Location: Gulfport, MS

Intended Recipient: Seemann Composites, Inc.

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: This project will develop a design and manufacturing approach for submarine hybrid multi-functional composite structures that integrate and maximize acoustic performance, structural reliability, and manufacturability.

Item Name: Hybrid Plastics and POSS Nanotechnology Engineering Scale-Up Initiative

Request: \$1,250,000

Location: Hattiesburg, MS

Intended Recipient: Hybrid Plastics, Inc.

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: POSS materials have a broad range of applications both military and commercial. The purpose of the ongoing Title III project is to create an affordable domestic supply of this critical material. The FY 2011 is the final step in this process.

Item Name: Institute for Cyber-Enabled Materials and Manufacturing (ICEMM)

Request: \$3,000,000

Location: Oxford, MS

Intended Recipient: The University of Mississippi

Benefit to Taxpayer: This project leverages university efforts to support national defense.

Project Purpose: To provide cyber-enabled research, educational and training opportunities in green and nanocomposite materials, and manufacturing to accelerate insertions of new ideas, methodologies, and technologies.

Item Name: Integrated Multi-Mode PBIED Screener (IMMPS)

Request: \$3,200,000

Location: Ocean Springs, MS

Intended Recipient: Rapiscan Systems Inc.

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: The purpose of this project is to integrate several Person Borne IED (PBIED) screening and inspection technologies in a compact modular package.

Item Name: Integrated Rugged Checkpoint Container

Request: \$3,000,000

Location: Ocean Springs, MS

Intended Recipient: Rapiscan Systems Inc.

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: The IRCC supplies the war fighter with a ruggedized suite of person, parcel and vehicle borne threat detection systems contained seamlessly in one integrated mobile container deployable in rugged/unimproved terrain. This project fills a unique capability.

Item Name: Jet Fuel From Mississippi Biomass

Request: \$1,000,000

Location: Starkville, MS

Intended Recipient: Catalyst Renewables Fuels LLC

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: At facilities in Starkville and Winona using Catalyst Renewable Fuels proprietary and licensed technology technically tests, demonstrates and operationally tests commercial-grade Jet A-1 fuel from Mississippi woody biomass.

Item Name: Ka-Band Mini-Multimode Search and Imaging Radar Completion and Flight

Request: \$8,000,000

Location: Space Center, MS

Intended Recipient: Global Technical Systems (GTS)

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Complete design, development, and testing of a Ka-Band Mini-Multimode Search and Imaging Radar, for small/medium UAV applications. This will enhance surveillance capabilities and provide a much needed technology to improve situational awareness.

Item Name: LCS Axial Flow High Power Density Waterjets

Request: \$4,250,000

Location: Gulfport, MS

Intended Recipient: Rolls-Royce Naval Marine Inc

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Produce two addl AFHPD WJs to add to the two under ONR contract for a complete set to install in an LCS ship for sea validation of Navy/RR model testing results. Four units will improve accuracy and fidelity of predicted improved performance.

Item Name: Linear Alternator Pulsed Power for Electric Weapons

Request: \$10,000,000

Location: Shannon, MS

Intended Recipient: General Atomics

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Electric weapons show promise for improvements in lethality and engagement of threats, but application is hampered by the size of the power system required. GA has conceived a new technology that provides the potential for reductions in the size/weight.

Item Name: Long Term Pain and Infection Management for Combat Casualty Care

Request: \$3,000,000

Location: Hattiesburg, MS

Intended Recipient: Ablitech

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: This project will provide advanced treatment and Long Term Pain and Infection Management of Combat Casualty Care for the warfighter. Funding will build upon current research and development in conjunction with the The University of Southern Mississippi.

Item Name: Manufacturing R & D for Low Cost Cargo and Humanitarian Aid Parachutes

Request: \$5,701,967

Location: Columbia, MS

Intended Recipient: Pioneer Aerospace Corporation

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: This initiative will develop automated manufacturing processes and equipment for a Low Cost Cargo and Humanitarian Aid Parachute design currently used by the U.S. Army. This project will establish a production capability in the State of MS.

Item Name: MARS (Modeling and Analysis of the Response of Structures)

Request: \$2,000,000

Location: Vicksburg, MS

Intended Recipient: ES3, Inc. (headquarters)

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: MARS is providing ERDC with advanced computational methods specifically designed to support DoD's requirements in assessing vulnerabilities of critical US assets (buildings and vehicles) to enemy threats (IEDs, mines, and bombs.)

Item Name: Medical and Healthcare Simulation Open Source/Architecture Solutions

Request: \$1,400,000

Location: Orlando, FL

Intended Recipient: National Center for Simulation

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: RDECOM and Dr. Robert Hester, Ph.D. Department of Physiology and Biophysics at the University of Mississippi will lead a consortium to develop a medical and healthcare simulation open source/open architecture solution.

Item Name: Navy Special Warfare Performance, Injury Prevention Program for SBT 22

Request: \$2,400,000

Location: Stennis Space Center, MS

Intended Recipient: University of Pittsburgh School of Health and Rehabilitation Science

Benefit to Taxpayer: This project leverages university efforts to support national defense.

Project Purpose: Phase 2 research activities will include laboratory testing to identify suboptimal characteristics which contribute to unintentional musculoskeletal injury and specific recommendations based on the results of this scientific approach to human performance.

Item Name: Next Generation CBRNE Standoff Detection (NGCST)

Request: \$3,800,000

Location: Oxford, MS

Intended Recipient: Paragon Research Corporation

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: To address the need for CBRN Defense by providing a standoff and point detection plug-n-play sensor system that will identify chemical and biological threats and provide advanced CBR.

Item Name: Novel Camouflage Paints and Textile Treatments

Request: \$2,500,000

Location: Hattiesburg, MS

Intended Recipient: SciGenesis

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: SciGenesis has successfully demonstrated proof of concept (TRL 3) of a novel cosmetic coating which significantly mitigates the risk of thermal injury in a battlefield fire compared to bare skin and skin covered with standard camouflage paint.

Item Name: Online Health Services Optimizaion

Request: \$5,000,000

Location: Hattiesburg, MS

Intended Recipient: Deloitte

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: To work with the Tricare Management Activity Information Management requirements identification work teams to identify focused research needs, perform research, and provide findings for their incorporation into new projects.

Item Name: Optimized Composite Mast Fabrication for CVN Ships (Phase II)

Request: \$5,100,000

Location: Pascagoula, MS

Intended Recipient: Northrop Grumman Shipbuilding Gulf Coast

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Fabricate for installation an optimized composite mast on a CVN ship.

Item Name: Orion High Altitude Long Endurance UAV Risk Reduction Effort

Request: \$13,100,000

Location: Columbus, MS

Intended Recipient: Aurora Flight Sciences

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: ORION will meet urgent national requirements for persistent intelligence, surveillance and reconnaissance, beyond line of sight communications, and assist in development of key technologies for long-term operations, realizing significant new capabilities.

Item Name: Polymer Science Research and Development

Request: \$8,000,000

Location: Hattiesburg, MS

Intended Recipient: University of Southern Mississippi

Benefit to Taxpayer: This project leverages university efforts to support national defense.

Project Purpose: Provide critical research for composite matrix materials specific to the Navy's needs. Advance the utilities of polymeric materials for the US Navy composites.

Item Name: Polymer Stress and Damage Sensors for Composites

Request: \$2,000,000

Location: Hattiesburg, MS

Intended Recipient: Crosslink

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Crosslink and the University of Southern Mississippi have developed the technology for realtime structural health monitoring systems to prevent catastrophic failure in composites that are increasingly being used in military aircraft.

Item Name: Projectile Penetration Research

Request: \$2,750,000

Location: Vicksburg, MS

Intended Recipient: US Army Engineer Research & Development Center

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: The Facility will be used regularly to evaluate new air-delivered; shoulder fired and artillery rounds as well as new hardened structure designs and materials.

Item Name: Rare Earths Alternatives for Permanent Magnet Motors

Request: \$6,100,000

Location: Columbus, MS

Intended Recipient: Baldor Electric

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: To identify and develop domestically produced alternative materials, material technology and manufacturing methods involving rare earth elements currently imported from China for use in military applications including permanent magnet (PM) motors.

Item Name: Real Time MS Laser Applied Research

Request: \$3,800,000

Location: Stennis Space Center, MS

Intended Recipient: Radiance Technologies

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: This initiative will allow the Space and Missile Defense Command (SMDC) Technology Center (TC) to expand the capabilities of the Advanced Measurements Optical Range (AMOR) to include battlefield cyber security, space protection and flexible materials.

Item Name: Regional Counterdrug Training Academy

Request: \$4,000,000

Location: Meridian, MS

Intended Recipient: Regional Counterdrug Training Academy

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: To develop and provide the highest quality drug law enforcement training for state and local law enforcement officers at no cost to the officers or their agencies. The RCTA intends to train more than 10,000 students in FY 2011.

Item Name: Sewage-Derived Biofuels Project

Request: \$5,500,000

Location: Shannon, MS

Intended Recipient: General Atomics

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: The U.S. military requires secure supplies of a variety of fuels, especially JP-8. Reliance on imported petroleum represents both a security risk and an economic burden for the country.

Item Name: Silicon Carbide Material Manufacturing Initiative

Request: \$7,000,000

Location: Starkville, MS

Intended Recipient: II-VI Wide Band Gap Materials Group

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Expand domestic second source of Silicon Carbide based materials and devices, required for highly energy efficient, high frequency and high power systems for critical military platforms and commercial applications.

Item Name: The Cooperative International Neuromuscular Research Group

Request: \$7,000,000

Location: Washington, DC

Intended Recipient: Foundation to Eradicate Duchenne

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Focused on testing of molecular patches; highly synthetic DNA-like drugs and research in order to combat muscle and neuron diseases which affect military personnel and their families.

Item Name: Unique Identification of Tangible Items

Request: \$2,000,000

Location: Stennis Space Center, MS

Intended Recipient: Applied Enterprise Solutions, LLC

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: DoD directed all services to uniquely identify tangible items. Unfunded mandate. DASN (A&LM) is: 1) DON IUID lead 2) responsible for DON IUID compliance 3) successfully incorporating IUID into DON business processes. Same approach needed throughout DoD.

Item Name: VePro - Implementation of Fatigue Data Analysis & Management Methods

Request: \$4,500,000

Location: Starkville, MS

Intended Recipient: HBM-nCode Products

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Reduce operational failures, improve fatigue performance & extend the life of existing military vehicles. Set up a VePro Development & Support (VDAS) Center to respond rapidly to fatigue failures, monitor vehicle fleets & "head off" future failures.

Item Name: Vertical Integration for Missile Defense Surveillance Data

Request: \$4,500,000

Location: Jackson, MS

Intended Recipient: Jackson State University

Benefit to Taxpayer: This project leverages university efforts to support national defense.

Project Purpose: This program integrates a variety of data collection media located on different and uncoordinated military collection systems. Facilitating the integration of defense threat information provides higher value decision-making information.

Item Name: Virtual Integrated Support for the Information Operations eNvironment

Request: \$10,000,000

Location: Tupelo, MS

Intended Recipient: Circadence Corporation

Benefit to Taxpayer: This project supports national defense through advanced research, development, and procurement.

Project Purpose: Vision integrates and synchronizes Information Operations analysis, planning, execution and assessment. VislOn operates at multiple security levels, including coalition operations, across Services and communities, and accelerates and improves accuracy.

Defense Appropriations FY 2011

National Programs

- Army Light Utility Helicopter (LUH) Procurement
- Arrow Weapons System
- F-15C Radar for Air National Guard
- JCMT Programmatic Request
- Long Lead Time Material, Material and Advanced Planning for LPD
- MQ-8 UAV Fire Scout - RDTE
- MQ-8 UAV Fire Scout - Procurement
- Readiness and Environmental Protection Initiative (REPI)
- Short Range Ballistic Missile Defense (SRBMD) – “David’s Sling”
- USAF Global Hawk Program Procurement
- USAF Global Hawk Program RDTE