

U.S. Sen. Jeff Sessions (R-AL)
Request for Funding
Fiscal Year 2011

WASHINGTON—U.S. Sen. Jeff Sessions (R-AL) made the following comments regarding the federal appropriations process:

“I am pleased to lend my support to a number of meritorious projects in Alabama that should be given strong consideration for funding in this year’s appropriations process.

“Under our Constitution, Congress—whose members are directly elected by and accountable to their constituents—has the sole authority to appropriate taxpayer money. When doing so, it is critical that Congress works within the constraints of the annual federal budget. If approved, the funding for the projects I am submitting would come completely from previously budgeted funds and would not increase federal spending or add to the debt in any way.

“The earmark process is ripe for reform, and I have cosponsored and voted in favor of, a moratorium on earmarks until that reform is implemented. Unfortunately, a majority of my colleagues oppose such a measure. I remain very uneasy about this process, but, so long as the current system is in place, I have an obligation to ensure that the people of Alabama see a fair share of their tax dollars invested in their state. Absent someone fighting for these projects, the funding would likely be directed to other states.

“My office receives nearly 600 non-defense requests for funding each year, far more than the committee will include. I am submitting a number of those requests that stand the best chance of approval, given their broad local support and potential to improve our communities and foster economic growth. Competition for appropriations will be tough. Based on past experience, only a very small number of those projects submitted will receive funding.

“This is one reason why I emphasize competitive grants, an alternative method of funding where experts at the 26 federal grant-making agencies use published criteria to select the most worthy grant applications. A full-time member of my staff is available to help local leaders in Alabama apply for competitive funding, and I am pleased to have supported successful applications that have resulted in \$210 million in competitive grants for Alabama initiatives over the last three years.”

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DEFENSE AUTHORIZATION/APPROPRIATIONS

Item: Adaptive Robotics Technology for Space, Air, and Missiles (ART- SAM)
Request: \$5,400,000
Account: Research, Development, Test, and Evaluation, Army
Line: 53
PE: 0603305A

Suggested Recipient: Army Space and Missile Defense Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: Advanced robotic hardware and software will assist in highly effective missile defense systems (radars, launchers, command, control and communications equipment) operating in quicker, more reliable and accurate processes to meet urgent U.S. Army Space and Missile Defense Command worldwide critical battlefield requirements. This R&D initiative develops adaptive robotics technology with emphasis on battlefield integration of unmanned space, aerial and ground systems for surveillance, reconnaissance, discrimination and intelligence resource management. ART-SAM funds will advance the ART-SAM Robotics Test Bed by employing and testing developed products and technologies for existing and emerging SMDC supported systems. The ART-SAM test bed will continue to evolve by employing plug & play robotics technology to be modeled, simulated, and then transitioned to replicate prototypes to meet SMDC robotics technology requirements.

Item: Advanced Commercial Technology Insertion
Request: \$6,000,000
Account: Research, Development, Test and Evaluation, Army
Line: 46
PE: 0603313A

Suggested Recipient: Army Aviation and Missile Research Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: To enhance the capabilities and efficiencies of the Army Aviation and Missile Research, Development and Engineering Center (AMRDEC) through a systematic and planned initiative that will: (1) identify new state of the art commercially-available cutting edge technology with the potential for enhancing the capabilities and efficiencies of existing and planned AMRDEC laboratories; (2) continue the evaluation of competing technologies and products, analyze cost-benefit trade-offs in implementing the technologies, and provide recommendations for implementation; (3) refine the designs and complete the implementation of the new technology into existing laboratories while minimizing impact to AMRDEC'S customers; (4) install new technologies and train operators; and (5) provide support for the technologies as required. Under FY09 and FY10 funding this program has completed the evaluation/insertion of advanced technologies. These advancements have led to expanded AMRDEC ASC capabilities providing direct benefits for the PAC3, THAAD, Raven, Viper Strike, PAM, NLOS, CMWS and MDA weapon systems. This FY11 initiative will add funds to complete the development and demonstration of the MAST, MEMS and PSUAS systems. It will culminate in field demonstration of all three systems as well as transition to the OSD Test and Evaluation community for fielding of these advanced test capabilities.

Item: Advanced Data Analytics for Conditioned Based Maintenance of
Weapon Systems
Request: \$1,000,000
Account: Research, Development, Test and Evaluation, Army
Line: 55
PE: 0603327A

Suggested Recipient: Army Aviation and Missile Research Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: This project will design and develop state of the art predictive algorithms for detecting and classifying conditions and weapon system states that could result in system malfunction or failure. The overarching goal is to enable predictive maintenance which involves establishing maintenance actions and schedules based on real-time monitoring of the health of a system or structure. It improves longevity, usability, and safety by predicting future failures while simultaneously saving significant cost through elimination of the need for unnecessary overhaul and replacement of components. Funding will be used for personnel costs and the cost of planned physical testing and experimentation to be conducted at Redstone Arsenal.

Item: AH-64 Fuselage Manufacturing
Request: \$5,500,000
Account: Aircraft Procurement, Army
Line: 9

Suggested Recipient: Army PEO Aviation

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: Due to the extended, high OPTEMPO of combat operations in OIF and OEF, the useful life of the Apache airframes is being rapidly consumed. Given the Block III will be the future force attack helicopter through 2040 and beyond, it will be remanufactured with a new airframe by Boeing. Currently, there is only one source for the Block III airframe and it is not manufactured domestically. This funds request will procure one set of special tooling and qualify a domestic source for the manufacture of this critical Apache airframe assembly with a substantial increase in the current manufacturing capability required by the program office.

Item: Application Software Assurance Center
Request: \$6,950,000
Account: Other Procurement, Air Force
Line: 35

Suggested Recipient: Maxwell-Gunter AFB

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: Cyber attacks against Department of Defense Information Systems continue to increase in both volume and complexity. Web applications are the primary target for attackers due to a lack of inherent security and the immediate access to sensitive information gained when even a single web application is compromised. These applications exist across all functional communities in the Air Force and can ultimately impact the Air Force's critical command and control functions. The center's mission is to secure these web applications while ensuring the Air Force is able to securely carry out its critical missions in cyberspace to support the warfighter.

Item: Army Aviation Robotic Systems Laboratory
Request: \$2,500,000
Account: Research, Development, Test and Evaluation, Army
Line: 8
PE: 0602211A

Suggested Recipient: Army Aviation and Missile Research Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The Army has prioritized integrating robotic Unmanned Aerial Systems into warfighter operations to support reconnaissance and offensive engagement missions and ultimately reducing the loss of life. Poorly designed and integrated UASs produce inefficiencies and frustration, and possibly failures that will jeopardize the mission and possibly the life of the warfighter. Validated UAS system design and test methodologies are needed that consider the mechanical design, sensor/weapon integration, reliability and sustainability, as well as the human operator. The requested appropriation would be provide experts, facilities, and educational programs to create a multi-disciplinary Aviation

Robotic Systems Laboratory whose capabilities span the life cycle from design through implementation including sustainability and supply chain impacts. This multi-disciplinary program is unique in the country and will supply the Army future employees trained across the UAS life cycle in “systems thinking” with the ability to design and manage complex systems such as UAS.

Item: Army Cyber Defense Integration
Request: \$6,000,000
Account: Research, Development, Test and Evaluation, Army
Line: 10
PE: 0602303A

Suggested Recipient: Army Aviation and Missile Research Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: There is an urgency for the capability to analyze, detect, protect, and prevent cyber attacks against Army systems. Cyber attacks have become a major threat to U.S. military personnel deployed overseas, particularly in Iraq and Afghanistan. U.S. forces are dependent on computers, computer networks, and computer enabled weapon systems that can be attacked or compromised thus reducing the ability to support Overseas Contingency Operations. The U.S. Army Aviation and Missile Research Development and Engineering Center’s Software Engineering Directorate (SED) would use the requested funding to establish an integrated cyber defense for Army components and systems.

Item: Army Responsive Tactical Space System Exerciser (ARTSSE)
Request: \$3,000,000
Account: Research, Development, Test & Evaluation, Army
Line: 44
PE: 0603313A

Suggested Recipient: Army Aviation and Missile Research Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: Army Responsive Tactical Space System Exerciser (ARTSSE) is a Hardware-in-the-Loop (HWIL) test facility designed to support testing of technologies critical to the Army Operationally Responsive Space (ORS) mission. The ARTSSE capability, along with system flight testing, will fully address the existing need to define performance requirements, evaluate and execute the Army Responsive Tactical Space Systems needed to ensure the warfighter's continued access to air and space. By cost effectively increasing confidence in system reliability and performance prior to the commitment of flight test resources, ground testing is a proven and affordable means of ensuring the success of flight programs. AMRDEC will provide this capability to Army Operationally Responsive Space (ORS) and Unmanned Aerial Systems (UAS) programs with further added value by capitalizing on an existing software infrastructure. ARTSSE will reduce program risk and cost while increasing the overall understanding and predictability of Army air and space systems. The requested funding level will ensure the availability of the initial HWIL capability in 12 months with full functionality in 24 months. This delivery schedule will allow Army UAS and ORS programs to maintain program schedules and cost while mitigating risk to upcoming flight tests.

Item: Blast Protection for Ground Soldiers
Request: \$2,500,000
Account: Research, Development, Test, and Evaluation, Army
Line: 28
PE: 0602787A

Suggested Recipient: Army Aeromedical Research Laboratory

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: This project will provide enhanced head and neck protection with improved helmets for ground soldiers against explosion blast injuries. Better understanding of explosion blast interactions with protective equipment and human head injury biomechanics will result in reduced casualties and improved medical treatments. This request will develop modeling tools, experimental procedures and new head protective armor to protect against blast wave head injury. Funds will be used for building a blast test stand, fabricate head/helmet prototypes, purchase necessary instrumentation, and conduct modeling and tests.

Item: Civil Air Patrol Operations and Maintenance
Request: \$4,500,000
Account: Operation & Maintenance, Air Force
Line: 042I

Suggested Recipient: Civil Air Patrol

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The Civil Air Patrol (CAP) is a cost effective force multiplier for the Air Force, it currently executes 60 to 80 percent of all daily sorties flown by 1st Air Force. Using low-cost, high-technology aircraft, the CAP flies missions for an average cost of only \$130 per flight hour. CAP volunteers also fly a wide variety of emergency and operational missions in support of federal agencies, states, local communities and other public service organizations. All CAP missions are flown by volunteer professionals donating their time. Approved funding would significantly increase readiness to support search and rescue, homeland security and disaster relief missions as well as CAP's ability to provide community service and youth leadership/development initiatives. It would also improve critical aircrew safety, mission readiness and mission effectiveness rates.

Item: Coordinated Smart Weapon Target Cueing
Request: \$2,500,000
Account: Research, Development, Test, and Evaluation, Army
Line: 44
PE: 0603313A

Suggested Recipient: Army Aviation and Missile Research Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The purpose of the Coordinated Smart Weapon Target Cueing program request is to provide the warfighter the ability to network legacy weapons in order to coordinate offensive action against various types of enemy formations. For example, networked cueing will allow Javelin gunners to designate targets for other Javelin teams or weapons platforms as part of a synchronized attack much like Apache Longbow or Kiowa Warrior helicopters do in aviation formations today. Networking will also allow Javelin gunners to designate targets for weapons on loitering UAV's or helicopters. A network interface will be developed capable of supporting various smart weapon systems such as TOW, Hellfire, and JAMS. This design will be demonstrated in prototype hardware for the JAVELIN Missile and undergo laboratory testing in FY11 for the purpose of design maturation.

Item: Cyber Assurance Tool Set (CATS)
Request: \$5,000,000
Account: Research, Development, Test and Evaluation, Army
Line: 54
PE: 0603308A

Suggested Recipient: Army Space and Missile Defense Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: Cyberspace Assurance Tool Set (CATS) will allow U.S. Army Space and Missile Command (SMDC) to develop and employ network embedded weapons systems in a cyberspace threat environment in order to test system vulnerabilities to cyber attack. CATS will ensure forces have unprecedented levels of situational awareness, data distribution, and operational coordination. CATS also address Integration of Offensive and Defensive Space Control Elements, Operationally Responsive Space, and Prompt Global Strike cyber assurance efforts. CATS will be used for simulation and modeling of cyberspace characteristics of network enabled weapon systems; vulnerability and risk assessment of these systems; mitigation to hostile forces attempts at deception, disruption, and/or destruction of networked weapon systems; certification and accreditation of operational networked systems to support tactical and strategic missions; and training developers and warfighters on use of capabilities.

Item: DoD Sponsored Educational Outreach Resource Center
Request: \$1,400,000
Account: Operation & Maintenance, Army
BA: 04
Sub-Activity Group: 422

Suggested Recipient: Army Aviation and Missile Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: This regional DoD Work Force Initiative will develop human capital (K-12, college and university) through educational outreach impacting the DoD community at Redstone Arsenal. Funding will establish an Educational Outreach Resource Center, which is part of a collaborative partnership with current programs supporting Team Redstone and surrounding counties, city schools (private and parochial), colleges and universities. Included in this request are the facilities, manpower, curriculum materials, and multi-media needed to educate K-12 students, teachers, college and university faculty and the general public relative to the business and technical needs of the DoD to support future workforce requirements of America's defense organizations and our soldiers. This effort will address the low volume of business and technical professionals that America's high schools and colleges are producing.

Item: Enhanced Gun Fire Detection on UAS
Request: \$4,500,000
Account: Research, Development, Test & Evaluation, Army
Line: 31
PE: 0603003A

Suggested Recipient: Army Research, Development and Engineering Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: U.S. Ground and Airborne Tactical Forces lack the ability to detect Hostile Fire Points of Origin (POO) to effectively counterfire or avoid. Using UAV's to detect these POOs provides the means to gain tactical superiority without dangerously exposing manned aircraft against threat systems. Unguided, undetected threat weapon systems such as Small Arms, AAA, and RPGs inflict over 90 percent of the total combat damages to rotary wing aircraft while random mortar fires immobilize our FOBs. This funding will develop, test, and demonstrate the Airborne WeaponWatch® Gun Fire Acquisition System (AWW-GFAS) on a UAV. AWW-GFAS can operate continuously over the battlefield detecting, locating and targeting active weapon systems in 5-50 milliseconds, subsequently disseminating this critical information to the airborne crews and command centers capable of taking immediate action. The urgent need for this capability is documented in the draft U.S. Army Initial Capabilities Document for Aircraft Survivability dated 20 July 2009.

Item: Enhanced Rapid Tactical Integration and Fielding Systems (ERTIFS)

Request: \$5,500,000
Account: Research, Development, Test & Evaluation, Army
Line: 31
PE: 0603003A

Suggested Recipient: Army Aviation and Missile Research Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The primary focus of the Software Engineering Directorate's (SED) E-RTIFS effort is the development of an Open-System Distributed Development and Test Architecture (ODDTA) to meet critical software system reliability needs. ODDTA provides early identification of software reliability issues that will limit cost and schedule overruns with Aviation/Missile System development. The ODDTA capability will leverage significant investments that have been made by Army Aviation and Missile PM's to establish government-owned test capabilities currently being utilized to support a number of requirements for individual tactical systems. These investments will be leveraged by the establishment of the ODDTA to support required reliability certification tests in the tactical environment.

Item: Enhanced Sensor and Data Security Initiative (ESDSI)
Request: \$5,000,000
Account: Research, Development, Test and Evaluation, Army
Line: 34
PE: 0603006A

Suggested Recipient: Army Space and Missile Defense Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The ESDSI demonstration project enables the U.S. Army's Space and Missile Defense Command (SMDC) to provide calibrated and validated imagery and other operational data securely on the minutes-to-seconds timelines required to provide warfighters with immediate information. ESDSI is an efficient, well designed, cyber-protected, efficient data system which combines proven and advanced technologies with subject matter experts to enable warfighters to use all of the data available from current and emerging data collection assets. ESDSI will demonstrate the cost-effective force-multiplication benefits by enhancing the timely and secure flow of data for real-time analysis to support the quick-response required by system operators, area commanders and warfighters, thereby reducing risk and ensuring positive engagement outcomes.

Item: FASTSAT Microsatellite-Based On-Orbit Cubesat Deployer
Request: \$5,000,000
Account: Research, Development, Test and Evaluation, Army
Line: 54
PE: 0603308A

Suggested Recipient: Army Space and Missile Defense Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: FASTSAT provides affordable, on-demand space support, augmentation, and reconstitution capability to the warfighter on the battlefield. These small satellites reduce the time from call-up to operation and will rapidly provide tactical data directly to the battlefield. This capability is complementary to that already provided by large National systems, such as strategic intelligence and position location information. The \$5M request level will allow development of the FASTSAT Cubesat Deployer to its critical design review (CDR) and start the ordering of long lead items for the satellite hardware.

Item: FOB Support Simulation Architecture (FSSA)
Request: \$4,300,000
Account: Research, Development, Test & Evaluation, Army

Line: 84
PE: 0604633A
Suggested Recipient: Army PEO Aviation

Suggested Location of Performance: As determined by the suggested recipient
Purpose/Project Description: The Forward Operating Base Support Simulation Architecture (FSSA) will focus situational awareness solutions towards the most crowded airspace in the highest priority areas of interest -- Forward Operating Base operations. The number one combat aviation safety concern of joint and Army aviation unit commanders is a mid-air collision due to extremely high air traffic density and the complexity associated with operating in joint airspace. To address this significant concern, commanders require an area-coverage, low-level, consolidated air picture with unambiguous Combat Identification that provides for greatly increased situational awareness while reducing mission execution risk for all airspace users. While fully documented, this requirement is not resourced, but is listed on the Unfunded Requirements (UFR) list.

Item: Highly Integrated Production for Expediting Reset (HIPER)
Request: \$6,200,000
Account: Research, Development, Test & Evaluation, Army
Line: 17
PE: 0602624A

Suggested Recipient: Army Armament Research, Development and Engineering Center
Suggested Location of Performance: As determined by the suggested recipient
Purpose/Project Description: The most critical readiness issue facing the military today is repairing and restoring – otherwise known as “resetting” – military equipment that has been damaged or worn out in battle. Resetting small arms and crew served weapons is particularly challenging, given their sheer numbers and the fact that, according to Anniston Army Depot (our sponsor), there is a growing incidence of non-conforming parts used to support reset operations there. In addition, under the current system, a lot of time and cost are required to design and apply product improvements during reset. HIPER ensure a quick and efficient RESET turn-around for weapons to the theater. This request is a follow-on to the HIPER program that leverages the Scanning Technology to Accelerate RESET (STAR) program at Anniston Army Depot, for which Congress has already invested \$1.6 million. Additional funding will extend that capability to the depot’s Armament & Weapons Systems Division (which has responsibility for small arms RESET), and will implement a similar capability within ARDEC’s rapid prototyping facility. It also leverages \$1.5M that OSD is currently investing to support the development and prove-out of the “Smarter Buyer Concept” at ARDEC.

Item: Immunocontraceptive Vaccines
Request: \$2,000,000
Account: Research, Development, Test and Evaluation, Navy
Line: 124
PE: 0604771N

Suggested Recipient: Naval Medical Research Center
Suggested Location of Performance: As determined by the suggested recipient
Purpose/Project Description: This program will dramatically reduce the overpopulation of wildlife that transmit disease or cause physical damage to federal property by developing and testing contraceptive vaccines designed to limit reproduction in wild animals.

Item: Improved Safety & Quality of Combat Rations for the Warfighter
Request: \$3,700,000
Account: Research, Development, Test, and Evaluation, Army
Line: 27
PE: 0602786A

Suggested Recipient: Army Research, Development, and Engineering Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The safety and quality of the food supplied to our warfighters in theater is one of the U.S. military's most important responsibilities. Because food contamination may be either inadvertent or intentional, a key component of U.S. military capability involves ensuring the safety of the warfighters' food supply. Moreover, considering that the average MRE is expected to have a shelf life of three years, the quality and flavor of the product is not always assured. While tremendous advances in the safety and quality of combat rations have been made over the years, the warfighter consistently requests improvements in the quality of MREs and the DoD is in need of improved technologies to detect and eliminate food borne pathogens without damaging the individual MRE. This funding will be used to improve the safety and quality of the U.S. military's food supply by focusing on technologies to enhance the shelf-life and taste of combat rations consumed by the warfighter, and the detection and elimination of food borne pathogens.

Item: Integrated Air and Missile Defense Scenario Generation
Request: \$6,500,000
Account: Research, Development, Test & Evaluation, Army
Line: 44
PE: 0603313A

Suggested Recipient: Army Aviation and Missile Research Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The US Army has embarked on an incremental strategy to establish an Integrated Air and Missile Defense (IAMMD) System to address concerns over capability gaps against emerging air breathing and cruise missile threats. This future IAMMD system will provide a network centric system-of-systems that utilizes modular and scalable task force organizations to integrate any mix of sensors and shooters through a common IAMMD battle command system. The use of networked battle command and improved capabilities for situational awareness and soldier training will dramatically increase overall system effectiveness, survivability and force protection. Robust scenario development for use in critical testing and evaluation will support design and production decision milestones and Initial Operational Capability (IOC) for the warfighter. Funding will complete development of the scenarios required for ground test and evaluation of the Integrated Air and Missile Defense (IAMMD) System Capabilities. Scenario products will be integrated into the Government Hardware-in-the-Loop test environment at the U.S. Army Software Engineering Directorate for use to evaluate Command and Control solution capabilities. The scenario generation effort will improve current capabilities by gap-filling required battlefield emulation conditions necessary to mature the comprehensive test matrix.

Item: Intelligence Collection Management Tool Follow-on Development
Request: \$5,000,000
Account: Research, Development, Test & Evaluation, Defense-Wide
Line: 999
PE: 0305880L

Suggested Recipient: Missile and Space Intelligence Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: These tools will significantly improve the efficiency and timeliness of the foreign missile intelligence collection process from identification of collection requirements through optimization of collection asset placement. Requested funds will be used to continue the development and deployment of automated software tools to assist Missile and Space Intelligence Center (MSIC) analysts in managing their collection requirements process: determining optimum locations for placement of surface and air-based collection sensors; and the integration and dissemination of Overhead Persistent Infrared (OPIR) data.

Item: Low Cost Radially Segmented Tactical Missile System (LoCRaS)
Request: \$6,000,000
Account: Research, Development, Test, and Evaluation, Army
Line: 54
PE: 0603308A

Suggested Recipient: Army Space and Missile Defense Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The Army Space Master Plan and the Army's Space Operations Concept Capability Plan outline the need for this type of system. From a command priority standpoint, this technology can be used to provide very low cost suborbital missions to support hypersonic testing of materials and subsystems, provide a low cost test methodology for satellite and space system components, conduct missions to exercise a variety of mid-to-long range sensor systems, conduct very low cost high altitude sounding rocket missions, provide a very affordable target vehicle for missile defense tests, and establish the technology basis for a long range conventional strike weapon.

This program systematically mitigates primary missile system risks early in the development process.

Requested funding will provide for immediate rapid engineering prototyping and development leading to near term hardware fabrication and ground test of the missile system.

Item: Materials Processing and Applications Development Center
Request: \$4,000,000
Account: Research, Development, Test and Evaluation, Army
Line: 4
PE: 0601104A

Suggested Recipient: Army Research Laboratory

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: There is an urgent need for new, lightweight materials for military vehicle structures and armor solutions. The Army Research Laboratory (ARL) does not have any foundry capabilities and therefore must turn to academic and industrial partners to develop the next generation of metals working capability. This project will specifically focus on rapid development and applications insertion of emerging design, materials, and manufacturing technologies to provide solution options for many important military needs. This will provide military systems solutions for significantly improved performance, increased durability, and lower cost for both acquisition and life cycle. New lightweight materials such as advanced magnesium alloys and metal matrix composites are crucial to the development of advanced military vehicles and armor systems.

Item: Mine Resistant Ambush Protected Vehicle Virtual Trainers (MRAP-VVT)
Request: \$5,000,000
Account: Other Procurement, Army
Line: 177

Suggested Recipient: Alabama Army National Guard

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: This funding will permit the procurement of one of these essential training systems. One system will allow the Alabama Army National Guard to train Soldiers prior to deployment to Iraq or Afghanistan. During current operations in Iraq and Afghanistan, more soldiers have been killed or wounded by IEDs than any other weapon. The MRAP Vehicle Virtual Trainer provides the best training available for this new family of Army combat vehicles. The trainer provides soldiers training on how to drive these vehicles and to operate cranes and mobile arms to disarm or destroy IEDs without endangering themselves.

Item: National Defense Education Diversity Initiatives
Request: \$2,000,000

Account: Research, Development, Test and Evaluation, Defense-Wide
Line: 8
PE: 0602228D8Z

Suggested Recipient: OSD National Defense Education Program

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: This DoD Research and Development Capacity Building Initiative will significantly boost the ability of minority institutions to deliver quality education programs, enhance supplemental learning opportunities and increase services to public historically black colleges and universities and students. By adequately preparing future leaders of the DoD, this program is contributing to the safety and well being of this nation. Additional funds would be used to help recruit minority students who will pursue careers in defense, contribute to workforce training and continue to expand technology capacity at member schools. The non-profit Thurgood Marshall College Fund will match any DoD investment made.

Item: Non-Invasive Vectored Vaccine Research
Request: \$5,000,000
Account: Research, Development, Test and Evaluation, Navy
Line: 124
PE: 0604771N

Suggested Recipient: Naval Medical Research Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: This project allows for rapid response to anthrax and influenza by producing highly protective single dose vaccines administered by droplet or spray into the nose of our military or civilian population. These vaccines are made in tissue culture and are not dependent on availability of chicken eggs. Funding will be used to (1) Manufacture cGMP vaccines (tissue culture based, antigen specific, vectored, non-replicating) against influenza and anthrax, (2) conduct pre-clinical safety studies in animal models to support IND submission to the FDA, and (3) conduct Phase I studies for anthrax and Phase II studies for pandemic flu to evaluate safety and efficacy in man.

Item: Novel Zinc Air Power Sources for Military Applications
Request: \$4,000,000
Account: Research, Development, Test and Evaluation, Army
Line: 18
PE: 0602705A

Suggested Recipient: Army Communications and Electronics Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: Development of Zinc-Air and Lithium-Air battery technology will significantly reduce warfighter battery carry weight. It will also reduce battery types and counts -- this lowers operational risk by reducing the need for re-supply. Lithium-Air battery technology, though still in its infancy, has a theoretical energy density of five times that of Zinc-Air and ten times standard Lithium-ion. This program will (1) develop a robust Lithium-Air Cell, (2) extend the Integrated Power System (IPS) for Zinc-Air batteries to additional soldier devices and (3) develop full production capability for the optimized Zinc-Air Gen4 cell.

Item: On-Board Vehicle Power (OBVP) Systems Development
Request: \$5,000,000
Account: Research, Development, Test and Evaluation, Army
Line: 33
PE: 0603005A

Suggested Recipient: Army Tank Automotive Research, Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The Army has initiated the development and integration of On-Board Vehicle Power solutions to improve the ability of its tactical and ground combat vehicle fleet to electrically power the broad range of required electronic systems. Prior year funding integrated a vehicle with OBVP but did not provide adequate funding to test and evaluate the technology in a relevant military environment. This funding will complete necessary testing, increase TRL to 7 and target preliminary design migration to an additional class of military vehicle provided sufficient funding is made available.

Item: Open Source Research Project
Request: \$3,000,000
Account: Research, Development, Test & Evaluation, Defense-Wide
Line: 999
PE: 0305880L

Suggested Recipient: Missile and Space Intelligence Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: Improves the capability and processes for collecting intelligence data to identify fundamental scientific research and development being pursued by adversary nations and organizations as a countermeasure to technological surprises. This program will continue the process for collecting open-source information on foreign scientific research related to weapon development. Identifying this type of research will help to identify advanced scientific developments, focus other intelligence collection assets, and mitigate technological surprises from potential adversaries.

Item: Post-Traumatic Stress Disorder and Genomics
Request: \$3,150,000
Account: **Research, Development, Test and Evaluation, Army**
Line: **30**
PE: **0603002A**

Suggested Recipient: Army Medical Research and Materiel Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: This proposal establishes a foundational study to collaborate with military physicians on work that could lead to treatments and tests for post-traumatic stress disorder (PTSD). The research would probe one million variations in the human genome to determine which genes contribute to symptoms of, and possible resistance to, PTSD. Resulting data could be used in the following ways: development of a predictive test for prognosis in individuals demonstrating PTSD; identification of genes for potential targets for drug development to prevent or alleviate PTSD symptoms; understanding of the mechanisms that result in the expression of PTSD symptoms (i.e. why some develop PTSD & why others do not); establishment of a predictive test to identify individuals with higher/lower likelihood to experience PTSD symptoms; and establishment of a repository of DNA samples & clinical information for future use by military researchers. Approved funding will provide (1) recruitment of participant samples (1500 control, 1500 affected), clinical data and the collection of DNA samples; (2) performance of the genotyping study, supplies and machines for genotyping; and (3) analysis of the data.

Item: Prototype Integration Facility (PIF) Enterprise Resource Planning (ERP) System
Request: \$3,750,000
Account: Research, Development, Test and Evaluation, Army
Line: 31
PE: 0603003A

Suggested Recipient: Army Aviation and Missile Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The U.S. Army Prototype Integration Facility (PIF) requires the implementation of an Enterprise Resource Planning (ERP) system. The ERP will provide an end-to-end solution that will significantly improve the government's ability to manage this complex \$1.7 billion multi-program contract. The PIF is a key enterprise asset in supporting Overseas Contingency Operations. Since 2002, the PIF has executed in excess of \$1.5 billion in rapid response, quick reaction and high priority weapons system hardware and services support to the warfighter. Funds would be used for the development of an ERP including software development and hardware purchase.

Item: Real-Time Active Imaging System for Tactical UAVs
Request: \$4,000,000
Account: Research, Development, Test and Evaluation, Army
Line: 10
PE: 0602303A

Suggested Recipient: Army Aviation and Missile Research Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: This technology would give the warfighter the ability to detect enemies who have learned to camouflage themselves from current sensing capabilities. Current technology is too large to fit on tactical UAVs that can get closer to the area of interest. This sensor will be smaller, will fit on tactical UAVs, and be able to more rapidly detect enemies who use camouflaging techniques to hide. It is necessary to combine current technologies with suitable algorithms, signal processing and sensor control to develop an advanced 3-D imaging system. Funding would accelerate development, integration, testing, and demonstration of a 3-D laser radar (LADAR) prototype system.

Item: Remote Monitoring and Troubleshooting (RMAT) Project
Request: \$2,890,000
Account: Other Procurement, Navy
Line: 19

Suggested Recipient: Naval Sea Systems Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: By implementing RMAT, Navy engineers will have the capability to provide global remote sustainment support to the operational fleet. RMAT will provide the means for remotely reading on-board sensors, monitoring shipboard system status, and innovatively supporting ship operations. Saving time, travel dollars, and salary wages by collectively supporting the entire fleet with one office of experts, the program creates a cost avoidance of redundant on-site support while increasing the efficiency and effectiveness of the shore infrastructure. RMAT will enable faster response times and mitigation of damage caused by engineering casualties, blast, fire, flooding, and equipment malfunction. Implementation of RMAT will increase the level of sensor data fusion, situational awareness, and survivability of the ship, as well as its ability to successfully complete its mission. The change from analog systems and manual data collection will save thousands of man-hours every year. FY11 funding for this project will be used to conduct the system design update, deployment plans, and certifications (\$0.8M) and deploy the ship-shore system (\$2.09M).

Item: Sensor Data Processing Research
Request: \$2,000,000
Account: Research, Development, Test and Evaluation, Defense-Wide
Line: 999
PE: 0305880L

Suggested Recipient: Missile and Space Intelligence Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The volume of sensor data collected routinely exceeds the ability of the intelligence and military communities to process and fuse the data into actionable intelligence, to provide

situational awareness, and to get the results to the right users and decision makers in a timely manner. Typically, sensed observation data is time-critical and is quickly de-valued within hours or even minutes. Approved funding will provide an efficient and cost-effective resource for researching and developing technologies that will greatly improve the analysis and processing of sensor data for the purpose of expediting operational information and knowledge to users in the intelligence and military communities. Funds will be used for computational resources, research staff, and workforce development.

Item: Software Hardware Asset Reuse Enterprise (SHARE)
Request: \$2,900,000
Account: Research, Development, Test, and Evaluation, Navy
Line: 31
PE: 0603382N

Suggested Recipient: Navy PEO Information Warfare Systems

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The Navy Open Architecture initiative includes a library of combat system software and hardware design components for reuse in developing surface ship systems. This effort will extend SHARE across the Naval Enterprise to include sub-surface, air, space, USMC and C4I domains. The goal is to promote reuse of existing software and hardware. This will reduce cost, schedule, and risk while increasing interoperability; reduce time to field; and improve quality in the development of large complex defense systems such as ship combat systems. FY 2011 funds are needed to accelerate development of these key automated services enabling a SHARE repository that can contribute significantly to the goals of the open architecture initiative in a timely fashion.

Item: Solar Heat Reflective Film for Energy & Fuel Efficiency in Buildings and Vehicles
Request: \$4,000,000
Account: Research, Development, Test & Evaluation, Navy
Line: 58
PE: 0603724N

Suggested Recipient: Naval Facilities Engineering Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The goal of this project is to develop and commercialize an advanced form of Solar Reflective Film. The U.S. Military is tasked with improving the energy efficiency of all its facilities throughout the world. Solar Heat Reflective Film under development utilizing precision multi-layer optical film nanotechnology is a key enabler for improving the energy efficiency in military, residential and commercial buildings. Developing this film nanotechnology would also have the additional benefits to military, commercial and consumer vehicles. There is a pressing need in the military to decrease vehicle power requirements, increase fuel efficiency and reduce emissions of carbon dioxide all while increasing the mission effectiveness of the soldier. These goals can be directly impacted by decreasing vehicle weight through the use of smaller air conditioning systems and lighter weight plastic window glazing. This Phase 2 funding will (1) finalize the design of the new multi-layer optical film and introduce new materials to improve the solar heat reflection, (2) complete the scale-up manufacturing runs, and (3) demonstrate the significant impact of this new product through performance testing in buildings and vehicles. Successful completion of Phase 2 is critical for us to launch this product into the marketplace and achieve the full impact of energy savings for our country.

Item: Swarms Defense
Request: \$6,000,000
Account: Research, Development, Test and Evaluation, Army
Line: 10
PE: 0602303A

Suggested Recipient: Army Aviation and Missile Research Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: There exists a gap between current capabilities and the future Enhanced Area Air Defense System (EAADS) for protection against enemy fires, especially high volume swarms of small munitions, such as mortars and rockets, and larger threats, such as lethal UAVs, cruise missiles, and large caliber rockets. The Swarms Defense System will address this by developing and demonstrating the critical technologies required to augment the gap in current personnel and asset protection capabilities. The U.S. Army Aviation and Missile Research Development and Engineering Center (AMRDEC) would use the requested funding for development of the Swarms Defense System.

Item: Synergistic Enhancements Using Thermal Management and Heat Dissipation
Technology for Missile Defense Electronics/Electro-Optics Cooling
Request: \$3,000,000
Account: Research, Development, Test and Evaluation, Army
Line: 54
PE: 0603308A

Suggested Recipient: Army Space and Missile Defense Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The Synergistic Enhancements Program will evaluate current thermal management technologies and their use and applications for missile electronics, electro-optics and other missile system components. Current thermal management systems are marginal with respect to cooling the electronics inside missiles to assure reliable targeting and flight path control and do not accomplish multiple functions to optimize overall capability. This program will evaluate mission critical thermal management systems for missile space flight by employing state-of-the-art and under development thermal management tools and hardware. Approved funding will model, build and test prototypes of promising thermal energy heat dissipation systems for initial simulated flight testing environments to be followed by actual full size laboratory tests.

Item: UAS Branch Concept Development
Request: \$3,200,000
Account: Operation & Maintenance, Army (OMA)
BA: 01
Sub-Activity Group: 116

Suggested Recipient: Army Aviation School Fort Rucker

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The Army Aviation School at Fort Rucker is the lead integrator for all unmanned aircraft and oversees new requirements, innovative technology and defines how best to utilize assets in the full spectrum operations. It serves as the representative on various Office of the Secretary of Defense integrated process teams including airspace, training, facilities, simulations, science and technology, experimentation, intelligence, electronic warfare, frequency, bandwidth protection and spectrum management. Funds will be used to staff the UAS Branch with essential personnel to work with DoD, other agencies, and industry stakeholders to facilitate interoperability and system integration. The end result is relevant and responsive development and realization of UAS concepts to field state-of-the-art UAS capabilities to the warfighter. The Army Aviation School oversees new requirements, innovative technology and defines how best to utilize assets in the full spectrum operation by fully integrating unmanned aircraft as a system-of-systems on the modern and future battlefields.

Item: UH-60A to UH-60L Conversion
Request: \$15,000,000
Account: Aircraft Procurement, Army
Line: 26

Suggested Recipient: Army PEO Aviation

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The UH-60 A to L conversion is needed to recapitalize the aging UH-60As that will be in the inventory for another 15 years and to overcome obsolescence issues on components that were designed over 30 years ago. In 2002, the Army approved a UH-60 Recapitalization Baseline Program that established the A-A program. It was designed to keep UH-60As safe and reliable until they could all be retired. Based on current UH-60M procurement projections, the Army expects to have UH-60As in the inventory beyond 2025. The A-L program is a sustainment effort that has become a natural outgrowth of the original A-A program.

Item: Virtual Convoy Operations Trainers (VCOT)
Request: \$2,000,000
Account: Other Procurement, Army
Line: 177

Suggested Recipient: Alabama Army National Guard

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The Alabama Army National Guard currently has one Virtual Convoy Operations Trainer. This trainer has been invaluable in training Alabama Soldiers for operations in Iraq and Afghanistan. A second trainer would double our capacity to train Soldiers. Also, the earliest versions of these trainers need to be upgraded to allow accurate training for current operations in Iraq and Afghanistan. An addition of \$2 million to the FY11 Defense Budget will allow the Alabama Army National Guard to purchase a second trainer and upgrade both trainers with the latest equipment to best replicate the conditions in theater. Alabama Army National Guard units continue to conduct Combat and Security operations in Iraq and Afghanistan. Prior to deployment and while deployed, these units have a heightened requirement to keep their soldiers trained and ready

Item: Wide Wavelength High Efficiency Photovoltaic/Ballistics
Technology Program
Request: \$2,500,000
Account: Research, Development, Test and Evaluation, Army
Line: 14
PE: 0602618A

Suggested Recipient: Army Research Libratory

Suggested Location of Performance: As determined by the suggested recipient **Purpose/Project**

Description: This funding will develop a sustainable, light-weight power generation system comprised of a high efficiency solar power (photovoltaic) generator as the main component, a durable storage system, and an intelligent sensor to manage power consumption and distribution. It is a priority of the U.S. military to develop a system to reduce its dependence on traditional batteries, which can be cumbersome, are non-standardized, costly to maintain, and difficult to dispose of efficiently. This system will enable the military to produce and store its own energy to provide power to whatever application it needs in environments where a reliable power source is unavailable.

To be funded in accordance with the Fiscal Year 2011 President's Budget:

Item: Ground-Based Midcourse Defense (GMD)
Request: Hold President's Budget at \$1,346,181,000

Account: Research, Development, Test & Evaluation, Defense Wide
Line: 76
PE: 0603882C

Suggested Recipient: Missile Defense Agency

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The Ground-Based Midcourse Defense (GMD) element is a key component of the Ballistic Missile Defense System (BMDS). This element consist of multiple sensors, a complex communications system, fire control capability, and ground-based interceptors capable of intercepting intermediate and long-range ballistic missile threats in their midcourse of flight. Ground Based Midcourse Defense provides the capability to engage and destroy long-range threats in the midcourse battle space to protect the U.S. Homeland.

Item: Integrated Air and Missile Defense Battle Command System (IBCS)/Army Integrated Air and Missile Defense (AIAMD)

Request: Hold President's Budget at \$251,124,000

Account: Research, Development, Test & Evaluation, Army

Line: 124

PE: 0605457A

Suggested Recipient: U.S. Army

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: IBCS is a key materiel element of the Army's Air and Missile Defense transformation fueled by lessons learned during Desert Storm, Southern Watch, and Iraqi Freedom, and capability gaps where the U.S. is overmatched by rapidly advancing adversary capabilities using ballistic and cruise missiles, rockets, artillery, and mortars. IBCS addresses these lessons learned and the capability gaps by providing warfighters with the ability to provide both adaptable force packages and flexible, joint firing doctrine to engage a myriad of threats.

Item: Joint Air to Surface Standoff Missile (JASSM) Upgrades

Request: Hold President's Budget at \$20,000,000

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

Line: 146

PE: 0207325F

Suggested Recipient: U.S. Air Force

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: JASSM is the United States' only low observable cruise missile system and provides air to surface, autonomous, precision guided standoff compatibility with fighter and bomber aircraft able to attack a variety of fixed or relocatable targets. This funding will (1) develop an Electronic Safe, Arm and Fire (ESAF) device to replace the existing warhead electro-mechanical fuse. The ESAF would improve overall missile reliability by up to 4% and reduce unit cost by \$10,000. (2) Develop a staring array infrared (IR) seeker to replace the existing gimbaled line-of-sight IR seeker. The staring array seeker would eliminate many moving parts and electronic drive circuitry, improve overall missile reliability by up to two percent and reduce unit cost by \$25,000. (3) Develop a compact Telemetry Instrumentation Kit (TIK) which can be installed in the missile at USAF field sites to support reliability flight tests. Eliminates \$50,000 of missile disassembly cost associated with installation of existing TIKs for each flight test missile.

Item: Joint High Speed Vessel

Request: Hold President's Budget at \$180,703,000

Account: Shipbuilding & Conversion, Navy

Line: 18

Suggested Recipient: U.S. Navy

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The Nation will needs lift assets that can provide for assured access, decrease predictability and dwell time, and have the capacity to quickly deliver troops and equipment together in a manner that provides for unit integrity. Joint High Speed Vessel (JHSV) will provide combatant commanders high-speed intra-theater sealift mobility with inherent cargo handling capability and the agility to achieve positional advantage over operational distances. Not limited to major ports, the JHSV will be able to operate in austere port environments. The Joint High Speed Vessel is one of three programs in the Department's "Capital Account Pilot Program."

Item: KC-X
Request: Hold President's Budget at \$863,875,000
Account: Research, Development, Test and Evaluation, Air Force
Line: 85
PE: 0605221F
Suggested Recipient: U.S. Air Force

Suggested Location of Performance: As determined by the suggested recipient
Purpose/Project Description: Recapitalization of this aging aircraft that has been declared the number one priority by two successive Chiefs of Staff of the Air Force and two successive Commanders of the United States Transportation Command. With a contract award delayed, sufficient funding is needed to continue RDT&E activities. Otherwise, procurement will be delayed and risk will increase for KC-135 age-related support problems and unanticipated catastrophic failure.

Item: Land Based SM-3
Request: Hold President's Budget at \$281,378,000
Account: Research, Development, Test and Evaluation, Defense-Wide
Line: 107
PE: 0604880C
Suggested Recipient: Missile Defense Agency

Suggested Location of Performance: As determined by the suggested recipient
Purpose/Project Description: Land Based SM-3 combined with the transportable AN/TPY-2 radar provides a regional defense capability across a large battle space. It can be integrated into existing systems such as THAAD and Patriot providing a layered and fully integrated defense defensive capability. LB SM-3 combined with THAAD provides better layered regional defense capability and reuses existing THAAD, Patriot, and the range of ground-based systems while realizing a cost of \$3 billion over 10 years.

Item: Littoral Combat Ship
Request: Hold President's Budget at \$1,509,335
Account: Shipbuilding & Conversion, Navy
Line: 12, 13
Suggested Recipient: U.S. Navy

Suggested Location of Performance: As determined by the suggested recipient
Purpose/Project Description: The Littoral Combat Ship is the next major procurement program for the Navy with a projected procurement of 55 ships equating to nearly 18 percent of the future fleet. It will use open-systems-architecture design, modular weapons, and sensor systems, and a variety of manned and unmanned vehicles to expand the battle space and project offensive power into the littoral. LCS will operate with focused-mission packages that deploy manned and unmanned vehicles to execute a variety of missions, including littoral anti-submarine warfare (ASW), anti-surface warfare (SUW), and mine countermeasures (MCM). LCS will also possess inherent capabilities, regardless of mission package installed, including Intelligence Surveillance Reconnaissance (ISR), homeland defense, Maritime Interdiction/Interception Operations (MIO), anti-terrorism/force protection (AT/FP), air self-defense, joint

littoral mobility, and Special Operating Forces (SOF) and logistic support for movement of personnel and supplies. This relatively small, high-speed surface combatant will complement the U.S. Navy's AEGIS fleet, by operating in environments where it is less desirable to employ larger, multi-mission ships.

Item: Maintenance Support Device
Request: Hold President's Budget at \$43,770,000
Account: Other Procurement, Army
Line: 182

Suggested Recipient: U.S. Army

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The MSD is a lightweight and rugged tester used at all levels of maintenance to automatically diagnose electronic and automotive subsystems of the Army's ground and aviation weapon systems. It hosts interactive electronic technical manuals (IETMs) and expert diagnostics systems, conducts intrusive testing in support of Army weapons and electronic systems, and provides a means to upload/download mission-critical software into weapon system on-board computer processors.

Item: SM-3 Procurement
Request: Hold President's Budget at \$94,080,000
Account: Procurement. Defense-Wide
Line: 33
PE: 0208866C

Suggested Recipient: Missile Defense Agency

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: Beginning in 2011, the Administration will commence the deployment of the Phased Adaptive Approach (PAA) for the defense of Europe with Aegis BMD and SM-3 as the centerpiece of this architecture. Aegis BMD is presently deployed in limited quantities today providing an important missile defense protection against short, medium and intermediate-range ballistic missiles. This capability enables U.S. Navy Aegis ships to detect, track, intercept, and destroy these threats in their ascent and midcourse phases of flight, helping to defend our forward deployed forces and allies. The Joint Capabilities Mix (JCM) Study II recommended an additional 116 SM-3 missiles to support Aegis BMD capability for the defense of Fleet assets. However, the Missile Defense Agency's Top Line budget only supports SM-3 production deliveries at 24/year (2/month) while production capacity is 48/year (4/month).

Item: Standardized Integrated Command Post System (SICPS) / Command Post Platform (CPP)
Request: Hold President's Budget at \$97,568,000
Account: Other Procurement, Army
Line: 101

Suggested Recipient: U.S. Army

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: To address the critical need for integrated C2 platforms where real time situational awareness and battle command can be executed in standardized, environmentally controlled, modular shelters, and tent systems that are safe, suitable, and supportable. The SICPS/ CPP Program provides standard mobile command posts (CPs) at all echelons and across support units to provide an interoperable force package to Combatant Commanders to execute battle command; the preponderance of the systems deployed to date have been focused on the Brigade level command center. This capability allows commanders to be positioned within the battle space where they can best influence operational outcomes without loss of connectivity to elements of the command. The program is intended to support Army and joint requirements for standardized C2 platforms and physical infrastructures that are interoperable across the force.

Item: Surface Launched Advanced Medium Range Air to Air Missile (SLAMRAAM)
Request: Hold President's Budget at \$116,732,000
Account: Missile Procurement, Army
Line: 2
Suggested Recipient: U.S. Army
Suggested Location of Performance: As determined by the suggested recipient
Purpose/Project Description: SLAMRAAM is a highly mobile and transportable Air and Cruise Missile Defense system consisting of an Integrated Fire Control System (IFCS), a radar, a slewable launcher and the AIM -20 AMRAAM missile. SLAMRAAM provides defense against cruise missiles, unmanned aerial vehicles, fixed wing, and rotary wing aircraft. SLAMRAAM incorporates common C4, improved weapons performance, reduced life cycle costs, and simplified operator training because of platform hardware and software commonality. These efforts include development of common Air and Missile Defense (AMD) software, common Integrated Fire Control (IFC) hardware, voice and data recorder, and Single Integrated Air Picture (SIAP) track management software.

MILITARY CONSTRUCTION

Project Name: Readiness Center
Request: \$16,630,000
Account: Military Construction, Army National Guard
Project Number: 010263
Service Component: Army National Guard
Project Location: Ft McClellan, AL
Project Description: Funding will result in the Phase II construction of a permanent readiness center to serve the operational and homeland defense missions of the 167th Theater Support Command. \$13.223 million was provided in FY07 for Phase I construction. This project is in the ARNG FYDP for 2012 and I am requesting to bring this project forward to 2011.

Project Name: Squadron Officer College Lodging Facility
Request: \$14,400,000
Account: Military Construction, Air Force
Project Number: QS063141
Service Component: Air Force
Project Location: Maxwell Air Force Base, AL
Project Description: This project will result in the Phase V construction of 82,850 square feet of properly designed quarters for students attending the Squadron Officers School and International Officers School at Maxwell Air Force Base. This project is the fifth phase of an eight-phased program. Phase five through eight will replace existing deteriorating lodging/dormitory facilities that were built in 1956. The project is schedule for FY 2014 and I am asking to bring it forward to 2011.

Project Name: Transmission Addition - Lost Scope
Request: \$2,050,000
Account: Military Construction, Army
Project Number: 77581
Service Component: Army
Project Location: Anniston Army Depot, AL
Project Description: Relocate and reinstall seven (7) existing serviceable transmission dynamometer test stands and other serviceable process equipment from the current transmission repair facilities to the new transmission remanufacturing facility. This project results in a \$500K per year savings in transportation costs alone. This project is needed to correct an administrative oversight in PN 57620

Powertrain Transmission Facility Addition (PTAF). The original PTAF DD 1391 did not address the relocation of existing equipment in the Primary Facilities; therefore, it was inadvertently left out of the project documentation. Previously funded using FY 2009 MCA appropriations under PN 57620.

Project Name: Martin Road Widening - West

Request: \$18,500,000

Account: Military Construction, Army

Project Number: 64084

Service Component: Army

Project Location: Redstone Arsenal, AL

Project Description: Construct two additional lanes approximately 2.5 miles long on Martin Road from Rideout Road interchange to the west Redstone Arsenal Boundary (Zeirdt Road). The project also includes three bridges, site clearing and preparation, site improvements, utility relocation, traffic markings, turn lanes, median barrier, and access to a new access control point. The project includes wetland mitigation requirements and a Phase II archaeology study. The project is required to relieve congested and unsafe traffic conditions on Martin Road, the major east-west corridor on post.

Project Name: Air Traffic Control Tower

Request: \$9,000,000

Account: Military Construction, Air Force

Project Number: PNQS103165

Service Component: Air Force

Project Location: Maxwell Air Force Base, AL

Project Description: An eight-story facility, constructed with a reinforced concrete foundation and floor slab, structural steel frame, masonry walls, elevator, welded-steel tower observation cab with tempered glass windows, and built-up roof. Overall project includes emergency generator system, HVAC, fire protection, communications, extended utilities, site improvements, and all other necessary support. Includes antiterrorism/force protection (ATFP) requirements identified in Department of Defense (DoD) unified facilities criteria. Demolish existing air traffic control tower facilities (407 SM/4,384 SF).

Project Name: Water Survival Training Facility

Request: \$9,000,000

Account: Military Construction, Army

Project Number: 70330

Service Component: Army

Project Location: Fort Rucker, AL

Project Description: Construct a Water Survival Training Facility (WSTF) to include classrooms, pool area, administrative offices, maintenance space, support spaces and core functions. Supporting facilities include electrical, water, sewer and gas service; storm drainage system; intrusion detection systems (IDS); utility monitoring and control systems (UMCS); communications; walks, curbs and gutters; paving to include parking and drives; fire protection and alarm systems; and site improvements. Interior design services will be required. Access for individuals with disabilities will be provided. Heating by self-contained systems. Air Conditioning (Estimated 83 Tons). This facility will support the water egress training requirement for the increasing number of Army aviation students.

Project Name: Live Fire Shooting Range House

Request: \$5,635,000

Account: Military Construction, Army National Guard

Project Number: 10278

Service Component: Army National Guard

Project Location: Ft McClellan, AL

Project Description: Funding will result in the construction of a live-fire shooting range to facilitate Alabama ARNG pre-deployment training and readiness. This project is in the ARNG FYDP for 2013 and I am requesting to bring this project forward to 2011.

Project Name: Squadron Operations Facility

Request: \$7,500,000

Account: Military Construction, Air National Guard

Project Number: FAQZ059173

Service Component: Air National Guard

Project Location: Montgomery Regional Airport

Project Description: Funding will result in the construction of a squadron operations facility at the Montgomery Regional Airport to facilitate Alabama ANG pre-deployment training and readiness. This project is in the ANG FYDP for 2015 and I am requesting to bring this project forward to 2011.

Pursuant to rules issued by the Senate Armed Services Committee, the following letter was submitted to the committee:

March 11, 2010

*The Honorable Carl Levin
Chairman
Senate Committee on Armed Services
228 Russell Senate Office Building
Washington, DC 20510*

*The Honorable John McCain
Ranking Member
Senate Committee on Armed Services
228 Russell Senate Office Building
Washington, DC 20510*

Dear Chairman Levin and Ranking Member McCain:

I certify that neither I nor my immediate family has a pecuniary interest in any of the congressionally directed spending items that I have requested, consistent with the requirements of paragraph 9 of Rule XLIV of the Standing Rules of the Senate.

Sincerely,

*Jeff Sessions
United States Senator*

Pursuant to rules issued by the Senate Appropriations Committee, the following letter was submitted to the committee:

March 23, 2010

The Honorable Daniel Inouye, Chairman
Member Senate Committee on Appropriations
S-128, U.S. Capitol
Washington, D.C. 20510

The Honorable Thad Cochran, Ranking
Senate Committee on Appropriations
S-128, U.S. Capitol
Washington, D.C. 20510

The Honorable Richard Durbin, Chairman
Member
Appropriations Subcommittee on Financial
Services and General Government
184 Dirksen Senate Office Building
Washington, D.C. 20510

The Honorable Susan Collins, Ranking
Appropriations Subcommittee on Financial
Services and General Government
184 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Chairmen and Ranking Members,

I certify that neither I nor my immediate family has a pecuniary interest in the congressionally directed spending item(s) that I have requested for Fiscal Year 2011, consistent with the requirements of paragraph 9 of Rule XLIV of the Standing Rules of the Senate.

Very Truly Yours,

Jeff Sessions
United States Senator

FINANCIAL SERVICES

Project: Royal Pines Recovery Center Workforce Development Technology Project
Request: \$125,000
Account: Small Business Administration
Project Requestor: The Jimmie Hale Mission
Project Location: Birmingham, Alabama, serving Blount, Jefferson, Cullman, Walker, Shelby, and St. Clair Counties.

Purpose/Project Description: The Jimmie Hale Mission (JHM) is a 501(c)(3) non-profit charitable organization that serves the homeless. JHM offers shelter and food for the homeless, addiction recovery programs, counseling, and education remediation and career readiness. JHM is in need of upgrading the Royal Pines facility's computer-based learning centers and administrative capacities. By replacing out-dated and slow-speed equipment with new technologies, JHM can better provide necessary education, job readiness, and life skills for clients.

ENERGY-WATER

Project: Neuroimaging for Alzheimer's and Other Diseases
Request: \$1,000,000
Project Requestor: The University of Alabama at Birmingham

Project Location: Birmingham, AL

Purpose/Project Description: The goal of this project is to acquire a cyclotron for the development of molecular imaging compounds for neurological diseases. A cyclotron is the most sophisticated imaging system in which short-lived, highly-specific molecules are generated. Short-lived molecules that are made in a cyclotron are utilized to identify biomarkers of disease. Many diseases have specific biomarkers that become selectively expressed during disease initiation and progression. In diseases such as Alzheimer's, the ability to develop novel imaging molecules that can be used non-invasively in longitudinal studies is critical to diagnosing the disease and understanding how the disease begins and changes during progression, as well as for assessing the response to therapies. In order for these imaging molecules to be useful, either in research experiments or clinical settings, the cyclotron must be near the subject that is being imaged. There is currently no cyclotron on the UAB campus. Acquiring this instrumentation is a worthwhile use of federal funds as it will allow new molecular imaging agents to be developed, standardized, and used to diagnose, monitor and treat diseases such as Alzheimer's.

Project: Climate Model Evaluation Program

Request: \$2,000,000

Project Requestor: The University of Alabama at Huntsville

Project Location: Huntsville, AL

Purpose/Project Description: The goal of this project is to produce an independent assessment of climate model projections based on evaluations using UAH's research-quality datasets and the understanding of physical processes generated by UAH's research program. UAH will examine and evaluate climate model simulations to quantify the level of performance these models achieve so that a better understanding of the quality of the forecasts may be provided to policymakers, and that the confidence placed in them is improved. With assessments of this type in hand, policymakers will have a better idea of the confidence they may reasonably place in the various scenarios of future climate and what legislation meant to deal with these may cost the taxpayers.

Project: Southeast Energy Innovation Consortium

Request: \$2,500,000

Project Requestor: Auburn University

Project Location: Auburn, AL

Purpose/Project Description: AU proposes the formation of an energy innovation consortium between three research institutions: Auburn University, University of Kentucky (UK), University of Tennessee (UT) and two national laboratories: DOE National Energy Technology Laboratory (NETL) and DOE Idaho National Laboratory (INL). Auburn University will direct the consortium and will apply systems approaches to the integrated utilization of biomass and coal for affordable and socially acceptable energy solutions with minimized CO₂ emissions. In this effort, results after the first year will include an established research and extension consortium that brings together expertise from Auburn, Tennessee, and Kentucky to coordinate research and implement new energy technologies.

Project: Mobile Harbor Dredging Project

Request: \$3,000,000

Project Requestor: Alabama State Port Authority

Project Location: Mobile, AL

Purpose/Project Description: Since last year, Alabama has experienced significantly high levels of rainfall, which has caused nearly constant flooding in her river systems. These floodwaters carry tremendous amounts of silt, which has caused considerable shoaling in the Mobile Channel since last fall, and has dramatically increased the amount of dredging needed. The shoaling in the upper end of the channel has an adverse impact on Alabama's oil imports, grain exports, and forest products exports. Dredging funding is requested to keep the Mobile Harbor operational.

Project: Black Warrior Tombigbee Waterway Project

Request: \$3,000,000

Project Requestor: Army Corps of Engineers

Project Location: Mobile, AL

Purpose/Project Description: This request is to build two new miter gates for Selden Lock and Dam and to replace the filling valves at the Holt Lock and Dam. In addition, due to adverse weather, additional funds for dredging will be needed to keep the waterway navigable. Finally, a large amount of backwater sloughs have become unavailable to environmentalists, fishermen, ecologists and nature lovers as a result of a buildup of silt over entrances that has closed off these pristine environments.

Project: Alabama River Lakes Project

Request: \$4,000,000 above President's FY11 Budget Request

Project Requestor: Army Corps of Engineer, Mobile District

Project Location: Entire State

Purpose/Project Description: The President's budget for the Alabama River Lakes is \$15.745 million. An additional \$4 million is needed to dredge the navigation channel to its authorized depth of 9 feet. Requested funds would support the Alabama River navigation channel, and dredging of the channel to its authorized dimension of nine feet deep would provide safety for river tows to be moved safely and efficiently. The current channel width of 100 feet is extremely tight in river turns. High water flows during rainy season cause increased silt in the channel, necessitating dredging.

Project: Southeast Alabama Regional Water Supply

Request: \$1,000,000

Project Requestor: City of Dothan

Project Location: Dothan, AL

Purpose/Project Description: The SE Alabama Regional Water Supply Project will provide a water reservoir for agricultural and clean drinking water needs in Southeast Alabama.

AGRICULTURE

Project: Auburn Research Center (ARC) on Detection and Food Safety

Request: \$1,000,000

Project Requestor: Auburn University

Project Location: Auburn, AL

Purpose/Project Description: The ARC will test a new dust sensor system's ability to identify bacterial contamination, such as Salmonella, on fresh vegetables. The new research aims to develop a new method by which to reduce food borne illness outbreaks and improve the safety of the U.S. food supply. The dust sensor technology will enable rapid screening of entire fields/crops for bacterial contamination, thereby enabling identification and isolation of the source of an outbreak early and greatly reducing public panic.

Project: Local Emphasis Agricultural Development (LEAD)

Request: \$300,000

Project Requestor: National Young Farmer Educational Association (NYFEA)

Project Location: Montgomery, AL

Purpose/Project Description: The LEAD program partners with NYFEA in developing a national network to assist in the education, recognition, and leadership training of the next generation of agriculture leaders. Through LEAD, the association places support people in a state/region to assist with the organization and implementation of Young and Beginning Producer and Young Agribusiness Professional programs. This request for funding would support LEAD's operations.

Project: Precision Agriculture and Forestry: Alabama

Request: \$450,000

Project Requestor: Auburn University

Project Location: Auburn, AL

Purpose/Project Description: Auburn's future research will build upon past research efforts by delivering precision agriculture and forestry technologies and strategies to: improve water quality; reduce pesticide and nutrient use thereby addressing nutrient run-off and loading issues; enhance efficiency of field operations, application of crop and timber inputs, and machinery energy usage; better identify, map and understand spatial variability of soil, terrain, and crops to develop site-specific management models; improve the management of water resources for growing crops; and increase precision technology adoption in Alabama. Funding will also permit the development of sensor technology to spatially evaluate biomass quality for optimal energy use, site-specific impact of biomass harvesting on nutrient removal for subsequent crops, and geo-referenced information systems that track product location and facilitate shipping directly to the appropriate bioenergy facility.

Project: Southeast Quadrant Drainage and Flood Prevention Project

Request: \$350,000

Project Requestor: City of Foley

Project Location: Foley, AL

Purpose/Project Description: This project will strengthen regional storm water management facilities that are constructed near the lower end of a sub-watershed and are designed to manage storm water runoff from multiple projects and/or properties. By capturing and retaining runoff during storm events, storm water management facilities control storm water quantity and quality. A major contributor to contamination of Foley's waterways is polluted storm water.

Mismanagement of storm water creates sediment, sludge, and solids that ultimately settle in Bon Secour Bay and the Gulf of Mexico. Two Foley's most valuable resources, seafood and recreational waterways, will be lost if storm water and its pollution are not managed properly.

Project: Sewer System Improvements

Request: \$350,000

Project Requestor: City of Georgiana

Project Location: Georgiana, AL

Purpose/Project Description: The Alabama Department of Environmental Management has issued an Administrative Order to Georgiana to make improvements to its sewage treatment plant and collection system. This project is necessary to bring the City into compliance with ADEM regulations in a manner that is financially feasible for its customers.

Project: Resolving the cogongrass threat in Alabama

Request: \$1,500,000

Project Requestor: Auburn University

Project Location: Auburn, AL

Purpose/Project Description: This research effort attempts to stop the continued spread and destructive impact of cogongrass. Auburn University will develop economically viable solutions to the cogongrass crisis confronting Alabama and the Southeastern United States. The project will include economic and social analysis of cogongrass impacts, strategies for coordinated eradication, evaluating early detection rapid response (EDRR) models, remote sensing tools for early detection, optimizing technologies for cogongrass seed and rhizome eradication, and ecosystem restoration. This research will be conducted by Auburn University researchers in collaboration with State and Federal Agency personnel.

Project: Natural Poultry Technology Center

Request: \$200,000

Project Requestor: Auburn University

Project Location: Auburn University, AL

Purpose/Project Description: The National Poultry Technology Center requests funding to develop, advise, and educate poultry growers and companies on implementing energy efficient technologies to greatly reduce operational expenses

INTERIOR

Project: The Locust Fork Wastewater Collection & Treatment System

Request: \$400,000

Project Requestor: Blount County Commission

Project Location: Blount County

Purpose/Project Description: This project will provide wastewater collection and treatment for the Town of Locust Fork, as well as seven school buildings belonging to the Blount County Board of Education.

Project: Water Treatment Plant Upgrades

Request: \$165,000

Project Requestor: City of Clanton

Project Location: Clanton, AL

Purpose/Project Description: This project will improve the function of the Clanton Sewer Treatment Plant, and enhance its compliance with state and federal regulatory standards.

Project: Wastewater System Improvements

Request: \$350,000

Project Requestor: City of Fort Payne

Project Location: Fort Payne, AL

Purpose/Project Description: The proposed project will install a wastewater collection system to serve nearly 100 residences near the City's drinking water reservoir, as well as install a pump station to transport wastewater from an additional 186 residences.

Project: Sanitary Sewer Extension Project on Lookout Mountain

Request: \$250,000

Project Requestor: City of Gadsden

Project Location: Gadsden, AL

Purpose/Project Description: This project will extend sanitary sewage facilities on Lookout Mountain, spurring new residential development and providing existing homeowners with an improved, environmentally-friendly sewer system.

Project: Ruffner Water System Improvements

Request: \$275,000

Project Requestor: City of Irondale

Project Location: Irondale, AL

Purpose/Project Description: Older sections of the Irondale Water System have been found to be experiencing needless loss of water due to leaks. In large part, these leakage problems have been identified as old and deficient water meters. Requested funds would be used to update the city's water meters

Project: Highway 43 Main Project

Request: \$300,000

Project Requestor: City of Jackson

Project Location: Jackson, AL

Purpose/Project Description: The Jackson Water Works and Sewer Board seeks additional and alternative sources of water to meet basic drinking water needs. This water and sewer project is designated to assist with the transition of water sources for the public's health from ground well water to treated water. Such development will include basic infrastructure, including sewer expansions to serve the area on and around the route. The new Jackson water plant will supply up to 4 million gallons of water and is currently pumping approximately 2.5 million.

Project: Pelham Bent Rail/Regional Water Project

Request: \$300,000

Project Requestor: City of Pelham

Project Location: Pelham, AL

Purpose/Project Description: The City of Pelham is party to a 2007 agreement with the City of Alabaster and Shelby County, AL to provide the resources to pay for a 20” water transmission line from Bent Trail Lane in Pelham to Alabaster. The line will connect to a new 30” water line owned by Shelby County, Alabama. The Shelby County line will provide water from Lay Lake on the Coosa River to hundreds of residents in western Shelby County.

Project: Red Bay Wastewater Infrastructure Project

Request: \$125,000

Project Requestor: City of Red Bay

Project Location: Red Bay, AL

Purpose/Project Description: The city seeks funding to make improvements in its existing wastewater treatment system to bring the system into compliance with EPA and Alabama Department of Environmental Management requirements. The project would bring the system into compliance, eliminating pollution, preventing fines, reducing health risk and allowing for future residential, commercial and industrial growth.

Project: Winfield Industrial Park Sewer Improvements Project

Request: \$175,000

Project Requestor: City of Winfield

Project Location: Winfield, AL

Purpose/Project Description: In order to improve its faltering economy the city must take advantage of the recently opened Interstate 22. For this reason the opening of the new industrial property along the interstate is of vital importance to the City of Winfield and the entire Marion County area. Completion of this project will provide necessary sewer infrastructure for the industrial park.

Project: US Highway 43 Wastewater Initiative Project

Request: \$500,000

Project Requestor: Mobile County Commission

Project Location: Mobile County, AL

Purpose/Project Description: Funding is requested to implement the planning, design and construction of a wastewater treatment plant and collection main along the U.S. Highway 43 corridor. This project will promote and stimulate economic development and growth in North Mobile County.

Project: Cahaba River National Wildlife Refuge

Request: \$750,000

Project Requestor: The Nature Conservancy

Project Location: Bibb County, AL

Purpose/Project Description: The project would allow The Nature Conservancy to acquire a 1,650 acre tract in the Cahaba River NWR in Bibb Co, Alabama. The proposed acquisition is significant because it includes several miles of frontage on the biologically rich Cahaba River that harbor several federally listed Threatened and Endangered aquatic species.

Project: Coosa Valley Water Supply District Project

Request: \$200,000

Project Requestor: St. Clair County

Project Location: St. Clair County, AL

Purpose/Project Description: The Town of Wattsville would like to be tied into the Coosa Valley Water Supply District. The first phase of the Coosa Valley Water Supply District is under construction and is scheduled to be completed in August 2011. The proposed phase will provide a drought-resistant, renewable source of drinking water and industrial water for citizens in St. Clair County and the surrounding region.

Project: Killen Sewer System Improvements Project

Request: \$500,000

Project Requestor: Town of Killen

Project Location: Killen, AL

Purpose/Project Description: The Town of Killen is strategically located at the intersection of two major U.S. Highways (U.S. Hwy. 43 and U.S. 72). However, the municipality lacks an adequate sanitary sewage system to meet the needs for existing and future growth. The project will therefore provide the Town of Killen with an adequate wastewater system, and further development of its sewer system by providing for necessary pumps stations, sewer system lines and treatment facility to meet current needs and future growth projections.

Project: Lowndesboro Waterline Extension Project

Request: \$125,000

Project Requestor: Town of Lowndesboro

Project Location: Lowndesboro, AL

Purpose/Project Description: The Town of Lowndesboro requests funds to perform improvements to its water system infrastructure. Specifically, the proposed project would construct 5 miles of new waterlines to serve town residents that do not have public water.

Project: Critical Structural Repairs to Fort Morgan

Request: \$250,000

Project Requestor: Alabama Historical Commission

Project Location: Fort Morgan, AL

Purpose/Project Description: This project will complete structural repairs necessary to stop deterioration of the 1833 historic brick fort and to protect visitors. Additionally, it will identify any hazardous lead concentrations in the parade and dry mote areas.

Project: Extension of Water Service into Rural Areas

Request: \$250,000

Project Requestor: Washington County Commission

Project Location: Washington County, AL

Purpose/Project Description: This project will extend water service from existing water systems to the nearly 100 households in Washington County that lack access to a public water system.

Project: Pinhoti Trail Construction

Request: \$95,000

Project Requestor: Alabama Hiking Trail Society

Project Location: Talladega National Forest, AL

Purpose/Project Description: This project would result in the construction of six miles of trail on land owned by the U.S. Forest Service in the Talladega National Forest in Clay County, Alabama.

Project: Carson Filter Plant Expansion Project

Request: \$300,000

Project Requestor: Birmingham Water Works Board

Project Location: Birmingham, AL

Purpose/Project Description: This project involves purchase and construction of major infrastructure and process mechanical components selected for increasing the capacity of the drinking water treatment facility from 25.9 MGD to 35.9 MGD.

COMMERCE, JUSTICE, AND SCIENCE SUBCOMMITTEE

Project: Alabama Computer Forensics Laboratory

Request: \$1 million

Project Requestor: Alabama District Attorneys Association

Project Location: Montgomery, AL

Purpose/Project Description: To fund operations of the computer forensics lab program to address all forms of computer crime, including child pornography, fraud, murder, and identity theft.

Project: Forensic Science Academic Programs

Request: \$500,000

Project Requestor: Alabama State University

Project Location: Montgomery, AL

Purpose/Project Description: To establish new academic programs, at the undergraduate and graduate levels, in forensic science at Alabama State University that would work in close collaboration with the existing State Forensic Laboratory located on ASU's campus.

Project: High Temperature Materials Research and Development project

Request: \$500,000

Project Requestor: Alabama A&M University Research Institute (AAMURI)

Project Location: Normal, AL

Purpose/Project Description: To support the Advanced Space Propulsion Materials Research Center at Alabama A&M University in creating a comprehensive, diverse, and flexible pool of talent to facilitate research, development, and analyses of all areas of advanced propulsion research and development.

Project: After-School Programs

Request: \$200,000

Project Requestor: Cleveland Avenue YMCA

Project Location: Montgomery, AL

Purpose/Project Description: To support a non-traditional after school and weekend school tutorial programs designed to improve math and science test scores among elementary and middle school at-risk youth ages 6-15.

Project: Innovative Techniques for Cybersecurity Training project

Request: \$300,000

Project Requestor: Jacksonville State University

Project Location: Jacksonville, AL

Purpose/Project Description: To create cybersecurity education programs for college and professional audiences, concentrating on digital forensics, risk management, financial fraud auditing and compliance, identity theft protection, and cybersecurity, as well as a K-12 program teaching cybersecurity awareness.

Project: Operation Swordphish project

Request: \$700,000

Project Requestor: Alabama Department of Public Safety

Project Location: Montgomery, AL

Purpose/Project Description: To continue "Operation Swordphish: A Model State Partnership for Cybercrime and Security," a State-led cybercrime initiative that provides leadership and training to state and local law enforcement on financial cyber crime investigations, which in turn enhances the state's ability to investigate and prosecute financial cybercrimes.

Project: Aerospace Materials Three-Dimensional Metrology Laboratory

Request: \$750,000

Project Requestor: The University of Alabama

Project Location: Tuscaloosa, AL

Purpose/Project Description: To establish a laboratory that will link the nascent field of nanoscale characterization of materials to their macroscale use in aerospace vehicles.

Project: Outward Bound STEP Program

Request: \$200,000

Project Requestor: Outward Bound Inc

Project Location: Mobile and Baldwin Counties, AL

Purpose/Project Description: To expand the Outward Bound STEP Program, operates experiential and adventure-based wilderness programming to promote academic achievement, character development and social responsibility for youth between the ages of 13 and 17 in Baldwin and Mobile Counties.

Project: Science, Technology, Engineering, and Mathematics Literacy for Alabama's Children

Request: \$250,000

Project Requestor: McWane Science Center

Project Location: Birmingham, AL

Purpose/Project Description: To support McWane's efforts to serve as an extension of the classroom, and to provide quality inquiry-based educational programs and teacher training workshops to children in Title 1 schools, especially in the Central Alabama area.

Project: Team Focus Youth Mentoring Program

Request: \$200,000

Project Requestor: Team Focus, Inc.

Project Location: Mobile, AL

Purpose/Project Description: To assist Team Focus in providing guidance and support to young men in academics, athletics, social skills, and moral values.

Project: The Bridge Builders Montgomery Youth Leadership for Community Change Program

Request: \$150,000

Project Requestor: The Central Alabama Community Foundation

Project Location: Montgomery, AL

Purpose/Project Description: To support Bridge Builders, a proven program designed to challenge social stereotypes and develop young leaders who understand the value of civic engagement.

Labor, Health and Human Services

Amount: \$500,000

Purpose: To fund the Comprehensive Obesity Prevention and Treatment Initiative

Location: Auburn, AL

Recipient: Auburn University

Benefit to the taxpayer: Taxpayers will benefit from Auburn University's research-based approach to combating obesity comprehensive interventions for 5-25 counties in Alabama.

Amount: \$250,000

Purpose: To replace and update medical equipment at the Druid City Hospital (DCH) Medical Center

Location: Tuscaloosa, AL

Recipient: Druid City Hospital Health System

Benefit to the taxpayer: Taxpayers will benefit from updated and improved medical equipment, including a multi-slice CT scanner to replace DCH's outdated dual-slice CT scanner.

Amount: \$150,000

Purpose: To fund the Gadsden State Rural Connection Through Technology project
Location: Gadsden, AL
Recipient: Gadsden State Community College (GSCC)
Benefit to the taxpayer: Taxpayers will benefit from enhanced technology in GSCC's classrooms, and technology infrastructure between several rural counties in Alabama that are served by the GSCC.

Amount: \$350,000
Purpose: To fund new medical equipment and technology for the Good Samaritan Health Clinic
Location: Cullman, AL
Recipient: Good Samaritan Health Clinic of Cullman
Benefit to the taxpayer: Taxpayers will benefit from improved and updated medical technology, leading to more efficient treatment of patients at the Good Samaritan Health Clinic.

Amount: \$150,000
Purpose: To fund the Huntingdon College Adult Degree Completion Program Distance Learning project
Location: Montgomery, AL
Recipient: Huntingdon College
Benefit to the taxpayer: Taxpayers will benefit from technology upgrades that would allow Huntingdon's faculty to reach long-distance students across Alabama.

Amount: \$250,000
Purpose: To fund the Jacksonville State University Nursing Human Patient Simulator
Location: Jacksonville, AL
Recipient: Jacksonville State University
Benefit to the taxpayer: Taxpayers will benefit from the improved competency of nursing students who are instructed through use of human patient simulators.

Amount: \$300,000
Purpose: To fund the American History, Civic, and Government Education project at American Village
Location: Montevallo, AL
Recipient: The Citizen Trust at American Village
Benefit to the taxpayer: Taxpayers will benefit from innovative social studies educational tools that fully engage students.

Amount: \$350,000
Purpose: To fund the Troy University Center for Deafness.
Location: Troy, AL
Recipient: Troy University
Benefit to the taxpayer: Taxpayers will benefit from training and support methods for individuals who have hearing impairments and loss.

Amount: \$100,000
Purpose: To fund the NASA Stars program

Location: Huntsville, AL

Recipient: The U.S. Space and Rocket Center

Benefit to the taxpayer: Taxpayers will benefit from Title I students' increased interest in the fields of science technology, engineering, and math (STEM), as well as improved instruction for teachers in how to better present STEM subjects.

Amount: \$350,000

Purpose: To fund a new building for the Hale County Medical and Dental Center

Location: Greensboro, AL

Recipient: Whatley Health Services

Benefit to the taxpayer: Taxpayers will benefit from additional capacity for medical, dental, mental health, and support services in the new building.

Amount: \$350,000

Purpose: To fund a new library building for Wilcox County

Location: Camden, AL

Recipient: The Wilcox County Library

Benefit to the taxpayer: Taxpayers will benefit from a new facility that will house more books and spaces for learning and reading.

Amount: \$150,000

Purpose: To fund the Building on Community Resources project

Location: Madison County, AL

Recipient: The ARC of Madison County

Benefit to the taxpayer: Taxpayers will benefit from gainful employment and better services provided for individuals with disabilities.

TRANSPORTATION, HOUSING AND URBAN DEVELOPMENT

Project: An Extension of Taxiway B and an Environmental Assessment for Runway 4-22

Request: \$750,000

Project Requestor: City of Tuscaloosa

Project Location: Tuscaloosa, AL

Purpose/Project Description: The City of Tuscaloosa requests funds to extend the existing partial Taxiway B to the approach end of Runway 4-22.

Project: U.S. 84 El Camino East/West Corridor, a 22-mile segment between Evergreen and Monroeville, AL

Request: \$2,000,000

Project Requestor: Monroe County Commission

Project Location: Monroe County, AL

Purpose/Project Description: Monroe County requests funds for construction on the 22-mile segment between Evergreen and Monroeville, AL. This is part of a five state highway project, the 1,729-mile El Camino E/W Corridor, Brunswick, GA to El Paso, TX, involving states of Georgia, Alabama, Mississippi, Louisiana & Texas.

Project: Appalachian Corridor V (US 72 East)

Request: \$1,000,000

Project Requestor: City of Huntsville

Project Location: Huntsville, AL

Purpose/Project Description: The City of Huntsville requests funds to be used for the design and engineering of an overpass and interchange at US 72 (Appalachian Corridor V) where it intersects with Ryland Pike and Jordan Road east of Huntsville.

Project: Storm Water Drainage Project

Request: \$500,000

Project Requestor: Town of Pike Road

Project Location: Pike Road, AL

Purpose/Project Description: The Town of Pike Road requests support to address the public health and safety needs created by inadequate storm water drainage systems in the Town of Pike Road and surrounding communities.

Project: Center Point Greenway and Pedestrian Walkway Project

Request: \$500,000

Project Requestor: City of Center Point

Project Location: Center Point, AL

Purpose/Project Description: The City of Center Point requests funding to create sidewalks and green spaces around a newly designed Senior Center that serves as the gateway to the proposed Five Mile Creek Greenway.

Project: West Veterans Boulevard Extension Project

Request: \$1,000,000

Project Requestor: City of Auburn

Project Location: Auburn, AL

Purpose/Project Description: The City of Auburn requests funding for the construction of an extension of West Veterans Boulevard and part of the Outer Loop road to connect with the Auburn Technology Park.

Project: "Trails of Africa" Project

Request: \$750,000

Project Requestor: Birmingham Zoo

Project Location: Birmingham, AL

Purpose/Project Description: The Birmingham Zoo requests funding for a mixed-species exhibit featuring an African elephant herd and a Large Animal Isolation & Research Facility that will become the hub for major pachyderm research initiatives.

Project: Pedestrian Promenade/North Boundary Street Project

Request: \$300,000

Project Requestor: City of Montevallo

Project Location: Montevallo, AL

Purpose/Project Description: The City of Montevallo requests funds to create a physical link between the University of Montevallo (UM) and downtown, by means of a pedestrian promenade from Oak Street at the UM main entrance to Main Street and Orr Park.

Project: Alabama Farmers Market Renovation and Revitalization

Request: \$500,000

Project Requestor: Jefferson County Truck Growers Association

Project Location: Jefferson County, AL

Purpose/Project Description: The Jefferson County Truck Growers Association requests funds to renovate the fifty-four year old market in Jefferson County by tearing down three dilapidated sheds and rebuilding them with refrigeration capabilities.

Project: School Property Renovation

Request: \$300,000

Project Requestor: Town of Silas

Project Location: Silas, AL

Purpose/Project Description: The Town of Silas requests funding to renovate abandoned school property into a community center.

Water Resources Development Act (WRDA)

Project: Mobile Ship Channel Passing Lane Study

Request: \$2.0 million

Project Requestor: The Alabama State Port Authority

Project Location: Port of Mobile, City of Mobile, and County of Mobile, Alabama

Purpose/Project Description: This project will fund a study to assess the feasibility of constructing a passing lane on the Mobile Ship Channel, which is a federally authorized deepwater ship channel at the Port of Mobile under the jurisdiction of the US Army Corps of Engineers. With the completion of the Mobile Harbor Turning Basin in July, the port will have Post-Panamax vessels transiting the Mobile Ship Channel and will have three new or expanded public terminals. These public terminals represent \$500 million in capital investment serving the coal, steel, and containerized freight industries in the 9th largest U.S. Seaport. Under the current Mobile Ship Channel configuration, larger, wider body vessels are restricted to one way traffic, which contributes to the overall inefficiency of managing daily traffic in and out of the port.

Project: U.S. Gulf Deepwater Horizon Oil Spill Effects Study

Request: \$5.0 million

Project Requestor: The Alabama State Port Authority

Project Location: U.S. Gulf of Mexico shoreline extending from Port Bienville, MS to St. Marks, FL.

Purpose/Project Description: The U.S. Gulf of Mexico coastline in the U.S. Corps of Engineers Mobile District, including Mississippi, Alabama and Florida, will experience near term and long range impacts associated with the DEEPWATER HORIZON OIL SPILL ACCIDENT. The U.S. Army Corps of Engineers will require authorizing language to assess the oil spill impacts on dredging operations, dredge material disposal practices and dredge material

disposal area management, and environmental restoration projects within the federal project area of Mobile District. This request is consistent with USACE Policies or Directives.