

One Hundred Tenth Congress
of the
United States of America

AT THE SECOND SESSION

*Begun and held at the City of Washington on Thursday,
the third day of January, two thousand and eight*

An Act

Making appropriations for the Department of Homeland Security for the fiscal year ending September 30, 2008, and for other purposes.

*Be it enacted by the Senate and House of Representatives of
the United States of America in Congress assembled,*

SECTION 1. SHORT TITLE.

This Act may be cited as the “Consolidated Security, Disaster Assistance, and Continuing Appropriations Act, 2009”.

SEC. 2. TABLE OF CONTENTS.

The table of contents for this Act is as follows:

DIVISION A—CONTINUING APPROPRIATIONS RESOLUTION, 2009
DIVISION B—DISASTER RELIEF AND RECOVERY SUPPLEMENTAL APPROPRIATIONS ACT, 2008
DIVISION C—DEPARTMENT OF DEFENSE APPROPRIATIONS ACT, 2009
DIVISION D—DEPARTMENT OF HOMELAND SECURITY APPROPRIATIONS ACT, 2009
DIVISION E—MILITARY CONSTRUCTION AND VETERANS AFFAIRS APPROPRIATIONS ACT, 2009

SEC. 3. REFERENCES.

Except as expressly provided otherwise, any reference to “this Act” or “this joint resolution” contained in any division of this Act shall be treated as referring only to the provisions of that division.

SEC. 4. EXPLANATORY STATEMENT.

The explanatory statement regarding this legislation, printed in the House of Representatives section of the Congressional Record on or about September 24, 2008 by the Chairman of the Committee on Appropriations of the House, shall have the same effect with respect to the allocation of funds and implementation of this Act as if it were a joint explanatory statement of a committee of conference.

DIVISION A—CONTINUING APPROPRIATIONS RESOLUTION,
2009

The following sums are hereby appropriated, out of any money in the Treasury not otherwise appropriated, and out of applicable corporate or other revenues, receipts, and funds, for the several departments, agencies, corporations, and other organizational units of Government for fiscal year 2009, and for other purposes, namely:

SEC. 101. Such amounts as may be necessary, at a rate for operations as provided in the applicable appropriations Acts for

[House Appropriations Committee Print]

**Consolidated Security, Disaster Assistance, and Continuing
Appropriations Act, 2009
(H.R. 2638; P.L. 110-329)**

**DIVISION C—DEPARTMENT OF DEFENSE
APPROPRIATIONS ACT, 2009**

TITLE IV—RESEARCH, DEVELOPMENT, TEST AND
EVALUATION

For Research, Development, Test and Evaluation funds are to be available for fiscal year 2009, as follows:

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST
RECAPITULATION			
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY.....	10,524,085	12,060,111	+1,536,026
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, NAVY.....	19,337,238	19,764,276	+427,038
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, AIR FORCE.	28,066,617	27,084,340	-982,277
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, DEFENSE-WIDE.....	21,499,229	21,423,338	-75,891
OPERATIONAL TEST AND EVALUATION, DEFENSE.....	188,772	188,772	---
GRAND TOTAL, RDT&E.....	79,615,941	80,520,837	+904,896

CONGRESSIONAL INTEREST ITEMS

Items for which additional funds have been provided as shown in the project level tables or in paragraphs using the phrase “only for” or “only to” are congressional interest items for purposes of the Base for Reprogramming Department of Defense form (DD Form 1414). Each of these items must be carried on the DD Form 1414 at the stated amount, as specifically addressed in these materials.

TECHNOLOGY AND INDUSTRIAL BASE CONSIDERATIONS

Section 2440 of Title 10 of the United States Code specifically addresses the need for consideration of industrial base when developing and implementing acquisition programs. The Secretary of Defense is directed to comply with 10 U.S.C. 2440 as it applies to the consideration of national technology and industrial base in the development and implementation of acquisition plans for each major defense acquisition program. Additionally, the Secretary of Defense is directed to provide a report to the congressional defense committees within 30 days of enactment of this Act on how the Department implements Section 2440 in the major defense acquisition programs.

KC-135 TANKER REPLACEMENT PROGRAM

On September 10, 2008, the Secretary of Defense informed the Congress that he was terminating the solicitation for the KC-135 tanker replacement program. After seven years of deliberation, the Department of Defense is no closer to providing the warfighter with a replacement for the aged KC-135s. The Department’s latest decision could delay replacing the tankers for several more years. The timing of the Secretary’s notification made it too late for the Congress to undertake a comprehensive review of alternatives and mandate a way forward that would be fair to all parties involved. The Department of Defense needs to address this serious problem as quickly as possible. The Department of Defense should consider any practical option that would enable the replacement of the KC-135s expeditiously to include the possibility of awarding competitive contracts to more than one offeror.

In light of the termination, the bill provides \$62,500,000 in Operation and Maintenance, Air Force for modest upgrades to the KC-135s to ensure continued reliability of the fleet. In addition, funding is provided for program office operations, termination costs, and anticipated claims from the offerors.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION (RDT&E)
PROGRAM ELEMENT CODES AND BUDGET JUSTIFICATION DOCUMENTS

Senate Report 110-155, accompanying the Fiscal Year 2008 Department of Defense Appropriations Act, recommended several improvements to enhance the information provided to Congress in the RDT&E budget documentation materials. This includes the provision of specific information about activities conducted and accomplishments achieved with prior year funding; information on planned activities and their costs for the budget year at the project level; the improvement of cross references among projects; provi-

sion of schedules that identify key events; updates to narratives that reflect prior years' events; and the implementation of a more informative display of programmatic, schedule and budgetary changes. Improvements to the quality of the RDT&E budget justification documents are expected to be made beginning with the fiscal year 2010 budget submission.

REPROGRAMMING GUIDANCE FOR ACQUISITION ACCOUNTS

The Department of Defense is directed to continue to follow the reprogramming guidance specified in the House Report (H. Rept. 110-279) accompanying the Fiscal Year 2008 Department of Defense Appropriations Act. Specifically, the dollar threshold for reprogramming funds will remain at \$20,000,000 for procurement, and \$10,000,000 for research, development, test and evaluation. The Department shall continue to follow the limitation that prior approval reprogrammings are set at either the specified dollar threshold or 20 percent of the procurement or research, development, test and evaluation line, whichever is less. These thresholds are cumulative. Therefore, if the combined value of transfers into or out of a procurement (P-1) or research, development, test and evaluation (R-1) line exceeds the identified threshold, the Department of Defense must submit a prior approval reprogramming to the congressional defense committees. In addition, guidelines on the application of prior approval reprogramming procedures for congressional special interest items are established elsewhere in this explanatory statement.

INTELLIGENCE, SURVEILLANCE AND RECONNAISSANCE

The Secretary of Defense notified the House and the Senate Committees on Appropriations of a number of urgent Intelligence, Surveillance and Reconnaissance (ISR) needs for fiscal year 2009 that were not contained in the budget request. In order to respond to these emerging requirements, an increase of \$750,000,000 is provided in operation and maintenance, procurement, and research, development, test and evaluation accounts. The following table includes research, development, test and evaluation funds provided in support of this initiative.

[In thousands of dollars]

Line	Account	Item	
R-239	CRDDW	Global Observer	\$40,000

REPROGRAMMING REPORTING REQUIREMENTS

The Under Secretary of the Department of Defense, Comptroller is directed to continue to provide the congressional defense committees quarterly, spreadsheet-based DD1416 reports for service and defense-wide accounts in titles III and IV of this Act as required in the statement of the managers accompanying the conference report on the Department of Defense Appropriations Act, 2006.

FUNDING INCREASES

The funding increases outlined in these tables shall be provided only for the specific purposes indicated in the table.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY

For Research, Development, Test and Evaluation, Army, funds are to be available for fiscal year 2009, as follows:

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST	
RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY				
BASIC RESEARCH				
1	IN-HOUSE LABORATORY INDEPENDENT RESEARCH.....	19,832	19,832	---
2	DEFENSE RESEARCH SCIENCES.....	176,959	198,759	+21,800
3	UNIVERSITY RESEARCH INITIATIVES.....	76,980	89,930	+12,950
4	UNIVERSITY AND INDUSTRY RESEARCH CENTERS.....	105,622	130,722	+25,100
	TOTAL, BASIC RESEARCH.....	379,393	439,243	+59,850
APPLIED RESEARCH				
5	MATERIALS TECHNOLOGY.....	26,985	81,205	+54,220
6	SENSORS AND ELECTRONIC SURVIVABILITY.....	46,147	75,547	+29,400
7	TRACTOR HIP.....	18,192	18,192	---
8	AVIATION TECHNOLOGY.....	42,013	47,053	+5,040
9	ELECTRONIC WARFARE TECHNOLOGY.....	16,611	21,811	+5,200
10	MISSILE TECHNOLOGY.....	48,174	56,934	+8,760
11	ADVANCED WEAPONS TECHNOLOGY.....	19,664	23,264	+3,600
12	ADVANCED CONCEPTS AND SIMULATION.....	17,048	21,848	+4,800
13	COMBAT VEHICLE AND AUTOMOTIVE TECHNOLOGY.....	55,234	89,334	+34,100
14	BALLISTICS TECHNOLOGY.....	71,550	88,250	+16,700
15	CHEMICAL, SMOKE AND EQUIPMENT DEFEATING TECHNOLOGY....	2,295	8,935	+6,640
16	JOINT SERVICE SMALL ARMS PROGRAM.....	7,531	9,131	+1,600
17	WEAPONS AND MUNITIONS TECHNOLOGY.....	30,576	102,676	+72,100
18	ELECTRONICS AND ELECTRONIC DEVICES.....	45,278	100,018	+54,740
19	NIGHT VISION TECHNOLOGY.....	25,647	46,847	+21,200
20	COUNTERMINE SYSTEMS.....	21,815	32,415	+10,600
21	HUMAN FACTORS ENGINEERING TECHNOLOGY.....	17,348	42,348	+25,000
22	ENVIRONMENTAL QUALITY TECHNOLOGY.....	16,064	19,864	+3,800
23	COMMAND, CONTROL, COMMUNICATIONS TECHNOLOGY.....	24,014	41,354	+17,340
24	COMPUTER AND SOFTWARE TECHNOLOGY.....	5,495	6,295	+800
25	MILITARY ENGINEERING TECHNOLOGY.....	52,066	59,006	+6,940
26	MANPOWER/PERSONNEL/TRAINING TECHNOLOGY.....	16,412	16,412	---
27	WARFIGHTER TECHNOLOGY.....	21,948	36,252	+14,304
28	MEDICAL TECHNOLOGY.....	75,395	188,835	+113,440
	TOTAL, APPLIED RESEARCH.....	723,502	1,233,826	+510,324

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST	
29	ADVANCED TECHNOLOGY DEVELOPMENT WARFIGHTER ADVANCED TECHNOLOGY.....	46,793	73,593	+26,800
30	MEDICAL ADVANCED TECHNOLOGY.....	59,043	322,323	+263,280
31	AVIATION ADVANCED TECHNOLOGY.....	57,277	106,637	+49,360
32	WEAPONS AND MUNITIONS ADVANCED TECHNOLOGY.....	73,697	109,437	+35,740
33	COMBAT VEHICLE AND AUTOMOTIVE ADVANCED TECHNOLOGY.....	107,992	264,752	+156,760
34	COMMAND, CONTROL, COMMUNICATIONS ADVANCED TECHNOLOGY..	9,183	11,583	+2,400
35	MANPOWER, PERSONNEL AND TRAINING ADVANCED TECHNOLOGY..	6,853	6,853	---
36	ELECTRONIC WARFARE ADVANCED TECHNOLOGY	50,961	62,561	+11,600
37	TRACTOR HIKE.....	14,562	14,562	---
38	NEXT GENERATION TRAINING & SIMULATION SYSTEMS.....	18,881	25,381	+6,500
39	TRACTOR ROSE.....	11,575	11,575	---
41	EXPLOSIVES DEMILITARIZATION TECHNOLOGY.....	10,564	13,764	+3,200
42	MILITARY HIV RESEARCH.....	7,116	15,116	+8,000
43	COMBATING TERRORISM, TECHNOLOGY DEVELOPMENT.....	13,064	13,064	---
45	ELECTRONIC WARFARE TECHNOLOGY.....	23,996	33,196	+9,200
46	MISSILE AND ROCKET ADVANCED TECHNOLOGY.....	63,998	76,958	+12,960
47	TRACTOR CAGE.....	12,372	12,372	---
48	LANDMINE WARFARE AND BARRIER ADVANCED TECHNOLOGY.....	30,797	37,657	+6,860
49	JOINT SERVICE SMALL ARMS PROGRAM.....	8,809	8,809	---
50	NIGHT VISION ADVANCED TECHNOLOGY.....	39,916	70,916	+31,000
51	ENVIRONMENTAL QUALITY TECHNOLOGY DEMONSTRATIONS.....	15,519	15,519	---
52	MILITARY ENGINEERING ADVANCED TECHNOLOGY.....	7,654	35,974	+28,320
53	ADVANCED TACTICAL COMPUTER SCIENCE & SENSOR TECHNOLOGY	48,236	62,236	+14,000
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT.....	738,858	1,404,838	+665,980

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST	
DEMONSTRATION & VALIDATION				
54	UNIQUE ITEM IDENTIFICATION (UID).....	649	649	---
55	ARMY MISSILE DEFENSE SYSTEMS INTEGRATION.....	14,005	91,065	+77,060
56	ARMY MISSILE DEFENSE SYSTEMS INTEGRATION (SPACE).....	19,986	47,986	+28,000
57	AIR AND MISSILE DEFENSE SYSTEMS ENGINEERING.....	116,410	119,210	+2,800
59	LANDMINE WARFARE AND BARRIER - ADV DEV.....	29,234	14,234	-15,000
60	SMOKE, OBSCURANT AND TARGET DEFEATING SYS-ADV DEV.....	3,840	3,840	---
61	TANK AND MEDIUM CALIBER AMMUNITION.....	45,866	40,866	-5,000
62	ADVANCED TANK ARMAMENT SYSTEM (ATAS).....	108,012	79,612	-28,400
63	SOLDIER SUPPORT AND SURVIVABILITY.....	30,716	25,716	-5,000
65	NIGHT VISION SYSTEMS ADVANCED DEVELOPMENT.....	2,588	2,588	---
66	ENVIRONMENTAL QUALITY TECHNOLOGY.....	5,355	15,355	+10,000
67	WARFIGHTER INFORMATION NETWORK-TACTICAL.....	414,357	394,357	-20,000
68	NATO RESEARCH AND DEVELOPMENT.....	5,041	5,041	---
69	AVIATION - ADV DEV.....	7,455	9,855	+2,400
70	LOGISTICS AND ENGINEER EQUIPMENT - ADV DEV.....	44,141	44,141	---
71	COMBAT SERVICE SUPPORT CONTROL SYSTEM EVALUATION.....	17,788	17,788	---
72	MEDICAL SYSTEMS - ADV DEV.....	26,308	30,308	+4,000
73	SOLDIER SYSTEMS - ADVANCED DEVELOPMENT.....	36,558	41,758	+5,200
	TOTAL, DEMONSTRATION & VALIDATION.....	928,309	984,369	+56,060
ENGINEERING & MANUFACTURING DEVELOPMENT				
76	AIRCRAFT AVIONICS.....	71,562	71,562	---
77	ARMED, DEPLOYABLE OH-58D.....	135,652	135,652	---
78	ELECTRONIC WARFARE DEVELOPMENT.....	32,325	36,325	+4,000
80	TRACTOR CAGE.....	16,807	16,807	---
82	INFANTRY SUPPORT WEAPONS.....	42,414	58,254	+15,840
83	MEDIUM TACTICAL VEHICLES.....	1,949	1,949	---
84	SMOKE, OBSCURANT AND TARGET DEFEATING SYS-SDD.....	5,603	5,603	---
85	FAMILY OF HEAVY TACTICAL VEHICLES.....	2,901	4,501	+1,600
86	AIR TRAFFIC CONTROL.....	14,214	14,214	---
89	NON-LIGHT OF SIGHT LAUNCH SYSTEM.....	200,099	208,699	+8,600
90	NON-LINE OF SIGHT CANNON.....	89,841	89,841	---
91	FCS MANNED GRD VEHICLES & COMMON GRD VEHICLE.....	774,257	785,257	+11,000
92	FCS SYSTEMS OF SYSTEMS ENGR & PROGRAM MGMT.....	1,413,945	1,419,445	+5,500
93	FCS RECONNAISSANCE (UAV) PLATFORMS.....	34,379	57,379	+23,000

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST
94 FCS UNMANNED GROUND VEHICLES.....	96,918	103,318	+6,400
95 FCS UNATTENDED GROUND SENSORS.....	12,967	17,067	+4,100
96 FCS SUSTAINMENT & TRAINING R&D.....	539,145	558,145	+19,000
97 MODULAR BRIGADE ENHANCEMENT.....	64,900	111,400	+46,500
98 NIGHT VISION SYSTEMS - SDD.....	44,508	51,708	+7,200
99 COMBAT FEEDING, CLOTHING, AND EQUIPMENT.....	2,499	2,499	---
100 NON-SYSTEM TRAINING DEVICES - SDD.....	35,424	38,424	+3,000
101 AIR DEFENSE COMMAND, CONTROL AND INTELLIGENCE -SDD....	22,415	22,415	---
102 CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT.....	26,244	26,244	---
103 AUTOMATIC TEST EQUIPMENT DEVELOPMENT.....	23,582	18,582	-5,000
104 DISTRIBUTIVE INTERACTIVE SIMULATIONS (DIS) - SDD.....	16,095	17,775	+1,680
105 COMBINED ARMS TACTICAL TRAINER (CATT) CORE.....	29,468	30,668	+1,200
106 JOINT NETWORK MANAGEMENT SYSTEM.....	676	676	---
107 WEAPONS AND MUNITIONS - SDD.....	52,140	58,140	+6,000
108 LOGISTICS AND ENGINEER EQUIPMENT - SDD.....	37,718	38,518	+800
109 COMMAND, CONTROL, COMMUNICATIONS SYSTEMS - SDD.....	9,795	9,795	---
110 MEDICAL MATERIEL/MEDICAL BIOLOGICAL DEFENSE EQUIPMENT	34,971	45,371	+10,400
111 LANDMINE WARFARE/BARRIER - SDD.....	126,475	117,075	-9,400
113 ARTILLERY MUNITIONS	78,197	79,397	+1,200
114 COMBAT IDENTIFICATION.....	10,909	10,909	---
115 ARMY TACTICAL COMMAND & CONTROL HARDWARE & SOFTWARE...	67,535	65,535	-2,000
117 GENERAL FUND ENTERPRISE BUSINESS SYSTEM (GFEBs).....	60,308	50,308	-10,000
118 FIREFINDER.....	47,845	47,845	---
119 SOLDIER SYSTEMS - WARRIOR DEM/VAL.....	15,790	17,790	+2,000
120 ARTILLERY SYSTEMS	42,300	33,300	-9,000
121 PATRIOT/MEADS COMBINED AGGREGATE PROGRAM (CAP).....	431,270	431,270	---
122 NUCLEAR ARMS CONTROL MONITORING SENSOR NETWORK.....	6,260	6,260	---
123 INFORMATION TECHNOLOGY DEVELOPMENT.....	73,740	68,040	-5,700
124 JOINT AIR-TO-GROUND MISSILE (JAGM).....	118,517	118,517	---
TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT.....	4,964,559	5,102,479	+137,920

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST

RDT&E MANAGEMENT SUPPORT			
126 THREAT SIMULATOR DEVELOPMENT.....	21,416	25,176	+3,760
127 TARGET SYSTEMS DEVELOPMENT.....	13,498	13,498	---
128 MAJOR T&E INVESTMENT.....	64,618	64,618	---
130 RAND ARROYO CENTER.....	16,339	20,339	+4,000
131 ARMY KWAJALEIN ATOLL.....	174,601	174,601	---
132 CONCEPTS EXPERIMENTATION PROGRAM.....	28,271	34,031	+5,760
134 ARMY TEST RANGES AND FACILITIES.....	342,079	347,579	+5,500
135 ARMY TECHNICAL TEST INSTRUMENTATION AND TARGETS.....	74,624	80,974	+6,350
136 SURVIVABILITY/LETHALITY ANALYSIS.....	41,066	41,066	---
137 DOD HIGH ENERGY LASER TEST FACILITY.....	2,835	6,835	+4,000
138 AIRCRAFT CERTIFICATION.....	5,054	5,054	---
139 METEOROLOGICAL SUPPORT TO RDT&E ACTIVITIES.....	8,289	8,289	---
140 MATERIEL SYSTEMS ANALYSIS.....	17,028	17,028	---
142 SUPPORT OF OPERATIONAL TESTING.....	72,942	74,942	+2,000
143 ARMY EVALUATION CENTER.....	63,382	63,382	---
144 SIMULATION & MODELING FOR ACQ, RQTS, & TNG (SMART)....	5,325	5,325	---
145 PROGRAMWIDE ACTIVITIES.....	73,748	73,748	---
146 TECHNICAL INFORMATION ACTIVITIES.....	42,905	44,505	+1,600
147 MUNITIONS STANDARDIZATION, EFFECTIVENESS AND SAFETY...	20,857	48,057	+27,200
148 ENVIRONMENTAL QUALITY TECHNOLOGY MGMT SUPPORT.....	5,125	5,125	---
149 MANAGEMENT HEADQUARTERS (RESEARCH AND DEVELOPMENT)....	15,665	15,665	---

TOTAL, RDT&E MANAGEMENT SUPPORT.....	1,109,667	1,169,837	+60,170
OPERATIONAL SYSTEMS DEVELOPMENT			
151 MLRS PRODUCT IMPROVEMENT PROGRAM.....	59,749	59,749	---
153 AEROSTAT JOINT PROJECT OFFICE.....	356,434	356,434	---
154 ADV FIELD ARTILLERY TACTICAL DATA SYSTEM.....	15,860	16,660	+800
155 COMBAT VEHICLE IMPROVEMENT PROGRAMS.....	141,114	143,514	+2,400
156 MANEUVER CONTROL SYSTEM.....	37,151	37,151	---
157 AIRCRAFT MODIFICATIONS/PRODUCT IMPROVEMENT PROGRAMS...	452,787	460,937	+8,150
158 AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM.....	332	332	---
159 DIGITIZATION.....	9,534	9,534	---
160 FORCE XXI BATTLE COMMAND, BRIGADE AND BELOW (FBCB2)...	38,418	23,418	-15,000
162 MISSILE/AIR DEFENSE PRODUCT IMPROVEMENT PROGRAM.....	37,871	37,871	---
163 OTHER MISSILE PRODUCT IMPROVEMENT PROGRAMS.....	1,527	5,227	+3,700

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST
164 TRACTOR CARD.....	19,601	19,601	---
165 JOINT TACTICAL COMMUNICATIONS PROGRAM (TRI-TAC).....	920	920	---
166 JOINT TACTICAL GROUND SYSTEM.....	1,957	1,957	---
167 JOINT HIGH SPEED VESSEL (JHSV).....	2,936	2,936	---
169 SECURITY AND INTELLIGENCE ACTIVITIES.....	---	3,200	+3,200
170 INFORMATION SYSTEMS SECURITY PROGRAM.....	38,090	41,290	+3,200
171 GLOBAL COMBAT SUPPORT SYSTEM.....	104,934	104,934	---
172 SATCOM GROUND ENVIRONMENT (SPACE).....	106,327	59,099	-47,228
173 WWMCCS/GLOBAL COMMAND AND CONTROL SYSTEM.....	12,922	12,922	---
174 JOINT COMMAND AND CONTROL PROGRAM (JC2).....	15,203	15,203	---
175 TACTICAL UNMANNED AERIAL VEHICLES.....	50,976	104,276	+53,300
177 DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS.....	---	3,600	+3,600
178 AVIONICS COMPONENT IMPROVEMENT PROGRAM.....	1,023	1,023	---
179 END ITEM INDUSTRIAL PREPAREDNESS ACTIVITIES.....	69,084	91,084	+22,000
TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT.....	1,574,750	1,612,872	+38,122
999 CLASSIFIED PROGRAMS.....	105,047	112,647	+7,600
TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY.....	10,524,085	12,060,111	+1,536,026

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	Recommendation
1 IN-HOUSE LABORATORY INDEPENDENT RESEARCH	19,832	19,832
2 DEFENSE RESEARCH SCIENCES	176,959	198,759
Perpetually Available and Secure Information Systems (PASIS)		3,200
Combat Mental Health Initiative		2,400
Technology Commercialization and Management Network		1,600
Cyber Threat Analytics		2,400
Nanocrystal Source Display		1,200
Fuel Logistics Reduction through Enhanced Engine Performance		1,200
Nanostructured Materials For Photovoltaic Applications		1,600
Sustainable Alternative Energy for DoD		2,400
Direct Methanol Fuel Cell Battery Recharger Program		2,400
Unsustained growth		-7,000
Center for Advanced Energy Storage Research and Technology		1,600
Fighting Drug Resistant Infections		2,000
Flexible Electronics Research Initiative		1,600
Global Military Operating Environment		2,000
Organic Semiconductor Modeling and Simulation		1,200
Toxic Particles		800
Urban Patterns and Signatures to Support Counter-Insurgency Operations		1,200
3 UNIVERSITY RESEARCH INITIATIVES	76,980	89,930
Electrofluidic Chromatophores for Adaptive Camouflage		1,750
DoD International Diabetes Research Initiative		2,000
Nanosystems through Optical Biosensors		1,600
Burn and Shock Trauma Institute		2,000
Columbia College Chicago Construct Program		800
Hi-Tech Eyes for the Battlefield		1,600
Low Temperature Vehicle Performance Research		1,600
Open Source Intelligence for Force Protection and Intelligence		1,600
4 UNIVERSITY AND INDUSTRY RESEARCH CENTERS	105,622	130,722
Center for Nanoscale Bio-Sensors as a Defense Against Biological Threats to America		800
Manufacturing and Industrial Technology Center		800
Nanotubes Optimized for Lightweight Exceptional Strength Composite Materials		2,400
Florida Collaborative Development of Advanced Materials for Strategic Applications		1,200
Ink-Based Desktop Electronic Material Technology		1,600
Western Hemisphere Security Analysis Center		1,600
NanoSensor StageGate Accelerator (NSSA)		1,200
Development of Enabling Chemical Technologies for Power from Green Sources		1,200
Norfolk State University Center for Modeling and Simulation		2,400

R-1	Budget Request	Recommendation
Unexecutable growth		-5,000
Academic Support and Research Compliance for Knowledge Gathering		2,000
Center for Education in Nanoscience and Nanotechnology		640
Center for Information Assurance		800
Large Area Monitoring Network (LAMNET)		6,000
MEMS Antenna for Wireless Comms		2,400
Nanoscale Biosensors		2,500
Novel Methods for Detecting and Inhibiting Corrosion		1,360
Visualization for Training and Simulation in Urban Terrains		1,200
5 MATERIALS TECHNOLOGY	26,985	81,205
Unjustified Program Growth		-2,000
Future Affordable Multi-Utility Materials for the Army Future Combat Systems		6,400
Ultrasonic Consolidation for Armor Applications		1,200
Next Generation Protective Seat		2,400
Control System for Laser Powder Deposition		500
Improvised Explosive Device (IED) Simulation in Different Soils		500
Ultra-Endurance Coating		3,600
Nickel Boron Coating Technology for Army Weapons		2,400
Dual Stage Variable Energy Absorber		2,400
Unmanned Ground Vehicle Advanced Technology Development		2,500
One-Step JP-8 Bio-Diesel Fuel		1,600
Modeling and Testing of Next Generation Body Armor		2,000
Project Kryptolite Force Implementation Phase		1,200
Development of Improved Lighter-Weight IED/EFP Armor Solutions		1,000
Nanomanufacturing of Multifunctional Sensors		1,000
Advanced Conductivity Program (ACP)		3,500
Affordable Light-Weight metal matrix composite armor		1,600
Ballistic Armor Research		3,200
Capability Expansion of Spinel Transparent Armor Manufacturing		5,120
Composite Applied Research and Technology for FCS and Tactical Vehicle Survivability		3,000
Lattice Block Structures for AM2 Matting Replacement		2,500
Lightweight Anti-Ballistic Protection for Aircraft		400
Lightweight Transparent Armor for Force Protection		2,000
Moldable Fabric Armor		1,200
Novel Extremity Body Armor		600
Renewable Jet Fuel from Lignocellulosic Feedstocks		3,200
Ultrasonic Impact Technology		1,200
6 SENSORS AND ELECTRONIC SURVIVABILITY	46,147	75,547
Self-Deploying Autonomous Sensor Platforms for Situational Awareness		4,000
Adaptive Infrastructure for SOF Experimentation		2,400
Wearable Gyro-Compensated Personnel Tracking During GPS Interference		800
Semi-Autonomous or Unattended Psychological Operations and Reconnaissance Tool (SUPPORT)		2,400

R-1	Budget Request	Recommendation
Next Generation Wearable Video Capture System		800
Lookout Small Scale Radar		2,000
Intelligent Fault Protected Laser Diodes		800
Advanced Detection of Explosives (ADE)		2,400
Large Aluminum Nitride Crystals for Effective Deep Ultraviolet Sources		800
Command and Control, Communications and Computers (C4) Module		1,200
Advanced Magnetic Nanosensors for Defense Applications		4,800
Advanced UV Light Diode Sensor Development		1,600
Hydrogen Batteries for the Warfighter		3,000
Nanophotonic Devices		1,600
Terahertz Spectrometer		800
8 AVIATION TECHNOLOGY	42,013	47,053
Aircraft Structural Condition Monitoring (ASCM)		1,600
Helicopter Reliability and Failure Analysis Center		880
Intensive Quenching for Advanced Weapon Systems		960
Composite Small Main Rotor Blades		1,600
9 ELECTRONIC WARFARE TECHNOLOGY	16,611	21,811
Counter-IED Force Protection Program		2,000
Integrated Information Technology Policy Analysis Research		1,600
Battlefield Connectivity		1,600
10 MISSILE TECHNOLOGY	48,174	56,934
D-NET: Electrically Charged Mesh (ECM) Defense Net Troop Protection System		2,560
Materials Applications Research Center		800
Center of Excellence in Integrated Sensor Systems (CEISS)		600
Large Energy National Shock Tunnel (LENS XX) Hypervelocity Ground Testing		1,600
Mariah II Hypersonic Wind Tunnel Development		3,200
11 ADVANCED WEAPONS TECHNOLOGY	19,664	23,264
Remote Video Weapons Sight, USSOCOM SBIR		2,000
Army Missile and Space Technology Initiative		1,600
12 ADVANCED CONCEPTS AND SIMULATION	17,048	21,848
Advanced Live, Virtual and Constructive (LVC) Training Systems		1,600
Boston University Photonics Center		3,200
13 COMBAT VEHICLE AND AUTOMOTIVE TECHNOLOGY	55,234	89,334
Nanofluids for Advanced Military Mobility		800
Extended Lifecycle Management Environment		1,000
Superlattice Semiconductors for Mobile SS Lighting and Solar Power Applications		2,400
Institute for Advanced Materials and Manufacturing Strategies (IAMMS)		1,200
DoD Hydrogen PEM Fuel Cell Medium/Heavy Duty Vehicle Demonstration Program		1,600
Turbo Fuel Cell Engine		2,500
Fire Resistant Fuels		3,200

R-1	Budget Request	Recommendation
	Improved EFP and IED Protection, Testing, Modeling and Proving Using Lithia Alumina Silica (LAS) Glass Ceramics	2,400
	Illinois Center for Defense Manufacturing	2,000
	Rapid Up-Armor Synthesis and Crashworthiness Design for Improved Soldier Survivability	1,200
	Tactical Metal Fabrication System (TACFAB)	2,000
	Ultra Light Weight Transmission for FCS	1,600
	Advanced Manufacture of Lightweight Components	2,400
	Center for Advanced Vehicle Technology and Fuel Development	800
	Condition Based Maintenance and Mission Assuredness for Ground Vehicles	2,400
	Ground Vehicle Reliability Modeling for Condition-Based Maintenance	800
	HEV Battery System for Future Combat System	1,600
	Integrated Vehicle Health Monitoring System	1,600
	Military Fuels Research Program	1,600
	Remote Unmanned Vehicle Checkpoint System	1,000
14	BALLISTICS TECHNOLOGY	71,550
	Advanced Composite Armor for Force Protection	1,600
	Eye-Safe Standoff Fusion Detection of CBE Threats	2,000
	5.56mm Aluminum Cartridge Case, Lake City Army Ammunition Plant	1,000
	Globally Accessible Manufacturing and Maintenance Activity Beneficial Infrastructure for Rotorcraft Risk Reduction Demonstrations	800
	Super High Accuracy Range Kit (SHARK)	3,600
	Laser Based Explosives, Chem/Bio Standoff and Point Detector	4,000
	Next Generation Lightweight Drive System for Army Weapons Systems	1,600
	Small Unmanned Aerial Vehicles and Sensors	500
	CHEMICAL, SMOKE AND EQUIPMENT DEFEATING TECHNOLOGY	
15	TECHNOLOGY	2,295
	Systems Biology Biomarkers Toxicology Initiative	2,640
	Rapid and Accurate Pathogen Identification/Detection (RAPID) Program	1,600
	Enhanced Vapor Aeration capabilities (EVAC)	2,400
16	JOINT SERVICE SMALL ARMS PROGRAM	7,531
	Extreme Light Sources, University of Florida	1,600
17	WEAPONS AND MUNITIONS TECHNOLOGY	30,576
	MATRIC-Project National Shield Integration Center	2,000
	Wyoming Valley Integrated Command Operations Program (ICOP)	1,600
	Kinetic Energy Enhanced Lethality and Protection Materials	2,000
	Regional Integrated Command Center (RICC)	800
	Remotely Operated Weapons Systems	5,000
	Advanced Technologies, Energy and Manufacturing Science	5,000
	Developmental Mission Integration	4,000
	Rapid Prototyping for Special Projects	3,200
	Mitigation of Energetic Single Point Failures	2,400

R-1	Budget Request	Recommendation
Green Armaments/Rangesafe		2,400
Armament Systems Engineering - ASEI2		3,200
Advanced Rarefaction Weapon Engineered System		2,400
Northern Ohio Integrated Command Operations Program		1,600
Threat Detection and Neutralization Project		3,200
Specialized Compact Automated Mechanical Clearance Platform		1,600
Effects Based Decision Support Services		8,000
Advanced Materials and Process For Armament Structures (AMPAS)		2,400
Rapid Response Force Protection System		2,400
Hospital Emergency Planning and Integration (HEPI)		800
Accelerated Materials Development and Characterization for Army		2,500
Army Center of Excellence in Acoustics		4,400
Center for Borane Technology		2,000
Electro Conversion of Energetic Materials		3,600
Exploding Foil Initiators (EFI) with Nanomaterial-Based Circuits		1,600
Heavy Metals Total Life-Cycle Initiative		800
High Power Electrolytic Super-Capacitors Based On Conducting Polymers		800
Munitions Evaluation for Composite Electric Armor		1,200
Ripsaw Unmanned Ground Vehicle (UGV) Weaponization		1,200
18 ELECTRONICS AND ELECTRONIC DEVICES	45,278	100,018
Extremely High Frequency (EHF) Transmitter for WIN-T Satellite Communications		2,000
Bio-Battery		800
Advanced Portable Power Institute		1,600
Compact Eyesafe Tactical Laser		1,200
Advanced Tactical 2KW External Combustion Power Sources for Cogeneration Applications		2,400
Highly Reliable, Maintenance Free Remote Solar Power System		640
Miniature Cooling Unit for Electronic Devices		800
Fuel Cell Power System		800
Manufacturing Technology Development of Advanced Solid State Lasers		2,400
Micro-Machined Switches in Support of Transformational Communications Architecture		2,400
Large Format Li-Ion Battery		800
Integrated Lightweight Tracker System		1,600
High-Frequency, High-Power Electronic and Optoelectronic Devices on Aluminum Nitride		3,200
Soldier Portable Power Pack (SP3) for the 21st Century Warrior		1,700
Novel Zinc Air Power Sources for Military Applications		1,600
SOCOM Lightweight Unmanned Ground Robot		1,600
Advanced Energy Storage Development for Renewable Energy Generation		1,200
Co-Generation of Power and Air Conditioning		800
Soldier Fuel Cell System		2,400
ONAMI Miniature Tactical Energy Systems Development		2,400
Program Increase		5,600

R-1	Budget Request	Recommendation
Solid Oxide Fuel Cell Powered Tactical Smart Charger		1,600
Advanced Soldier Portable Power Systems Technologies		1,600
Ceramic Membrane Battery Systems		1,200
Cogeneration for Enhanced Cooling and Heating of Advanced Tactical Vehicles		2,400
Maryland Proof of Concept Alliance for Defense Technologies		3,500
Military Jet-Fueled Fuel Cell Generator		800
Renewable Energy for Military Applications		1,600
Self Powered, Lightweight, Flexible Display Unit on a Plastic Substrate		1,600
Stabilized Enzyme Biofuel Cell (SEBC) for Unmanned Ground Sensors		800
Tactical Asset Visibility Enhancement		500
Thermoelectric Power Generation Materials and Devices		1,200
19 NIGHT VISION TECHNOLOGY	25,647	46,847
Next Generation Communications System		1,200
Lightweight Polymer Designs for Soldier Combat Optics		1,200
Miniaturized Sensors for Small and Tactical Unmanned Aerial Vehicles (MINISENS)		1,200
Uncooled Metal-Oxide Semiconductor Field-Effect Transistor (MOSFET) Embedded Micro-cantilevers		2,400
Night Vision Technology Research		9,600
Small Business Infrared Material Manufacturing-Silicon Alternative Substrates		5,600
20 COUNTERMINE SYSTEMS	21,815	32,415
Spectroscopic Materials Identification Center		800
Hawaii Undersea Chemical Military Munitions Assessment Plan		4,000
Standoff Improvised Explosive Device Detection Program		4,800
UXO Detection and Classification in Volcanic Soil Using an Integrated Fully Polametic GPR and Chemical Sensor Technology		1,000
21 HUMAN FACTORS ENGINEERING TECHNOLOGY	17,348	42,348
LWI Training-based Collaborative Research		25,000
22 ENVIRONMENTAL QUALITY TECHNOLOGY	16,064	19,864
Range Scrap Disposal, Hawthorne Army Depot		800
MLRS Disposal System		3,000
COMMAND, CONTROL, COMMUNICATIONS TECHNOLOGY	24,014	41,354
Portable Non-Magnetic Compass/Positioning/Timing Device		1,600
Innovative Wireless Technologies for Sensor Networks		700
21st Century Command, Control, and Communications Technology		640
Automated Language and Cultural Analysis for National Security		2,000

R-1	Budget Request	Recommendation
Dynamically Managed Data Dissemination (DMDD)		1,200
On-The-Move Telescoping Mast		2,400
Intelligent Distributed Command and Control (IDC2)		2,400
Tactical Booster for Mobile Network Centric Warfare		1,600
Ruggedized Cylinders for Expandable Mobile Shelters		2,400
Modular Universal TOC Packages for Vehicles and Shelters		2,400
24 COMPUTER AND SOFTWARE TECHNOLOGY	5,495	6,295
Lightweight Soldier Sensor Computing		800
25 MILITARY ENGINEERING TECHNOLOGY	52,066	59,006
Nano-Crystalline Cement for High Strength, Rapid Curing Concrete with Improved Blast Resistance		1,440
Cellulose Nanocomposite Panels for Enhanced Blast and Ballistic Protection		2,400
Airborne Threats		1,500
Geosciences/ Atmospheric Research (CG/AR)		1,600
27 WARFIGHTER TECHNOLOGY	21,948	36,252
Protective Textile Fabric		800
Advanced Thermal Processing of Packaged Combat Rations		1,680
Solid State Shelter Lighting System		384
Chemical and Biological Protective Hangars		2,240
Photovoltaic Tent Fabric		2,800
Injection Molded Ceramic Body Armor		800
Wearable Personal Area Network Technology		2,400
Biosecurity for Soldier Food Safety		1,600
Lightweight 1-2 Person Low-Pressure Inflatable Tents		800
Modular Ballistic System for Force Protection		800
28 MEDICAL TECHNOLOGY	75,395	188,835
Battlefield Research Accelerating Virtual Environments for Military Individual Neuro Disorder (BRAVEMIND)		800
Battlefield Treatment of Hemorrhagic Shock		800
Biological and Immunological Infectious Agent and Cancer Vaccine Research		800
Cancer Prevention through Remote Biological Sensing		1,600
Center for Injury Biomechanics		3,200
Center for Ophthalmic Innovation (Note: Department of Defense Military Health System Enhancement)		2,400
Plug-In Architecture for DoD Medical Imaging		800
Cold Springs Harbor Laboratory-Women's Cancer Genomics Center (Note: Department of Defense Military Health System Enhancement)		2,800
Combat Stress Intervention Program (CSIP)		2,400
Consortium for Bone and Tissue Repair and Regeneration		800
Control of Vector-Borne Diseases		1,200
Copper Air Quality Program		2,000
Disposable Unit Dose Drug Pumps for Anesthesia and Antibiotics		1,750
Extended Duration Silver Wound Dressing-Clinical Trials		1,600
Lehman Injury Research Center (Ryder Trauma Center) (Note: Includes Funding for Jackson Health System)		6,000
Medical Resources Conservation Technology System		2,400

R-1	Budget Request	Recommendation
		10,000
	Military Interoperable Digital Hospital Testbed	
	Minimizing Health Effects of Air Toxins on Military Personnel	1,600
	Nanofabricated Bioartificial Kidney, Pancreas and Liver	2,500
	Nano-Imaging Agents for Early Disease Detection	1,600
	National Eye Evaluation and Research Network (NEER) - Clinical Trials of Orphan Retinal Degenerative Diseases	800
	Neural Controlled Prosthetic Device for Amputees	1,600
	Neuroimaging of Brain Disorders	800
	Neuroscience Research Consortium to Study Spinal Cord Injuries	800
	Neutron/Hadron Particle Therapy	1,200
	New Vaccines to Fight Respiratory Infection	4,000
	Plant-based Vaccine Research (Mitchell Memorial Cancer Center)	2,000
	Plasma Technology Laboratory	800
	Prevention of Compartment Syndrome, Ultrafiltration Catheter	1,600
	Rapid Vaccine Discovery Technology	1,600
	Self-Powered Prosthetic Limb Technology	2,400
	Synchrotron-based Scanning Research Neuroscience and Proton Institute	5,000
	Use of Drugs to Reduce Hearing Loss from Acute Acoustic Trauma	1,280
	Wound Infection Treatment Program	2,400
	Behavior and Neuroscience, Functional Magnetic Resonance Imaging Research Project	800
	Expanding Access to Proven Lifestyle Modification Treatments Focused on Preventing and Reversing Chronic Diseases	1,750
	Vision Integrating Strategies in Ophthalmology and Neurochemistry (VISION)	3,200
	Advanced Functional Nanomaterials for Biological Processes	2,000
	Carbon Nanotube Production	1,200
	Center for Aerospace Human Factors Research and Innovation	800
	Complementary & Alternative Medicine Research for Military Operations & Healthcare	5,000
	Development of Drugs for Malaria and Leishmaniasis in US Military and Civilian Personnel	3,400
	Engineering Replacement Tissues	1,600
	Expansion and Development Upper and Lower Bionic Limbs	2,000
	Facilitating Use of Advanced Prosthetic Limb Technology	1,600
	Freeze Dried Blood Technology Clinical Research	2,000
	Military Photomedicine Program	2,800
	Mosquito Born Disease Prevention : Malaria & Dengue Fever	800
	Optical Neural Techniques for Combat / Post-Trauma Healthcare	1,600
	Peer Reviewed Orthopaedic Extremity Trauma Research	5,000
	Respiratory Biodefense Initiative	1,600
	Soldier Survival in Extreme Environments	2,960
29	WARFIGHTER ADVANCED TECHNOLOGY	46,793
	Chemical and Biological Threat Protection Coating	2,400
	Precision Guided Airdropped Equipment	3,680
	Compact, Day and Night CMOS Camera for Mini and Micro UAVs	2,000

R-1	Budget Request	Recommendation
Improved Lightweight Integrated Communication and Hearing Protection Device		800
Flame and Thermal Protection for Individual Soldier		3,200
Ballistic Precision Aerial Delivery System (BPADS)		1,000
Aerial Firefighting - Precision Container Aerial Delivery System (PCADS)		2,320
Ration Packaging Materials and Systems for MREs		3,600
Compact MVCC Soldier Cooling System		1,600
Multi-layer Coextrusion for High Performance Packaging		2,400
J50 Unsustained Growth		-3,000
High Pressure Processing Prototype for Meals-Ready-to-Eat (MRE)		1,600
Laser Studied and Enhanced Reactive Materials: Self-Decontaminating Polymers for Chemical-Biological Defense		1,600
Novel Flame Retardant Nylon Fabrics		1,200
Technology and Human Systems Integration		2,400
30 MEDICAL ADVANCED TECHNOLOGY	59,043	322,323
Advanced Medical Multi-Missions and CASEVAC Roles (Note: VTOL man rated UAV/JGV)		800
Advanced Restoration Therapies in Spinal Cord Injuries		2,000
Alliance for NanoHealth (Note: Department of Defense Military Health System Enhancement)		3,200
Anti-Terror Medical Technology Program		2,800
Angiogenesis and Tissue Engineering Research		1,200
Automated and Portable Field System for the Rapid Detection and Diagnosis of Diseases		1,600
National Oncogenomics and Molecular Imaging Center		3,200
Brain Interventional-Surgical Hybrid Initiative		1,600
Brain, Biology, and Machine Applied Research		1,600
Cellular Therapy for Battlefield Wounds (Phase II)		1,600
Center for Integration of Medicine and Innovative Technology		8,000
Center of Cardiac Surgery Robotic Computerized Telem Manipulation (Note: As part of a Comprehensive Approach to Advanced Heart care)		1,600
Center of Genetic Origins of Cancer (Note: Department of Defense Military Health System Enhancement)		2,400
Center for Untethered Health Care		1,000
Chronic Tinnitus Treatment Program		1,000
Clinical Looking Glass Project (Note: to Enhance the capabilities of the Fort Drum, New York Military Health System)		800
Composite Tissue Allotransplantation Research and Clinical Program		1,600
Corneal Wound Repair		5,500
Extremity War Injury Research Foundation		800
Fibrin Adhesive Stat (FAST) Dressing		3,000
Host Pathogen Interaction Study		3,200
Human Genomics, Molecular Epidemiology, and Clinical Diagnostics for Infectious Diseases (Note: Department of Defense Military Health System Enhancement)		1,160
Infectious and Inflammatory Disease Center at the Burham Institute for Medical Research (Note: Department of Defense Military Health System Enhancement)		2,400
Institute for the Advancement of Bloodless Medicine		1,600
Institute of Surgical and Interventional Simulation (ISIS)		4,400

R-1	Budget Request	Recommendation
Integrated Functional Materials		800
Joint Collaborative Medical Information System (JCMIS)		3,200
Limb Tissue Regeneration after Battlefield Injuries using Bone Marrow Stem Cells		3,000
Limb Regeneration Through Biometrics Technology		800
Linear Accelerator Cancer Research		800
Mary Bird Perkins Cancer Center (Note: A treatment Planning Research Laboratory for High Performance Computing and Radiation Dose Effects for the Department of Defense)		2,400
Mass Scale Biosensor Threat Diagnostic for In-Theater Defense Utilization (FIU)		1,600
Maine Institute for Human Genetics and Health		1,600
Midwest Traumatic Injury Rehabilitation Center		1,460
Military Low Vision Research		1,600
MUSC Cancer Genomics Research Collaborative		800
Neuroimaging and Neuropsychiatric Trauma in Warfighters		5,000
Assistive Technology Research Center at the National Rehabilitative Hospital		2,400
National Warfighter Health Sustainment Study		800
National Center of Ophthalmology Training and Education at Wills Eye Center		1,000
Oncology Group Pediatric Cancer Research (CH)		1,600
Prader Willi Syndrome (PWS) Research		1,600
Prostate and Ovarian Cancer Biomarkers (Note: Department of Defense Military Health System Enhancement)		1,200
Proteomics Project (CH-LA)		1,200
Rehabilitation and Assistive Technologies to Enhance the Life of Individuals with Disabilities		800
Remote Bio-Medical Detector		2,000
Rural Health (CERMUSA) (Note: to serve remote and rural military retiree populations)		2,400
Rugged Electronic Textile Vital Signs Monitoring		3,000
Smart Prosthetics Research		1,600
Southeast Nebraska Cancer Center-National Functional Genomics Center		1,200
Spinal Muscular Atrophy (SMA) Research Program		3,200
Stratice Dermal Matrix Research		2,400
Technologies for Metabolic Monitoring (TMM)		800
Telepharmacy Remote Medicine Device Unit (TRMDU)		1,400
Trauma Hemostat		800
Ultra High Speed MEMS Electromagnetic Cell Sorter (UHSMECS)		2,400
Ultra-High Resolution Display for Army Medicine (UHRDARM)		4,000
UMDJ Cancer Initiative		2,400
Warfighter Cancer Care Engineering		2,400
Wireless Electronic Patient Records		3,200
National Functional Genomics Center		6,000
Returning Soldier Adjustment Assessment Remote Monitoring System		3,120
Controlled Release of Anti-Inflammatory and Tissue Repair Agents from Prosthetic Devices and Burn Treatment		6,000
Green Environmentally Sustainable Laboratories and Clean Rooms (USAMRMC)		800
Battlefield Exercise and Combat Related Spinal Cord Injury Research (Miami Project)		800
Battlefield Nursing Program		1,600

R-1	Budget Request	Recommendation
Personal Status Monitor		2,000
Intensive Care Unit to Intensive Care Hospital		2,400
Total Quality System for FDA Regulated Activities Database		1,440
Accelerating Treatment for Trauma Wounds		1,200
Feeding Tube for Battlefield Trauma Patients (Phase II)		1,600
Gulf War Illness Peer-Reviewed Research Program		8,000
Neurofibromatosis (NF) Research		10,000
Military Adult Stem Cell Collection and Storage Project		800
Medical Errors Reduction Initiative		400
Neurotoxin Exposure Treatment Parkinsons Research Program		25,000
101st Airborne Injury Prevention & Performance Enhancement Research Initiative		2,000
Advanced Lower Limb Protheses for Battlefield Amputees		1,600
Advanced Regenerative Medicine Therapies for Combat Injuries		3,000
Advanced Surface Technologies for Prosthetic Development		1,600
Battlefield Tracheal Intubation		4,200
Biodefense Tech Transfer Initiative (only for militarily relevant technology)		1,500
Bioelectrics Research for Casualty Care and Management		1,600
Biosensor, Communicator and Controller System		5,000
Blood, Medical & Food Safety Via Eco-Friendly Wireless Sensing		1,000
Blood Safety and Decontamination Technology		1,600
Combat Wound Initiative at WRAMC		1,600
Control of Inflammation and Tissue Repair		3,200
Health Sciences Regenerative Medicine Center		3,000
Hibernation Genomics		2,000
Integrated Patient Quality Program		1,600
International Heart Institute/US Army Vascular Graft Research Project		1,000
Medical Modeling and Simulation Through Synthetic Digital Genes		1,000
Military Burn Trauma Research Program		4,000
Military Nutrition Research: Personnel Readiness and Warfighter Performance		1,600
Modular Stethoscope For Harsh Environments		1,200
National Biodefense Training		5,000
Novel Approaches to Reduce the Severity of Battlefield Combined Tissue Injury		1,600
Online Medical Training for Military Personnel		2,800
Portable Autonomous Fluid-less Near-infrared Non-invasive Alcohol Testing Devices		500
Safe Airway Access in Combat		2,000
Smart Prosthetic Hand Technology		1,600
Solutions for Infection Control in Military Hospitals		2,000
Staph Vaccine		4,000
Trauma Care, Research and Training		2,400
Weight Measurements and Standards for Military Personnel		2,000
31 AVIATION ADVANCED TECHNOLOGY	57,277	106,637
Defense Helicopter Power Dense Transmission		1,280
Drive System Composite Structural Component Risk Reduction Program		2,400

R-1	Budget Request	Recommendation
Autonomous Cargo Acquisition for Rotorcraft Unmanned Aerial Vehicles		2,400
Brownout Sensor Visualization and Hazard Avoidance System		800
Heavy Fuel Burning Engines for UAVs		2,000
Cutting Tools and Materials for Aerospace		800
Non-Hazardous Infrared Anti-Reflective Coatings for Army Aircraft Sensors		1,200
Reconfigurable Tooling System		1,600
Mission Execution Technology Implementation		3,200
Power Dense Transmissions		1,280
Fuel Cells for Mobile Robotic Systems Project		800
Universal Control Full Authority Digital Engine Control (FADEC)		3,200
UAV-Resupply BURRO		1,200
Inter Turbine Burner for Turbo Shaft Engines		3,200
Improved Black Hawk De-Icing		800
Technologies for Military Equipment Replenishment		3,600
Army Aviation Weapon Technology		800
Enhanced Rapid Tactical Integration and Fielding Systems (ERTIFS)		1,600
Helicopter Vulnerability Reduction		2,400
Next Generation Ice Protection Technologies		1,600
Parts on Demand for CONUS Operations		5,000
QuickMEDS		800
UAS Sense and Avoid Concept Evaluation for Airspace Integration		2,400
Vectored Thrust Ducted Propeller Compound Helicopter		5,000
32 WEAPONS AND MUNITIONS ADVANCED TECHNOLOGY	73,697	109,437
Unjustified Program Growth		-2,500
Advanced Lightweight Gunner Protection Kit		1,200
Lens-Less Micro Seeker System for Small Steerable Projectiles		1,600
Micro Electrical Mechanical Systems (MEMS) Technology and Plastic Armor Applications		1,600
Rapid Insertion of Developmental Technology		2,400
Enhanced Jamming Resistant Technology for INS/GPS Precision Guided Munitions		1,600
Lightweight Munitions and Surveillance System for Unmanned Air and Ground Vehicles		2,800
Advanced Medium Caliber Tungsten Penetrators		1,600
Titanium Powder Advanced Forged Parts Program		1,600
Nanotechnology Fuze-On-A-Chip		2,800
Advanced Prototyping with Non-Traditional Suppliers		3,200
Precision Molding Manufacturing Technology for Infrared Aspheric Optics		2,320
Advanced Fuzing Technologies		3,600
Development of Truck Deployed Explosive Containment Vessel		1,600
Hybrid Luminescent Ammunition		800
Lightweight Cannon Recoil Reduction		1,920
Nanotechnology Manufacturing Center		2,000
Novel Guidance Kit - Phase 2 (NGK2) for M864 Projectile		4,000
Raman Chemical ID System		1,600

R-1	Budget Request	Recommendation
COMBAT VEHICLE AND AUTOMOTIVE ADVANCED		
33 TECHNOLOGY	107,992	264,752
		1,200
		2,800
		1,600
		2,000
		800
		800
		2,400
		2,000
		2,000
		2,000
		2,000
		3,200
		3,600
		3,200
		2,560
		800
		2,400
		3,200
		1,600
		1,600
		2,400
		4,000
		800
		4,000
		2,400
		800
		1,200
		2,400
		1,600
		8,000
		2,400
		2,400
		800
		4,000
		800
		3,200
		2,000
		1,600
		2,400

R-1	Budget Request	Recommendation
	Advanced Hybrid Electric Vehicle Technologies for Fuel Efficient Blast Protected Vehicles	1,200
	Alternative Energy Research	20,000
	Applied Power Management Control and Integration	800
	Combat Vehicle Electrical Power-21st Century (CVEP-21)	800
	Crosshairs Hostile Fire Indicating System	2,000
	Enhanced Military Vehicle Maintenance System Demonstration Project with Anniston Army Depot and Auburn University	1,600
	FCV Advanced Suspension System	1,600
	Ground Vehicle Integration Technologies	2,400
	Ground-forces Readiness Enabler for Advanced Tactical Vehicles (GREAT-V)	800
	Hull Humvee Protection Program	2,000
	Hybrid Electric (Heavy Truck) Vehicle	2,400
	Implementation of an Advanced Tactical Wheeled Armored Vehicle System	3,000
	Light Tactical Vehicle Ambulance Shelter	2,400
	Light Weight Structural Composite Armor for Blast and Ballistic Protection	1,600
	Lightweight Partial Hybrid Electric Military Transport Vehicle	1,600
	Michigan Technological University's Project for Diverse Sensing for Synergistic Force Protection in Urban Threat Environments	800
	Next Generation Non-Tactical Vehicle Propulsion	1,600
	Novel Onboard Hydrogen Storage System Development	800
	Payload and Advanced Development for Next Generation Robot Platform	2,000
	Power and Energy Research Equipment Upgrades	6,000
	Robotics Vehicle Secure Communications	2,000
	Unmanned Ground Vehicle Initiative (UGVI)	12,000
	COMMAND, CONTROL, COMMUNICATIONS ADVANCED TECHNOLOGY	
34	Vertical/Horizontal Integration of Space Technologies and Applications (VISTA)	9,183
		11,583
		2,400
36	ELECTRONIC WARFARE ADVANCED TECHNOLOGY	50,961
	Applied Communications and Information Networking (ACIN)	3,200
	Maritime C4ISR System	800
	Advanced Wireless Technologies	1,200
	Networked Dynamic Spectrum Access Investigation Enhanced MBITR	2,400
	Portable Emergency Broadband System	4,000
38	NEXT GENERATION TRAINING & SIMULATION SYSTEMS	18,881
	Joint Fires and Effects Training System (JFETS)	2,000
	Joint Medical Simulation Technology Research and Development Center (JMSTRDC)	1,600
	Experiential Technologies for Urban Warfare and Disaster Response	500
	Mobile Medic Training Program	800
	Vigilant Sentinel Auto-ID and Access Control System	1,600

R-1	Budget Request	Recommendation
41 EXPLOSIVES DEMILITARIZATION TECHNOLOGY	10,564	13,764
Transportable Cryofracture/Plasma Arc		1,600
Press-Loaded Explosive Projectile Washout Line		800
Unserviceable Ammunition Demilitarization via Chemical Dissolution		800
42 MILITARY HIV RESEARCH	7,116	15,116
HIV Research		8,000
45 ELECTRONIC WARFARE TECHNOLOGY	23,996	33,196
Advanced Communications ECM Demo		1,600
Non-communications ECM Technology Demo		1,200
Advanced IED Jammer Research and Development Program		2,000
ALQ-211 Networked EW Controller		1,600
Highly Mobile Remote Controlled IED Countermeasures		800
Aerial Canopy MASINT System		2,000
46 MISSILE AND ROCKET ADVANCED TECHNOLOGY	63,998	76,958
Rapid Response System for Active Protection of Ground and Air Vehicles		4,160
Advanced Commercial Technology Insertion for Aviation and Missile Research, Development, and Engineering		2,400
Army Responsive Tactical Space System Exerciser (ARTSSE)		2,000
Heavy Fuel High Efficiency Turbine Engine		2,000
High Fidelity Virtual Simulation and Analysis		1,600
Long Range Hypersonic Interceptor		800
LANDMINE WARFARE AND BARRIER ADVANCED TECHNOLOGY		
48	30,797	37,657
Enhanced Landmine and IED Detection System		960
Advanced Demining Technology		5,900
50 NIGHT VISION ADVANCED TECHNOLOGY	39,916	70,916
Hyperspectral Sensor for Improved Force Protection (Hyper-IFP)		1,600
Brownout Situational Awareness Sensor		1,600
Personal Miniature Thermal Viewer		1,600
Night Vision Advanced Technology Research		12,000
Enhanced Digital Electronic Night-Vision (EDEN)		1,600
InfraRed Goggle Upgrade System (IRGUS)		800
Mini-LRAS3 Scout Surveillance System		1,600
Passive IR Sensor for Persistent Wide Area Surveillance		2,000
Short Range Electro Optic (SREO)		1,600
Smart Data Project: Real-Time Geospatial Video Sensor Intelligence		800
Smart Sensor Supercomputing Center		5,800
52 MILITARY ENGINEERING ADVANCED TECHNOLOGY	7,654	35,974
Enhanced Holographic Imager		2,480
Direct Methanol Fuel Cell Development		800
Synthetic Automotive Virtual Environments		2,400
Defense Applications of Carbonate Fuel Cells		1,600
Complete Molten Carbonate Fuel Cell Demonstrator - Parks Reserve Forces Training Area		1,600

R-1	Budget Request	Recommendation
		2,000
		2,000
		4,500
		3,200
		5,000
		3,280
56 ARMY MISSILE DEFENSE SYSTEMS INTEGRATION (SPACE)	19,986	47,986
High Fidelity Imaging System (HiFIS)		800
High Altitude Airship		3,200
Geospatial Airship Research Platform		2,800
Army Responsive Tactical Space (ARTS)		2,400
High Altitude Integration Testbed (HIT)		3,000
High Altitude Shuttle System for Battlespace Coverage		800
Low Cost Interceptor		2,400
Missile Attack Early Warning System (MAEWS)		2,000
Multipurpose Nanosat Missile System (MNMS) formerly Integrated		
Nanosat Delivery System (INDS)		6,000
Nanocomposite Enhanced Radar and Aerospace Materials		1,200
Positron Sensors and Energy Applications		3,000
Small Agile Satellites		400
57 AIR AND MISSILE DEFENSE SYSTEMS ENGINEERING	116,410	119,210
Air, Space and Missile Defense Architecture Analysis Program (A3P)		1,200
Border Security and Defense Systems Research		1,600
59 LANDMINE WARFARE AND BARRIER - ADV DEV	29,234	14,234
AMDS program delays		-15,000
61 TANK AND MEDIUM CALIBER AMMUNITION	45,866	40,866
Follow-on Cartridge Integration Test forward funding		-5,000
62 ADVANCED TANK ARMAMENT SYSTEM (ATAS)	108,012	79,612
Stryker Common Active Protection System (APS) Radar		1,600
S-PIP change to acquisition strategy		-30,000
63 SOLDIER SUPPORT AND SURVIVABILITY	30,716	25,716
REF - forward funding		-5,000
66 ENVIRONMENTAL QUALITY TECHNOLOGY	5,355	15,355
Battlefield Asset Recovery Decontamination System (BARDS)		1,600
Plasma Energy Pyrolysis System (PEPS) Clean Fuels		800
Program Increase		4,000
Battlefield Plastic Biodiesel		1,600
Renewable Energy Testing Center		1,600
Demonstration/Evaluation Project at Travis Air Force Base (Note: To develop a greenhouse gas inventory and footprint utilizing a web-based Environmental Management Information System (EMIS))		400
67 WARFIGHTER INFORMATION NETWORK-TACTICAL	414,357	394,357
Authorization adjustment		-20,000

R-1		Budget Request	Recommendation
69	AVIATION - ADVANCED DEVELOPMENT	7,455	9,855
	New High Temperature Domestic Sourced PES		
	Foam Fabrication/Certification for DOD Aerospace Applications		2,400
72	MEDICAL SYSTEMS - ADVANCED DEVELOPMENT	26,308	30,308
	Leishmania Skin Test		800
	Garment-Based Physiological Monitoring Systems		1,600
	Wireless Medical Monitoring System (WMed)		1,600
73	SOLDIER SYSTEMS - ADVANCED DEVELOPMENT	36,558	41,758
	Unjustified Program Growth		-3,000
	Acid Alkaline Direct Methanol Fuel Cell Technology		2,800
	Individual Airburst Weapon System		1,000
	High Explosive Air Burst (HEAB) 25mm Ammunition		4,400
78	ELECTRONIC WARFARE DEVELOPMENT	32,325	36,325
	Hostile Fire Indicator		4,000
82	INFANTRY SUPPORT WEAPONS	42,414	58,254
	Headborne Energy Analysis and Diagnostic System (HEADS)		1,600
	Next Generation High Performance Ballistic Materials and Technologies Providing 7.62mm Small Arms Protection for US Armed Forces Helmets		1,440
	Composite Bottles for Survival Egress Air		2,000
	Lightweight Caliber .50 Machine Gun (LW50MG)		8,000
	Next-generation Combat Helmet Development		2,800
85	FAMILY OF HEAVY TACTICAL VEHICLES	2,901	4,501
	VIPER Mobile Power Development Project		800
	Enhanced Ku-Band/L-Band Antenna System		800
89	NON-LIGHT OF SIGHT LAUNCH SYSTEM (NLOS-LS)	200,099	208,699
	FCS Restructure: NLOS-LS National Security Agency Requirements		8,600
	FCS MANNED GROUND VEHICLES & COMMON GROUND		
91	VEHICLE	774,257	785,257
	FCS Restructure: Manned Ground Vehicle Work Delayed From Fiscal Year 2008		11,000
92	FCS SYSTEMS OF SYSTEMS ENGR & PROGRAM MGMT	1,413,945	1,419,445
	FCS Restructure: Work for Preliminary Design Review Delayed From Fiscal Year 2008		5,500
93	FCS RECONNAISSANCE (UAV) PLATFORMS	34,379	57,379
	Authorization Adjustment - Increased Level of Effort		12,000
	FCS Restructure: UAV Work Delayed From Fiscal Year 2008		11,000
94	FCS UNMANNED GROUND VEHICLES	96,918	103,318
	Authorization Adjustment - Increased Level of Effort		6,400
95	FCS UNATTENDED GROUND SENSORS	12,967	17,067
	FCS Restructure: Work Delayed From Fiscal Year 2008		4,100

R-1	Budget Request	Recommendation
96 FCS SUSTAINMENT & TRAINING R&D	539,145	558,145
FCS Restructure: Network National Security Agency Work Delayed From Fiscal Year 2008		19,000
97 MODULAR BRIGADE ENHANCEMENT	64,900	111,400
Authorization Adjustment - Increased Level of Effort		8,000
FCS Restructure: Testing Delayed from Fiscal Year 2008		21,500
FCS Restructure: Evaluation Task Force Support		12,000
FCS Restructure: TRADOC Support of Infantry Brigade Combat Team Studies		5,000
98 NIGHT VISION SYSTEMS - SDD	44,508	51,708
Common Remote Stabilized Sensor System (CRS3)		2,800
Soldier Worn Gunshot Detection System		2,400
Automatic Aim-Point Targeting Technology with Enhanced Imaging		2,000
100 NON-SYSTEM TRAINING DEVICES - SDD	35,424	38,424
Center of Excellence for Military Operations in Urban Terrain and Cultural Training		3,000
103 AUTOMATIC TEST EQUIPMENT DEVELOPMENT	23,582	18,582
NGATS excessive growth		-5,000
104 DISTRIBUTIVE INTERACTIVE SIMULATIONS (DIS)	16,095	17,775
Joint Training Integration and Evaluation Center (JTIEC)		1,680
105 COMBINED ARMS TACTICAL TRAINER (CATT) CORE	29,468	30,668
Light Utility Helicopter Simulator		1,200
107 WEAPONS AND MUNITIONS - SDD	52,140	58,140
HYBRID Propellant for Medium and Large Caliber Ammunition		3,200
Lightweight Multi-Functional Material Technology for Combat Munitions Logistics		800
Extended Range Modular Sniper Rifle System		2,000
108 LOGISTICS AND ENGINEER EQUIPMENT - SDD	37,718	38,518
CAMEL - Water transport system		800
MEDICAL MATERIEL/MEDICAL BIOLOGICAL DEFENSE		
110 EQUIPMENT	34,971	45,371
Rotary Valve Pressure Swing Absorption Oxygen Generator		800
Plasma Sterilizer		3,200
Lightweight Trauma Module		2,400
Pharmaceutical Advanced Packaging		1,600
LSTAT Advanced Medical Technologies		2,400
111 LANDMINE WARFARE/BARRIER - SDD	126,475	117,075
Authorization Adjustment - Funding Ahead of Need		-12,200
Magneto Inductive Remote Activation Munition System (MI-RAMS) Frequency and Digital Enhancements		2,800

R-1	Budget Request	Recommendation
113 ARTILLERY MUNITIONS	78,197	79,397
Advanced Cargo Projectile Technology		1,200
ARMY TACTICAL COMMAND & CONTROL HARDWARE AND SOFTWARE		
115 SOFTWARE	67,535	65,535
Common Software growth		-2,000
117 GENERAL FUND ENTERPRISE BUSINESS SYSTEM (GFEBS)	60,308	50,308
Unjustified growth		-10,000
119 SOLDIER SYSTEMS - WARRIOR DEM/VAL	15,790	17,790
Optimized M-25 Soldier Fuel Cell System		2,000
120 ARTILLERY SYSTEMS	42,300	33,300
Unjustified Program Growth		-9,000
123 INFORMATION TECHNOLOGY DEVELOPMENT	73,740	68,040
Health Informatics Initiative		2,500
FBS unjustified growth		-10,000
Electric Commodity Project		800
Health Information Technology Demonstration Project at Madigan Army Medical Center and Puget Sound VA Medical Center		1,000
126 THREAT SIMULATOR DEVELOPMENT	21,416	25,176
Electronic Combat and Counter Terrorism Threat Developments to Support Joint Forces		3,760
130 RAND ARROYO CENTER	16,339	20,339
Rand Arroyo Center Program Adjustment		4,000
132 CONCEPTS EXPERIMENTATION PROGRAM	28,271	34,031
Gunfire Detection Systems for Unmanned Aerial Vehicles		800
Arabic Language Training Program		960
Automated Communications Support System for Warfighters, Intelligence Community, Linguists, and Analysts		1,600
Moving Vehicle BAT Face Recognition Surveillance System		1,200
Technology for Rapid Foreign Language Acquisitions for Specialized Military and Intelligence Purposes		1,200
134 ARMY TEST RANGES AND FACILITIES	342,079	347,579
Cold Regions Test Center Distributed Test Coordination Cell		1,500
Test Support Infrastructure Darning and Trafficability Study		4,000
135 ARMY TECHNICAL TEST INSTRUMENTATION AND TARGETS	74,624	80,974
Mobile Optical Tracking System (MOTS) All Sky Imager (MASI)		1,200
Dugway Lidar and Modeling Improvements		2,400
Enhanced Robotic Manipulators for Defense Applications		750
Joint Urban Environment Test Capability		2,000
137 DOD HIGH ENERGY LASER TEST FACILITY	2,835	6,835
DOD High Energy Laser Test Facility		4,000

R-1	Budget Request	Recommendation
142 SUPPORT OF OPERATIONAL TESTING	72,942	74,942
MATTRACKS		2,000
146 TECHNICAL INFORMATION ACTIVITIES	42,905	44,505
Knowledge, Innovation and Technology Sharing Program		1,600
MUNITIONS STANDARDIZATION, EFFECTIVENESS AND		
147 SAFETY	20,857	48,057
Joint Munitions and Lethality Mission Integration		1,600
Joint Munitions and Lethality Warfighter Technology Insertion		2,400
Advanced Cluster Energetics		3,200
Medium Caliber Metal Parts Upgrade		2,600
Domestically Produced Atomized Magnesium for Defense		800
Virtual Opportunity and Information Center		1,000
Hybrid Protective Armor Systems		4,000
Domestic Production of Nanodiamond for Military Operations		1,600
Defense Materials Technology Center		3,000
Depleted Uranium Sensing and Treatment for Removal (DUSTR) Program		4,000
Titanium Extraction, Mining and Process Engineering Research (TEMPER)		3,000
154 ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM	15,860	16,660
Fire Support Technology Improvement Program		800
155 COMBAT VEHICLE IMPROVEMENT PROGRAMS	141,114	143,514
Ground Combat Systems Electronic Enhancements		2,400
AIRCRAFT MODIFICATIONS/PRODUCT IMPROVEMENT		
157 PROGRAMS	452,787	460,937
Operator Situational Awareness System - MEDEVAC		1,750
CH-47 Chinook Helicopter Accessory Gear Box (AGB) Improvement		800
OH-58D Kiowa Warrior Vehicle Health and Usage Management System (VHUMS) Demonstration		2,400
CH-47 Integrated Vehicle Health Management System (IVHMS)		3,200
160 FORCE XXI BATTLE COMMAND, BRIGADE AND BELOW (FBCB2)	38,418	23,418
JBC-P lack of acquisition strategy		-15,000
163 OTHER MISSILE PRODUCT IMPROVEMENT PROGRAMS	1,527	5,227
Close Combat Missile Modernization (Javelin)		3,700
169 SECURITY AND INTELLIGENCE ACTIVITIES	0	3,200
Mobile Object Search Toolkit for Intelligence Analysts		3,200
170 INFORMATION SYSTEMS SECURITY PROGRAM	38,090	41,290
Information Assurance Development		1,600
Biometrics DNA Applications		1,600
172 SATCOM GROUND ENVIRONMENT (SPACE)	106,327	59,089
Excess to Requirement		-47,228

R-1	Budget Request	Recommendation
175 TACTICAL UNMANNED AERIAL VEHICLES	50,976	104,276
Sky Warrior - Army Requested Transfer from OP.A line 61		49,300
Shadow Tactical Unmanned Aerial System Flight in the National Airspace		4,000
177 DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	0	3,600
Effect Based Approach to Operations		1,600
Heuristic Internet Protocol Packet Inspection Engine (HIPPIE)		2,000
179 END ITEM INDUSTRIAL PREPAREDNESS ACTIVITIES	69,084	91,084
Solid State Processing of Titanium Alloys for Defense Materiel Armaments		1,440
Spring Suspended Airless Tires for Convoy Protection		2,800
Smart Machine Platform Initiative		4,000
Network Centric Prototype Manufacturing		4,000
Vehicle Common Armor Manufacturing Process (VCAMP)		2,000
Advanced Modeling Technology for Large Structure Titanium Machining Initiative		800
Legacy Aerospace Gear Drive Re-Engineering Initiative		2,000
Manufacturing Metrology for Weapon System Production and Sustainment (M2VSPS)		1,760
Near-Net Shaped Direct-Sintered Silicon Carbide Torso Plates		1,600
Superior Weapons Systems Through Castings		1,600
999 CLASSIFIED PROGRAMS	105,047	112,647
Asymmetric Threat Response and Analysis Program (ATRAP)		2,400
Silver Fox and Manta UAS		2,000
Constant Look Operational Support Environment (CLOSE)		1,600
BLOS Network for MASINT Sensors		800
Blast Damage Assessment Risk Analysis and Mitigation Application - Enhancements (BRAMA-E)		800

AERIAL CANOPY SENSOR DELIVERY SYSTEM

The Department of Defense Appropriations Act, 2008, provided in Research, Development, Test and Evaluation, Defense-Wide, \$1,000,000 in Line 27, SO/LIC Advanced Development, for Aerial Canopy Sensor Delivery System. U.S. Special Operations Command and the Army now concur that the proper account for funding this program is Research, Development, Test and Evaluation, Army, Line 45, Electronic Warfare Technology. The Secretary of Defense is directed to initiate a reprogramming action to provide the funds to the Army for proper execution.

WARFIGHTER INFORMATION NETWORK—TACTICAL (WIN–T)

The budget request for fiscal year 2009 contains \$414,357,000 for Warfighter Information Network—Tactical (WIN–T) research and development. Within that amount, \$330,438,000 is to continue research and development efforts for WIN–T Increment 3, full networking on the move. There is concern with the lack of definitized requirements and program costs for Increment 3. Additionally, the revised program acquisition baseline is not expected to be completed until almost two years after the Nunn-McCurdy breach, creating an uncertain basis for the budget request. Therefore, the amount proposed in the budget request has been reduced by \$20,000,000. Additionally, the Comptroller General is directed to continue his review of the WIN–T program under the guidelines set forth in Senate Report 110–155.

TUNGSTEN/COBALT ALLOY CARCINOGEN STUDY

There is concern with the potential carcinogenic nature of tungsten/cobalt alloys and the Army is encouraged, in conjunction with the research community, to undertake a study to determine if tungsten/cobalt alloys are a probable human carcinogen in either the manufacturing or employment of ammunition and other defense equipment.

ROCK ISLAND ARSENAL

The Rock Island Arsenal is undertaking efforts to demonstrate small scale, clean energy conversion technology to provide an uninterruptible source of energy for potential use at Department of Defense facilities. The Army is encouraged to determine what environmental, economic, and safety benefits might be achieved by this energy initiative.

NEUROTOXIN EXPOSURE TREATMENT PARKINSON'S RESEARCH PROGRAM

The United States Army Medical Research and Materiel Command (USAMRMC) is advancing research in investigating the underlying biologic mechanisms and therapeutic interventions of neuro-degenerative effects caused by deployment, environmental and occupational exposures. Therefore, \$25,000,000 is recommended for the continuation of this vital research and other neurological disorders through collaborative work between the mili-

tary, a non-profit organization and an academic laboratory with distinguished scientific credentials in this field.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, NAVY

For Research, Development, Test and Evaluation, Navy, funds are to be available for fiscal year 2009, as follows:

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST	
RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY				
BASIC RESEARCH				
1	UNIVERSITY RESEARCH INITIATIVES.....	103,707	108,907	+5,200
2	IN-HOUSE LABORATORY INDEPENDENT RESEARCH.....	17,298	17,298	---
3	DEFENSE RESEARCH SCIENCES.....	407,271	421,171	+13,900
	TOTAL, BASIC RESEARCH.....	528,276	547,376	+19,100
APPLIED RESEARCH				
4	POWER PROJECTION APPLIED RESEARCH.....	79,913	99,113	+19,200
5	FORCE PROTECTION APPLIED RESEARCH.....	131,310	187,410	+56,100
6	MARINE CORPS LANDING FORCE TECHNOLOGY.....	36,480	42,980	+6,500
7	MATERIALS, ELECTRONICS AND COMPUTER TECHNOLOGY.....	---	7,300	+7,300
8	COMMON PICTURE APPLIED RESEARCH.....	77,054	85,554	+8,500
9	WARFIGHTER SUSTAINMENT APPLIED RESEARCH.....	93,862	116,102	+22,240
10	RF SYSTEMS APPLIED RESEARCH.....	54,830	59,870	+5,040
11	OCEAN WARFIGHTING ENVIRONMENT APPLIED RESEARCH.....	47,278	51,678	+4,400
12	JOINT NON-LETHAL WEAPONS APPLIED RESEARCH.....	6,084	6,084	---
13	UNDERSEA WARFARE APPLIED RESEARCH.....	58,658	65,458	+6,800
14	MINE AND EXPEDITIONARY WARFARE APPLIED RESEARCH.....	47,869	54,869	+7,000
	TOTAL, APPLIED RESEARCH.....	633,338	776,418	+143,080
ADVANCED TECHNOLOGY DEVELOPMENT				
15	POWER PROJECTION ADVANCED TECHNOLOGY.....	60,360	82,160	+21,800
16	FORCE PROTECTION ADVANCED TECHNOLOGY.....	55,099	113,859	+58,760
17	COMMON PICTURE ADVANCED TECHNOLOGY.....	104,578	90,378	-14,200
18	WARFIGHTER SUSTAINMENT ADVANCED TECHNOLOGY.....	112,520	137,880	+25,360
19	RF SYSTEMS ADVANCED TECHNOLOGY.....	37,058	56,058	+19,000
20	MARINE CORPS ADVANCED TECHNOLOGY DEMONSTRATION (ATD)...	100,787	103,667	+2,880
21	JOINT NON-LETHAL WEAPONS TECHNOLOGY DEVELOPMENT.....	11,020	13,020	+2,000
22	WARFIGHTER PROTECTION ADVANCED TECHNOLOGY.....	12,129	53,929	+41,800
23	UNDERSEA WARFARE ADVANCED TECHNOLOGY.....	81,490	83,890	+2,400
24	NAVY WARFIGHTING EXPERIMENTS AND DEMONSTRATIONS.....	70,216	66,416	-3,800
25	MINE AND EXPEDITIONARY WARFARE ADVANCED TECHNOLOGY....	33,426	34,626	+1,200
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT.....	678,683	835,883	+157,200

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST
26 DEMONSTRATION & VALIDATION AIR/OCEAN TACTICAL APPLICATIONS.....	66,133	67,733	+1,600
27 AVIATION SURVIVABILITY.....	5,917	13,717	+7,800
28 DEPLOYABLE JOINT COMMAND AND CONTROL.....	5,905	7,105	+1,200
29 ASW SYSTEMS DEVELOPMENT.....	28,799	37,199	+8,400
30 TACTICAL AIRBORNE RECONNAISSANCE.....	4,298	4,298	---
31 ADVANCED COMBAT SYSTEMS TECHNOLOGY.....	4,367	7,167	+2,800
32 SURFACE AND SHALLOW WATER MINE COUNTERMEASURES.....	119,164	123,429	+4,265
33 SURFACE SHIP TORPEDO DEFENSE.....	49,171	51,731	+2,560
34 CARRIER SYSTEMS DEVELOPMENT.....	120,511	148,111	+27,600
35 SHIPBOARD SYSTEM COMPONENT DEVELOPMENT.....	4,003	26,903	+22,900
36 PILOT FISH.....	86,017	86,017	---
37 RETRACT LARCH.....	93,078	93,078	---
38 RETRACT JUNIPER.....	159,175	159,175	---
39 RADIOLOGICAL CONTROL.....	1,094	1,094	---
40 SURFACE ASW.....	29,574	48,374	+18,800
42 ADVANCED SUBMARINE SYSTEM DEVELOPMENT.....	141,720	151,400	+9,680
43 SUBMARINE TACTICAL WARFARE SYSTEMS.....	10,212	13,812	+3,600
44 SHIP CONCEPT ADVANCED DESIGN.....	31,111	38,311	+7,200
45 SHIP PRELIMINARY DESIGN & FEASIBILITY STUDIES.....	14,627	24,867	+10,240
46 ADVANCED NUCLEAR POWER SYSTEMS.....	158,270	158,270	---
47 ADVANCED SURFACE MACHINERY SYSTEMS.....	---	2,000	+2,000
48 CHALK EAGLE.....	352,858	352,858	---
49 LITTORAL COMBAT SHIP (LCS).....	371,008	369,308	-1,700
50 COMBAT SYSTEM INTEGRATION.....	54,401	64,401	+10,000
51 CONVENTIONAL MUNITIONS.....	8,124	8,124	---
52 MARINE CORPS ASSAULT VEHICLES.....	316,052	256,052	-60,000
54 MARINE CORPS GROUND COMBAT/SUPPORT SYSTEM.....	59,049	65,449	+6,400
55 JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT.....	115,086	115,086	---
56 COOPERATIVE ENGAGEMENT.....	38,316	43,116	+4,800
57 OCEAN ENGINEERING TECHNOLOGY DEVELOPMENT.....	7,737	7,737	---
58 ENVIRONMENTAL PROTECTION.....	19,632	20,832	+1,200
59 NAVY ENERGY PROGRAM.....	5,611	10,311	+4,700
60 FACILITIES IMPROVEMENT.....	4,086	18,886	+14,800
61 CHALK CORAL.....	117,543	117,543	---

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST
62 NAVY LOGISTIC PRODUCTIVITY.....	2,846	17,846	+15,000
63 RETRACT MAPLE.....	138,091	138,091	---
64 LINK PLUMERIA.....	60,444	60,444	---
65 RETRACT ELM.....	139,139	139,139	---
66 SHIP SELF DEFENSE.....	11,001	11,001	---
67 LINK EVERGREEN.....	75,995	75,995	---
68 SPECIAL PROCESSES.....	60,678	60,678	---
69 NATO RESEARCH AND DEVELOPMENT.....	10,129	10,129	---
70 LAND ATTACK TECHNOLOGY.....	40,028	18,042	-21,986
71 NONLETHAL WEAPONS.....	46,902	49,302	+2,400
72 JOINT PRECISION APPROACH AND LANDING SYSTEMS.....	99,929	77,429	-22,500
73 SINGLE INTEGRATED AIR PICTURE (SIAP) SYSTEM ENGINEER..	41,807	41,807	---
75 DIRECTED ENERGY AND ELECTRIC WEAPON SYSTEMS.....	---	4,560	+4,560
76 TACTICAL AIR DIRECTIONAL INFRARED COUNTERMEASURES	63,244	66,844	+3,600
79 SPACE & ELECTRONIC WARFARE (SEW) ARCHITECTURE/ENGINE..	47,518	48,318	+800
TOTAL, DEMONSTRATION & VALIDATION.....	3,440,400	3,533,119	+92,719
ENGINEERING & MANUFACTURING DEVELOPMENT			
80 OTHER HELO DEVELOPMENT.....	58,210	58,210	---
81 AV-8B AIRCRAFT - ENG DEV.....	29,924	29,924	---
82 STANDARDS DEVELOPMENT.....	71,920	67,020	-4,900
83 MULTI-MISSION HELICOPTER UPGRADE DEVELOPMENT.....	70,329	70,329	---
84 AIR/OCEAN EQUIPMENT ENGINEERING.....	5,750	5,750	---
85 P-3 MODERNIZATION PROGRAM.....	3,589	3,589	---
86 WARFARE SUPPORT SYSTEM.....	8,611	12,611	+4,000
87 TACTICAL COMMAND SYSTEM.....	128,742	102,742	-26,000
88 ADVANCED HAWKEYE.....	484,159	484,159	---
89 H-1 UPGRADES.....	3,795	3,795	---
90 ACOUSTIC SEARCH SENSORS.....	45,790	39,790	-6,000
91 V-22A.....	68,763	68,763	---
92 AIR CREW SYSTEMS DEVELOPMENT.....	16,192	16,192	---
93 EA-18.....	128,906	130,106	+1,200
94 ELECTRONIC WARFARE DEVELOPMENT.....	106,932	90,932	-16,000
95 VHXX EXECUTIVE HELO DEVELOPMENT.....	1,047,835	835,000	-212,835
96 JOINT TACTICAL RADIO SYSTEM - NAVY (JTRS-NAVY).....	834,650	848,150	+13,500

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST
97 SC-21 TOTAL SHIP SYSTEM ENGINEERING.....	678,936	598,036	-80,900
98 SURFACE COMBATANT COMBAT SYSTEM ENGINEERING.....	188,500	200,900	+12,400
99 LPD-17 CLASS SYSTEMS INTEGRATION.....	985	985	---
100 SMALL DIAMETER BOMB (SDB).....	19,574	19,574	---
101 STANDARD MISSILE IMPROVEMENTS.....	234,653	237,653	+3,000
102 AIRBORNE MCM.....	39,882	41,882	+2,000
103 NAVAL INTEGRATED FIRE CONTROL-COUNTER AIR SYSTEMS ENG.	10,533	13,333	+2,800
104 ADVANCED ABOVE WATER SENSORS.....	153,558	139,158	-14,400
105 SSN-688 AND TRIDENT MODERNIZATION.....	143,453	143,453	---
106 AIR CONTROL.....	8,191	8,191	---
107 SHIPBOARD AVIATION SYSTEMS.....	42,843	45,643	+2,800
108 COMBAT INFORMATION CENTER CONVERSION.....	14,792	17,792	+3,000
109 NEW DESIGN SSN.....	167,357	190,357	+23,000
111 SUBMARINE TACTICAL WARFARE SYSTEM.....	58,592	66,592	+8,000
112 SHIP CONTRACT DESIGN/ LIVE FIRE T&E.....	72,932	81,132	+8,200
113 MINE DEVELOPMENT.....	2,008	2,008	---
115 LIGHTWEIGHT TORPEDO DEVELOPMENT.....	50,732	52,332	+1,600
116 JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT.....	10,858	10,858	---
117 PERSONNEL, TRAINING, SIMULATION, AND HUMAN FACTORS....	5,263	5,263	---
118 JOINT STANDOFF WEAPON SYSTEMS.....	22,510	22,510	---
119 SHIP SELF DEFENSE (DETECT & CONTROL).....	35,999	44,999	+9,000
120 SHIP SELF DEFENSE (ENGAGE: HARD KILL).....	36,238	46,938	+10,700
121 SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW).....	57,574	63,974	+6,400
122 INTELLIGENCE ENGINEERING.....	13,750	13,750	---
123 MEDICAL DEVELOPMENT.....	7,833	39,833	+32,000
124 NAVIGATION/ID SYSTEM.....	49,007	49,007	---
125 DISTRIBUTED SURVEILLANCE SYSTEM.....	---	2,000	+2,000
126 JOINT STRIKE FIGHTER (JSF).....	1,532,748	1,749,348	+216,600
127 INFORMATION TECHNOLOGY DEVELOPMENT.....	30,238	30,238	---
128 INFORMATION TECHNOLOGY DEVELOPMENT.....	72,497	91,897	+19,400

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST
130 CH-53K.....	570,484	570,484	---
131 C/KC-130 AVIONICS MODERNIZATION PROGRAM (AMP).....	24,407	24,407	---
132 JOINT AIR-TO-GROUND MISSILE (JAGM).....	62,324	62,324	---
133 MULTI-MISSION MARITIME AIRCRAFT (MMA).....	1,132,026	1,132,026	---
134 TACTICAL CRYPTOLOGIC SYSTEMS.....	16,678	18,278	+1,600
TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT.....	8,682,052	8,704,217	+22,165
RDT&E MANAGEMENT SUPPORT			
135 THREAT SIMULATOR DEVELOPMENT.....	24,959	24,959	---
136 TARGET SYSTEMS DEVELOPMENT.....	80,337	80,337	---
137 MAJOR T&E INVESTMENT.....	42,391	52,191	+9,800
138 STUDIES AND ANALYSIS SUPPORT - NAVY.....	8,084	8,084	---
139 CENTER FOR NAVAL ANALYSES.....	49,745	49,745	---
141 SMALL BUSINESS INNOVATIVE RESEARCH.....	---	400	+400
142 TECHNICAL INFORMATION SERVICES.....	713	15,613	+14,900
143 MANAGEMENT, TECHNICAL & INTERNATIONAL SUPPORT.....	51,568	51,568	---
144 STRATEGIC TECHNICAL SUPPORT.....	3,597	3,597	---
145 RDT&E SCIENCE AND TECHNOLOGY MANAGEMENT.....	69,913	69,913	---
147 RDT&E SHIP AND AIRCRAFT SUPPORT.....	195,017	195,017	---
148 TEST AND EVALUATION SUPPORT.....	356,254	346,254	-10,000
149 OPERATIONAL TEST AND EVALUATION CAPABILITY.....	12,195	12,195	---
150 NAVY SPACE AND ELECTRONIC WARFARE (SEW) SUPPORT.....	2,708	2,708	---
151 SEW SURVEILLANCE/RECONNAISSANCE SUPPORT.....	25,358	25,358	---
152 MARINE CORPS PROGRAM WIDE SUPPORT.....	24,687	30,287	+5,600
153 TACTICAL CRYPTOLOGIC ACTIVITIES.....	1,998	1,998	---
154 SERVICE SUPPORT TO JFCOM, JNTC.....	5,148	5,148	---
TOTAL, RDT&E MANAGEMENT SUPPORT.....	954,672	975,372	+20,700
OPERATIONAL SYSTEMS DEVELOPMENT			
157 HARPOON MODIFICATIONS.....	68,214	68,214	---
158 UNMANNED COMBAT AIR VEHICLE (UCAV) ADVANCED COMPONENT.....	275,823	275,823	---
159 STRATEGIC SUB & WEAPONS SYSTEM SUPPORT.....	80,120	78,774	-1,346
160 SSBN SECURITY TECHNOLOGY PROGRAM.....	34,131	34,131	---
161 SUBMARINE ACOUSTIC WARFARE DEVELOPMENT.....	7,384	7,384	---
162 NAVY STRATEGIC COMMUNICATIONS.....	47,495	43,495	-4,000
163 RAPID TECHNOLOGY TRANSITION (RTT).....	34,469	34,469	---

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST
164 F/A-18 SQUADRONS.....	71,232	73,632	+2,400
165 E-2 SQUADRONS.....	54,096	54,096	---
166 FLEET TELECOMMUNICATIONS (TACTICAL).....	26,696	26,696	---
167 TOMAHAWK AND TOMAHAWK MISSION PLANNING CENTER (TPMC) ..	14,212	18,212	+4,000
168 INTEGRATED SURVEILLANCE SYSTEM.....	20,565	28,765	+8,200
169 AMPHIBIOUS TACTICAL SUPPORT UNITS.....	2,325	2,325	---
170 CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT.....	28,017	27,657	-360
171 CRYPTOLOGIC DIRECT SUPPORT.....	1,441	1,441	---
172 ELECTRONIC WARFARE (EW) READINESS SUPPORT.....	24,276	24,276	---
173 HARM IMPROVEMENT.....	31,427	33,927	+2,500
174 TACTICAL DATA LINKS.....	4,247	4,247	---
175 SURFACE ASW COMBAT SYSTEM INTEGRATION.....	21,720	22,520	+800
176 MK-48 ADCAP.....	15,879	26,279	+10,400
177 AVIATION IMPROVEMENTS.....	122,906	100,266	-22,640
178 NAVY SCIENCE ASSISTANCE PROGRAM.....	3,625	3,625	---
179 OPERATIONAL NUCLEAR POWER SYSTEMS.....	71,576	71,576	---
180 MARINE CORPS COMMUNICATIONS SYSTEMS.....	273,696	281,416	+7,720
181 MARINE CORPS GROUND COMBAT/SUPPORTING ARMS SYSTEMS....	136,080	119,380	-16,700
182 MARINE CORPS COMBAT SERVICES SUPPORT.....	9,646	9,646	---
183 TACTICAL AIM MISSILES.....	6,679	6,679	---
184 ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM).....	8,556	8,556	---
185 JOINT HIGH SPEED VESSEL (JHSV).....	11,960	11,960	---
188 TECHNICAL RECONNAISSANCE AND SURVEILLANCE.....	---	2,000	+2,000
190 SATELLITE COMMUNICATIONS (SPACE).....	652,463	653,263	+800
191 INFORMATION SYSTEMS SECURITY PROGRAM.....	27,037	33,737	+6,700
192 JOINT COMMAND AND CONTROL PROGRAM (JC2).....	2,000	2,000	---
193 JOINT COMMAND AND CONTROL PROGRAM (JC2).....	4,148	4,148	---
194 COBRA JUDY.....	101,114	101,114	---
195 NAVY METEOROLOGICAL AND OCEAN SENSORS-SPACE (METOC) ...	8,208	8,208	---
196 JOINT MILITARY INTELLIGENCE PROGRAMS.....	4,614	4,614	---
197 TACTICAL UNMANNED AERIAL VEHICLES.....	45,717	51,817	+6,100
198 ENDURANCE UNMANNED AERIAL VEHICLES.....	480,098	433,698	-46,400
199 AIRBORNE RECONNAISSANCE SYSTEMS.....	55,719	66,519	+10,800
200 MANNED RECONNAISSANCE SYSTEMS.....	13,982	19,882	+5,900
201 DISTRIBUTED COMMON GROUND SYSTEMS.....	44,540	44,540	---

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST
202 AERIAL COMMON SENSOR (ACS)	74,604	74,604	---
203 MODELING AND SIMULATION SUPPORT.....	8,007	8,007	---
204 DEPOT MAINTENANCE (NON-IF).....	21,130	11,130	-10,000
205 AVIONICS COMPONENT IMPROVEMENT PROGRAM.....	1,877	1,877	---
206 INDUSTRIAL PREPAREDNESS.....	56,681	61,881	+5,200
TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT.....	3,110,432	3,082,506	-27,926
999 CLASSIFIED PROGRAMS.....	1,309,385	1,309,385	---
TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY.....	19,337,238	19,764,276	+427,038

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
(In thousands of dollars)

R-1	Budget Request	Recommendation
1 UNIVERSITY RESEARCH INITIATIVES	103,707	108,907
Program Growth		-3,000
Computational Modeling and High Performance Computing in Advanced Material Processing, Synthesis and Design		1,200
National Security Training		1,600
Human Neural Cell-Based Biosensor		1,000
Low Acoustic and Thermal Signature Battlefield Power Source		2,000
Next Generation Automated Technology for Landmine Detection		1,600
Radiation Hardness and Survivability of Electronic Systems		800
3 DEFENSE RESEARCH SCIENCES	407,271	421,171
Program Growth		-5,000
Biochemical Agent Detection		800
Energetics S&T Workforce Development		4,500
ONAMI Nanoelectronics and Nanometrology Initiative		4,000
Research Support for Nanoscale Research Facility		2,800
Center for Quantum Studies		1,200
Evaluating ELF Signals in Maritime Environments		1,600
Navy Science and Technology Outreach (N-STAR) - Maryland		1,000
Texas Microfactory		3,000
4 POWER PROJECTION APPLIED RESEARCH	79,913	99,113
Aging Military Aircraft Fleet Support		1,600
Electronic Motion Actuation Systems		800
High Energy Conventional Energetics (Phase II)		3,200
High Power Free Electron Laser Development for Naval Applications		2,400
Marine Mammal Hearing and Echolocation Research		1,600
Millimeter Wave Imaging		1,600
Strike Weapon Propulsion (SWEAP)		2,400
Unmanned Aerial Vehicle Fuel Cell Power Source with Hybrid Reforming		1,600
Combustion Light Gas Gun Projectile		4,000
5 FORCE PROTECTION APPLIED RESEARCH	131,310	187,410
High Strength Welded Structures		800
Integration of Electro-Kinetic Weapons into Next Generation of Navy Ships		4,500
Lithium Batteries		1,600
Lithium/Sulfur Chemistry Validation for Sonobuoy Application		1,600
Naval Special Warfare 11m RIB Replacement Craft Design		800
Planar Solid Oxide Fuel Cell System Demonstration at UTC SimCenter		3,500
Standoff Explosive Detection System (SEDS)		1,200
Advanced Simulation Tools for Aircraft Structures Made of Composite Materials		1,200
Alternative Energy Research		20,000
DEPUTEE - High Powered Microwave Non-Lethal Vehicle/Vessel Engine Disabling		1,600
Harbor Shield - Homeland Defense Port Security Initiative		3,500
High Power Density Propulsion and Power for USSVs		1,600
High Speed ACRC & Composites Sea Lion Craft Development		2,000
Lithium-Ion Cell Development with Electro Nano Materials		4,000
Magnetic Refrigeration Technology		2,400
Mk V.1 MAKO for Improved Signature and Weight Performance		2,000

R-1		Budget Request	Recommendation
	PMRF Force Protection Lab		2,000
	Shipboard Production of Synthetic Aviation Fuel		1,000
	Solid Oxide Fuel Cell		800
6	MARINE CORPS LANDING FORCE TECHNOLOGY	36,480	42,980
	High Power, Ultra-Lightweight Zinc-Air Battery		2,500
	Warfighter Rapid Awareness Processing Technology		4,000
7	MATERIALS, ELECTRONICS AND COMPUTER TECHNOLOGY	0	7,300
	Novel Coating Technologies for Military Equipment		4,800
	Infrared Materials Laboratories		2,500
8	COMMON PICTURE APPLIED RESEARCH	77,054	85,554
	All Weather Sense and Avoid Sensors for UAVs		2,500
	Sensor Integration Framework		1,200
	Layered Surveillance/Sensing		1,600
	SOF Test Environment for Advanced Team Collaboration Missions		2,000
	Unmanned Ground Vehicle Mobility and Coordination in Joint Urban/Littoral Environments		1,200
9	WARFIGHTER SUSTAINMENT APPLIED RESEARCH	93,862	116,102
	Acoustic Research Detachment Test Support Platform Upgrade		1,500
	Intelligent Retrieval of Imagery		2,400
	Nanotechnology Engineering and Manufacturing Operations		1,600
	Pulse Virtual Clinical Learning Lab		2,400
	Advanced Composite Maritime Manufacturing		2,000
	Assistive Technologies for Injured Servicemembers		1,600
	Biosensors for Defense Applications		2,000
	Composite Materials Enhancements Through Polymer Science Research and Development		2,240
	Digital Directed Manufacturing Project		1,700
	Friction Stir Welding		800
	On-Board Vehicle Power Systems Development		2,400
	Optimization of New Marine Coatings		1,600
10	RF SYSTEMS APPLIED RESEARCH	54,830	59,870
	Energy Efficient Gallium Nitride Semiconductor Technology		1,040
	Gallium Nitride RF Power Technology		1,600
	Reparative Core Medicine		800
	National Initiatives for Applications of Multifunctional Materials		1,600
11	OCEAN WARFIGHTING ENVIRONMENT APPLIED RESEARCH	47,278	51,678
	Autonomous Marine Sensors and Networks for Rapid Littoral Assessment		1,600
	Extended Underwater Optical Imaging		2,000
	Littoral Battlespace Sensing-Autonomous UUV		800
13	UNDERSEA WARFARE APPLIED RESEARCH	58,658	65,458
	Autonomous Unmanned Undersea Vehicle (UUV) Delivery and Communication (AUDAC) Implementation		2,800
	Advanced High Energy Density Surveillance Power Module		2,400
	Galfenol Energy Harvesting		1,600

R-1	Budget Request	Recommendation
14 MINE AND EXPEDITIONARY WARFARE APPLIED RESEARCH	47,869	54,869
Detection and Neutralization of Electronically Initiated Improvised Explosive Devices		2,000
Electromagnetic Signature Assessment System Using Multiple AUVs		1,600
Virtual Onboard Analyst (VIRONA) for Multi Sensor Mine Detection		1,000
Water Security Program (Inland Water Quality and Desalination)		2,400
15 POWER PROJECTION ADVANCED TECHNOLOGY	60,360	82,160
High Speed Anti-radiation Demonstration (HSAD)		800
Quiet Drive Advanced Rotary Actuator		2,000
Real-Time Hyperspectral Targeting Sensor		2,400
Smart Instrument Development for the Magdalena Ridge Observatory (MRO)		7,000
Advanced Ship Self Defense Technology Testing		4,000
Countermine Lidar UAV-based System		1,200
Detection, Tracking, and Identification for ISRTE of Mobile and Asymmetric Targets		1,600
Long Wavelength Array		2,800
16 FORCE PROTECTION ADVANCED TECHNOLOGY	55,099	113,859
Accelerating Fuel Cells Manufacturability and their Application in the Armed Forces		2,400
Advanced Logistics Fuel Reformer for Fuel Cells		2,400
Agile Port and High Speed Ship Technology		6,000
Center for Applied Research in Intelligent Autonomous Systems		2,400
High Power Density Motor Drive		1,000
High Temperature Superconductor Trap Field Magnet Motor		2,000
Implementation of Formable Textile for Composite Shaped Aerospace Composite Structures		1,600
Integrated Advanced Ship Control (IASC)		1,200
Integrated Ship and Motion Control Technology		3,440
Mobile Manufacturing and Repair Cell/Engineering Education Outreach Program		2,400
Navy Multi-Fuel Combustor for Shipboard Fuel Cell Systems		1,600
Remote Continuous Energetic Material Manufacturing for Pyrotechnic IR Decoys		1,600
Self Healing Target System for Laser and Sniper Ranges		1,600
Solid-State DC Protection System		1,200
Stabilized Laser Designation Capability		2,000
Ultra-Wide Coverage Visible Near Infrared Sensor for Force Protection		1,200
Underground Coordination of Managed Mesh-networks (UCOMM)		2,400
Video and Water Mist Technologies for Incipient Fire Detection on Ships		3,200
Wide Area Sensor for Force Protection Targeting		1,600
Advanced Continuous Active Sonar for UUVs		2,500
Durability, Energy Saving and Sustainability of Oceanic Vehicles and Support Infrastructure Through Use of Nanotech Lubricants		800
Electrochemical Field Deployable System for Water Generation		2,800
Future Fuel Non-Tactical Vehicle Initiative		1,600
Improved Stealth and Lower Cost Operations for Ships Using High Strength Flame Resistant LCP Reinforced Netting		1,600
Laser Perimeter Awareness System		1,500
M65 Bismaleimide Carbon Fiber Prepreg		1,600
Single Generator Operations Lithium Ion Battery		4,000
Strategic/Tactical Resource Interoperability Kinetic Environment Program		1,120

R-1		Budget Request	Recommendation
17	COMMON PICTURE ADVANCED TECHNOLOGY	104,578	90,378
	Program Growth		-3,000
	High Integrity Global Positioning System		-11,200
18	WARFIGHTER SUSTAINMENT ADVANCED TECHNOLOGY	112,520	137,880
	Defense Modernization and Sustainment Initiative		5,000
	Desktop Virtual Trainer Follow-On		2,400
	Domain Specific Knowledge Capture Interface		1,360
	Environmentally Sealed, Ruggedized Avionics Displays		4,000
	Intelligent Work Management for Class Squadrons (CLASSRONS)		2,000
	System for Intelligent Task Assignment and Readiness (SITAR)		800
	Validation of Lift Fan Engine Systems		2,000
	Chaffing Protection System		1,200
	Predicting Bio-Agent Threat Profiles Using Automated Behavior Analysis		1,600
	Sea Base Mobility and Interfaces		5,000
19	RF SYSTEMS ADVANCED TECHNOLOGY	37,058	56,058
	C-Band Radar Replacement Development		4,000
	Pacific Airborne Surveillance and Testing		15,000
	MARINE CORPS ADVANCED TECHNOLOGY DEMONSTRATION		
20	(ATD)	100,787	103,667
	Ballistic Helmet Development		1,200
	Craft Integrated Electronic Suite (CIES)		2,880
	Ground Warfare Acoustical Combat System of Netted Sensors		2,000
	Near Infrared Optical (NIRO) Augmentation System		800
	Marine Air-Ground Task Force Situational Awareness		1,000
	Reduction to Growth		-5,000
21	JOINT NON-LETHAL WEAPONS TECHNOLOGY DEVELOPMENT	11,020	13,020
	Eye Safe Laser Warning Systems		2,000
22	WARFIGHTER PROTECTION ADVANCED TECHNOLOGY	12,129	53,929
	C.W. Bill Young Marrow Donor Recruitment and Research Program		31,500
	Amelioration of Hearing Loss		1,000
	High Speed Blood and Fluid Transfusion Equipment		3,100
	Integrated Warfighter Biodefense Program		3,000
	Repair of Massive Tissue Loss and Amputation through Composite Tissue Allotransplantation		3,200
23	UNDERSEA WARFARE ADVANCED TECHNOLOGY	81,490	83,890
	Theater Undersea Warfare Initiative		2,400
24	NAVY WARFIGHTING EXPERIMENTS AND DEMONSTRATIONS	70,216	66,416
	Program Growth		
	Portable Launch and Recovery System for Unmanned Aerial Vehicle Operation		3,200
	Immersive Naval Officer Training Systems		3,000
	Reduction to Growth		-10,000
	MINE AND EXPEDITIONARY WARFARE ADVANCED TECHNOLOGY		
25		33,426	34,626
	Joint Explosive Ordnance Disposal Diver Situational Awareness System		1,200

R-1	Budget Request	Recommendation
26 AIR/OCEAN TACTICAL APPLICATIONS	66,133	67,733
Semi-Submersible UUV		1,600
27 AVIATION SURVIVABILITY	5,917	13,717
Agile Laser Eye Protection		800
In Buoy Processor for Trigger and Alert Sonobuoy System (TASS)		2,000
Air Sentinel		1,000
Modular Advanced Vision System		2,000
UAS Optimization Technologies		2,000
28 DEPLOYABLE JOINT COMMAND AND CONTROL	5,905	7,105
Deployable Command and Control Vehicle		1,200
29 ASW SYSTEMS DEVELOPMENT	28,799	37,199
Program Growth		-3,000
Holographic Optical Filter for Light Detection and Ranging (LIDAR)		2,000
Low Cost Multi-Channel Camera System		2,400
Marine Mammal Awareness, Alert and Response Systems (MMAARS)		2,400
Tactical E-Field Buoy Development		1,600
Sonobuoy Wave-Energy Module		3,000
31 ADVANCED COMBAT SYSTEMS TECHNOLOGY	4,367	7,167
Open Architecture/Maintenance Free Operating Period (MFOP)		2,800
32 SURFACE AND SHALLOW WATER MINE COUNTERMEASURES	119,164	123,429
Unmanned Underwater Vehicle Program Delay		-2,935
Unmanned Undersea Vehicles Near Term Interim Capability		4,000
AN/SQQ-32 Mine Hunting Sonar Upgrades		3,200
33 SURFACE SHIP TORPEDO DEFENSE	49,171	51,731
Supportability Training Services Infrastructure		1,600
Mobile Acoustic Decoys for Surface Ship Defense		960
34 CARRIER SYSTEMS DEVELOPMENT	120,511	148,111
Improved Corrosion Protection for Electromagnetic Aircraft Launch System (EMALS) for CVN-21 Class Carriers		2,000
National Sensor Fusion Support for Puget Sound Port Security		1,600
Electromagnetic Aircraft Launch System		24,000
35 SHIPBOARD SYSTEM COMPONENT DEVELOPMENT	4,003	26,903
Advanced Repair Technology for the Expeditionary Navy		800
Data Acquisition Reporting and Trending System (DARTS)		2,400
Extreme Torque Density (XTM) Propulsion Motor		800
Integrated Power System Converter		2,000
Infrared LED Free Space Optics Communications Advancement		400
Landing Craft Composite Lift Fan		1,000
Mobile Valve and Flex Hose Maintenance (MVFM)		1,000
Advanced Fluid Controls for Shipboard Applications Phase III		2,500
Advanced Steam Turbine		1,600
DDG-51 Hybrid Drive System		6,600
Power Dense Integrated Power System for CG(X)		3,000
Smart Valve		800
40 SURFACE ASW	29,574	48,374
Automated Readiness Measurement System (ARMS)		2,800
Small Business Technology Insertion		16,000

R-1	Budget Request	Recommendation
42 ADVANCED SUBMARINE SYSTEM DEVELOPMENT	141,720	151,400
Acoustic Research Detachment Large Scale Vehicles Operations Enhancement		480
Fiber Optic Conformal Acoustic Velocity Sensor (FOCAVES)		2,000
Submarine Fatline Vector Sensor Towed Array		800
Submarine Littoral Defense System		1,600
Low Cost Laser Module Assembly for Acoustic Sensors		1,600
Undersea Launched Missile Study		3,200
43 SUBMARINE TACTICAL WARFARE SYSTEMS	10,212	13,812
Common Architecture Imaging System (CAIS) Program		800
High Awareness Littoral Observing (HALO) Sensor - 360 Degree Imaging for Submarines		1,200
Submarine Panoramic Awareness System Program		1,600
44 SHIP CONCEPT ADVANCED DESIGN	31,111	38,311
Analytics for Shipboard Monitoring Systems		1,600
Low-Signature Modular Weapon Platform		3,200
Smart Machinery Spaces System		2,400
45 SHIP PRELIMINARY DESIGN & FEASIBILITY STUDIES	14,627	24,867
Naval Ship Hydrodynamic Test Facilities		4,000
Bow Lifting Body Ship Research		6,240
47 ADVANCED SURFACE MACHINERY SYSTEMS	0	2,000
Ship Affordability Through Advanced Aluminum		2,000
49 LITTORAL COMBAT SHIP (LCS)	371,008	369,308
Combat System C4I Development		-12,000
Autonomous Acoustic Array Advanced Tubular Solid Oxide Fuel Cell		2,000
LCS Common Mission Package Training Environment		4,500
Alternative Use of Mine Warfare Modules		3,800
50 COMBAT SYSTEM INTEGRATION	54,401	64,401
Navy Requested Transfer from Line 148		10,000
52 MARINE CORPS ASSAULT VEHICLES	316,052	256,052
Program Delay		-60,000
54 MARINE CORPS GROUND COMBAT/SUPPORT SYSTEM	59,049	65,449
Hybrid Capacitor Supercell for Marine Combat Vehicle		1,200
Marine Expeditionary Rifle Squad - Sensor Integrated, Modular Protection, Combat Helmet (MERS-SIMP)		1,600
Anti-Sniper Infrared Targeting System		2,000
Urban Operations Laboratory		1,600
56 COOPERATIVE ENGAGEMENT	38,316	43,116
Cooperative Engagement Capability		4,800
58 ENVIRONMENTAL PROTECTION	19,632	20,832
Puget Sound Anoxia Research for the Department of the Navy		1,200
59 NAVY ENERGY PROGRAM	5,611	10,311
Hydrogen Fuel Cell Development		1,200
Molten Carbonate Fuel Cell Demonstrator		3,500

R-1		Budget Request	Recommendation
60	FACILITIES IMPROVEMENT	4,086	18,886
	Kinetic Hydropower System (KHPS) Turbine		2,400
	Over-the-Horizon Vessel Tracking		800
	Regenerative Fuel Cell Back-up Power		1,200
	Swimmer Detection Sonar Network for the Portsmouth Naval Shipyard		3,200
	Testing of Critical Components for Ocean Alternate Energy Options for the Department of the Navy		2,000
	Wave Energy PowerBuoy Generating System for the Department of the Navy		1,600
	Hydrokinetic Power Generator		1,600
	Permanent Magnet Linear Generator Power Buoy System		2,000
62	NAVY LOGISTIC PRODUCTIVITY	2,846	17,846
	Field Support of Fiber Optic Cable		1,600
	Integrated Product Support Data Management System		1,000
	NAVAIR Distance Support Environment		800
	Advanced Naval Logistics		1,600
	Highly Integrated Optical Interconnect for Military Avionics		1,600
	RFID TECH Program		800
	Thin Film Materials for Advanced Applications, Advanced IED and Anti-Personnel Sensors		3,000
	Unique Identification of Tangible Items		3,000
	Zero-Standoff HERO-compliant RFID Systems		1,600
70	LAND ATTACK TECHNOLOGY	40,028	18,042
	Extended Range Guided Munition		-34,786
	Affordable Weapons System		11,200
	76mm Swarbuster Capability		1,600
71	NONLETHAL WEAPONS	46,902	49,302
	Boat Trap System for Port Security/Water Craft Interdiction		2,400
72	JOINT PRECISION APPROACH AND LANDING SYSTEMS	99,929	77,429
	Precision Approach Program Delay		-22,500
75	DIRECTED ENERGY AND ELECTRIC WEAPON SYSTEMS	0	4,560
	Multi-Function Laser System		1,200
	Directed Energy Initiative		1,760
	Guillotine		1,600
76	TACTICAL AIR DIRECTIONAL INFRARED COUNTERMEASURES	63,244	66,844
	Assault Directed Infrared Countermeasures		2,000
	Compact Ultra-Fast Laser System Development		1,600
	SPACE & ELECTRONIC WARFARE (SEW)		
79	ARCHITECTURE/ENGINE	47,518	48,318
	Cross-Domain Network Access System		800
82	STANDARDS DEVELOPMENT	71,920	67,020
	U.S. Navy Metrology and Calibration (METCAL)		2,800
	Common Avionics Displays		-7,700
86	WARFARE SUPPORT SYSTEM	8,611	12,611
	Common Expeditionary Force Protection System Architecture		4,000
87	TACTICAL COMMAND SYSTEM	128,742	102,742
	Maritime Domain Awareness Spiral 2		-30,000
	ISR Enhancements		4,000

R-1		Budget Request	Recommendation
90	ACOUSTIC SEARCH SENSORS	45,790	39,790
	ASW Sensors and Processors Management Growth		-6,000
93	EA-18	128,906	130,106
	Next Generation Electronic Warfare Simulator		1,200
94	ELECTRONIC WARFARE DEVELOPMENT	106,932	90,932
	Digital Radio Frequency Memory on Board Jammer Program Delay		-21,000
	Integrated Naval Electronic Warfare		1,000
	Point Mugu Electronic Warfare Laboratory Upgrade		1,600
	USMC Electronic Warfare (EW) Training		2,400
95	VHXX EXECUTIVE HELO DEVELOPMENT	1,047,835	835,000
	Increment II		-212,835
96	JOINT TACTICAL RADIO SYSTEM - NAVY (JTRS-NAVY)	834,650	848,150
	Digital Modular Radio (DMR)		2,000
	Army Tactical Radios for Future Combat Systems		11,500
97	SC-21 TOTAL SHIP SYSTEM ENGINEERING	678,936	598,036
	Floating Area Network Littoral Sensor Grid		4,800
	Bio/Nano-MEMS for Defense Applications		1,500
	CG(X) Program Delay		-87,200
98	SURFACE COMBATANT COMBAT SYSTEM ENGINEERING	188,500	200,900
	Adaptive Diagnostic Electronic Portable Testset (ADEPT)		800
	AEGIS Combat Information Center Modernization		4,000
	DDG 51 Permanent Magnet Hybrid Electric Propulsion System		7,600
101	STANDARD MISSILE IMPROVEMENTS	234,653	237,653
	Extensible Launching System		3,000
102	AIRBORNE MCM	39,882	41,882
	Airborne Mine Countermeasures Open Architecture Technology Insertion		2,000
	NAVAL INTEGRATED FIRE CONTROL-COUNTER AIR SYSTEMS		
103	ENG	10,533	13,333
	Sustainability of AN/SPS-49 Common Signal Data Processor		2,800
104	ADVANCED ABOVE WATER SENSORS	153,558	139,158
	Common Below Decks Affordable Architecture		3,200
	National Radio Frequency Research and Development and Technology Transfer Center		4,000
	Advanced Sensor Development		12,000
	CG(X) Program Delay		-33,600
107	SHIPBOARD AVIATION SYSTEMS	42,843	45,643
	Sensorless Control of Linear Motors in EMALS		2,800
108	COMBAT INFORMATION CENTER CONVERSION	14,792	17,792
	Scalable Open Architecture Upgradeable Reliable Computing Environment		3,000

R-1	Budget Request	Recommendation
109 NEW DESIGN SSN	167,357	190,357
Highly Corrosive-Resistant Alloy Joining for Nuclear Applications		800
Large-Scale Demonstration Item for Virginia Class Submarine Bow Dome		1,800
Submarine Automated Test and Re-Test (ATR/T)		2,000
Small Business Technology Insertion		16,000
ASW Enhancements		2,400
111 SUBMARINE TACTICAL WARFARE SYSTEM	58,592	66,592
Advanced Tactical Control System (ATCS)		1,600
Submarine Maintenance Automation and Communication System (SMACS)		1,600
Water Space Management Navigation Decision Aid		2,400
Submarine Environment for Evaluation and Development		2,400
112 SHIP CONTRACT DESIGN/ LIVE FIRE T&E	72,932	81,132
Automated Fiber Optic Manufacturing Initiative		2,800
Transfer LHA (R) from NDSF		5,400
115 LIGHTWEIGHT TORPEDO DEVELOPMENT	50,732	52,332
Torpedo Composite Homing Array		1,600
119 SHIP SELF DEFENSE (DETECT & CONTROL)	35,999	44,999
Cyber Security		2,400
Autonomous Unmanned Surface Vessel		1,200
Expeditionary Swimmer Defense System		2,400
Persistent Surveillance Wave PowerBuoy System		3,000
120 SHIP SELF DEFENSE (ENGAGE: HARD KILL)	36,238	46,938
Next Generation Phalanx with Laser Demo		10,700
121 SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)	57,574	63,974
Accelerated Improvement for Active Surface Electronic Warfare Systems		1,600
Shipboard Electronic Warfare Sustainment Training		3,200
NULKA Decoy and Mk 53 Decoy Launch System		1,600
123 MEDICAL DEVELOPMENT	7,833	39,833
Advanced Molecular Medicine Initiative		2,000
Hampton University Cancer Treatment Initiative		8,000
Military Dental Research		6,000
Mobile Oxygen, Ventilation and External Suction (MOVES)		1,200
On-Demand Custom Body Implants/Prosthesis for Injured Personnel		1,600
Penn State Cancer Institute		2,800
US Navy Cancer Vaccine Program		2,400
US Navy Pandemic Influenza Vaccine Program		1,600
Composite Tissue Transplantation for Combat Wounded Repair		2,000
Disposable Biocidal Medical Masks for NAMRU Evaluation		800
HealthForces		2,800
Topical Hemostat Effectiveness Study		800
125 DISTRIBUTED SURVEILLANCE SYSTEM	0	2,000
Sure Trak Re-Architecture and Sensor Augmentation		2,000
126 JOINT STRIKE FIGHTER (JSF)	1,532,748	1,749,348
Alternate Engine		215,000
JSF F-35B Lift Fan Component Manufacturing		1,600

R-1	Budget Request	Recommendation
128 INFORMATION TECHNOLOGY DEVELOPMENT	72,497	91,897
National Terrorism Preparedness Institute Anti-Terrorism/Counter-Terrorism Technology Development and Training		3,000
Base Level Inventory Tracking System Enhancements		2,800
Condition-based Maintenance Enabling Technologies Program		2,400
Digitization, Integration, and Analyst Access of Investigative Files, NCIS		1,600
Integration of Logistics Information for Knowledge Projection and Readiness Assessment		1,600
Supply Chain Logistics Capability at the ABL NIROP		8,000
134 TACTICAL CRYPTOLOGIC SYSTEMS	16,678	18,278
Paragon System Upgrades		1,600
137 MAJOR T&E INVESTMENT	42,391	52,191
Air Combat Environment Test and Evaluation Facility Upgrade		3,000
Improved Interoperability Research and Development to Support NAVAIR and GWOT		2,000
Network Expansion and Integration of Navy/NASA RDT&E Ranges and Facilities		4,800
141 SMALL BUSINESS INNOVATIVE RESEARCH	0	400
Autonomous Power Management for Distributed Operation		400
142 TECHNICAL INFORMATION SERVICES	713	15,613
Center for Commercialization of Advanced Technology		2,500
Integrated Manufacturing Enterprise		2,400
HTDV		10,000
148 TEST AND EVALUATION SUPPORT	356,254	346,254
Navy Requested Transfer to Line 50		-10,000
152 MARINE CORPS PROGRAM WIDE SUPPORT	24,687	30,287
Logistics Technology Improvements		1,600
Global Supply Chain Management		1,600
USMC Logistics Analysis and Optimization		2,400
159 STRATEGIC SUB & WEAPONS SYSTEM SUPPORT	80,120	78,774
Reliable Replacement Warhead		-23,346
Advanced Linear Accelerator (LINAC) Facility		3,200
Covert Robust Location Aware Wireless Network		1,600
Maritime Security - Surface and Sub-surface Surveillance System and Expeditionary Test-Bed		3,600
Adelos National Security Sensor System		2,000
Enhanced Special Weapons/Nuclear Weapons Security Program		1,600
Advanced Technology for MK5 AF&F		10,000
162 NAVY STRATEGIC COMMUNICATIONS	47,495	43,495
Program Growth		-4,000
164 F/A-18 SQUADRONS	71,232	73,632
Distributed Targeting Processor		2,400

R-1	Budget Request	Recommendation
TOMAHAWK AND TOMAHAWK MISSION PLANNING CENTER		
167 (TMPC)	14,212	18,212
Low-Cost Image-Based Navigation and Precision Targeting		800
Precision Terrain Aided Navigation (PTAN)		1,600
Tomahawk Cost Reduction Initiatives		1,600
168 INTEGRATED SURVEILLANCE SYSTEM	20,565	28,765
Autonomous Anti-Submarine Vertical Beam Array		1,600
Low Cost, Expendable, Fiber Optic Sensor Array		5,000
Distributed Maritime Surveillance System		1,600
170 CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT	28,017	27,657
Curriculum and Trainer Development Growth		-3,000
ASW Training Interoperability Enterprise Demonstration Test Bed		1,600
Total Ship Training System		1,040
173 HARM IMPROVEMENT	31,427	33,927
Aircraft Composite Rocket Launcher Improvement		2,500
175 SURFACE ASW COMBAT SYSTEM INTEGRATION	21,720	22,520
Long Range Synthetic Aperture Sonar for ASW		800
176 MK-48 ADCAP	15,879	26,279
MK 48 Torpedo Post-Launch Communication System		800
Undersea Weapons Enterprise Common Automated Test Equipment		3,200
ASW Enhancements		6,400
177 AVIATION IMPROVEMENTS	122,906	100,266
Multi-Purpose Bomb Rack Program Delay		-35,000
F/A-18 Avionics Ground Support System		2,400
Lightweight Composite Structure Development for Aerospace Vehicles		800
Reduction of Weapon System Downtime Rapid Repair Structural Adhesives		2,400
Rotor Blade Protection Against Sand and Water Erosion		800
Sacrificial Film Laminates for Navy Helicopter Windscreens		960
Vet-Biz Initiative for National Sustainment (VINS-Navy)		1,600
Arc Fault Circuit Breaker with Arc Location System		1,000
Wireless Sensors for Navy Aircraft		2,400
180 MARINE CORPS COMMUNICATIONS SYSTEMS	273,696	281,416
Center for Geospatial Intelligence and Investigation (GII)		1,520
Battlefield Sensor Netting		2,400
M2C2		3,800
MARINE CORPS GROUND COMBAT/SUPPORTING ARMS		
181 SYSTEMS	136,080	119,380
Marine Corps Shotgun Modernization Program		3,000
Marine Personnel Carrier Program Delay		-20,700
MARCOM Computer Research		1,000
188 TECHNICAL RECONNAISSANCE AND SURVEILLANCE	0	2,000
ACINT (MASINT) Tape Digitization Program		2,000
190 SATELLITE COMMUNICATIONS (SPACE)	652,463	653,263
Joint Integrated Systems Technology for Advanced Digital Networking (JIST-NET)		800

R-1	Budget Request	Recommendation
191 INFORMATION SYSTEMS SECURITY PROGRAM	27,037	33,737
TSG Technology Accreditation		2,400
Universal Description, Discovery and Integration		4,300
197 TACTICAL UNMANNED AERIAL VEHICLES	45,717	51,817
Micro-munitions Interface for Tactical Unmanned Systems (MITUS)		1,600
Unmanned Air Systems Tactical Control System		2,500
SKYBUS 80K and 130K LTA-UAS Multirole Technologies		2,000
198 ENDURANCE UNMANNED AERIAL VEHICLES	480,098	433,698
Broad Area Maritime Surveillance Program Delay		-48,000
Advanced Airship Flying Laboratory, AAFL Phase 2		1,600
199 AIRBORNE RECONNAISSANCE SYSTEMS	55,719	66,519
EP-3E Requirements Capability Migration Technology Integration Lab		4,800
Fusion, Exploitation, Algorithm, Targeting High-Altitude Reconnaissance		6,000
200 MANNED RECONNAISSANCE SYSTEMS	13,982	19,882
Unmanned Force Augmentation System		2,400
Collective Aperture Multi-Band Sensor System		3,500
204 DEPOT MAINTENANCE (NON-IF)	21,130	11,130
F-18 Service Life Assessment Program Delay		-10,000
206 INDUSTRIAL PREPAREDNESS	56,681	61,881
E-Beam Free Form Repair Qualification		1,200
Next Generation Scalable Lean Manufacturing Initiative		2,400
Out of Autoclave Composite Processing		1,600

MINE WARFARE

The Mine Warfare Mission Modules onboard the Littoral Combat Ships (LCS) will provide a significant portion of the Navy's Mine Warfare capability. Delays in the fielding of the LCS translate to a commensurate delay in fielding the mine warfare capability provided by these platforms. Given that the LCS will not be fully operational in significant numbers until well into the next decade, the Nation cannot afford such a delay to the mine warfare capability provided by the associated mission modules. However, the mine warfare capability provided by the mission modules can provide benefit to the fleet even without the LCS platform. Therefore, \$3,800,000 is provided to the LCS mission module development effort to research and study methods to employ these modules independently of the LCS platform. The Secretary of the Navy is directed to provide a report to the congressional defense committees not later than June 30, 2009, detailing the results of this study and the plan for the operational employment of the mine warfare mission modules independent of the LCS.

ELECTROMAGNETIC AIRCRAFT LAUNCHING SYSTEM (EMALS)

An additional \$24,000,000 is provided to address cost overruns in the Electromagnetic Aircraft Launching System (EMALS) program. Due to continuing concerns about meeting the schedule for integration into PCU Gerald R. Ford (CVN-78), the Secretary of the Navy is directed to submit a report to the congressional defense committees by April 1, 2009, which shall contain a description of efforts to control cost and schedule, an updated schedule for completion of research and development efforts and integration into CVN-78, and an assessment of aircraft launch system options for CVN-78, including cost estimates of those options, if the EMALS program experiences further delays.

BONE MARROW REGISTRY

The bill includes \$31,500,000 for the Department of the Navy, to be administered by the C.W. Bill Young Marrow Donor Recruitment and Research Program, also known as and referred to within the Naval Medical Research Center as the Bone Marrow Registry. Funds appropriated for the C.W. Bill Young Marrow Donor Recruitment and Research Program shall remain available only for the purposes for which they were appropriated, and may only be obligated for the C.W. Bill Young Marrow Program. This Department of Defense donor center has recruited more than 475,000 Department of Defense volunteers, and provides more marrow donors per week than any other donor center in the Nation. More than 2,880 servicemembers and other Department volunteers from this donor center have provided marrow to save the lives of patients. The success of this national and international life-saving program for military and civilian patients, which now includes more than 7,000,000 potential volunteer donors is admirable. Further, the agencies involved in contingency planning are encouraged to continue to include the C.W. Bill Young Marrow Donor Recruitment and Research Program in the development and testing of their contingency plans. The Department of Defense form (DD Form 1414)

shall show this as a congressional interest item. The Department is further directed to release all the funds appropriated for this purpose to the C.W. Bill Young Marrow Donor Recruitment and Research Program within 60 days of enactment of this Act.

JOINT COUNTER RADIO-CONTROLLED ELECTRONIC WARFARE
(JCREW)

The Navy has been designated as the executive agent for JCREW 3.3 to protect personnel from improvised explosive devices (IEDs), and is dependent upon transfer of funds from the Joint IED Defeat Organization for critical science and technology projects. Reliance on other sources of funding is inconsistent with the Navy's role as executive agent for JCREW 3.3. Therefore, the Secretary of the Navy is directed to fund these enabling science and technology projects within the Research, Development, Test and Evaluation, Navy account in future budget requests.

ELECTRIC PROPULSION TECHNOLOGY FOR SURFACE COMBATANTS

Significant steps have been taken in developing more energy efficient alternatives to the mechanical drive propulsion systems currently powering Navy ships. Funding has been provided for several years to mature electric propulsion technologies to support current and future Navy needs, either as an upgrade to DDG-51 or DDG-1000 class ships, or for the next-generation cruiser. Therefore, due to the increased flexibility, projected fuel savings and performance enhancements provided by such technologies, the Secretary of the Navy is directed to continue the exploration of electric propulsion as an integrated part of its surface combatant design and construction plan. Additionally, the Navy is encouraged to continue the development of all-electric technology by including funding in future Shipboard System Component Development (Program Element 0603513N) budget requests.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, AIR
FORCE

For Research, Development, Test and Evaluation, Air Force, funds are to be available for fiscal year 2009, as follows:

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST	
RESEARCH, DEVELOPMENT, TEST & EVAL, AIR FORCE				
BASIC RESEARCH				
1	DEFENSE RESEARCH SCIENCES.....	309,926	314,726	+4,800
2	UNIVERSITY RESEARCH INITIATIVES.....	125,949	140,789	+14,840
3	HIGH ENERGY LASER RESEARCH INITIATIVES.....	13,425	13,425	---
	TOTAL, BASIC RESEARCH.....	449,300	468,940	+19,640
APPLIED RESEARCH				
7	MEDICAL DEVELOPMENT.....	---	4,900	+4,900
8	MATERIALS.....	117,143	188,503	+71,360
9	AEROSPACE VEHICLE TECHNOLOGIES.....	122,870	126,970	+4,100
10	HUMAN EFFECTIVENESS APPLIED RESEARCH.....	82,091	95,891	+13,800
11	AEROSPACE PROPULSION.....	218,049	251,109	+33,060
12	AEROSPACE SENSORS.....	109,048	130,448	+21,400
13	SPACE TECHNOLOGY.....	117,519	135,799	+18,280
14	CONVENTIONAL MUNITIONS.....	55,963	55,963	---
15	DIRECTED ENERGY TECHNOLOGY.....	62,871	62,871	---
16	COMMAND CONTROL AND COMMUNICATIONS.....	109,492	114,292	+4,800
17	HIGH ENERGY LASER RESEARCH.....	49,449	49,449	---
	TOTAL, APPLIED RESEARCH.....	1,044,495	1,216,195	+171,700
ADVANCED TECHNOLOGY DEVELOPMENT				
18	ADVANCED MATERIALS FOR WEAPON SYSTEMS.....	41,926	65,646	+23,720
19	ADVANCED AEROSPACE SENSORS.....	56,916	65,316	+8,400
20	AEROSPACE TECHNOLOGY DEV/DEMO.....	44,918	46,118	+1,200
21	AEROSPACE PROPULSION AND POWER TECHNOLOGY.....	170,856	180,256	+9,400
22	CREW SYSTEMS AND PERSONNEL PROTECTION TECHNOLOGY.....	26,630	34,110	+7,480
23	ELECTRONIC COMBAT TECHNOLOGY.....	21,056	31,936	+10,880
25	ADVANCED SPACECRAFT TECHNOLOGY.....	80,958	98,580	+17,622
26	MAUI SPACE SURVEILLANCE SYSTEM (MSSS).....	4,838	36,438	+31,600
27	CONVENTIONAL WEAPONS TECHNOLOGY.....	11,813	19,213	+7,400
28	ADVANCED WEAPONS TECHNOLOGY.....	44,507	56,467	+11,960
29	MANUFACTURING TECHNOLOGY PROGRAM.....	39,729	45,329	+5,600
30	C3I ADVANCED DEVELOPMENT.....	30,103	34,003	+3,900
32	HIGH ENERGY LASER ADVANCED TECHNOLOGY PROGRAM.....	4,013	4,013	---
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT.....	578,263	717,425	+139,162

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST
DEMONSTRATION & VALIDATION			
33 INTELLIGENCE ADVANCED DEVELOPMENT.....	4,988	6,588	+1,600
34 PHYSICAL SECURITY EQUIPMENT.....	477	1,677	+1,200
36 GPS III - OPERATIONAL CONTROL SEGMENT.....	2,975	307,335	+304,360
37 GPS OPERATIONAL CONTROL SEGMENT.....	304,360	---	-304,360
38 ADVANCED EHF MILSATCOM (SPACE).....	388,041	388,041	---
39 POLAR MILSATCOM (SPACE).....	237,749	237,749	---
40 SPACE CONTROL TECHNOLOGY.....	76,845	86,645	+9,800
41 COMBAT IDENTIFICATION TECHNOLOGY.....	29,400	29,400	---
42 NATO RESEARCH AND DEVELOPMENT.....	4,334	4,334	---
43 INTERNATIONAL SPACE COOPERATIVE R&D.....	627	627	---
44 TRANSFORMATIONAL SATCOM (TSAT).....	842,974	767,974	-75,000
45 INTEGRATED BROADCAST SERVICE.....	21,105	21,105	---
46 INTERCONTINENTAL BALLISTIC MISSILE.....	65,629	70,429	+4,800
47 WIDEBAND GAFILLER SYSTEM RDT&E (SPACE).....	12,422	52,422	+40,000
49 POLLUTION PREVENTION (DEM/VAL).....	2,877	11,677	+8,800
50 JOINT PRECISION APPROACH AND LANDING SYSTEMS.....	7,479	7,479	---
52 ALTERNATIVE FUELS.....	28,464	59,864	+31,400
53 AUTOMATED AIR-TO-AIR REFUELING.....	9,889	9,889	---
55 OPERATIONALLY RESPONSIVE SPACE.....	110,032	197,232	+87,200
56 NATIONAL POLAR-ORBITING OPERATIONAL ENVIRONMENTAL SAT.....	289,469	289,469	---
TOTAL, DEMONSTRATION & VALIDATION.....	2,440,136	2,549,936	+109,800
ENGINEERING & MANUFACTURING DEVELOPMENT			
57 GLOBAL BROADCAST SERVICE (GBS).....	18,790	18,790	---
58 NUCLEAR WEAPONS SUPPORT.....	20,166	20,166	---
59 B-1B.....	128,871	143,031	+14,160
60 SPECIALIZED UNDERGRADUATE FLIGHT TRAINING.....	7,462	13,462	+6,000
61 B-2 ADVANCED TECHNOLOGY BOMBER.....	351,417	365,077	+13,660
63 ELECTRONIC WARFARE DEVELOPMENT.....	54,995	56,495	+1,500
64 PHYSICAL SECURITY EQUIPMENT.....	52	52	---
65 SMALL DIAMETER BOMB (SDB).....	125,067	126,667	+1,600
66 COUNTERSPACE SYSTEMS.....	74,918	76,518	+1,600
67 SPACE SITUATION AWARENESS SYSTEMS.....	210,501	210,501	---
68 AIRBORNE ELECTRONIC ATTACK.....	34,279	34,279	---
69 SPACE BASED INFRARED SYSTEM (SBIRS) HIGH EMD.....	529,771	544,771	+15,000

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST
70 ALTERNATIVE INFRARED SPACE SYSTEM (AIRSS).....	149,064	960	-148,104
71 ARMAMENT/ORDNANCE DEVELOPMENT.....	2,095	2,095	---
72 SUBMUNITIONS.....	1,730	1,730	---
73 AGILE COMBAT SUPPORT.....	5,790	5,790	---
75 LIFE SUPPORT SYSTEMS.....	10,998	16,598	+5,600
76 COMBAT TRAINING RANGES.....	28,047	28,047	---
77 INTEGRATED COMMAND & CONTROL APPLICATIONS (IC2A).....	177	5,777	+5,600
78 INTELLIGENCE EQUIPMENT.....	1,488	2,288	+800
80 JOINT STRIKE FIGHTER (JSF).....	1,524,016	1,739,016	+215,000
81 EVOLVED EXPENDABLE LAUNCH VEHICLE PROGRAM (SPACE).....	33,719	33,719	---
82 RDT&E FOR AGING AIRCRAFT.....	13,828	17,028	+3,200
83 NEXT GENERATION AERIAL REFUELING AIRCRAFT.....	831,759	23,000	-808,759
84 CSAR-X RDT&E.....	305,062	233,027	-72,035
85 HC/MC-130 RECAP RDT&E.....	11,692	11,692	---
86 LINK-16 SUPPORT AND SUSTAINMENT.....	186,213	193,813	+7,600
87 E-10 SQUADRONS.....	42,215	---	-42,215
88 SINGLE INTEGRATED AIR PICTURE (SIAP).....	66,909	66,909	---
89 FULL COMBAT MISSION TRAINING.....	135,152	135,152	---
90 JOINT CARGO AIRCRAFT (JCA).....	26,777	16,777	-10,000
91 CV-22.....	18,562	18,562	---
92 AIRBORNE SENIOR LEADER C3 (SLC3S).....	1,992	1,992	---
TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT.....	4,953,574	4,163,781	-789,793

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST

RDT&E MANAGEMENT SUPPORT			
93 THREAT SIMULATOR DEVELOPMENT.....	34,568	34,568	---
94 MAJOR T&E INVESTMENT.....	61,818	69,418	+7,600
95 RAND PROJECT AIR FORCE.....	28,676	31,676	+3,000
97 INITIAL OPERATIONAL TEST & EVALUATION.....	29,537	29,537	---
98 TEST AND EVALUATION SUPPORT.....	787,737	787,737	---
99 ROCKET SYSTEMS LAUNCH PROGRAM (SPACE).....	14,895	14,895	---
100 SPACE TEST PROGRAM (STP).....	48,072	48,072	---
101 FACILITIES RESTORATION & MODERNIZATION - TEST & EVAL..	46,234	49,434	+3,200
102 FACILITIES SUSTAINMENT - TEST AND EVALUATION SUPPORT..	28,898	36,298	+7,400
104 INTERNATIONAL ACTIVITIES.....	3,910	3,910	---

TOTAL, RDT&E MANAGEMENT SUPPORT.....	1,084,345	1,105,545	+21,200
OPERATIONAL SYSTEMS DEVELOPMENT			
105 COMMON VERTICAL LIFT SUPPORT PLATFORM.....	3,868	3,868	---
106 ANTI-TAMPER TECHNOLOGY EXECUTIVE AGENCY.....	20,987	20,987	---
108 B-52 SQUADRONS.....	38,651	47,651	+9,000
110 AIR-LAUNCHED CRUISE MISSILE (ALCM).....	396	396	---
111 STRAT WAR PLANNING SYSTEM - USSTRATCOM.....	17,553	17,553	---
112 NIGHT FIST - USSTRATCOM.....	5,299	5,299	---
114 REGION/SECTOR OPERATION CONTROL CENTER MODERNIZATION..	23,858	23,858	---
115 STRATEGIC AEROSPACE INTELLIGENCE SYSTEM ACTIVITIES....	15	15	---
116 WARFIGHTER RAPID ACQUISITION PROCESS (WRAP) RAPID TRAN	20,807	20,807	---
117 MQ-9 UAV.....	43,557	46,557	+3,000
118 A-10 SQUADRONS.....	---	4,000	+4,000
119 F-16 SQUADRONS.....	123,979	127,179	+3,200
120 F-15E SQUADRONS.....	184,213	199,413	+15,200
121 MANNED DESTRUCTIVE SUPPRESSION.....	5,585	5,585	---
122 F-22 SQUADRONS.....	700,305	607,305	-93,000
124 TACTICAL AIM MISSILES.....	5,748	5,748	---
125 ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM)....	54,239	54,239	---
126 JOINT HELMET MOUNTED CUEING SYSTEM (JHMCS).....	3,192	3,192	---
127 AF TENCAP.....	11,578	11,578	---
129 COMPASS CALL.....	4,670	4,670	---
130 AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM.....	150,956	150,956	---
132 JOINT AIR-TO-SURFACE STANDOFF MISSILE (JASSM).....	13,035	33,035	+20,000

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST
133 AIR AND SPACE OPERATIONS CENTER (AOC).....	118,834	98,834	-20,000
134 CONTROL AND REPORTING CENTER (CRC).....	60,590	60,590	---
135 AIRBORNE WARNING AND CONTROL SYSTEM (AWACS).....	126,300	126,300	---
136 TACTICAL AIRBORNE CONTROL SYSTEMS.....	1,530	1,530	---
137 ADVANCED COMMUNICATIONS SYSTEMS.....	29,782	29,782	---
138 EVALUATION AND ANALYSIS PROGRAM.....	794,036	794,036	---
140 THEATER BATTLE MANAGEMENT (TBM) C4I.....	19,437	19,437	---
141 FIGHTER TACTICAL DATA LINK.....	62,788	57,788	-5,000
142 BOMBER TACTICAL DATA LINK.....	11,702	11,702	---
143 C2ISR TACTICAL DATA LINK.....	1,727	1,727	---
144 COMMAND AND CONTROL (C2) CONSTELLATION.....	32,151	32,151	---
145 JOINT SURVEILLANCE AND TARGET ATTACK RADAR SYSTEM	97,641	81,541	-16,100
146 SEEK EAGLE.....	21,645	21,645	---
148 USAF MODELING AND SIMULATION.....	28,981	28,981	---
149 WARGAMING AND SIMULATION CENTERS.....	3,870	3,870	---
150 DISTRIBUTED TRAINING AND EXERCISES.....	7,137	7,137	---
151 MISSION PLANNING SYSTEMS.....	97,560	97,560	---
152 INFORMATION WARFARE SUPPORT.....	12,220	12,220	---
153 SPECIAL EVALUATION SYSTEM.....	1,077,970	1,077,970	---
167 NATIONAL AIR INTELLIGENCE CENTER.....	---	1,360	+1,360
159 E-4B NATIONAL AIRBORNE OPERATIONS CENTER (NAOC).....	4,069	4,069	---
161 MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK	70,995	70,995	---
162 INFORMATION SYSTEMS SECURITY PROGRAM.....	187,933	187,933	---
163 GLOBAL COMBAT SUPPORT SYSTEM.....	4,320	4,320	---
164 GLOBAL COMMAND AND CONTROL SYSTEM.....	3,218	7,218	+4,000
165 JOINT COMMAND AND CONTROL PROGRAM (JC2).....	3,234	3,234	---
166 MILSATCOM TERMINALS.....	337,098	337,098	---
167 SPECIAL ACTIVITIES.....	---	5,600	+5,600
168 AIRBORNE SIGINT ENTERPRISE.....	173,631	173,631	---
ADVANCED GEOSPATIAL INTELLIGENCE.....	---	2,000	+2,000
171 GLOBAL AIR TRAFFIC MANAGEMENT (GATH).....	6,275	6,275	---
172 CYBER SECURITY INITIATIVE.....	2,083	2,083	---
173 SATELLITE CONTROL NETWORK (SPACE).....	16,758	16,758	---
174 WEATHER SERVICE.....	47,347	47,347	---
175 AIR TRAFFIC CONTROL, APPROACH, & LANDING SYSTEM (ATC).....	6,867	6,867	---

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST
176 AERIAL TARGETS.....	34,777	34,777	---
179 SECURITY AND INVESTIGATIVE ACTIVITIES.....	786	786	---
181 DEFENSE JOINT COUNTERINTELLIGENCE ACTIVITIES.....	39	39	---
184 NAVSTAR GLOBAL POSITIONING SYSTEM (USER EQUIPMENT)....	127,513	131,513	+4,000
185 NAVSTAR GLOBAL POSITIONING SYSTEM (SPACE AND CONTROL)...	91,277	91,277	---
187 SPACE AND MISSILE TEST AND EVALUATION CENTER.....	1,985	1,985	---
188 SPACE WARFARE CENTER.....	3,003	3,003	---
189 SPACELIFT RANGE SYSTEM (SPACE).....	12,376	12,376	---
190 INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS.....	1,237	3,637	+2,400
191 AIRBORNE RECONNAISSANCE SYSTEMS.....	149,752	104,152	-45,600
192 MANNED RECONNAISSANCE SYSTEMS.....	12,819	17,859	+5,040
193 DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS.....	107,834	107,834	---
194 PREDATOR UAV (JMIP).....	24,773	37,173	+12,400
195 GLOBAL HAWK UAV.....	284,292	311,507	+27,215
196 NETWORK-CENTRIC COLLABORATIVE TARGET (TIARA).....	8,807	8,807	---
197 GPS III SPACE SEGMENT.....	420,342	393,342	-27,000
198 INTELLIGENCE SUPPORT TO INFORMATION WARFARE.....	5,438	5,438	---
200 NUDET DETECTION SYSTEM (SPACE).....	41,292	41,292	---
201 NATIONAL SECURITY SPACE OFFICE.....	10,797	7,797	-3,000
202 SPACE SITUATION AWARENESS OPERATIONS.....	16,166	16,166	---
203 NASS, IO TECHNOLOGY INTEGRATION & TOOL DEV.....	15,726	15,726	---
204 SHARED EARLY WARNING (SEW).....	3,152	3,152	---
205 C-130 AIRLIFT SQUADRON.....	172,560	179,760	+7,200
206 C-5 AIRLIFT SQUADRONS.....	125,063	127,463	+2,400
207 C-17 AIRCRAFT.....	236,047	236,047	---
208 C-130J PROGRAM.....	52,354	27,354	-25,000
209 LARGE AIRCRAFT IR COUNTERMEASURES (LAIRCM).....	32,100	36,500	+4,400
210 KC-135S.....	7,133	7,133	---
214 AIR MOBILITY TACTICAL DATA LINK.....	---	8,000	+8,000
215 SPECIAL TACTICS / COMBAT CONTROL.....	5,728	7,728	+2,000
216 DEPOT MAINTENANCE (NON-IF).....	1,531	1,531	---
217 ACQUISITION AND MANAGEMENT SUPPORT.....	34,428	37,228	+2,800
218 INDUSTRIAL PREPAREDNESS.....	---	4,800	+4,800
220 LOGISTICS INFORMATION TECHNOLOGY (LOGIT).....	189,679	159,679	-30,000

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST
221 SUPPORT SYSTEMS DEVELOPMENT.....	8,145	46,945	+38,800
222 JOINT NATIONAL TRAINING CENTER.....	3,214	3,214	---
223 OTHER PERSONNEL ACTIVITIES.....	116	1,116	+1,000
224 JOINT PERSONNEL RECOVERY AGENCY.....	5,768	5,768	---
225 SERVICE-WIDE SUPPORT (NOT OTHERWISE ACCOUNTED FOR)....	3,016	3,016	---
226 CIVILIAN COMPENSATION PROGRAM.....	8,123	8,123	---
227 PERSONNEL ADMINISTRATION.....	18,625	18,625	---
228 FINANCIAL MANAGEMENT INFORMATION SYSTEMS DEVELOPMENT..	31,782	16,782	-15,000
TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT.....	7,211,815	7,121,930	-89,885
999 CLASSIFIED PROGRAMS.....	10,304,689	9,740,588	-564,101
TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, AIR FORCE	28,066,617	27,084,340	-982,277

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	Recommendation
1 DEFENSE RESEARCH SCIENCES	309,926	314,726
Center for Microplasma Science and Technology (CMST)		2,000
Coal Transformation Laboratory		800
Development and Validation of Advanced Design Technologies for Hypersonic Research		2,000
2 UNIVERSITY RESEARCH INITIATIVES	125,949	140,789
Aerodynamic Wind Tunnel Upgrade Initiative		1,600
Cyber Security Laboratory at Louisiana Tech University		3,000
Institute for Science and Engineering Simulation (ISES)		3,360
Lean Management System Research Initiative at Air Mobility Wing MacDill AFB		800
Secure Network Centric Operations		1,600
Unmanned Aerial Systems Mission Planning and Operation Center		400
Battlespace: Reducing Military Decision Cycles		1,280
High Temperature Hydrogen Energy Production Facility		1,200
Partnership in Innovative Preparation for Educators and Students and the Space Education Consortium		800
Rapid Prototyping and Nanotechnology Initiative		800
7 MEDICAL DEVELOPMENT	0	4,900
Biothreat Test Pouch for Film Array System		800
Health Surveillance System		1,600
Regional Telepathology Initiative at Keesler AFB		2,500
8 MATERIALS	117,143	188,503
Accelerated Insertion of Advanced Materials and Certification for Military Aircraft Structure Material Substitution and Repair		3,000
Advance Casting and Coating Technologies for Aircraft Canopies		2,800
Advanced Aerospace Heat Exchangers		1,600
Advanced Carbon Fiber Research and Test Initiative		2,400
Advanced Thermal Control Coatings for Space Applications		1,600
Carbon Non-Materials for Advanced Aerospace Applications		2,400
Ceramic Matrix Composite Turbine Blade Demonstration		4,000
FEL Capabilities for Aerospace Microfabrication		1,120
Fire and Blast Resistant Materials for Force Protection		1,600
Gallium Nitride RF Power Technology		1,600
High Power Broadly Tunable Middle-Infrared Laser Sources		2,400
Intelligent Manufacturing Initiative		2,400
Large Area, APVT Materials Development for High Power Devices		800
Light Weight Organic Photovoltaic Technologies		1,200
Liquid Crystal Laser Eye Protection		1,600
Nanocomposites for Lightning Protection of Composite Airframe Structures		1,200
Next Generation Manufacturing Processes		1,200
Optic Band Control Program		800
Partnership for Emerging Technologies		1,600
Pennsylvania NanoMaterials Commercialization Center		2,000
Plasma-Sphere Array for Flexible Electronics		2,800
Science for Sustainment		1,600
Advanced Military Installations That Integrate Renewable Energy and Advanced Energy Storage Technologies		4,000
Air Force Minority Leaders Program		8,000
Aircraft Fatigue Modeling and Simulation		3,000
Conducting Polymer Stress and Damage Sensors for Composites		1,440

R-1	Budget Request	Recommendation
Low Voltage, Wideband Electro-Optic Polymer Modulators		3,000
Persistent Sensing Data Processing, Storage and Retrieval		1,600
Space Qualification of the Common Data Link		1,600
Super-Resolution Sensor System		2,000
Wideband Digital Airborne Electronic Sensing Array		2,400
13 SPACE TECHNOLOGY	117,519	135,799
Advanced Modular Avionics for Operationally Responsive Space Use		2,400
Center for Responsive Space Systems		800
Multicontinuum Technology for Space Structures		2,880
Radiation Hardened Non-Volatile Memory Technology		1,600
Defensive Counterspace Testbed		800
Field Programmable Gate Arrays Mission Assurance Center		3,000
Lightweight, High-Efficiency Solar Cells for Spacecraft		800
Massively Parallel Optical Interconnects for MicroSatellite Applications		1,600
Nuclear Test Seismic Research		2,000
Reconfigurable Electronics and Non-Volatile Memory Research		2,000
Shielding Rocket Payloads		400
16 COMMAND CONTROL AND COMMUNICATIONS	109,492	114,292
Compact Laser Terminal for Airborne Network Centric Warfare		2,800
Cyber Attack Mitigation and Exploitation Laboratory (CAMEL) III		2,000
18 ADVANCED MATERIALS FOR WEAPON SYSTEMS	41,926	65,646
Advanced Nanotube Micro-Munitions Weapon Technology Initiative		1,600
EMI Grid Fabrication Technology		2,720
Aircraft Evaluation Readiness Initiative		2,400
Hybrid Bearing		1,600
Materials Integrity Management Research for Air Force Systems		800
Metals Affordability Initiative		4,000
Rapid Automated Processing of Advanced Low Observables		1,600
Sewage-Derived Biofuels Project		2,400
Silicon Carbide Electronics Material Producibility Initiative		4,800
Sonic Infrared Imaging Technology Development		800
Strategic Biofuel Supply Program		1,000
19 ADVANCED AEROSPACE SENSORS	56,916	65,316
Active Unmanned Air Vehicle (UAV) Phenomenology and Automatic Target Recognition Technology Transition (ATR)		2,000
Automated Sensor-Communication Response Technology		1,600
Moving Target Strike		2,000
Reconfigurable Secure Computing		1,200
Precision Image Tracking and Registration		1,600
20 AEROSPACE TECHNOLOGY DEV/DEMO	44,918	46,118
Big Antennas Small Structures Efficient Tactical (BASSET) UAV		1,200
21 AEROSPACE PROPULSION AND POWER TECHNOLOGY	170,856	180,256
Bio-JPB Fuel Development		800
Texas Research Institute for Environmental Studies		1,600
Small Adaptive Cycle Turbine Engines		1,600
Renewable Hydrocarbon Fuels for Military Applications (Great Lakes Region)		2,000
XTC58F VAATE Small Turbo Fan Program		3,600

R-1	Budget Request	Recommendation
Assured Aerospace Fuels Research		1,600
Silicon Carbide Power Electronics for More Electric Aircraft		3,200
Turbine Engine Core Components - program growth		-5,000
CREW SYSTEMS AND PERSONNEL PROTECTION		
22 TECHNOLOGY	26,630	34,110
Air Purification with Carbon Nanotube Nanostructured Material		5,000
PhasorBIRD Helmet Tracker		2,480
23 ELECTRONIC COMBAT TECHNOLOGY	21,056	31,936
Innovative Polymeric Materials for Three-Dimensional (3-D) Microdevice Construction		1,600
New Electronic Warfare Specialists Through Advanced Research by Students		1,600
COTS Analysis Tools for Navigational Warfare		1,200
Advanced Electromagnetic Location of IEDs Defeat System		1,600
Advance Threat Alert/Advance Technology Demonstration		4,880
25 ADVANCED SPACECRAFT TECHNOLOGY	80,958	98,580
Small Low-Cost Reconnaissance Spacecraft Components		1,600
Space Situational Awareness		1,200
Semiconductor Optical Amplifier for Responsive Space MPOI		2,200
Hybrid Sounding Rocket Propulsion		800
Integrated Spacecraft Engineering Tool (ISET)		1,600
Micromachined Switches for Next Generation Modular Satellites		2,400
Satellite Coherent Optical Receiver (SCORE)		1,750
Operational Responsive Space Architecture for Dual Use Applications		1,272
Thin Film Amorphous Solar Arrays		1,600
Ultra Low Power Electronics		3,200
26 MAUI SPACE SURVEILLANCE SYSTEM (MSSS)	4,838	36,438
Flash Hyper-Dimensional Imaging System for Space Situational Awareness and Ballistic Missile Defense		1,600
MSSS Operations & Research		22,000
PanSTARRS		8,000
27 CONVENTIONAL WEAPONS TECHNOLOGY	11,813	19,213
Energetic Device Quality and Reliability Improvements Using Computer Aided Process Control		2,400
Body Armor Improved Ballistic Protection		2,000
Integrated Targeting Device		3,000
28 ADVANCED WEAPONS TECHNOLOGY	44,507	56,467
Compound Zoom for Airborne Reconnaissance (CZAR)		1,200
Advanced Fiber Lasers Systems and Components		960
Applications of LIDAR to Vehicles with Analysis		7,000
Real-time Optical Surveillance Applications		2,800
29 MANUFACTURING TECHNOLOGY PROGRAM	39,729	45,329
Prepreg Thickness Variability Reduction Program		1,600
Production of Nanocomposites for Aerospace Applications		1,600
Next Generation Casting Supplier Base Initiative		2,400
30 C3I ADVANCED DEVELOPMENT	30,103	34,003
MPOI for Battlespace Information Exchange		3,900

R-1	Budget Request	Recommendation
33 INTELLIGENCE ADVANCED DEVELOPMENT	4,988	6,588
Broad Area Multi-Intelligence Ubiquitous Surveillance Enterprise		1,600
34 PHYSICAL SECURITY EQUIPMENT	477	1,677
Multi-Sensor Person-Borne Suicide Counter Bomber Detection Systems		1,200
36 GPS III - OPERATIONAL CONTROL SEGMENT	2,975	307,335
GPS III OCX		304,360
37 GPS OPERATIONAL CONTROL SEGMENT	304,360	0
GPS III- OCX backwards compatibility		-304,360
40 SPACE CONTROL TECHNOLOGY	76,845	86,645
COTS Technology for Situational Space Awareness		2,800
Multi-mission Deployable Optical System		4,000
Space Situational Awareness - TCN Demonstration and Deployment		3,000
44 TRANSFORMATIONAL SATCOM (TSAT)	842,974	767,974
Program Reduction/TSAT Contract Award Delay		-75,000
46 INTERCONTINENTAL BALLISTIC MISSILE	65,629	70,429
Conventional Strike Mission Integration Demonstration		4,800
47 WIDEBAND GAPPILLER SYSTEM RDT&E (SPACE)	12,422	52,422
Program Sustain and Evolution		40,000
49 POLLUTION PREVENTION (DEM/VAL)	2,877	11,677
Microcomposite Coatings for Chrome Replacement		800
Program Increase		8,000
52 ALTERNATIVE FUELS	28,464	59,864
Alternative Energy - Tin City		500
Eielson AFB Coal to Liquid Initiative		5,000
Air Force Requested Transfer (Note: Includes transfer from OM, AF Line 41A)		25,900
55 OPERATIONALLY RESPONSIVE SPACE	110,032	197,232
Micro-Satellite Serial Manufacturing to Include Academic Outreach Educational Program		800
Chip Scale Atomic Clock		2,400
Ballistic Missile Technology		2,400
Florida National Guard Missile Range Safety Technology		1,600
Infrared Sensor Payload Development and Demonstration (Note: Includes transfer from Line 70)		75,000
Low-Earth Orbit Nanosatellite Integrated Defense Autonomous Systems		5,000
59 B-1B	128,871	143,031
FIDL and CITS Program Increase (Note: Air Force requested transfer from AP,AF Line 25)		10,000
B-1 Bomber 16-Carry Adapter Weapons Initiative		4,160
60 SPECIALIZED UNDERGRADUATE FLIGHT TRAINING	7,462	13,462
AT-6B Capabilities Demonstration for the Air National Guard		6,000

R-1	Budget Request	Recommendation
61 B-2 ADVANCED TECHNOLOGY BOMBER	351,417	365,077
Air Force Requested Transfer (Note: Air Force requested transfer to AP,AF Line 24)		-18,500
B-2 Integrated Strike Warfare		12,720
B-2 Moving Target Kill (MTK)/SDB II		8,240
B-2 Advanced Tactical Data Link		11,200
63 ELECTRONIC WARFARE DEVELOPMENT	54,995	56,495
Rapid Replacement of Mission Critical Electronics to Support High Usage Wartime Aircraft Deployments		1,500
65 SMALL DIAMETER BOMB (SDB)	125,067	126,667
M-PACT High Pressure Pure Air Generator System		1,600
66 COUNTERSPACE SYSTEMS	74,918	76,518
Space Control Test Capabilities		1,600
69 SPACE BASED INFRARED SYSTEM (SBIRS) HIGH EMD	529,771	544,771
SBIRS Space HEO Ground Integration		15,000
70 ALTERNATIVE INFRARED SPACE SYSTEM (AIRSS)	149,064	960
Third Generation Infrared System (3GIRS) (Note: Transferred to Line 55)		-149,064
Advanced Staring Infrared Testbed (ASIRT) Technology Demonstration		960
75 LIFE SUPPORT SYSTEMS	10,998	16,598
ACES 5 Ejection Seat		5,600
77 INTEGRATED COMMAND & CONTROL APPLICATIONS (IC2A)	177	5,777
Distributed Mission Interoperability Toolkit (DMIT)		1,600
ASSET eWing and Data Fusion Technology Integration		4,000
78 INTELLIGENCE EQUIPMENT	1,488	2,288
Integrated SAR/PI Evaluator for Critical Target and Activity Recognition (INSPECTAR)		800
80 JOINT STRIKE FIGHTER (JSF)	1,524,016	1,739,016
Alternate Engine		215,000
82 RDT&E FOR AGING AIRCRAFT	13,828	17,028
KC-135R Tanker Blended Winglet Development		3,200
83 NEXT GENERATION AERIAL REFUELING AIRCRAFT	831,759	23,000
Transfer to Tanker Replacement Transfer Fund		-808,759
84 CSAR-X RDT&E	305,062	233,027
Request Ahead of Need/Contract Delay		-40,000
Adjustment due to Fiscal Year 2008 Unobligated Balance		-32,035
86 LINK-16 SUPPORT AND SUSTAINMENT	186,213	193,813
Program Increase		6,400
Flexible Access Secure Transfer (FAST)		1,200
87 E-10 SQUADRONS	42,215	0
Transfer to Global Hawk Line 195		-42,215

R-1		Budget Request	Recommendation
90	JOINT CARGO AIRCRAFT (JCA)	26,777	16,777
	Unexecutable request		-10,000
94	MAJOR T&E INVESTMENT	61,818	69,418
	FPS-16 Radar Mobilization Upgrade		2,800
	Eglin AFB Range Operations Center (ROCC) Initiative		800
	Holloman High Speed Test Track		4,000
95	RAND PROJECT AIR FORCE	28,676	31,676
	Program Increase		3,000
101	FACILITIES RESTORATION & MODERNIZATION - TEST & EVAL	46,234	49,434
	Base Facility Energy Independence		3,200
102	FACILITIES SUSTAINMENT - TEST AND EVALUATION SUPPORT	28,898	36,298
	Internal Base Facility Energy Independence - Solar		1,800
	Low Profile Arresting Gear		800
	Sustainable Energy Vermont National Guard Demonstration Projects		5,000
108	B-52 SQUADRONS	38,651	47,651
	Core Component Jammer (CCJ)		9,000
117	MQ-9 UAV	43,557	46,557
	MQ-9 Reaper - UAS AirPortal, Hancock Field		3,000
118	A-10 SQUADRONS	0	4,000
	Scorpion Low Cost Helmet Mounted Cueing and Information Display System		4,000
119	F-16 SQUADRONS	123,979	127,179
	Synthetic Aperture Radar (SAR) Thunder Radar Pod (TRP)		3,200
120	F-15E SQUADRONS	184,213	199,413
	F-15 AN/ALR-56C RWR Digital Receiver Upgrade		3,200
	F-15 AESA Development and Demonstration		12,000
122	F-22 SQUADRONS	700,305	607,305
	Funding for Engines Provided Previously		-38,000
	Program Growth		-35,000
	Lab Infrastructure Program Growth		-20,000
132	JOINT AIR-TO-SURFACE STANDOFF MISSILE (JASSM)	13,035	33,035
	JASSM Extended Range Development (Note: Transferred from MP_AF Line 2)		20,000
133	AIR AND SPACE OPERATIONS CENTER (AOC)	118,834	98,834
	ASOC increment 10.2 program delay		-20,000
141	FIGHTER TACTICAL DATA LINK	62,788	57,788
	Advanced Tactical Data Link program delay		-5,000
145	JOINT SURVEILLANCE AND TARGET ATTACK RADAR SYSTEM	97,641	81,541
	Funded in FY08 Supplemental - DMS		-36,100
	Multi Platform Radar Technology Improvement Program (MPRTIP) Integration and Test on JSTARS		20,000

R-1	Budget Request	Recommendation
154 NATIONAL AIR INTELLIGENCE CENTER		1,360
Air Cargo Tracking and Analysis/Secure Skies		1,360
164 GLOBAL COMMAND AND CONTROL SYSTEM	3,218	7,218
Command and Control Service Level Management (C2SLM) Program		4,000
167 SPECIAL ACTIVITIES		5,600
Massively Parallel Optical Interconnects (MPOI) for ISR Satellites		1,600
Radiation Hardened Microelectronics (HX5000) Carbon Nanotube Sensors		2,000
Ultralight Aerospace Nanotube Conductors		2,000
170 ADVANCED GEOSPATIAL INTELLIGENCE		2,000
Advanced Technical Intelligence Center		2,000
184 NAVSTAR GLOBAL POSITIONING SYSTEM (USER EQUIPMENT)	127,513	131,513
Transportable Transponder Landing System		4,000
190 INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS	1,237	3,637
Warfighter Support Using HELIOS		2,400
191 AIRBORNE RECONNAISSANCE SYSTEMS	149,752	104,152
Blackswift - Unjustified Program		-50,000
Multiple UAS Cooperative Concentrated Observation and Engagement Against a Common Ground Objective		4,400
192 MANNED RECONNAISSANCE SYSTEMS	12,819	17,859
Rivet Joint ISR Network Integration		2,000
Combat Sent Wideband Sensor Upgrade Program		3,040
194 PREDATOR UAV (JMIP)	24,773	37,173
Predator Mission Aircrew Training System (PMATS) Upgrade		2,400
Center of Excellence for Defense UAV Education		4,000
Multi-Sensor Detect, See and Avoid		6,000
195 GLOBAL HAWK UAV	284,292	311,507
Program Execution		-15,000
Transferred from E-10 Line 87		42,215
197 GPS III SPACE SEGMENT	420,342	393,342
Contract Award Delay		-27,000
201 NATIONAL SECURITY SPACE OFFICE	10,797	7,797
Program Reduction		-3,000
205 C-130 AIRLIFT SQUADRON	172,560	179,760
Electromagnetic In-Flight Propeller Balancing System		2,000
C-130 Automated Inspection, Repair, Corrosion and Aircraft Tracking Condition-Based Maintenance Plus		3,200
NP 2000 Propeller System - Air National Guard Special Missions C-130		2,000
206 C-5 AIRLIFT SQUADRONS	125,063	127,463
Inductive Thermography Systems Inspection		2,400

R-1	Budget Request	Recommendation
208 C-130J PROGRAM	52,354	27,354
International Block Upgrade Savings		-25,000
209 LARGE AIRCRAFT IR COUNTERMEASURES (LAIRCM)	32,100	36,500
LAIRCM for AFSOC AC/MC-130 Aircraft		4,400
214 AIR MOBILITY TACTICAL DATA LINK		8,000
MAF-Data Link Integration (Note: Air Force requested transfer from APAF, Line 59)		8,000
215 SPECIAL TACTICS / COMBAT CONTROL	5,728	7,728
Next Generation Tactical Environmental Clothing for AFSOC		2,000
217 ACQUISITION AND MANAGEMENT SUPPORT	34,428	37,228
Acquisition Data Repository (ADR)		2,800
218 INDUSTRIAL PREPAREDNESS	0	4,800
Technology Insertion Demonstration and Evaluation (TIDE)		3,200
Laser Peening for Friction Stir Welded Aerospace Structures		1,600
220 LOGISTICS INFORMATION TECHNOLOGY (LOGIT)	189,679	159,679
ECSS Unjustified Growth/Program Delay		-30,000
221 SUPPORT SYSTEMS DEVELOPMENT	8,145	46,945
WR-ALC Strategic Airlift Aircraft Availability Improvement		3,360
Expeditionary 200 kW+ Alternative Power Generator		800
Micro-Grid Energy Storage Utilizing a Deployable Zinc-Bromide Flow Battery		1,600
Alternative Energy Fuel Cell Power		1,600
Accelerator-Driven Non-Destructive Testing		2,000
Eielson Air Force Base Alternative Energy Source Program		2,400
Technical Order Modernization Environment		1,440
Alternative Energy Research		20,000
Assessment of Alternative Energy for Aircraft Ground Equipment		1,800
Freedom Fuels/Coal Fuels Alliance		3,200
Warner Robbins Air Logistics Center Special Operations Forces		800
223 OTHER PERSONNEL ACTIVITIES	116	1,116
Expert Organization Development System (EXODUS)		1,000
FINANCIAL MANAGEMENT INFORMATION SYSTEMS		
228 DEVELOPMENT	31,782	16,782
DEAMS program delay		-15,000
999 CLASSIFIED PROGRAMS	10,304,689	9,740,588
Classified Programs		-579,941
Remote Suspect Identification		3,200
Thermal IR Processing and Exploitation Cell (TPEC)		2,400
Close Proximity Space Situational Awareness		640
Carbon Nanotube-based Radiation Hard Nano-Electronics Devices		7,200
Carbon Nanotube Enhanced Power Sources for Space		2,400

MAUI SPACE SURVEILLANCE SYSTEM (MSSS)

The bill provides an increase of \$22,000,000 over the budget request for sustainment, investment in new technologies and initiatives, and research and development activities at MSSS. The Air Force is directed to base its overhead charges only on the amount requested. None of the increases provided here shall be subject to Air Force taxes or withholds. Furthermore, research funds should be allocated by Air Force officials on-site to local programs that offer the greatest potential return and merit.

SPACE MAJOR FORCE PROGRAM

In the Fiscal Year 2008 Department of Defense Appropriations Act, the Secretary of Defense was directed to create a major force program category for space for the future years defense program of the Department of Defense. Further clarification toward this intent is required. The virtual major force program has been an established measure for several years and it is considered an acceptable foundation for development of the final space major force program inventory. The current virtual major force program includes space-based assets and the associated non-space, command, control, communications, and intelligence assets supporting the space systems.

Space systems are not just the satellites resident in the exo-atmosphere but also include the associated terminal programs. In the past, these terminal programs were desynchronized from the space platforms due to funding shortfalls and schedule delays. In the future, a tighter coupling of these programs is required. Therefore, these terminal programs must be included in the space major force program inventory. The Department of Defense is directed to implement the final space major force program prior to the submission of the fiscal year 2011 budget. Furthermore, six months after enactment of this Act, the Secretary of Defense is directed to report to the congressional defense committees the status of the population and development of the space major force program.

MISSILE WARNING

The current Defense Support Program constellation of satellites is aging and needs to be replaced. The Air Force has been pursuing the Space Based Infrared Satellite System—geosynchronous (SBIRS—GEO) component for over a decade and the development is almost complete. A sister system, Space Based Infrared Satellite System—highly elliptical orbit (SBIRS—HEO) has launched, successfully initialized, and is providing extraordinary data, well beyond expectations. However, the SBIRS—HEO component is not fully integrated into the ground system, so the data products are not fully exploited. Therefore, the bill includes \$15,000,000 above the budget request to be used for increased SBIRS—HEO ground integration and data exploitation.

Furthermore, to date the Department of Defense has not planned for additional SBIRS—GEO satellites. In order to avoid a production break and the associated costs, the Department of Defense is directed to begin procurement of the fourth and fifth SBIRS—GEO satellites in the fiscal year 2010 budget request.

NATIONAL SECURITY SPACE OFFICE

The original intent of the National Security Space Office (NSSO) was to provide the Executive Agent for Space with an analysis team that would make recommendations to the priorities, capabilities and budgets of both the Department of Defense and intelligence community space programs. In recent years, the NSSO has lost the support of the National Reconnaissance Office, which has provided no funding for the NSSO, and the Air Force and other Department of Defense organizations have used the NSSO as personal staff. The Secretary of Defense and the Director of National Intelligence are directed to assess the roles and responsibilities of the NSSO and to report back to the congressional defense committees by May 15, 2009.

COAL TO LIQUID FUELS

The Congress understands that the Air Force is strongly committed to an energy strategy that looks to certify their entire fleet of aircraft on a synthetic fuel blend by 2011, with the intent to purchase 50 percent of their aviation fuel used in the United States in the form of a synthetic fuel blend by 2016. Part of this strategy involves examining the feasibility, cost effectiveness, and environmental impacts of building coal-to-liquid fuel (CTL) plants, utilizing enhanced-use leasing authorities. It is envisioned that these plants would be built in strategic locations, where there are abundant coal and water resources to operate these plants. Consistent with the Air Force vision and availability of resources necessary for a CTL plant, a total of \$10,000,000 is provided only to support Air Force efforts in siting and contracting for such a plant on Eielson Air Force Base. This funding is split between Operation and Maintenance, Air Force, and Research, Development, Test and Evaluation, Air Force accounts.

The Secretary of the Air Force is directed to submit a report to the congressional defense committees no later than April 1, 2009, which provides the framework for a joint partnership between the Department of Defense and a private developer, to include an associated milestone schedule, a preliminary design, engineering studies, and the plan to accomplish any required environmental work.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION,
DEFENSE-WIDE

For Research, Development, Test and Evaluation, Defense-Wide, funds are to be available for fiscal year 2009, as follows:

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST	
RESEARCH, DEVELOPMENT, TEST & EVAL, DEFENSE-WIDE				
BASIC RESEARCH				
1	DTRA UNIVERSITY STRATEGIC PARTNERSHIP BASIC RESEARCH..	18,000	22,400	+4,400
2	DEFENSE RESEARCH SCIENCES.....	195,657	203,037	+7,380
3	GOVERNMENT/INDUSTRY COSPONSORSHIP OF UNIVERSITY RESEAR	---	4,400	+4,400
4	DEFENSE EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE	2,833	14,833	+12,000
5	NATIONAL DEFENSE EDUCATION PROGRAM.....	68,972	68,972	---
6	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.....	53,191	72,791	+19,600
	TOTAL, BASIC RESEARCH.....	338,653	386,433	+47,780
APPLIED RESEARCH				
7	INSENSITIVE MUNITIONS--EXPLORATORY DEVELOPMENT.....	15,254	15,254	---
9	HISTORICALLY BLACK COLLEGES & UNIV (HBCU) SCIENCE.....	15,156	41,556	+26,400
10	LINCOLN LABORATORY RESEARCH PROGRAM.....	31,340	31,340	---
11	INFORMATION AND COMMUNICATIONS TECHNOLOGY.....	254,009	252,109	-1,900
12	COGNITIVE COMPUTING SYSTEMS.....	145,262	145,262	---
13	BIOLOGICAL WARFARE DEFENSE.....	66,291	56,291	-10,000
14	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.....	203,731	234,131	+30,400
15	HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) APP	7,685	7,685	---
16	TACTICAL TECHNOLOGY.....	371,481	353,881	-17,600
17	MATERIALS AND BIOLOGICAL TECHNOLOGY.....	285,264	283,664	-1,600
18	WMD DEFEAT TECHNOLOGY.....	---	1,200	+1,200
19	ELECTRONICS TECHNOLOGY.....	211,457	199,937	-11,520
21	WEAPONS OF MASS DESTRUCTION DEFEAT TECHNOLOGIES.....	211,078	213,078	+2,000
23	SPECIAL OPERATIONS TECHNOLOGY DEVELOPMENT.....	23,104	38,504	+15,400
24	SOF MEDICAL TECHNOLOGY DEVELOPMENT.....	2,459	2,459	---
25	INSENSITIVE MUNITIONS - ADVANCED DEVELOPMENT.....	15,970	9,970	-6,000
	TOTAL, APPLIED RESEARCH.....	1,859,541	1,886,321	+26,780

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST	
26	ADVANCED TECHNOLOGY DEVELOPMENT SO/LIC ADVANCED DEVELOPMENT.....	32,832	33,632	+800
27	COMBATING TERRORISM TECHNOLOGY SUPPORT.....	79,970	123,690	+43,720
28	COUNTERPROLIFERATION INITIATIVES--PROLIF PREV & DEFEAT	211,325	219,645	+8,320
29	BALLISTIC MISSILE DEFENSE TECHNOLOGY.....	118,718	119,718	+1,000
30	JOINT DOD-DOE MUNITIONS TECHNOLOGY DEVELOPMENT.....	23,727	23,727	---
31	ADVANCED AEROSPACE SYSTEMS.....	107,857	87,857	-20,000
32	SPACE PROGRAMS AND TECHNOLOGY.....	287,009	227,009	-60,000
33	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM - ADVANCED DEV	337,927	316,827	-21,100
34	JOINT ELECTRONIC ADVANCED TECHNOLOGY.....	9,320	10,520	+1,200
35	JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS.....	206,337	208,237	+1,900
36	NETWORKED COMMUNICATIONS CAPABILITIES.....	39,923	29,923	-10,000
37	BIOMETRICS SCIENCE AND TECHNOLOGY.....	10,579	10,579	---
38	HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) ADV	9,381	9,381	---
39	DEFENSE-WIDE MANUFACTURING SCIENCE AND TECHNOLOGY PROG	11,981	18,381	+6,400
40	JOINT ROBOTICS PROGRAM/AUTONOMOUS SYSTEMS.....	8,449	9,249	+800
41	GENERIC LOGISTICS R&D TECHNOLOGY DEMONSTRATIONS.....	19,375	76,135	+56,760
42	DEPLOYMENT AND DISTRIBUTION ENTERPRISE TECHNOLOGY.....	30,000	30,000	---
43	STRATEGIC ENVIRONMENTAL RESEARCH PROGRAM.....	69,038	69,038	---
44	MICROELECTRONIC TECHNOLOGY DEVELOPMENT AND SUPPORT....	---	32,480	+32,480
45	JOINT WARFIGHTING PROGRAM.....	11,098	12,098	+1,000
46	ADVANCED ELECTRONICS TECHNOLOGIES.....	201,146	200,046	-1,100
47	SYNTHETIC APERTURE RADAR (SAR) COHERENT CHANGE DETECT.	7,984	7,984	---
48	ADVANCED CONCEPT TECHNOLOGY DEMONSTRATIONS.....	---	1,200	+1,200
49	HIGH PERFORMANCE COMPUTING MODERNIZATION PROGRAM.....	208,079	221,559	+13,480
50	COMMAND, CONTROL AND COMMUNICATIONS SYSTEMS.....	338,964	328,964	-10,000
52	CLASSIFIED DARPA PROGRAMS.....	196,697	196,697	---
53	NETWORK-CENTRIC WARFARE TECHNOLOGY.....	156,733	154,433	-2,300
54	SENSOR TECHNOLOGY.....	226,470	218,070	-8,400
55	GUIDANCE TECHNOLOGY.....	110,572	108,272	-2,300
56	DISTRIBUTED LEARNING ADVANCED TECHNOLOGY DEVELOPMENT..	13,538	13,538	---
57	SOFTWARE ENGINEERING INSTITUTE.....	31,244	31,244	---
59	QUICK REACTION SPECIAL PROJECTS.....	113,924	107,385	-6,539
60	JOINT EXPERIMENTATION.....	114,947	109,377	-5,570
61	JOINT WARGAMING SIMULATION MANAGEMENT OFFICE.....	38,147	33,787	-4,360

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST
62 TEST & EVALUATION SCIENCE & TECHNOLOGY.....	94,672	94,672	---
63 TECHNOLOGY LINK.....	2,170	5,770	+3,600
64 SPECIAL OPERATIONS ADVANCED TECHNOLOGY DEVELOPMENT....	28,930	61,250	+32,320
65 SPECIAL OPERATIONS ADVANCED TECHNOLOGY DEVELOPMENT....	10,990	10,990	---
TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT.....	3,520,053	3,573,364	+53,311
DEMONSTRATION & VALIDATION			
66 NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT .	38,758	50,158	+11,400
68 RETRACT LARCH.....	22,945	22,945	---
69 JOINT ROBOTICS PROGRAM.....	11,847	11,847	---
70 ADVANCE SENSOR APPLICATIONS PROGRAM.....	---	16,000	+16,000
71 ENVIRONMENTAL SECURITY TECHNICAL CERTIFICATION PROGRAM	31,600	38,904	+7,304
72 BALLISTIC MISSILE DEFENSE TERMINAL DEFENSE SEGMENT....	1,019,073	959,973	-59,100
73 BALLISTIC MISSILE DEFENSE MIDCOURSE DEFENSE SEGMENT...	2,076,662	1,512,662	-564,000
73a TWO STAGE INTERCEPTOR SEGMENT.....	---	363,250	+363,250
73b EUROPEAN MIDCOURSE RADAR.....	---	76,800	+76,800
73c EUROPEAN GLOBAL ENGAGEMENT MANGER/U.S. COMMUNICATIONS.	---	27,100	+27,100
74 BALLISTIC MISSILE DEFENSE BOOST DEFENSE SEGMENT.....	421,229	402,129	-19,100
75 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.....	51,291	62,891	+11,600
76 BALLISTIC MISSILE DEFENSE SENSORS.....	1,076,983	770,232	-306,751
77 BALLISTIC MISSILE DEFENSE SYSTEM INTERCEPTOR.....	386,817	386,817	---
78 BALLISTIC MISSILE DEFENSE TEST & TARGETS.....	665,445	914,845	+249,400
79 BALLISTIC MISSILE DEFENSE SYSTEMS CORE.....	432,262	404,162	-28,100
80 SPECIAL PROGRAMS - MDA.....	288,315	176,315	-112,000
81 AEGIS BMD.....	1,157,783	1,117,483	-40,300
82 SPACE SURVEILLANCE & TRACKING SYSTEM.....	242,441	209,641	-32,800
83 MULTIPLE KILL VEHICLES.....	354,455	284,455	-70,000
84 BALLISTIC MISSILE DEFENSE SYSTEM SPACE PROGRAMS.....	29,771	24,771	-5,000
85 BALLISTIC MISSILE DEFENSE C2BMC.....	289,277	289,277	---
86 BALLISTIC MISSILE DEFENSE HERCULES.....	55,955	55,955	---
87 BALLISTIC MISSILE DEFENSE JOINT WARFIGHTER SUPPORT....	69,982	69,982	---
88 BALLISTIC MISSILE DEFENSE JOINT NATIONAL INTERGRATION.	96,404	106,404	+10,000
90 REGARDING TRENCH.....	2,978	2,978	---
91 SEA BASED X-BAND RADAR (SBX).....	---	147,400	+147,400
92 HUMANITARIAN DEMINING.....	14,373	14,373	---
93 COALITION WARFARE.....	14,030	13,319	-711

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST
94 DEPARTMENT OF DEFENSE CORROSION PROGRAM.....	5,102	22,402	+17,300
95 JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS.....	14,962	13,562	-1,400
96 HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) RES	5,991	5,991	---
97 JOINT SYSTEMS INTEGRATION COMMAND (JSIC).....	19,643	19,643	---
98 JOINT FIRES INTEGRATION & INTEROPERABILITY TEAM.....	16,906	16,906	---
99 REDUCTION OF TOTAL OWNERSHIP COST.....	24,765	24,765	---
100 JOINT ELECTROMAGNETIC TECHNOLOGY (JET) PROGRAM.....	3,524	5,524	+2,000
101 DEFENSE ACQUISITION CHALLENGE PROGRAM (DACP).....	30,363	28,566	-1,797
102 NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT .	4,355	4,355	---
103 PROMPT GLOBAL STRIKE.....	117,572	74,572	-43,000
TOTAL, DEMONSTRATION & VALIDATION.....	9,093,859	8,749,354	-344,505
ENGINEERING & MANUFACTURING DEVELOPMENT			
104 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.....	299,373	304,173	+4,800
105 JOINT ROBOTICS PROGRAM.....	5,725	5,725	---
106 ADVANCED IT SERVICES JOINT PROGRAM OFFICE (AITS-JPO)..	13,770	13,770	---
107 JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM (JTIDS)	20,600	20,600	---
108 WEAPONS OF MASS DESTRUCTION DEFEAT CAPABILITIES.....	15,946	15,946	---
109 INFORMATION TECHNOLOGY DEVELOPMENT.....	11,611	12,411	+800
110 DEFENSE INTEGRATED MILITARY HUMAN RESOURCES SYSTEM....	37,400	37,400	---
111 BUSINESS TRANSFORMATION AGENCY R&D ACTIVITIES.....	148,958	148,958	---
112 HOMELAND PERSONNEL SECURITY INITIATIVE.....	400	400	---
113 TRUSTED FOUNDRY.....	42,360	42,360	---
114 DEFENSE ACQUISITION EXECUTIVE (DAE) PILOT PROGRAM.....	5,883	5,883	---
116 GLOBAL COMBAT SUPPORT SYSTEM.....	18,604	18,604	---
117 JOINT COMMAND AND CONTROL PROGRAM (JC2).....	147,339	57,339	-90,000
TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT.....	767,969	683,569	-84,400
RDT&E MANAGEMENT SUPPORT			
118 TRAINING TRANSFORMATION (T2).....	38,729	58,329	+19,600
119 DEFENSE READINESS REPORTING SYSTEM (DRRS).....	11,385	11,385	---
120 JOINT SYSTEMS ARCHITECTURE DEVELOPMENT.....	14,310	14,310	---
121 CENTRAL TEST AND EVALUATION INVESTMENT DEVELOPMENT....	133,852	152,852	+19,000
122 THERMAL VICAR.....	9,658	9,658	---
123 JOINT MISSION ENVIRONMENT TEST CAPABILITY (JMETC).....	8,834	8,834	---
124 TECHNICAL STUDIES, SUPPORT AND ANALYSIS.....	34,520	36,520	+2,000

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST
125 USD(A&T)--CRITICAL TECHNOLOGY SUPPORT.....	4,007	4,007	---
126 FOREIGN MATERIAL ACQUISITION AND EXPLOITATION.....	62,816	62,816	---
127 JOINT THEATER AIR AND MISSILE DEFENSE ORGANIZATION....	55,282	55,282	---
128 CLASSIFIED PROGRAM USD(P).....	---	102,000	+102,000
129 FOREIGN COMPARATIVE TESTING.....	34,910	34,910	---
130 NUCLEAR MATTERS - PHYSICAL SECURITY.....	4,475	4,475	---
131 SUPPORT TO NETWORKS AND INFORMATION INTEGRATION.....	14,723	14,723	---
132 GENERAL SUPPORT TO USD (INTELLIGENCE).....	4,379	4,379	---
133 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.....	100,082	100,082	---
139 SMALL BUSINESS INNOVATION RESEARCH/CHALLENGE ADMINISTR	2,165	5,765	+3,600
140 DEFENSE TECHNOLOGY ANALYSIS.....	11,040	11,040	---
142 FORCE TRANSFORMATION DIRECTORATE.....	20,701	23,201	+2,500
143 DEFENSE TECHNICAL INFORMATION CENTER (DTIC).....	52,696	52,696	---
144 R&D IN SUPPORT OF DOD ENLISTMENT, TESTING & EVALUATION	25,435	18,435	-7,000
145 DEVELOPMENT TEST AND EVALUATION.....	20,396	23,596	+3,200
146 DARPA AGENCY RELOCATION.....	28,000	28,000	---
147 MANAGEMENT HEADQUARTERS (RESEARCH & DEVELOPMENT).....	52,700	48,700	-4,000
148 BUDGET AND PROGRAM ASSESSMENTS.....	5,878	5,878	---
151 SUPPORT TO INFORMATION OPERATIONS (IO) CAPABILITIES...	30,039	35,159	+5,120
152 INFORMATION TECHNOLOGY RAPID ACQUISITION.....	5,254	5,254	---
153 CYBER SECURITY INITIATIVE.....	50,000	50,000	---
154 INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS (IO)...	17,625	17,625	---
155 INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS(IO)(NSA	---	1,200	+1,200
156 WARFIGHTING AND INTELLIGENCE-RELATED SUPPORT.....	831	831	---
157 PENTAGON RESERVATION.....	19,734	19,734	---
158 MANAGEMENT HEADQUARTERS - MDA.....	86,453	81,453	-5,000
159 IT SOFTWARE DEV INITIATIVES.....	599	599	---
TOTAL, RDT&E MANAGEMENT SUPPORT.....	961,508	1,103,728	+142,220
OPERATIONAL SYSTEMS DEVELOPMENT			
160 DEFENSE INFORMATION SYSTEM FOR SECURITY (DISS).....	11,533	5,533	-6,000
161 PARTNERSHIP FOR PEACE (PFP) INFORMATION MANAGEMENT SYS	2,496	2,496	---
162 CHEMICAL AND BIOLOGICAL DEFENSE (OPERATIONAL SYSTEMS D	10,274	12,674	+2,400
163 JOINT INTEGRATION AND INTEROPERABILITY.....	49,371	49,371	---
164 JOINT STAFF ANALYTICAL SUPPORT.....	8,030	8,030	---
165 CLASSIFIED PROGRAMS.....	1,728	1,728	---

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST
166 C4I INTEROPERABILITY.....	76,226	76,226	---
167 CRYPTOLOGIC ACTIVITIES.....	---	3,200	+3,200
168 JOINT/ALLIED COALITION INFORMATION SHARING.....	19,073	19,073	---
177 NATIONAL MILITARY COMMAND SYSTEM-WIDE SUPPORT.....	615	615	---
178 DEFENSE INFO INFRASTRUCTURE ENGINEERING AND INTEGRATIO	16,054	16,054	---
179 LONG HAUL COMMUNICATIONS (DCS).....	8,508	8,508	---
180 MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK....	9,685	9,685	---
181 PUBLIC KEY INFRASTRUCTURE (PKI).....	15,577	15,577	---
182 KEY MANAGEMENT INFRASTRUCTURE (KMI).....	49,578	49,578	---
183 INFORMATION SYSTEMS SECURITY PROGRAM.....	13,459	13,459	---
184 INFORMATION SYSTEMS SECURITY PROGRAM.....	394,074	403,574	+9,500
186 DISA MISSION SUPPORT OPERATIONS.....	2,181	2,181	---
187 C4I FOR THE WARRIOR.....	3,662	3,662	---
189 GLOBAL COMMAND AND CONTROL SYSTEM.....	36,374	36,374	---
190 JOINT SPECTRUM CENTER.....	19,319	19,319	---
191 NET-CENTRIC ENTERPRISE SERVICES (NCES).....	429	429	---
192 TELEPORT PROGRAM.....	2,060	2,060	---
193 SPECIAL APPLICATIONS FOR CONTINGENCIES.....	16,225	26,325	+10,100
195 DEFENSE GEOSPATIAL-INTELLIGENCE.....	---	1,600	+1,600
196 CYBER SECURITY INITIATIVE.....	1,000	1,000	---
198 CYBER SECURITY INITIATIVE.....	12,800	12,800	---
199 CRITICAL INFRASTRUCTURE PROTECTION (CIP).....	12,700	17,900	+5,200
201 DEFENSE JOINT COUNTERINTELLIGENCE ACTIVITIES.....	2,947	2,947	---
203 POLICY R&D PROGRAMS.....	8,237	8,237	---
206 NET CENTRICITY.....	12,716	12,716	---
210 DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS.....	3,165	765	-2,400
213 DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS.....	3,227	3,227	---
215 MQ-1 PREDATOR A UAV.....	13,679	13,679	---
218 COMBATANT COMMAND INTELLIGENCE OPERATIONS.....	---	12,880	+12,880
225 INDUSTRIAL PREPAREDNESS.....	20,480	55,280	+34,800
226 LOGISTICS SUPPORT ACTIVITIES.....	2,846	2,846	---
227 MANAGEMENT HEADQUARTERS (JCS).....	3,401	3,401	---
228 NATO JOINT STARS.....	27,756	27,756	---
231 SPECIAL OPERATIONS AVIATION SYSTEMS ADVANCED DEV.....	43,977	44,777	+800

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST
232 SPECIAL OPERATIONS TACTICAL SYSTEMS DEVELOPMENT.....	13,263	26,263	+13,000
233 SPECIAL OPERATIONS INTELLIGENCE SYSTEMS DEVELOPMENT...	39,125	39,974	+849
234 SOF OPERATIONAL ENHANCEMENTS.....	48,137	55,337	+7,200
235 SPECIAL OPERATIONS CV-22 DEVELOPMENT.....	38,229	40,229	+2,000
237 OPS ADVANCED SEAL DELIVERY SYSTEM (ASDS) DEVELOPMENT..	7,090	8,690	+1,600
238 MISSION TRAINING AND PREPARATION SYSTEMS (MTPS).....	4,052	5,652	+1,600
239 UNMANNED VEHICLES (UV).....	1,527	43,927	+42,400
240 MC130J SOF TANKER RECAPITALIZATION.....	4,659	4,659	---
241 SOF WEAPONS SYSTEMS.....	2,759	2,559	-200
242 SOF SOLDIER PROTECTION AND SURVIVAL SYSTEMS.....	3,190	3,190	---
243 SOF VISUAL AUGMENTATION, LASERS & SENSOR SYSTEMS.....	3,495	6,986	+3,491
244 SOF ROTARY WING AVIATION.....	3,822	1,647	-2,175
245 SOF UNDERWATER SYSTEMS.....	3,142	5,542	+2,400
246 SOF SURFACE CRAFT.....	5,206	5,206	---
247 SOF PSYOP.....	15,554	15,554	---
248 SOF GLOBAL VIDEO SURVEILLANCE ACTIVITIES.....	14,686	14,686	---
249 SOF OPERATIONAL ENHANCEMENTS INTELLIGENCE.....	8,729	8,729	---
TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT.....	1,152,127	1,296,372	+144,245
999 CLASSIFIED PROGRAMS.....	3,805,519	3,744,197	-61,322
TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, DEF-WIDE.	21,499,229	21,423,338	-75,891

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1		Budget Request	Recommendation
1	DTRA UNIVERSITY STRATEGIC PARTNERSHIP BASIC RESEARCH	18,000	22,400
	Dual Use Technologies for Bio-Defense: Drug Design and Delivery of Novel Therapeutics		1,200
	University Strategic Partnership		3,200
2	DEFENSE RESEARCH SCIENCES	195,657	203,037
	Infections Disease Research (AMNH) for Defense Research Sciences		2,000
	Bio-Butanol Production Research		2,000
	Institute for Collaborative Sciences Research		1,200
	Ultra Photonics Program		1,280
	Reduction to fiscal year 2009 new starts		-4,000
	Advanced Materials Research Institute		2,400
	Institute for Information Security		2,500
3	GOVERNMENT/INDUSTRY COSPONSORSHIP OF UNIVERSITY RESEARCH	0	4,400
	Research of Chemical and Biological Warfare Agents		800
	Shock Trauma Research Center		2,000
	Integrated Cryo-cooled High Power Density Systems		1,600
4	DEFENSE EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE	2,833	14,833
	Program Enhancement		12,000
6	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	53,191	72,791
	Continued Expansion of Prototypes for the Destruction of Airborne Pathogens Project		800
	Defense Through Early Containment		1,200
	High Speed, High Volume Laboratory Network for Infectious Diseases		5,000
	Novel Viral Biowarfare Agent Identification and Treatment (NOVBAIT)		4,000
	Zumwalt National Program for Countermeasures to Biological and Chemical Threats		1,200
	Mismatch Repair Derived Antibody Medicines to Treat Staphylococcus-derived Bioweapons		1,600
	DNA Safeguard		1,200
	In Vitro Models for Biodefense Vaccine		1,000
	Protection from Oxidative Stress		1,600
	Superstructural Particle Evaluation and Characterization with Targeted Reaction Analysis (SPECTRA)		1,200
	Vaccine Development Program		800
9	HISTORICALLY BLACK COLLEGES & UNIVERSITIES AND MINORITY SERVING INSTITUTIONS- SCIENCE	15,156	41,556
	Morehouse College, John Hopps Program		1,600
	Defense Leadership and Technology Initiative		2,400
	Program Increase		20,000
	Instrumentation Program for Tribal Colleges		2,400

R-1	Budget Request	Recommendation
11 INFORMATION AND COMMUNICATIONS TECHNOLOGY	254,009	252,109
Software Assurance Education and Research Institute		800
National Repository of Digital Forensic Intelligence (NRDFI) and the Center for Telecommunications and Network Security (CTANS)		1,200
Intelligent Remote Sensing for Urban Warfare Operations		2,400
Reduction to fiscal year 2009 new starts		-7,900
Document Analysis and Exploitation		1,600
13 BIOLOGICAL WARFARE DEFENSE	66,291	56,291
Program Execution Delays		-10,000
14 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	203,731	234,131
Biosurety Development and Management Program		1,200
Botulinum Neurotoxin Research		1,600
Chemical Warfare Agent Fate Appropriate Response Tool		1,600
Countermeasures to Chemical/Biological Control-Rapid Response		2,400
HyperAcute Vaccine Development		2,400
Miniaturized Chemical Detector for Chemical Warfare Protection (ChemPen)		1,600
Mixed Oxidants for Chem Bio Decontamination		2,800
Multiple Applications for Light Activated, Reactive Materials for the Protection of the Warfighter, First Responder, and Public Health		1,600
Rapid Forensic Evaluation of Microbes in Biodefense		1,000
Chemical/Biological Preparedness Center for Advanced Development of Mobile Rapid Response Prototypes		4,000
Preventing long-term brain and lung damage caused by battlefield trauma project		2,900
TMTI - Reduction to new starts		-7,000
Antibody-Based Therapeutic Against Smallpox		800
Chemical/Biological Infrared Detection System		1,200
Contaminated Human Remains Pouch		1,600
Multivalent Marburg, Ebola Filovirus Vaccine Program		3,500
Novel System for Developing Therapeutics Against Botulism		4,000
Research on a Molecular Approach to Hazardous Materials Decontamination		1,200
Ultra-rapid Next Generation Pathogen identification		2,000
16 TACTICAL TECHNOLOGY	371,481	353,881
Program Execution Delays		-30,000
Explosively Formed Projectile Iron Curtain		800
SeaCatcher UAS Launch and Recovery System		1,600
CEROS		10,000
17 MATERIALS AND BIOLOGICAL TECHNOLOGY	285,264	283,664
Program Execution Delays		-10,000
Strategic Materials and Silicon Carbide Optics		4,400
Synthetic Fuel Innovation		4,000
18 WMD DEFEAT TECHNOLOGY	0	1,200
Center for Nonproliferation Studies, Monterey Institute for International Affairs		1,200

R-1	Budget Request	Recommendation
19 ELECTRONICS TECHNOLOGY	211,457	199,937
3-D Technology for Advanced Sensor Systems		1,440
Indium Based Nitride Technology Development		3,000
Reduction to fiscal year 2009 new starts		-16,200
Secure Media and ID Card Development		240
21 WEAPONS OF MASS DESTRUCTION DEFEAT TECHNOLOGIES	211,078	213,078
Comprehensive National Incident Management System		2,000
23 SPECIAL OPERATIONS TECHNOLOGY DEVELOPMENT	23,104	38,504
Miniature, Remote Wideband Survey, Collection, and Recording System		800
Advanced Craft Technology Demonstrators to Quantify and Mitigate Operator Injury		2,000
Flashlight Soldier-to-Soldier Combat Identification System (FSCIS)		5,600
Technology Infusion Cell (TIC)		1,000
Extended-Lifetime Radioisotope Batteries		1,600
Unified Management Infrastructure System		1,200
Foliage Penetrating Reconnaissance and Surveillance System		3,200
25 INSENSITIVE MUNITIONS - ADVANCED DEVELOPMENT	15,970	9,970
Excessive growth		-6,000
26 SOLIC ADVANCED DEVELOPMENT	32,832	33,632
Long-range Tagging and Locating System		800
27 COMBATING TERRORISM TECHNOLOGY SUPPORT	79,970	123,690
Biometric Terrorist Watch-List Database Management Development		1,600
Covert Sensing and Tagging System (CSTS)		1,200
Combating Terrorism Technology Support Office/STAR-TEC Partnership Program		2,400
Improved LAS Glass-Ceramic Laminated Armored Window Systems		1,600
EDIT Technology for Counter-Tunnel Operations and Cache Detection		800
Facial Recognition Technology Initiative		2,000
Facility Security Using Tactical Surveys		3,000
Low-Cost Stabilized Turret		1,600
Machine Augmented Composite Armor		800
Military/Law Enforcement Counterterrorism Test Bed		2,400
Port and Hull Security 3D, Real Time Sonar System - Echoscope		1,600
Roll-On, Roll-Off Reconnaissance, Surveillance, and Special Mission Palletized System		4,000
Tactical Biometrics Operating and Surveillance System (TBOSS)		1,600
Ultra Portable Unmanned Surveillance Helicopter		1,000
Validation of an Enhanced Urban Air Blast Tool		2,400
SOF Unattended Sensor Network (Note: only for SBIR SOCOM 03-004)		1,280
Radio Inter-Operability System (RIOS)		800
BOPPER (Bioterrorism Operations Policy for Public Emergency Response)		1,200
Document and Media Search and Discovery (DMSD)		1,440
Ex-RAD Radiation Protection Program		5,000
Full Scale Impact and Blast Loading Laboratory Testing Program		1,600
Remote Sensor Network Services Platform		2,000

R-1	Budget Request	Recommendation
Robotic Mobility Platform System		1,200
Unmanned Aerial Vehicle Avionics Upgrade (UAVAU)		1,200
28 COUNTERPROLIFERATION INITIATIVES--PROLIFERATION PREVENTION & DEFEAT	211,325	219,645
AELED IED Electronic Signature Detection		3,200
Continuation of Advanced Materials (Mercuric Iodide) Research for Nuclear Detection, Counter-Proliferation and Imaging for CBRNE Special Operations		800
National Nuclear Security Agency (NNSA) Metals Declassification for Reuse by DoD in Armaments		2,720
Next Generation Intelligent Portable Radionuclide Detection and Identification Systems		1,600
29 BALLISTIC MISSILE DEFENSE TECHNOLOGY	118,718	119,718
General Reduction		-5,000
Night Vision Sensor		1,000
Multiple Target Tracking Optical Sensor Array Technology		5,000
31 ADVANCED AEROSPACE SYSTEMS	107,857	87,857
Unexecutable growth		-20,000
32 SPACE PROGRAMS AND TECHNOLOGY	287,009	227,009
Blackswift		-60,000
33 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM - ADVANCED DEVELOPMENT	337,927	316,827
Transformational Medical Tech Initiative- excessive Growth in New Starts		-63,000
Antioxiant Micronutrient Therapeutic Countermeasures for Chemical Agents		800
Bio Agent Early Warning Detector		2,000
Carbon Nanotube Chemical Detector		800
Continuation of Industry Based Research into Biological Agent Identifiers without Wet Reagents		1,600
Eye-Safe Long Range Stand-off System for Detection of Chemical and Biological Weapons		1,500
Mobile Continuous Air Monitor (MCAM)		1,600
Nano Porous Hollow Fiber Regenerative Chemical Filter		1,000
Photo Catalytic Oxidation (PCO) Demonstration for Water Reuse		2,400
Protective Self-Decontaminating Surfaces		1,600
Surface Enhanced Infrared Detection of Threats		1,200
Total Perimeter Surveillance		1,000
Portable Rapid Bacterial Warfare Detection Unit		4,000
Rapid Response Institute		3,200
Liquid Crystal Sensor Technology Research and Development for Force Protection		2,400
Acinetobacter Baumannii Research		2,000
Advanced Development of Mobile Rapid Response Prototypes		1,600
Biodefense Vaccine Development and Engineering of Antiviral Peptides		1,600
Center for Advanced Emergency Response		4,400
Improved Chemical, Biological, and Radiological Filters		1,600
Multi-Purpose Biodefense Immunoarray		800
NIDS Improved Handheld Biological Agent Detector		1,600
Plant Vaccine Development		1,600
ViriChip Rapid Virus Detection Systems		1,600

R-1	Budget Request	Recommendation
34 JOINT ELECTRONIC ADVANCED TECHNOLOGY	9,320	10,520
Advanced Tactical Laser Flashlight Devices		1,200
35 JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS	206,337	208,237
Distributed Network Switching		2,000
Reduction to execution year new starts		-7,000
Maritime UAS Demonstration for the SOUTHCOM Region		3,000
Simultaneous Field Radiation Technology (SFRT)		2,300
Spartan Advanced Composite Technology		1,600
36 NETWORKED COMMUNICATIONS CAPABILITIES	39,923	29,923
Unsustained growth		-10,000
39 DEFENSE-WIDE MANUFACTURING SCIENCE AND TECHNOLOGY PROGRAM	11,981	18,381
High Performance Manufacturing Technology Initiative		6,400
40 JOINT ROBOTICS PROGRAM/AUTONOMOUS SYSTEMS	8,449	9,249
Joint Ground Robotics Enterprise Modeling, Simulation, Analysis Project		800
41 GENERIC LOGISTICS R&D TECHNOLOGY DEMONSTRATIONS	19,375	76,135
Advanced Mobile Microgrid		2,720
Aging Systems Sustainment and Enabling Technologies		2,000
Connectory Expansion for Rapid Identification of Technology Sources for DoD		400
Florida Defense Manufacturing Supply Chain Initiative		2,000
High-Pressure Mobile Water Delivery System		800
On-Site Alternative Fuel Manufacturing System		1,200
Reliability Testing of Lead-Free Circuits/Components		1,440
New England Defense Manufacturing Supply Chain Initiative		800
Smart, Modular Regenerative Off-Grid Hydrogen Fuel Cell		1,000
Energy Strategy for the Department of Defense		20,000
Alternative Energy from Organic Sources		6,000
Biofuels Program		1,600
Commodity Management System Consolidation Program		1,600
Continuous Acquisition and Life-Cycle (CALs) and Integrated Data		
Environment and Defense Logistics Enterprise Services Program		3,200
Defense Fuelcell Locomotive		2,000
Emerging Critical Interconnection Tech		2,000
Vehicle Fuel Cell and Hydrogen Logistics Program		8,000
44 MICROELECTRONIC TECHNOLOGY DEVELOPMENT AND SUPPORT	0	32,480
3-D Electronics and Power		2,400
Agile JTRS Integrated Circuits		1,600
Carbon Nanotube Thin Film Devices for Portable Power		1,600
Defense Command Integration Center		880
Electronics and Materials for Flexible Sensors and Transponders (EMFST)		3,200
Feature Size Migration at DMEA AMRS Boundary		2,000
Scalable Topside Array Radar Demonstrator		800
Spintronics Memory Storage Technology		2,400
Superlattice Nanotechnology		2,000
X-Band/W-Band Solid State Power Amplifier		1,600
Semiconductor Photomask Technology Infrastructure Initiative		2,400
C-Scout Container Security System		2,400

R-1	Budget Request	Recommendation
High Performance Tunable Materials		2,400
Smart Bomb Millimeter Wave Radar Guidance System		2,000
Tunable MicroRadio for Military Systems		4,800
45 JOINT WARFIGHTING PROGRAM	11,098	12,098
UAV Situational Awareness System		1,000
46 ADVANCED ELECTRONICS TECHNOLOGIES	201,146	200,046
Hybrid Power Generation System		1,200
Reduction to fiscal year 2009 new starts		-14,900
Center for Autonomous Solar Power (CASP) large-area, flexible PV energy research		4,000
Institute of Advanced Flexible Manufacturing Systems		7,000
Ultra Low Power Electronics for Special Purpose Computers		1,600
48 ADVANCED CONCEPT TECHNOLOGY DEMONSTRATIONS	0	1,200
Advanced Emergency Response Integrated Environment (AERIE)		1,200
49 HIGH PERFORMANCE COMPUTING MODERNIZATION PROGRAM	208,079	221,559
Naval Research Lab Supercomputing Information Prototype		2,800
Arctic Regional Supercomputer		3,200
High Performance Computational Design of Novel Materials		2,480
MHPCC		5,000
50 COMMAND, CONTROL AND COMMUNICATIONS SYSTEMS	338,964	328,964
Growth reduction for program execution		-10,000
53 NETWORK-CENTRIC WARFARE TECHNOLOGY	156,733	154,433
Reduction to fiscal year 2009 new starts		-2,300
54 SENSOR TECHNOLOGY	226,470	218,070
Reduction to fiscal year 2009 new starts		-8,400
55 GUIDANCE TECHNOLOGY	110,572	108,272
Reduction to fiscal year 2009 new starts		-2,300
59 QUICK REACTION SPECIAL PROJECTS	113,924	107,385
Reduction to execution year new starts		-9,339
Augmented Reality to enhance Special Warfare Domain Awareness		1,600
Unmanned Aerial Vehicles		1,200
60 JOINT EXPERIMENTATION	114,947	109,377
Reduction for excessive growth		-6,770
Collaboration Gateway		1,200
61 JOINT WARGAMING SIMULATION MANAGEMENT OFFICE	38,147	33,787
Modeling and Simulation Standards Development		640
Program adjustment		-5,000
63 TECHNOLOGY LINK	2,170	5,770
First Link		2,000
MilTech Expansion Program		1,600

R-1	Budget Request	Recommendation
64 SPECIAL OPERATIONS ADVANCED TECHNOLOGY DEVELOPMENT	28,930	61,250
Hostile Fire Indicating System		800
Field Experimentation Program for Special Operations		1,600
Partnership for Defense Innovation Wi-Fi		
Laboratory Testing and Assessment Center		2,000
Improved Information Transfer for Special Forces		2,400
Advanced Distributed Aperture System		21,120
Micro-power Special Operations Generator		1,600
Autonomous Rendezvous/Formation Flight		2,000
Small Assault Vehicle Expeditionary (SAVE)		800
66 NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT	38,758	50,158
Terahertz High-Resolution Portable Explosives Detector		800
Camp Guernsey Joint Training and Experimentation Center		6,000
Intelligent Decision Exploration		3,600
Pacific Data Conversion and Technology Program		1,000
70 ADVANCED SENSOR APPLICATIONS PROGRAM	0	16,000
Program adjustment		16,000
71 ENVIRONMENTAL SECURITY TECHNICAL CERTIFICATION PROGRAM	31,600	38,904
Environmentally Friendly Nanometal Electroplating Processes for Cadmium and Chromium Replacement		5,304
Inland Empire Perchlorate Wellhead Treatment		2,000
72 BALLISTIC MISSILE DEFENSE TERMINAL DEFENSE SEGMENT	1,019,073	959,973
Transfer to Procurement, Defense-Wide Line 95		-65,000
Arrow-Upper Tier		30,000
Arrow-Short Range BMD		28,000
Target funding transfer to Line 78		-52,100
73 BALLISTIC MISSILE DEFENSE MIDCOURSE DEFENSE	2,076,662	1,512,662
Long lead for 2-Stage Interceptors (EIS) (Note: Transfer to Line 73A)		-19,200
Target funding (Note: Transfer to Line 78)		-104,000
GMD upgrades and enhancements		40,000
2-Stage Interceptor Development (Note: Transfer to Line 73A)		-182,900
Missile Field Equipment and Supporting Activities (EIS) (Note: Transfer to Line 73A)		-165,100
Site Planning/ Design/ Activation (EIS) (Note: Transfer to Line 73A)		-65,500
Communications (EIS) (Note: Transfer to Line 73A)		-26,200
European Global Engagement Manager (Note: Transfer to Line 73C)		-26,700
U.S. Communications for European Sites (Note: Transfer to Line 73C)		-14,400

R-1	Budget Request	Recommendation
73A STAGE TWO INTERCEPTOR SEGMENT	0	363,250
2-Stage Interceptor Development (Note: Transfer from Line 73)		182,900
Long lead for 2-Stage Interceptors (EIS) (Note: Transfer from Line 73)		19,200
Missile Field Equipment and Supporting Activities (EIS) (Note: Transfer from Line 73)		82,550
Site Planning/ Design/ Activation (EIS) (Note: Transfer from Line 73)		65,500
Communications (EIS) (Note: Transfer from Line 73)		13,100
73B EUROPEAN MIDCOURSE RADAR	0	76,800
Sensor Equipment (Note: Transfer from Line 76)		44,900
Site Planning/ Design/ Activation (Note: Transfer from Line 76)		15,800
Communications (Note: Transfer from Line 76)		16,100
73C EUROPEAN GLOBAL ENGAGEMENT MANAGER/U.S. COMMUNICATIONS	0	27,100
Global Engagement Manager (Note: Transfer from Line 73)		16,700
U.S. Communications (Note: Transfer from Line 73)		10,400
74 BALLISTIC MISSILE DEFENSE BOOST DEFENSE SEGMENT	421,229	402,129
2nd Airborne Laser Trade Studies		-15,800
Target funding transfer to Line 78		-3,300
75 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	51,291	62,891
Biological Threat Antibody Research		1,600
Environmentally Friendly Aircraft Decontamination Systems		1,800
IM Formulation Development of Anthrax Therapeutic		800
Networked Standoff Biological LIDAR		1,200
Reactive Overlay and Removable CBRN Coatings		1,600
Recombinant BChE Formulation Program		1,600
Vacuum Sampling Pathogen Collection and Concentration		3,200
76 BALLISTIC MISSILE DEFENSE SENSORS	1,076,983	770,232
European Site-Southern Radar Site (AN/TPY-2 #6 Radar Manufacturing and Program Support)		-39,119
Airborne Infrared Surveillance (AIRS) System (Note: Transfer to Line 91)		800
External Sensors Lab - program growth		-147,400
Sensor Equipment (EMR) (Note: Transfer to Line 73B)		-10,000
Site Planning/ Design/ Activation (EMR) (Note: Transfer to Line 73B)		-59,900
Communications (EMR) (Note: Transfer to Line 73B)		-15,800
Communications (European Forward Based Radar - AN/TPY-2) - premature request		-22,100
Mobile Sensor Enhancement to BMD Sensors Network		-17,232
		4,000
78 BALLISTIC MISSILE DEFENSE TEST & TARGETS	665,445	914,845
Backup Target		8,000
Inventory LV-2 with MBRV-2		16,000
Kodiak Unique GSE and C4 Pathfinder (Note: Transfer from Line 72)		8,000
(Note: Transfer from Line 73)		52,100
(Note: Transfer from Line 74)		104,000
(Note: Transfer from Line 81)		3,300
(Note: Transfer from Line 82)		39,200
Test and Training Range Upgrades		2,800
		16,000

R-1		Budget Request	Recommendation
79	BALLISTIC MISSILE DEFENSE SYSTEMS CORE	432,262	404,162
	General Reduction		-40,000
	Advanced Battery Technology		2,300
	Next Generation Sensor Producability-flight 2		9,600
80	SPECIAL PROGRAMS - MISSILE DEFENSE AGENCY	288,315	176,315
	Program Decrease		-112,000
81	AEGIS BALLISTIC MISSILE DEFENSE	1,157,783	1,117,483
	Ballistic Signal Processor/Open Architecture		16,000
	SM-3 Block 1A (Note: Transfer to Procurement, D-W, Line 95)		-57,100
	Target funding (Note: Transfer to Line 78)		-39,200
	Aegis BMD enhancements		40,000
82	SPACE SURVEILLANCE & TRACKING SYSTEM	242,441	209,641
	STSS follow-on program		-30,000
	Target funding transfer to Line 78		-2,800
83	MULTIPLE KILL VEHICLES	354,455	284,455
	Reduction - MKV-R		-55,000
	Program growth		-15,000
84	BALLISTIC MISSILE DEFENSE SYSTEM SPACE PROGRAMS	29,771	24,771
	Space Testbed		-10,000
	Space-based Interceptor Study		5,000
88	BALLISTIC MISSILE DEFENSE JOINT NATIONAL INTEGRATION	96,404	106,404
	MDIOC Modeling and Simulation		10,000
91	SEA BASED X-BAND RADAR (SBX)	0	147,400
	SBX (Note: Transfer from Line 76)		147,400
93	COALITION WARFARE	14,030	13,319
	Reduction to execution year new starts		-711
94	DEPARTMENT OF DEFENSE CORROSION PROGRAM	5,102	22,402
	Corrosion Engineering Education Initiative		800
	Environmentally Intelligent Moisture and Corrosion Control		2,000
	Department of Defense Corrosion Program		12,000
	Managing and Extending DoD Asset Lifecycles		2,500
95	JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS	14,962	13,562
	Advanced Active Denial Planar Scanning Antenna System		1,600
	Program adjustment for lack of transitions		-3,000
100	JOINT ELECTROMAGNETIC TECHNOLOGY (JET) PROGRAM	3,524	5,524
	Secure, Miniaturized, Free Space, Optical Communications		2,000
101	DEFENSE ACQUISITION CHALLENGE PROGRAM (DACP)	30,363	28,566
	Reduction to execution year new starts		-1,797
103	PROMPT GLOBAL STRIKE	117,572	74,572
	Alternative Re-Entry System		-43,000

R-1	Budget Request	Recommendation
104 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	299,373	304,173
Catalytic Oxidation Integrated Demonstration		2,400
Large Scale Single-use Bio Reactor for Rapid Response to Bioterrorism		800
Joint Services Aircrew Mask Don/Doff In-flight Upgrade		1,600
109 INFORMATION TECHNOLOGY DEVELOPMENT	11,611	12,411
In Transit Visibility System		800
117 JOINT COMMAND AND CONTROL PROGRAM (JC2)	147,339	57,339
Net-Enabled Command Capability (NECC)		-90,000
118 TRAINING TRANSFORMATION (T2)	38,729	58,329
Integrated Analysis Environment		1,200
Agile Software Capability Interventions		1,600
Indiana Complex Operations Partnership		2,000
New Mexico State University Institute for Defense and Public Policy		10,000
Playas Training and Research Center Joint Training Experiment		4,800
121 CENTRAL TEST AND EVALUATION INVESTMENT DEVELOPMENT	133,852	152,852
Gulf Range Mobile Instrumentation Capability		800
Joint Gulf Range Complex Upgrade		1,200
Range Element Network Enterprise Technology (RE-NET)		4,000
UAV Systems Operations Validation Program (USOVP)		5,000
Advanced SAM Hardware Simulator Development		5,000
Pacific Region Interoperability Test and Evaluation Capability		3,000
124 TECHNICAL STUDIES, SUPPORT AND ANALYSIS	34,520	36,520
Center for Technology and National Security Policy at the National Defense University		1,200
Defense Support to Large Scale Disaster Preparedness		800
128 CLASSIFIED PROGRAM USD(P)	0	102,000
Classified Program		102,000
139 SMALL BUSINESS INNOVATION RESEARCH/CHALLENGE ADMINISTRATION	2,165	5,765
Directed Energy Systems for UAV Payloads		800
Ferroelectric Component Technology		1,200
Random Obfuscating Compiler Anti-Tamper Software		1,600
142 FORCE TRANSFORMATION DIRECTORATE	20,701	23,201
Buoyancy Assisted Lift Air Vehicle		2,500
144 R&D IN SUPPORT OF DOD ENLISTMENT, TESTING & EVALUATION	25,435	18,435
HR Automation Enhancements - unjustified program		-7,000
145 DEVELOPMENT TEST AND EVALUATION	20,396	23,596
Renewable Fuel Systems for Defense Applications		3,200
147 MANAGEMENT HEADQUARTERS (RESEARCH & DEVELOPMENT)	52,700	48,700
Unexecutable growth		-4,000

R-1	Budget Request	Recommendation
151 SUPPORT TO INFORMATION OPERATIONS (IO) CAPABILITIES	30,039	35,159
Enhanced Simulation for IO Capabilities		5,120
155 INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS (IO)	0	1,200
Advanced Information Discovery and Analysis Capability for NSA		1,200
158 MANAGEMENT HEADQUARTERS - MISSILE DEFENSE AGENCY	86,453	81,453
Management Support		-5,000
160 DEFENSE INFORMATION SYSTEM FOR SECURITY (DISS)	11,533	5,533
Execution delays		-6,000
162 CHEMICAL AND BIOLOGICAL DEFENSE (OPERATIONAL SYSTEMS)	10,274	12,674
Next Generation Respiratory Protection		2,400
167 CRYPTOLOGIC ACTIVITIES	0	3,200
National Biometrics Security Project		3,200
184 INFORMATION SYSTEMS SECURITY PROGRAM	394,074	403,574
High Assurance Cross Domain Solutions for High Performance Computing Center Net-Centric Operations		2,000
Intelligence Analyst Education and Training		3,900
Security for Critical Communication Networks		3,600
193 SPECIAL APPLICATIONS FOR CONTINGENCIES	16,225	26,325
UML UAV/UAS Test Facility		2,400
Advanced Technology Sensors and Payloads		1,800
Expeditionary Persistent Power (USSOCOM)		1,600
Comprehensive Maritime Domain Awareness		4,500
195 DEFENSE - GEOSPATIAL - INTELLIGENCE PROGRAM	0	1,600
Commercial Denied Area Radargrammetry Mapping		800
Improved Commercial Integration (ICI)		800
199 CRITICAL INFRASTRUCTURE PROTECTION (CIP)	12,700	17,900
Electric Grid Reliability/Assurance		1,200
Disaster Response: Communications and Other Infrastructure Restoration		4,000
210 DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	3,165	765
Excess to need		-2,400
218 COMBATANT COMMAND INTELLIGENCE OPERATIONS	0	12,880
Advanced Missile Simulation Technology for Intelligence Analysts		1,280
All-Source Content Management (ASCMAN) for Actionable Intelligence		1,600
Armed Forces Health and Food Supply Research		5,000
National Consortium for MASINT Research		3,000
Pat Roberts Intel Scholars Program (PRISP)		2,000
225 INDUSTRIAL PREPAREDNESS	20,480	55,280
Copper-Based Casting Technology Applications		2,800
Improved Collapsible Urethane-Fuel Storage Tanks (ICU-FST)		1,600
Ultrahigh-Strength Steel for Landing Gear		2,000
Wiring Integrity Technology		1,600
Northwest Defense Manufacturing Initiative		1,600

R-1	Budget Request	Recommendation
Vet-Biz Initiative for National Sustainment (VINS)		2,000
Cellulosic-Derived Biofuels Research Project		4,000
Industrial Base Innovation Fund		19,200
231 SPECIAL OPERATIONS AVIATION SYSTEMS ADVANCED DEVELOPMENT	43,977	44,777
Helicopter Cable Warning and Obstacle Avoidance		800
232 SPECIAL OPERATIONS TACTICAL SYSTEMS DEVELOPMENT	13,263	26,263
Covert Communications for SOF Operations		1,600
Integrated Bridge System		1,200
Common UGV Command and Control for PSYOP Programs		800
SEAL Delivery Vehicle (SDV) Integrated Combat System (ICS)		3,200
Advanced, Long Endurance Unattended Ground Sensor Technologies		3,600
Integration of Force XXI Battle Command, Brigade & Below (FBCB2) with Tactical Handheld Digital Devices (THDD)		1,200
Weapons Shot Counter		1,400
233 SPECIAL OPERATIONS INTELLIGENCE SYSTEMS DEVELOPMENT	39,125	39,974
Global Sensors Network, execution		-9,051
Generation II Special Operation Forces Internally Transported Vehicle (SOF-ITV)		1,600
Advanced Tactical Threat Warning Radio (ATTWR)		1,200
Biometric Signatures Research		2,000
Multi-Spectral Laboratory (UML) and Analytical Services Center (ASCENT) Program		1,600
Picoceptor and Processor for Man-portable Threat Warning		3,500
234 SOF OPERATIONAL ENHANCEMENTS	48,137	55,337
Freeze-dried Plasma		800
USSOCOM Medical Research		4,000
Signal Intelligence and Electronic Warfare Developments for Integration of SOF Systems		1,600
Communications-Capable Reconnaissance Imager		800
235 SPECIAL OPERATIONS CV-22 DEVELOPMENT	38,229	40,229
CV-22 Helmet Mounted Display		2,000
237 OPS ADVANCED SEAL DELIVERY SYSTEM (ASDS) DEVELOPMENT	7,090	8,690
Lithium Ion Battery Safety Detection and Control of Impending Catastrophic Failures		1,600
238 MISSION TRAINING AND PREPARATION SYSTEMS (MTPS)	4,052	5,652
SOF Mission Training and Preparation Systems Interoperability		1,600
239 UNMANNED VEHICLES (UV)	1,527	43,927
Photovoltaic Power Supply for Autonomous Sensors		2,400
Global Observer Development		40,000
241 SOF WEAPONS SYSTEMS	2,759	2,559
SOF Combat Assault Rifle Acceleration		-200

R-1	Budget Request	Recommendation
243 SOF VISUAL AUGMENTATION, LASERS & SENSOR SYSTEMS	3,495	6,986
SOCOM requested transfer from P-82 for Precision Laser Targeting Device		5,000
SOF Laser Rangefinder and Designator		-1,509
244 SOF ROTARY WING AVIATION	3,822	1,647
Infrared Exhaust Suppressor Termination		-2,175
245 SOF UNDERWATER SYSTEMS	3,142	5,542
Technology for Shallow Water Special Operations Forces Mobility		2,400
999 CLASSIFIED PROGRAMS	3,805,519	3,744,197
Classified Programs		-84,762
Laboratory for High Performance Computational Systems		1,600
Advanced Scientific Missile Intelligence Preparation of the Battlespace (IPB)		2,000
Collection Management Tool Development		1,440
Northwest Maritime Information and Littoral Operations Program		2,800
Defense Manpower Data Center		800
Integrated Signature Production and Exploitation		800
Countering Missile-Related Technology Proliferation		2,000
Center for Innovative Geospatial Technology		10,000
High Assurance Cross Domain Technology Development		2,000

ENERGY STRATEGY FOR THE DEPARTMENT OF DEFENSE

Achieving improved energy efficiency, which includes reduced consumption, expanded sources of supply as well as a reduction in our dependence on foreign oil are possibly the greatest national security challenges facing our nation.

In 2006, according to the Defense Science Board, the Department of Defense consumed 110,000,000 barrels of premium fuel and 3,800,000,000 kilowatt hours of electricity at a cost of \$13,600,000,000. Of this amount, \$10,000,000,000 was spent on fuel for combat and combat-related systems, and another \$3,600,000,000 to power the Department of Defense's infrastructure. The major challenges to fuel efficiency are operational, tactical and fixed based.

The most recent Defense Science Board Task Force is but the latest in a long line of reports addressing the necessity for a reduction in the fuel burden. The 2001 Defense Science Board Task Force report entitled, "More Capable Warfighting through Reduced Fuel Burden," stated that 70 percent of the tonnage the Army ships into battle is associated with fuel logistics and that multiple technologies were available at all levels of maturity that could reduce demand. Furthermore, it advocated "including fuel efficiency as a key performance parameter in all operational requirements documents and capstone requirements documents." It was not until 2007 that the Department issued a memorandum making it policy to include the fully burdened cost of delivered energy in trade off analyses conducted for all tactical systems and identified only three pilot programs.

While the Department is the leading consumer of fuel in the U.S., the Air Force is the leading consumer of fuel within the Department. The Air Force has been in the forefront on alternative fuels and is on the path to qualify all Air Force aircraft on a coal-based jet fuel by 2012. The challenge in using coal-based jet fuels is directly dependent upon carbon capture and sequestration to mitigate CO₂ emissions.

The Department is provided \$20,000,000 to initiate research into carbon capture and sequestration technology for the future production of coal-based jet fuel. The Department is encouraged to budget for the continued research of this initiative in the fiscal year 2010 request. The Secretary of Defense is directed to provide the congressional defense committees with specific plans for utilizing these funds to include specific details and goals not later than 90 days after enactment of this Act.

Similarly, in the fixed base, there is a near total reliance on the commercial power grid. Efforts to raise the issue and support alternative and/or renewable energy sources for the Department of Defense have been sporadic at best.

The Department of Defense's scattered efforts to address the energy issue throughout its organization is coupled with minimal centralized policy and oversight. The Defense Science Board Task Force went on to say, "decisions that create energy demand are dispersed organizationally across the Department and throughout the services. There is no unifying vision, strategy, or metrics or governance structure with enterprise-wide energy in its portfolio."

The Department of Defense can no longer rely on such haphazard approaches to energy. Our future national security and military readiness demands swift action guided by a clear mandate.

The Secretary of Defense is encouraged to appoint a senior official to be responsible for energy efficiency. Further, the Department is directed to address comprehensively and submit a report, not later than June 15, 2009, regarding energy efficiency and how it will be given greater importance and weight in all aspects of the Department's resource allocation process.

TRANSFORMATIONAL MEDICAL TECHNOLOGIES INITIATIVE (TMTI)

The fiscal year 2009 budget request includes \$240,900,000 for the Transformational Medical Technologies Initiative (TMTI) in program elements 0601384BP, 0602384BP and 0603384BP of the Chemical and Biological Defense Program, an increase of \$105,000,000 over the amount appropriated in fiscal year 2008. Of the amount requested for fiscal year 2009, more than half, or \$123,900,000, is requested for new start projects, an increase of \$78,300,000 over the amount provided for new projects in fiscal year 2008. This growth for new starts is excessive at this juncture in the program and the request for new start projects in fiscal year 2009 is reduced by \$70,000,000. The Special Assistant, Chemical and Biological Defense is directed to provide the annual TMTI report (as detailed in Senate Report 109—292) with the submission of the fiscal year 2010 budget request.

DEFENSE ADVANCED RESEARCH PROJECTS AGENCY (DARPA)

The fiscal year 2009 budget request for DARPA is \$3,285,569,000, an increase of \$326,493,000, more than 10 percent, over the fiscal year 2008 appropriated program of \$2,959,076,000. In recent years, DARPA has repeatedly underexecuted its funded program level, executing a fiscal year 2005 program that was nine percent below the appropriated program and a fiscal year 2006 program that was twelve percent below the appropriated program. Based on program execution to date, DARPA will likely continue that trend for the fiscal year 2007 and 2008 programs. While DARPA's continued underexecution can partially be explained by its fiscally responsible management approach of withholding funds from projects that fail to demonstrate progress, doubts exist about DARPA's ability to responsibly manage such a large increase. Therefore, the bill provides \$3,142,229,000, a reduction of \$143,340,000 from the request. The Director of DARPA is directed to provide to the congressional defense committees not later than 60 days after enactment of this Act a report that details by program element and project the application of undistributed reductions made in this Act.

The conference reports accompanying the fiscal year 2007 and 2008 Department of Defense Appropriations Acts cited the lack of individual project level detail provided in DARPA's budget justification materials. While the high-risk nature of many DARPA projects makes it hard to pinpoint detailed schedules, there is concern about the lack of detail provided for individual projects regarding their scope, notional schedule and overall funding requirements.

Moreover, project funding is often adjusted from one year to the next without justification. DARPA is directed to provide greater programmatic detail for its projects in its justification materials beginning with the fiscal year 2010 budget request. Further, DARPA is encouraged to continue to pursue transition plans for all of its Advanced Technology Development programs. The Director of DARPA is directed to submit with the fiscal year 2010 budget submission the report on transitions that was initiated in fiscal year 2009.

NEW STARTS IN THE YEAR OF EXECUTION

The fiscal year 2009 budget request includes no less than \$176,770,000 in the Research, Development, Test and Evaluation, Defense-Wide account for new start programs that will be selected and initiated in fiscal year 2009, an increase of \$61,766,000 from the amount above the fiscal year 2007 level. While there is awareness of the need for certain programmatic flexibility to address urgent unfunded requirements, this level of funding is unjustified, particularly in light of the fact that several projects continue to be resourced from these funds over a sustained period of time without transitioning to funded programs of record. Additionally, congressional notification of programs initiated with these funds has been lagging and inconsistent. Therefore, the bill reduces the request for these programs by ten percent.

JOINT REPORT ON COAL-TO-LIQUID FUELS

The Secretary of Defense, in coordination with the Department of Energy's Office of Fossil Energy is directed to submit a report to the congressional defense committees no later than March 31, 2009, on alternatives to reduce the life cycle emissions of coal-to-liquid fuels and potential uses of coal-to-liquid fuels to meet the Department of Defense's mobility energy requirements. The report shall examine, at a minimum, the following: the potential clean energy alternatives for powering the coal-to-liquids conversion processes, including nuclear, solar, and wind energies; the alternatives for reducing carbon emissions during the coal-to-liquids conversion processes; and the military utility of coal-to-liquid fuels for military operations and for use by expeditionary forces compared with the military utility and life cycle emissions of mobile, in-theater synthetic fuel processes.

INFRARED FOCAL PLANE ARRAYS

Infrared Focal Plane Arrays (IFPA) are the key to infrared sensor systems widely used by the military. New and improved military capabilities will require the development of new and more complex arrays. Recent reports reveal that the United States, which has traditionally held the lead in IFPA technology, is falling behind. This poses the very real threat that the United States government could lose control of this technology. The Department of Defense is directed to review developments in this critical area and report on the status of the United States' competitive position, and if warranted, provide a plan of action to remedy the situation. This

report should be submitted no later than 90 days after enactment of this Act.

CLIMATE CHANGE AND NATIONAL SECURITY

Climate change is a key environmental issue that has national security implications. The Department of Defense should assess the impact of climate change on our coasts, water resources, and other geographic and environmental components of the United States national security. The Department of Defense should also establish a baseline set of indicators for assessing climate change and a set of tools for measuring its future impact on those aspects of climate change that could affect our national security.

MISSILE DEFENSE AGENCY (MDA) REPORTING REQUIREMENTS AND JUSTIFICATION MATERIALS

The budget information provided by the MDA does not allow sufficient oversight of the Ballistic Missile Defense programs. The programs change significantly from the time the budget is submitted to the time funding is appropriated, making it extremely difficult to understand what is actually in the budget on an annual basis. The justification materials should no longer be presented in the block structure format, but rather by fiscal year for each activity within the program element. The documents must provide more detailed schedules, quantities, and break-outs of funding for each activity.

Past Congresses have established a framework of laws that require program and cost reporting to Congress to help exercise this oversight. The MDA is directed to report according to the existing acquisition laws to improve accountability and transparency of the programs.

NEAR-TERM MISSILE DEFENSE PROGRAMS

In order to execute a balanced program, the Missile Defense Agency (MDA) must continue to field the near-term missile defense programs, primarily Ground-Based Missile Defense (GMD), AEGIS Ballistic Missile Defense (BMD), and Theater High Area Altitude Defense (THAAD) programs. Funding for fielding these programs, however, is sacrificed each year to pay for the development of futuristic missile defense programs. Therefore, the bill reduces funding for several of the far-term programs, such as the Multiple Kill Vehicle, the Airborne Laser, and Space Test Bed and provides an additional \$120,000,000 for enhancements to the GMD, AEGIS and THAAD programs. The MDA is directed to provide a report to the congressional defense committees by December 1, 2008, on how those additional funds will be allocated to the programs.

The Joint Capability Mix (JCM) study, conducted by the Joint Staff, concluded that U.S. combatant commanders need about twice as many Standard Missile-3 and THAAD interceptors as currently planned to meet minimum operational requirements for defending against short and medium-range ballistic missiles. The MDA's highest priority should be to achieve the minimum levels of interceptor inventories identified in the JCM study and the Department

of Defense should budget accordingly in its fiscal year 2010 budget submission.

EUROPEAN CAPABILITY—THIRD SITE

Three separate program elements are recommended for the European Missile Defense sites in order to provide adequate visibility of these initiatives and to ensure that funding for the Ground-Based Missile Defense, Sensors, and Command and Control program elements are not adversely impacted by the European sites.

The bill provides \$467,150,000 for European missile defense and development and testing of the two-stage interceptor. The first program element provides \$363,250,000 for the development and testing of the two-stage interceptors and the interceptor site planned for Poland. The bill provides \$182,900,000 for development and testing of the two-stage interceptors; \$19,200,000 for long-lead components for two-stage interceptors; and \$65,500,000 for site planning, design and activation. Due to the delay in ratification of a missile defense agreement with Poland, funding for missile field equipment is reduced by \$82,550,000 and communications by \$13,100,000, half of the request.

The second program element provides \$76,800,000 for the European Midcourse Radar (EMR) to be located in the Czech Republic. The bill provides \$15,800,000 for site planning, design and activation, but reduces funding for sensor equipment by \$15,000,000 and communications by \$6,000,000 due to at least a three month delay in ratification of an agreement with the Czech government in fiscal year 2009.

The third program element provides \$27,100,000 for the European Global Engagement Manager and U.S. Communications for the European sites. Due to the delay in ratifying agreements with the European host sites, the request is reduced by \$14,000,000. The bill provides no funding for the European Forward Based Radar (AN-TPY-2) since a location has not been determined for the site.

These estimates do not include costs for barracks, family housing or any other costs normally associated with infrastructure of a cantonment area of a military facility. Also, the estimate does not include personnel costs for manning the facilities.

SPACE TRACKING AND SURVEILLANCE SYSTEM (STSS)

It is premature for the Missile Defense Agency to move forward with a follow-on STSS constellation until after a successful launch and thorough analysis of the STSS demonstrator data. No funding is provided to begin work on an STSS follow-on constellation, an STSS gap filler, space sensor research and development, or any other space demonstration program.

FLIGHT TEST DELAYS AND CANCELLATIONS

As one of the largest research, development, test and evaluation programs in the Department of Defense, the Missile Defense Agency (MDA) has established a pattern of cost, schedule and performance problems. Tests were delayed or cancelled in fiscal years 2006, 2007 and 2008 and it is not unreasonable to assume that some of the tests planned for fiscal year 2009 will likely slip into subse-

quent fiscal years. The MDA annually conducts operational testing of the Ballistic Missile Defense System through a series of planned tests which are outlined in the Integrated Master Test Plan (IMTP). The numbers reflected in the IMTP only address successful flights of a missile. Rates of delay, cancellations or changes that occur annually in the testing programs and which affect the programming and budgeting of future years are not addressed.

In fiscal years 2006 through 2008, the MDA conducted approximately 85 percent of the planned tests in the same fiscal year as originally scheduled. The MDA's fiscal year 2009 test schedule reflects 13 flight tests with 77 percent of these tests scheduled for the third and fourth quarters of 2009. The fiscal year 2009 test schedule contains two major flight tests to support Ground-Based Mid-course Defense (FTG-05 and FTG-06). Combined, these tests cost approximately \$300,000,000. Department of Defense officials have expressed concern that FTG-06 will not have a target vehicle to support the test within fiscal year 2009. Therefore, the Missile Defense Agency is directed to report to the congressional defense committees by January 15, 2009, on the state of the testing program and what funding shortfalls exist, if any.

TARGETS

The Missile Defense Agency (MDA) has renewed its focus and commitment to the target program and must continue this momentum in order to achieve optimal production and deliveries. In order to ensure that the program office has the proper oversight of all funding for the targets program, the bill transfers the entire request for targets from the individual program elements to the Test and Target program element.

The bill provides an additional \$32,000,000 above the budget request for the flexible family of targets to initiate an inventory build up of critical long lead hardware items. However, there are additional funding shortfalls for targets that need to be addressed in fiscal year 2009. The MDA should submit an above threshold reprogramming to the congressional defense committees to ensure that this important component of missile defense testing is adequately funded. In addition, MDA should adequately address shortfalls in its out-year budget requests for targets to continue inventory buildup to ensure proper support of the rigorous testing program planned beginning in fiscal year 2010.

TERMINAL HIGH ALTITUDE AREA DEFENSE (THAAD)

The bill transfers \$65,000,000 from Program Element 0603881C to Procurement, Defense-Wide, Line 95, as identified by the Missile Defense Agency (MDA) to recover schedule and mitigate production line gaps for Fire Unit #3 and #4. The MDA is directed to identify additional funds to ensure production line continuity.

STANDARD MISSILE-3 (SM-3) INTERCEPTORS

The bill transfers \$57,100,000 from Program Element 0603892C to Procurement, Defense-Wide, Line 95, for advance procurement of SM-3 Block 1A interceptors.

AEGIS BALLISTIC MISSILE DEFENSE

Management of the kill vehicle for the Standard Missile-3 Block II is being done by the Kill Vehicle program office instead of the AEGIS program. The AEGIS program has had a long history of success working with the Navy to manage the entire development and fielding of the Standard Missile, and any change in management could result in a delay to the program. Therefore, the AEGIS program is directed to manage all current and future Standard Missile development and upgrades for ballistic missile defense, including the kill vehicles.

SPACE-BASED INTERCEPTOR STUDY

The bill provides \$5,000,000 to support the study outlined in section 236 of S. 3001, the National Defense Authorization Act for Fiscal Year 2009.

OPERATIONAL TEST AND EVALUATION, DEFENSE

For Operational Test and Evaluation, Defense, funds are to be available for fiscal year 2009, as follows:

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	RECOMMENDED	CHANGE FROM REQUEST	

OPERATIONAL TEST & EVAL, DEFENSE				
RDT&E MANAGEMENT SUPPORT				
1	OPERATIONAL TEST AND EVALUATION.....	53,196	53,196	---
2	LIVE FIRE TESTING.....	11,572	11,572	---
3	OPERATIONAL TEST ACTIVITIES AND ANALYSES.....	124,004	124,004	---

	TOTAL, RDT&E MANAGEMENT SUPPORT.....	188,772	188,772	---

	TOTAL, OPERATIONAL TEST & EVAL, DEFENSE.....	188,772	188,772	---

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
PA,A	Grenade Incendiary Thermite AN-M14	1,600,000	Ross	
PA,A	Grenades, All Types	4,000,000	Ross	Lincoln, Pryor
PA,A	Holston Army Ammunition Plant Critical Reliability Enhancement	1,600,000	Davis, David	
PA,A	M769, Mortar, Full Range Practice Cartridge	4,000,000	Kanjorski	Specter
PA,A	Rapid Wall Breaching Kit (RWBK)	3,200,000	Whitfield, Rogers (KY)	McConnell
PA,A	Small Caliber Trace Charging Facilitization Program	1,200,000	Shimkus, Costello, LaHood	Brownback
PA,A	Supercritical Water Oxidation, Bluegrass Army Depot	1,700,000		Bunning
PA,AF	McAlester Army Ammunition Plant Bomb Line Modernization	1,600,000	Boren	Inhofe
PA,AF	PGU-14 API Armor Piercing Incendiary, 30mm Ammunition	2,400,000	LaHood, Costello, Obey	
PANMC	Grenades, All Types	1,600,000		Lincoln, Pryor
RDTE,A	National Center of Ophthalmology Training and Education at Wills Eye Center	1,000,000	Brady (PA)	
RDTE,A	101st Airborne Injury Prevention & Performance Enhancement Research Initiative	2,000,000		Alexander, Corker
RDTE,A	21st Century Command, Control, and Communications Technology	640,000	Holt	
RDTE,A	3D2 Advanced Battery Technology	4,000,000	LaHood	Durbin
RDTE,A	5.56mm Aluminum Cartridge Case, Lake City Army Ammunition Plant	1,000,000	Graves	Bond, Crapo
RDTE,A	Academic Support and Research Compliance for Knowledge Gathering	2,000,000		Roberts
RDTE,A	Accelerated Materials Development and Characterization	2,500,000	Herseth Sandlin	Johnson

RDTE,A	Accelerating Treatment for Trauma Wounds	1,200,000	Stearns, Crenshaw	Nelson (FL)
RDTE,A	Acid Alkallne Direct Methanol Fuel Cell Technology	2,800,000	McIntyre, Price (NC)	
RDTE,A	Adaptive Infrastructure for SOF Experimentation	2,400,000	Hoyer	
RDTE,A	Adaptive Lightweight Materials for Missile Defense	1,600,000		Baucus, Tester
RDTE,A	Advance Stand off Technologies for National Security	1,200,000	Boyd	Nelson (FL)
RDTE,A	Advanced Cargo Projectile Technology	1,200,000	Hastings (WA)	
RDTE,A	Advanced Cavitation Power Technology	4,400,000		Cochran
RDTE,A	Advanced Cluster Energetics	3,200,000	Frelinghuysen, Payne	Lautenberg, Menendez
RDTE,A	Advanced Commercial Technology Insertion for Aviation and Missile Research, Development, and Engineering	2,400,000	Everett	Shelby
RDTE,A	Advanced Communications ECM Demo	1,600,000	Holt	
RDTE,A	Advanced Composite Armor for Force Protection	1,600,000	Coble	
RDTE,A	Advanced Composites for Light Weight, Low Cost Transportation Systems using 3+ Ring Extruder	2,400,000	Stupak	
RDTE,A	Advanced Conductivity Program (ACP)	3,500,000	Young (FL)	
RDTE,A	Advanced Corrosion Protection for Military Vehicles	2,400,000		Kohl
RDTE,A	Advanced Demining Technology	5,900,000		Leahy
RDTE,A	Advanced Detection of Explosives (ADE)	2,400,000	Young (FL)	
RDTE,A	Advanced Digital Hydraulic Hybrid Drive System	2,000,000	Upton, Ramstad	Coleman, Klobuchar, Levin, Stabenow
RDTE,A	Advanced Drivetrains for Enhanced Mobility and Safety	1,600,000	Upton, Walberg	Stabenow
RDTE,A	Advanced Electronics Rosebud Integration	3,200,000	Herseth Sandlin	Johnson, Thune

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,A	Advanced Energy Storage Development for Renewable Energy Generation	1,200,000	Schwartz	Casey
RDTE,A	Advanced Environmental Control Systems	5,500,000		Reid
RDTE,A	Advanced Fuel Cell Research Program	3,000,000	Poe	Cornyn, Hutchison
RDTE,A	Advanced Functional Nanomaterials for Biological Processes	2,000,000	Snyder	Lincoln, Pryor
RDTE,A	Advanced Fuzing Technologies	3,600,000	Bartlett	Byrd
RDTE,A	Advanced Hybrid Electric Vehicle Technologies for Fuel Efficient Blast Protected Vehicles	1,200,000		Graham
RDTE,A	Advanced Hypersonic Weapon Technology Demonstration	2,400,000	Everett, Aderholt	Shelby, Wicker
RDTE,A	Advanced IED Jammer Research and Development Program	2,000,000	Honda, Holt, Lofgren	
RDTE,A	Advanced Lightweight Gunner Protection Kit	1,200,000	Altmire	
RDTE,A	Advanced Lightweight Multi-Functional Multi-Threat Composite Armor Technology	2,400,000	Rangel	Schumer
RDTE,A	Advanced Lithium Iron Phosphate Battery System for Army Combat Hybrid HMMWV and Other Army Vehicle Platforms	2,000,000	Dingell	Levin, Stabenow
RDTE,A	Advanced Live, Virtual, and Constructive (LVC) Training Systems	1,600,000	Latham	Grassley, Harkin
RDTE,A	Advanced Lower Limb Prostheses for Battlefield Amputees	1,600,000	Markey, McGovern	Kennedy, Kerry
RDTE,A	Advanced Magnetic Nanosensors for Defense Applications	4,800,000	Fortenberry	Hagel, Nelson (NE)
RDTE,A	Advanced Manufacture of Lightweight Components	2,400,000		Kohl
RDTE,A	Advanced Materials and Process For Armament Structures (AMPAS)	2,400,000	Regula, Sutton	Brown

RDTE,A	Advanced Medical Multi-Missions and CASEVAC Roles (Note: VTOL man rated UAG/UGV)	800,000	Harman	
RDTE,A	Advanced Medium Caliber Tungsten Penetrators	1,600,000	Murphy, Tim	
RDTE,A	Advanced Modeling Technology for Large Structure Titanium Machining Initiative	800,000	Ramstad	Coleman, Klobuchar, Stabenow
RDTE,A	Advanced Performance Transparent Armor for Tactical Wheeled Vehicles	1,200,000	Altmire	
RDTE,A	Advanced Portable Power Institute	1,600,000	Gordon	Corker
RDTE,A	Advanced Prototyping with Non-Traditional Suppliers	3,200,000	Rothman	Lautenberg, Menendez
RDTE,A	Advanced Radar Transceiver IC Development	800,000	Harman, Hayes	
RDTE,A	Advanced Rarefaction Weapon Engineered System	2,400,000	Kaptur	
RDTE,A	Advanced Regenerative Medicine Therapies for Combat Injuries	3,000,000	Doyle	Casey, Specter
RDTE,A	Advanced Restoration Therapies in Spinal Cord Injuries	2,000,000	Hoyer, Ruppersberger	Cardin, Mikulski
RDTE,A	Advanced Soldier Portable Power Systems Technologies	1,600,000		Cochran, Wicker
RDTE,A	Advanced Strap Down Seeker	5,000,000		Gregg, Sununu
RDTE,A	Advanced Surface Technologies for Prosthetic Development	1,600,000		Baucus, Tester
RDTE,A	Advanced Tactical 2KW External Combustion Power Sources for Cogeneration Applications	2,400,000	Hastings (WA)	Cantwell, Murray
RDTE,A	Advanced Tactical Fuels for the U.S. Military	4,000,000		Conrad, Dorgan
RDTE,A	Advanced Technologies, Energy and Manufacturing Science	5,000,000	Frelinghuysen	
RDTE,A	Advanced Thermal Management System	2,400,000	Stupak	Levin
RDTE,A	Advanced Thermal Processing of Packaged Combat Rations	1,680,000	Gingrey	Isakson
RDTE,A	Advanced UV Light Diode Sensor Development	1,600,000	Clyburn	Graham
RDTE,A	Advanced Wireless Technologies	1,200,000	Sestak	Casey, Schumer, Specter

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,A	Aerial Canopy MASINT System	1,600,000	Rogers (KY)	
RDTE,A	Aerial Firefighting—Precision Container Aerial Delivery System (PCADS)	2,320,000	Rohrabacher	
RDTE,A	Affordable Light-Weight metal matrix composite armor	1,600,000		Reid
RDTE,A	Air, Space and Missile Defense Architecture Analysis Program (A3P)	1,200,000	Aderholt, Rogers (AL)	Sessions
RDTE,A	Airborne Threats	1,500,000		Stevens
RDTE,A	Aircraft Structural Condition Monitoring (ASCM)	1,600,000	Cramer	
RDTE,A	Alliance for NanoHealth (Note: Department of Defense Military Health Enhancement)	3,200,000	Culberson	
RDTE,A	ALQ-211 Networked EW Controller	1,600,000	Pascrell	Lautenberg, Menendez
RDTE,A	Alternative Power Technology for Missile Defense	4,000,000	Herseth Sandlin	Johnson, Thune
RDTE,A	Angiogenesis and Tissue Engineering Research	1,200,000	Capuano	
RDTE,A	Antiballistic Windshield Armor	3,600,000	Donnelly, Clyburn	Bayh, Graham, Lugar
RDTE,A	Anti-Terror Medical Technology Program	2,800,000	Rothman, Pallone	Lautenberg, Menendez
RDTE,A	Applied Communications and Information Networking (ACIN)	3,200,000	Andrews, LoBiondo	Casey, Lautenberg, Menendez
RDTE,A	Applied Power Management Control and Integration	800,000		Levin, Stabenow
RDTE,A	Arabic Language Training Program	960,000		Brownback
RDTE,A	Armament Systems Engineering—ASEI2	3,200,000	Frelinghuysen, Sires	
RDTE,A	Army Applications of Direct Carbon Fuel Cells	800,000	Regula	

RDTE,A	Army Aviation Weapon Technology	800,000	Aderholt, Rogers (AL)	Shelby
RDTE,A	Army Center of Excellence in Acoustics	4,400,000		Cochran
RDTE,A	Army Missile and Space Technology Initiative	1,600,000	Sessions	
RDTE,A	Army Responsive Tactical Space (ARTS)	2,400,000		Cochran
RDTE,A	Army Responsive Tactical Space System Exerciser (ARTSSE)	2,000,000	Aderholt, Cramer	Sessions, Shelby
RDTE,A	Asymmetric Threat Response and Analysis Program (ATRAP)	2,400,000	Giffords	
RDTE,A	Automated and Portable Field System for the Rapid Detection and Diagnosis of Diseases	1,600,000	Kuhl	
RDTE,A	Automated Communications Support System for Warfighters, Intelligence Community, Linguists, and Analysts	1,600,000		Chambliss, Isakson
RDTE,A	Automated Language and Cultural Analysis for National Security	2,000,000	Hoyer, Cummings, Edwards (MD), Sarbanes, Van Hollen	Cardin, Mikulski
RDTE,A	Automatic Aim-Point Targeting Technology with Enhanced Imaging	2,000,000	Weiner	
RDTE,A	Autonomous Cargo Acquisition for Rotorcraft Unmanned Aerial Vehicles	2,400,000	Cramer, Aderholt	Shelby
RDTE,A	Auxiliary Power Unit (APU) for the Abrams M1/A2 Tank	2,400,000	Sarbanes, Bartlett, Ruppersberger	Cardin, Mikulski
RDTE,A	Ballistic Armor Research	3,200,000	Dent	Specter
RDTE,A	Ballistic Precision Aerial Delivery System (BPADS)	1,000,000	Larson, Taylor	Wicker
RDTE,A	Base Security Systems	1,200,000	Rogers (MI)	Stabenow
RDTE,A	Battlefield Asset Recovery Decontamination System (BARDS)	1,600,000	Clay	
RDTE,A	Battlefield Connectivity	1,600,000	Moran (VA)	
RDTE,A	Battlefield Exercise and Combat Related Spinal Cord Injury Research (Miami Project)	800,000	Brown-Waite	
RDTE,A	Battlefield Nursing Program	1,600,000	Cohen	

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,A	Battlefield Plastic Biodiesel	1,600,000	King (IA), Boswell, Latham	Grassley, Harkin
RDTE,A	Battlefield Research Accelerating Virtual Environments for Military Individual Neuro Disorders (BRAVEMIND)	800,000	Harman	Boxer
RDTE,A	Battlefield Tracheal Intubation	4,200,000		Nelson (NE)
RDTE,A	Battlefield Treatment of Hemorrhagic Shock	800,000	Cohen	
RDTE,A	Behavior and Neuroscience, Functional Magnetic Resonance Imaging Research Project	800,000	Herseth Sandlin	
RDTE,A	Beneficial Infrastructure for Rotorcraft Risk Reduction Demonstrations	800,000	Sestak	
RDTE,A	Bio-Battery	800,000	Cramer	
RDTE,A	Biodefense Tech Transfer Initiative (BTTI) (only for militarily relevant technology)	1,500,000		Cardin, Mikulski
RDTE,A	Bioelectronics Research for Casualty Care and Management	1,600,000	Scott (VA)	Warner, Webb
RDTE,A	Biological Air Filtering System Technology	1,600,000	Berry	Lincoln, Pryor
RDTE,A	Biological and Immunological Infectious Agent and Cancer Vaccine Research	800,000	Capuano	
RDTE,A	Biomass-to-Liquid Using Synthetic Enzymes	2,000,000	Visclosky	Bingaman
RDTE,A	Biometrics DNA Applications	1,600,000		Byrd
RDTE,A	Biosecurity for Soldier Food Safety	1,600,000		Roberts
RDTE,A	Biosensor, Communicator and Controller System	5,000,000		Reid
RDTE,A	Blast Damage Assessment Risk Analysis and Mitigation Application—Enhancements (BRAMA-E)	800,000	Young (AK)	

RDTE,A	Blood Safety and Decontamination Technology	1,600,000	DeLauro, McDermott	Coleman
RDTE,A	Blood, Medical & Food Safety Via Eco-Friendly Wireless Sensing	1,000,000		Coleman, Klobuchar
RDTE,A	BLOS Network for MASINT Sensors	800,000	Moran (VA)	
RDTE,A	Border Security and Defense Systems Research	1,600,000		Hutchison
RDTE,A	Boston University Photonics Center	3,200,000	Capuano	Kennedy, Kerry
RDTE,A	Brain Interventional-Surgical Hybrid Initiative	1,600,000	Wasserman Schultz	
RDTE,A	Brain, Biology, and Machine Applied Research	1,600,000	DeFazio, Hooley, Walden, Wu	Smith, Wyden
RDTE,A	Brownout Sensor Visualization and Hazard Avoidance System	800,000	Cramer, Aderholt	Shelby
RDTE,A	Brownout Situational Awareness Sensor	1,600,000	Hunter	
RDTE,A	Burn and Shock Trauma Institute	2,000,000		Durbin
RDTE,A	C4ISR Auxiliary Power Unit (APU) for Soldier Tactical Applications	1,600,000	Sherman	
RDTE,A	CAMEL—Water transport system	800,000		Bond
RDTE,A	Cancer Prevention Through Remote Biological Sensing	1,600,000	Bishop (NY)	Schumer
RDTE,A	Capability Expansion of Spinel Transparent Armor Manufacturing	5,120,000	Salazar	Allard, Salazar
RDTE,A	Carbon Nanotube Production	1,200,000		Hutchison
RDTE,A	Cellular Therapy for Battlefield Wounds (Phase II)	1,600,000	Jones (OH)	
RDTE,A	Cellulose Nanocomposite Panels for Enhanced Blast and Ballistic Protection	2,400,000	Michaud, Allen	Collins, Snowe
RDTE,A	Center for Advanced Energy Storage Research and Technology	1,600,000		Levin, Stabenow
RDTE,A	Center for Advanced Vehicle Technology and Fuel Development	800,000		Levin
RDTE,A	Center for Aerospace Human Factors Research and Innovation	800,000		Conrad, Dorgan

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,A	Center for Borane Technology	2,000,000		Bond
RDTE,A	Center for Education in Nanoscience and Nanotechnology	640,000	Braley	Grassley, Harkin
RDTE,A	Center for Information Assurance	800,000	Scott (VA)	Warner, Webb
RDTE,A	Center for Injury Biomechanics	3,200,000	Boucher, Goode, Moran (VA)	Warner, Webb
RDTE,A	Center for Integration of Medicine and Innovative Technology	8,000,000	Capuano, Lynch	Kennedy, Kerry
RDTE,A	Center for Nanoscale Bio-sensors as a Defense against Biological Threats to America	800,000	Boozman, Ross	
RDTE,A	Center for Ophthalmic Innovation (Note: Department of Defense Military Health System Enhancement)	2,400,000	Diaz-Balart, Mario; Ros-Lehtinen	Nelson (FL)
RDTE,A	Center for Untethered Healthcare	1,000,000	McGovern	Kennedy, Kerry
RDTE,A	Center of Cardiac Surgery Robotic Computerized Telemanipulation (Note: as part of a Comprehensive Approach to Advanced Heart Care)	1,600,000	Brady (PA), Gerlach	
RDTE,A	Center of Excellence for Military Operations in Urban Terrain and Cultural Training	3,000,000	Crenshaw	Nelson (FL)
RDTE,A	Center of Excellence in Integrated Sensor Systems (CEISS)	600,000	Cramer	
RDTE,A	Center of Genetic Origins of Cancer (Note: Department of Defense Military Health System Enhancement)	2,400,000	Dingell	Stabenow
RDTE,A	Ceramic and Metal Matrix Composite (MMC) Armor Development using Ring Extruder Technology	800,000	Stupak	
RDTE,A	Ceramic Membrane Battery Systems	1,200,000	Schwartz	Casey, Specter
RDTE,A	CERDEC Airborne and Ground Wideband Digital Communications and Antenna Testbed	1,600,000	Smith (NJ)	

RDTE,A	CH-47 Chinook Helicopter: Accessory Gear Box (AGB) Improvement	800,000	Regula	Dodd, Lieberman, Voinovich
RDTE,A	CH-47 Integrated Vehicle Health Management System (IVHMS)	3,200,000		Leahy
RDTE,A	Chemical and Biological Protective Hangars	2,240,000	Hulshof	
RDTE,A	Chemical and Biological Threat Protection Coating	2,400,000	Barrett	Graham
RDTE,A	Chronic Tinnitus Treatment Program	1,000,000	Dent	
RDTE,A	Clinical Looking Glass Project (Note: To Enhance the capabilities of Fort Drum, New York Military Health System)	800,000	Engel	
RDTE,A	Close Combat Missile Modernization (Javelin)	3,700,000	Brown (FL), Everett	Sessions, Shelby
RDTE,A	Cogeneration for Enhanced Cooling and Heating of Advanced Tactical Vehicles	2,400,000		Kohl
RDTE,A	Co-Generation of Power and Air Conditioning	800,000	Shays	Dodd, Lieberman
RDTE,A	Cold Regions Test Center Distributed Test Coordination Cell	1,500,000		Stevens
RDTE,A	Cold Springs Harbor Laboratory—Women's Cancer Genomics Center (Note: Department of Defense Military Health System Enhancement)	2,800,000	McCarthy (NY), Lowey	
RDTE,A	Columbia College Chicago Construct Program	800,000		Durbin
RDTE,A	Combat Mental Health Initiative	2,400,000	Kaptur	
RDTE,A	Combat Stress Intervention Program (CSIP)	2,400,000	Murtha	
RDTE,A	Combat Vehicle Electrical Power-21st Century (CVEP-21)	800,000		Bayh, Lugar
RDTE,A	Combat Wound Initiative at WRAMC	1,600,000		Byrd, Reed
RDTE,A	Command and Control, Communications and Computers (C4) module	1,200,000	Young (AK)	
RDTE,A	Commercially Viable Si/C Power Semiconductors Using Superlattice Technology	2,560,000	Gillibrand, Maloney	Schumer
RDTE,A	Common Remote Stabilized Sensor System (CRS3)	2,800,000	Emerson	Bond

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,A	Compact Eyesafe Tactical Laser	1,200,000	Grijalva	
RDTE,A	Compact MVCC Soldier Cooling System	1,600,000	Young (FL)	
RDTE,A	Compact Pulsed Power Initiative	3,000,000	Neugebauer, Conaway	Hutchison
RDTE,A	Compact, Day and Night CMOS Camera for Mini and Micro UAVs	2,000,000	Inslee	
RDTE,A	Complementary & Alternative Medicine Research for Military Operations & Healthcare	5,000,000		Harkin
RDTE,A	Complete Molten Carbonate Fuel Cell Demonstrator—Parks Reserve Forces Training Area	1,600,000	McNerney	
RDTE,A	Composite Applied Research and Technology for FCS and Tactical Vehicle Survivability	3,000,000	Castle	Biden, Carper
RDTE,A	Composite Bottles for Survival Egress Air	2,000,000		Crapo
RDTE,A	Composite Small Main Rotor Blades	1,600,000	Tiahrt	Brownback, Dodd
RDTE,A	Composite Structure Design	1,600,000	Johnson (GA)	
RDTE,A	Composite Tissue Allotransplantation Research and Clinical Program	1,600,000	Yarmuth	
RDTE,A	Condition Based Maintenance and Mission Assuredness for Ground Vehicles	2,400,000	Knollenberg	Isakson, Levin, Stabenow
RDTE,A	Consortium for Bone and Tissue Repair and Regeneration	800,000	Emerson	
RDTE,A	Constant Look Operational Support Environment (CLOSE)	1,600,000	Young (AK)	
RDTE,A	Control of Inflammation and Tissue Repair	3,200,000	Inslee, McDermott	Cantwell, Murray
RDTE,A	Control of Vector-Borne Diseases	1,200,000	Visclosky	
RDTE,A	Control System for Laser Powder Deposition	500,000	Herseth Sandlin	Johnson, Thune

RDTE,A	Controlled Release of Anti-Inflammatory and tissue Repair Agents from Prosthetic Devices and Burn Treatment	6,000,000	Blunt	
RDTE,A	Conversion of Municipal Solid Waste to Renewable Diesel Fuel	1,600,000	Rothman, Bartlett, Moran (VA), Payne	Bayh, Lautenberg, Menendez, Specter
RDTE,A	Copper Air Quality Program	2,000,000	Whitfield	Wicker, Lieberman
RDTE,A	Corneal Wound Repair	5,400,000	Blunt	
RDTE,A	Counter-IED Force Protection Program	2,000,000	Holt	
RDTE,A	C-RAM Armor Development	800,000	Moran (VA)	
RDTE,A	Crosshairs Hostile Fire Indicating System	2,000,000		Cornyn
RDTE,A	Cutting Tools and Materials for Aerospace	800,000	Grijalva	
RDTE,A	Cyber Threat Analytics	2,400,000	Lewis (CA)	
RDTE,A	Defense Applications of Carbonate Fuel Cells	1,600,000	Larson	
RDTE,A	Defense Helicopter Power Dense Transmission	1,280,000	Barrow	Isakson
RDTE,A	Defense Materials Technology Center	3,000,000	Regula, Ryan (OH)	Brown
RDTE,A	Demonstration/Evaluation project at Travis Air Force Base, California, to develop a greenhouse gas inventory and footprint utilizing a web-based Environmental Management Information System (EMIS)	400,000	Tauscher	
RDTE,A	Depleted Uranium Sensing and Treatment for Removal (DUSTR) Program	4,000,000		Cochran
RDTE,A	Deployable Space and Electronic Warfare Analysis Tools	800,000	Lamborn	Casey
RDTE,A	Detection Algorithms and Software for Force Protection	1,600,000		Reed, Whitehouse
RDTE,A	Detection, Mitigation and Neutralization of High Explosive, Remotely Detonated Devices	3,500,000		Bond
RDTE,A	Development of Drugs for Malaria and Leishmaniasis in US Military and Civilian Personnel	3,400,000		Cochran

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,A	Development of Enabling Chemical Technologies for Power from Green Sources	1,200,000	Olver	
RDTE,A	Development of Improved Lighter-Weight IED/EFP Armor Solutions	1,000,000	Tiahrt	Roberts
RDTE,A	Development of Truck Deployed Explosive Containment Vessel	1,600,000		Reid
RDTE,A	Developmental Mission Integration	4,000,000	Frelinghuysen	
RDTE,A	Dielectrically Enhanced Sensor Systems (DESS)	1,200,000		Cochran, Wicker
RDTE,A	Diminishing Manufacturing Sources and Material Shortages Case Resolution Program	2,400,000	Knollenberg, Miller (MI), Levin	Levin, Stabenow
RDTE,A	Direct Methanol Fuel Cell Battery Recharger Program	2,400,000	Visclosky	
RDTE,A	Direct Methanol Fuel Cell Development	800,000	Crenshaw	Martinez, Nelson (FL)
RDTE,A	Disposable Unit Dose Drug Pumps for Anesthesia and Antibiotics	1,750,000	Pelosi	
RDTE,A	D-NET: Electrically Charged Mesh (ECM) Defense Net Troop Protection System	2,560,000	Aderholt	
RDTE,A	DoD High Energy Laser Test Facility	4,000,000		Bingaman, Domenici
RDTE,A	DoD Hydrogen PEM Fuel Cell Medium/Heavy Duty Vehicle Demonstration Program	1,600,000	Larson	Lieberman
RDTE,A	DoD International Diabetes Research Initiative	2,000,000	Dicks	
RDTE,A	Domestic Production of Nanodiamond for Military Operations	1,600,000	Peterson (PA)	Casey
RDTE,A	Domestically Produced Atomized Magnesium for Defense	800,000	Kaptur	
RDTE,A	Drive System Composite Structural Component Risk Reduction Program	2,400,000	Brady (PA)	Casey, Specter
RDTE,A	Dual Stage Variable Energy Absorber	2,400,000	Murphy, Patrick	Specter

RDTE,A	Dugway Lidar and Modeling Improvements	2,400,000	Bishop (UT)	Bennett, Hatch
RDTE,A	Dynamically Managed Data Dissemination (DMDD)	1,200,000	Olver	
RDTE,A	Dynamometer Facility Upgrade Program at TARDEC	3,200,000	Dingell, Levin	Levin, Stabenow
RDTE,A	Effect Based Approach to Operations	1,600,000		Bennett
RDTE,A	Electric Commodity Project	800,000		Byrd
RDTE,A	Electro Conversion of Energetic Materials	3,600,000		Enzi
RDTE,A	Electrofluidic Chromatophores for Adaptive Camouflage	1,750,000	Chabot	
RDTE,A	Electronic Combat and Counter Terrorism Threat Developments to Support Joint Forces	3,760,000	Kingston	Shelby
RDTE,A	Embedding Iris Recognition Technology On-board Warfighter Personal Equipment	800,000	Miller, George	Roberts
RDTE,A	End-to-End Vehicle Survivability Technology	1,600,000	Knollenberg	Stabenow
RDTE,A	Engineering Replacement Tissues	1,600,000		Reed, Whitehouse
RDTE,A	Enhanced Digital Electronic Night-Vision (EDEN)	1,600,000		Hutchison
RDTE,A	Enhanced Holographic Imager	2,480,000	Conaway, Granger	Cornyn
RDTE,A	Enhanced Jamming Resistant Technology for INS/GPS Precision Guided Munitions	1,600,000	Frelinghuysen	
RDTE,A	Enhanced Ku-band / L-band Antenna System	800,000	Moran (VA)	
RDTE,A	Enhanced Landmine and IED Detection System	960,000	Cubin	
RDTE,A	Enhanced Military Vehicle Maintenance System Demonstration Project with Anniston Army Depot and Auburn University	1,600,000	Rogers (AL)	Shelby
RDTE,A	Enhanced Rapid Tactical Integration and Fielding Systems (ERTIFS)	1,600,000		Sessions, Shelby
RDTE,A	Enhanced Robotic Manipulators for Defense Applications	750,000	Cubin	Enzi
RDTE,A	Enhanced Vapor Aeration Capabilities (EVAC)	2,400,000	LaTourette	Voinovich

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,A	Expanding Access to Proven Lifestyle Modification Treatments Focused on Preventing and Reversing Chronic Diseases	1,750,000	Pelosi	
RDTE,A	Expansion and Development Upper and Lower Bionic Limbs	2,000,000	Davis (IL)	Durbin
RDTE,A	Experiential Technologies for Urban Warfare and Disaster Response	500,000		Burr
RDTE,A	Exploding Foil Initiators (EFI) with Nanomaterial-Based Circuits	1,600,000	Herseth Sandlin	Johnson
RDTE,A	Extended Duration Silver Wound Dressing—Clinical Trials	1,600,000	Shuler	
RDTE,A	Extended Lifecycle Management Environment	800,000	English	
RDTE,A	Extended Range Modular Sniper Rifle System	2,000,000		Inhofe
RDTE,A	Extreme Light Sources, University of Florida	1,600,000	Wexler	
RDTE,A	Extremely High Frequency (EHF) Transmitter for WIN-T Satellite Communications	2,000,000	Carney	Casey
RDTE,A	Extremity War Injury Research Foundation	800,000	Doyle	
RDTE,A	Eye-Safe Standoff Fusion Detection of CBE Threats	2,000,000	Doyle	Specter
RDTE,A	Facilitating Use of Advanced Prosthetic Limb Technology	1,600,000	Rush	Durbin
RDTE,A	FCV Advanced Suspension System	1,600,000		Reid
RDTE,A	Feeding Tube for Battlefield Trauma Patients (Phase II)	1,600,000	Ryan (OH)	
RDTE,A	Fibrin Adhesive Stat (FAST) Dressing	3,000,000	Etheridge, Price (NC), Van Hollen	Burr, Cardin, Dole, Mikulski, Schumer
RDTE,A	Fighting Drug Resistant Infections	2,000,000		Hagel, Nelson (NE)

RDTE,A	Fire Resistant Fuels	3,200,000	Rodriguez	
RDTE,A	Fire Shield	3,200,000	Dreier	
RDTE,A	Fire Support Technology Improvement Program	800,000	Shuster	
RDTE,A	Flame and Thermal Protection for Individual Soldier	3,200,000	Kagen	Kohl
RDTE,A	Flexible Electronics Research Initiative	1,600,000		Specter
RDTE,A	Florida Collaborative Development of Advanced Materials for Strategic Applications	1,200,000	Buchanan	
RDTE,A	Foliage Penetrating, Reconnaissance, Surveillance, Tracking, and Engagement Radar (FORESTER)	3,200,000	McHugh, Walsh	
RDTE,A	Freeze Dried Blood Technology Clinical Research	2,000,000	Cole	Cardin, Inhofe
RDTE,A	Fuel Cell Power System	800,000	Lungren	
RDTE,A	Fuel Cells for Mobile Robotic Systems Project	800,000	Jackson	
RDTE,A	Fuel Logistics Reduction through Enhanced Engine Performance	1,200,000	McGovern	
RDTE,A	Future Affordable Multi-Utility Materials for the Army Future Combat Systems	6,400,000	Boyd	Grassley, Harkin, Johnson, Thune
RDTE,A	Future TOC Hardware/Software Integration	2,000,000	Everett	Sessions, Shelby
RDTE,A	Garment-Based Physiological Monitoring Systems	1,600,000	Castle	Biden, Carper
RDTE,A	Gas Engine Driven Air Conditioning (GEDAC) Demonstration	2,400,000	Berkley, Porter, Grijalva, Pastor, Renzi	Reid
RDTE,A	Geosciences/ Atmospheric Research (CG/AR)	1,600,000		Allard, Salazar
RDTE,A	Geospatial Airship Research Platform	2,800,000	Kaptur	
RDTE,A	Global Military Operating Environment	2,000,000		Ensign, Reid
RDTE,A	Globally Accessible Manufacturing and Maintenance Activity	1,600,000	Knollenberg	Stabenow
RDTE,A	Green Armaments/Rangesafe	2,400,000	Frelinghuysen, Rothman, Sires	Lautenberg, Menendez

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,A	Green Environmentally Sustainable Laboratories and Clean rooms (USAMRMC)	800,000	Bishop (GA)	
RDTE,A	Ground Combat Systems Electronic Enhancements	2,400,000	McKeon	
RDTE,A	Ground Vehicle Integration Technologies	2,400,000		Levin
RDTE,A	Ground Vehicle Reliability Modeling for Condition-Based Maintenance	800,000		Levin, Stabenow
RDTE,A	Ground-forces Readiness Enabler for Advanced Tactical Vehicles (GREAT-V)	800,000		Hutchison
RDTE,A	Gunfire Detection Systems for Unmanned Aerial Vehicles	800,000	Everett	
RDTE,A	Hawaii Undersea Chemical Military Munitions Assessment Plan	4,000,000	Hirono, Abercrombie	
RDTE,A	Headborne Energy Analysis and Diagnostic System (HEADS)	1,600,000	Mitchell	
RDTE,A	Health Informatics Initiative	2,500,000	Putnam, Castor, Young (FL)	
RDTE,A	Health Information Technology Demonstration Project at Madigan Army Medical Center and Puget Sound VA Medical Center	1,000,000		Cantwell
RDTE,A	Health Sciences Regenerative Medicine Center	3,000,000		Burr, Dole
RDTE,A	Heat Dissipation for Electronic Systems and Enclosures	2,000,000		Reid
RDTE,A	Heavy Fuel Burning Engines for UAVs	2,000,000	Diaz-Balart, Lincoln	Stabenow
RDTE,A	Heavy Fuel High Efficiency Turbine Engine	2,000,000	Wexler	
RDTE,A	Heavy Metals Total Life-Cycle Initiative	800,000		Bingaman, Domenici
RDTE,A	Helicopter Reliability and Failure Analysis Center	880,000	Cramer, Aderholt	Shelby

RDTE,A	Helicopter Vulnerability Reduction	2,400,000	DeLauro, Courtney, Shays	Dodd, Lieberman
RDTE,A	Heuristic Internet Protocol Packet Inspection Engine (HIPPIE)	2,000,000	Akin	Bond
RDTE,A	HEV Battery System for Future Combat System	1,600,000		Bayh, Lugar
RDTE,A	Hibernation Genomics	2,000,000		Stevens
RDTE,A	High Altitude Airship	3,200,000	Ryan (OH)	Brown
RDTE,A	High Altitude Integration Testbed (HIT)	3,000,000	Cramer	Sessions, Shelby
RDTE,A	High Altitude Shuttle System for Battlespace Coverage	800,000	Hooley	Smith, Wyden
RDTE,A	High Detail Architecture Analysis Tool (HDAAT)	1,440,000	Cramer	
RDTE,A	High Explosive Air Burst (HEAB) 25mm Ammunition	4,400,000	Costello, LaHood	Durbin
RDTE,A	High Fidelity Imaging System (HiFIS)	800,000	Cramer	
RDTE,A	High Fidelity Virtual Simulation and Analysis	1,600,000	Aderholt	Shelby
RDTE,A	High Power Electrolytic Super-Capacitors Based On Conducting Polymers	800,000		Bond
RDTE,A	High Pressure Processing Prototype for Meals-Ready-to-Eat (MRE)	1,600,000		Murray
RDTE,A	High Speed Digital Imaging	4,500,000		Gregg, Sununu
RDTE,A	High Temperature Polymers for Missile System Applications	3,200,000		Cochran
RDTE,A	High-Frequency, High-Power Electronic and Optoelectronic Devices on Aluminum Nitride	3,200,000	Price (NC)	Burr
RDTE,A	Highly Mobile Remotely Controlled IED Countermeasures	800,000	Rothman	Lautenberg, Menendez
RDTE,A	Highly Reliable, Maintenance Free Remote Solar Power System	640,000	Johnson (IL)	
RDTE,A	Hi-Tech Eyes for the Battlefield	1,600,000		Hutchison
RDTE,A	Hospital Emergency Planning and Integration (HEPI)	800,000	Shuster	

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,A	Host Pathogen Interaction Study	3,200,000	Cramer	
RDTE,A	Hostile Fire Indicator	4,000,000	Shea-Porter	Gregg, Sununu
RDTE,A	Hull Humvee Protection Program	2,000,000	Barrett, Brown (SC)	Graham
RDTE,A	Human Genomics, Molecular Epidemiology, and Clinical Diagnostics for Infectious Diseases (Note: Department of Defense Military Health System Enhancement)	1,160,000	Pastor	
RDTE,A	Human Terrain Geographic Decision Support	3,000,000	Murtha	
RDTE,A	Hybrid Electric (Heavy Truck) Vehicle	2,400,000	Bartlett	Cardin, Mikulski
RDTE,A	Hybrid Luminescent Ammunition	800,000		Landrieu, Vitter
RDTE,A	HYBRID Propellant for Medium and Large Caliber Ammunition	3,200,000	Boyd	
RDTE,A	Hydraulic Hybrid Vehicles (HHV) for the Tactical Wheel Fleet	800,000	Regula, Knollenberg	Levin, Stabenow
RDTE,A	Hydrogen Batteries for the Warfighter	3,000,000	Clyburn	Graham
RDTE,A	HYPERSAR	2,400,000		Bond
RDTE,A	Hyperspectral Sensor for Improved Force Protection (Hyper-IFP)	1,600,000	Akin	
RDTE,A	Illinois Center for Defense Manufacturing	2,000,000	Manzullo, Hare	Durbin
RDTE,A	Implementation of an Advanced Tactical Wheeled Armored Vehicle System	3,000,000		Levin
RDTE,A	Improved Blackhawk De-icing	800,000	Moran (VA)	
RDTE,A	Improved EFP and IED protection, Testing, Modeling and Proving Using Lithia Alumina Silica (LAS) Glass Ceramics	2,400,000	Tauscher, Sestak	Corker

RDTE,A	Improved Lightweight Integrated Communication and Hearing Protection Device	800,000	Altmire	Casey, Specter
RDTE,A	Improvised Explosive Device (IED) Simulation in Different Soils	500,000	Herseth Sandlin	Johnson, Thune
RDTE,A	Individual Airburst Weapon System	1,000,000	Hayes, Rothman	Coleman, Klobuchar, Lautenberg, Menendez
RDTE,A	Infectious and Inflammatory Disease Center at the Burnham Institute for Medical Research (Note: Department of Defense Military Health System Enhancement	2,400,000	Bilbray, Davis (CA)	Nelson (FL)
RDTE,A	Information Assurance Development	1,600,000	Holt	
RDTE,A	InfraRed Goggle Upgrade System (IRGUS)	800,000	Sessions, Shea-Porter	Cornyn
RDTE,A	Injection Molded Ceramic Body Armor	800,000	Olver	
RDTE,A	Ink-Based Desktop Electronic Material Technology	1,600,000	Frelinghuysen	
RDTE,A	Innovative Wireless Technologies for Sensor Networks	700,000	Goode	
RDTE,A	Institute for Advanced Materials and Manufacturing Strategies (IAMMS)	1,200,000	Kildee	Stabenow
RDTE,A	Institute for the Advancement of Bloodless Medicine	1,600,000	Rothman, Garrett	Lautenberg, Menendez
RDTE,A	Institute of Surgical and Interventional Simulation (ISIS)	4,400,000	Dicks, McDermott, Smith (WA)	Cantwell, Murray
RDTE,A	Integrated Functional Materials	800,000	Young (FL)	
RDTE,A	Integrated Information Technology Policy Analysis Research	1,600,000	Lewis (CA)	
RDTE,A	Integrated Lightweight Tracker System	1,600,000	Obey	
RDTE,A	Integrated Patient Quality Program	1,600,000	Simpson	Craig, Crapo
RDTE,A	Integrated Vehicle Health Monitoring System	1,600,000	Tsongas	Kennedy
RDTE,A	Intelligent Distributed Command and Control (IDC2)	2,400,000	Visclosky	
RDTE,A	Intelligent Fault Protected Laser Diodes	800,000	Capuano	

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Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,A	Intensive Care Unit to Intensive Care Hospital	2,400,000	Rothman	
RDTE,A	Intensive Quenching for Advanced Weapon Systems	960,000	Sutton	Schumer
RDTE,A	Inter Turbine Burner for Turbo Shaft Engines	3,200,000	Lewis (CA)	
RDTE,A	International Heart Institute/US Army Vascular Graft Research Project	1,000,000		Baucus, Tester
RDTE,A	JAMMA Lightweight, Armored, Hybrid, Power Generating, Tactical Vehicle	2,000,000	Cannon	Bennett, Hatch
RDTE,A	Joint Collaborative Medical Information System (JCMS)	3,200,000	Murtha	
RDTE,A	Joint Combat Support Trailer	3,200,000	Kagen	
RDTE,A	Joint Fires and Effects Training System (JFETS)	2,000,000	Cole	Inhofe
RDTE,A	Joint Medical Simulation Technology Research and Development Center (JMSTRDC)	1,600,000	Feeney	
RDTE,A	Joint Munitions and Lethality Mission Integration	1,600,000	Frelinghuysen	
RDTE,A	Joint Munitions and Lethality Warfighter Technology Insertion	2,400,000	Frelinghuysen	
RDTE,A	Joint Training Integration and Evaluation Center (JTIEC)	1,680,000	Feeney	
RDTE,A	Joint Urban Environment Test Capability	2,000,000		Bingaman
RDTE,A	Kinetic Energy Enhanced Lethality and Protection Materials	2,000,000	Davis, David	Alexander, Corker
RDTE,A	Knowledge, Innovation and Technology Sharing Program	1,600,000		Bond
RDTE,A	Large Aluminum Nitride Crystals for Effective Deep Ultraviolet Sources	800,000	McNulty	Schumer
RDTE,A	Large Area Monitoring Network (LAMNET)	6,000,000		McConnell

RDTE,A	Large Energy National Shock Tunnel (LENS XX) Hypervelocity Ground Testing	1,600,000	Higgins	
RDTE,A	Large Format Li-Ion Battery	800,000	Moore (WI)	Kohl
RDTE,A	Laser Based Explosives, Chem/Bio Standoff and Point Detector	4,000,000		Cardin, Mikulski
RDTE,A	Laser Studied and Enhanced Reactive Materials: Self-Decontaminating Polymers for Chemical-Biological Defense	1,600,000		Craig, Crapo
RDTE,A	Lattice Block Structures for AM2 Matting Replacement	2,500,000	Hodes	Gregg, Sununu
RDTE,A	Legacy Aerospace Gear Drive Re-Engineering Initiative	2,000,000	Larson	Dodd
RDTE,A	Lehman Injury Research Center (Ryder Trauma Center) (Note: Includes funding for Jackson Health System)	6,000,000	Diaz-Balart, Lincoln; Diaz-Balart, Mario; Meek; Wasserman Schultz	Nelson (FL)
RDTE,A	Leishmania Skin Test	800,000	Hunter	
RDTE,A	Lens-Less Micro Seeker System for Small Steerable Projectiles	1,600,000	Dreier	
RDTE,A	Light Tactical Vehicle Ambulance Shelter	2,400,000		Biden, Cantwell, Murray
RDTE,A	Light Utility Helicopter Simulator	1,200,000	Barton	
RDTE,A	Light Weight Medical Evacuation Unit	1,600,000	Knollenberg	
RDTE,A	Light Weight Structural Composite Armor for Blast and Ballistic Protection	1,600,000	Castle, Price (NC), Shuler	Burr
RDTE,A	Lightweight 1-2 Person Low-Pressure Inflatable Tents	800,000		Gregg
RDTE,A	Lightweight Anti-Ballistic Protection for Aircraft	400,000		Enzi
RDTE,A	Lightweight Caliber .50 Machine Gun (LW50MG)	8,000,000		Collins, Leahy, Snowe
RDTE,A	Lightweight Cannon Recoil Reduction	1,920,000	Heller	Ensign, Reid
RDTE,A	Lightweight Multi-Functional Material Technology for Combat Munitions Logistics	800,000	Frelinghuysen, Rothman	Lautenberg, Menendez
RDTE,A	Lightweight Munitions and Surveillance System for Unmanned Air and Ground Vehicles	2,800,000	Garrett	Lautenberg, Menendez

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,A	Lightweight Partial Hybrid Electric Military Transport Vehicle	1,600,000		Bayh, Lugar
RDTE,A	Lightweight Polymer Designs for Soldier Combat Optics	1,200,000	Olver	Kennedy
RDTE,A	Lightweight Soldier Sensor Computing	800,000		Kohl
RDTE,A	Lightweight Transparent Armor for Force Protection	2,000,000	Cramer	Casey, Specter
RDTE,A	Lightweight Trauma Module	2,400,000	Frelinghuysen, Pascrell	Lautenberg, Menendez
RDTE,A	Limb Regeneration Through Biometrics Technology	800,000	Capuano	
RDTE,A	Limb Tissue Regeneration after Battlefield Injuries using Bone Marrow Stem Cells	3,000,000	Wu, Baird, Blumenauer, Hooley, Smith (WA)	Murray, Smith, Wyden
RDTE,A	Linear Accelerator Cancer Research	800,000	Rangel	Schumer
RDTE,A	Lithium Ion Battery Exchange Program	2,400,000	Dent	
RDTE,A	Logistical Fuel Processors for Army Development Program	2,800,000	Bachus, Rogers (AL)	Sessions
RDTE,A	Long Range Hypersonic Interceptor	800,000	Boyd	Brownback, Roberts
RDTE,A	Lookout Small Scale Radar	2,000,000	Walsh	Schumer
RDTE,A	Low Cost Interceptor	2,400,000		Shelby
RDTE,A	Low Temperature Vehicle Performance Research	1,600,000		Levin
RDTE,A	LSTAT Advanced Medical Technologies	2,400,000	Sanchez, Loretta; Richardson	
RDTE,A	LWI Training-based Collaborative Research	25,000,000	Skelton	

RDTE,A	Magneto Inductive Remote Activation Munition System (MI-RAMS) Frequency and Digital Enhancements	2,800,000	Lewis (CA)	
RDTE,A	Magneto-Rheological (MR) Suspensions for Tactical Wheeled Vehicles	2,400,000	Price (NC)	Dole, Stabenow
RDTE,A	Maine Institute for Human Genetics and Health	1,600,000	Michaud	Collins, Snowe
RDTE,A	Manufacturing and Industrial Technology Center	800,000	Boyd	
RDTE,A	Manufacturing Metrology for Weapon System Production and Sustainment (M2WSPS)	1,760,000		Reed
RDTE,A	Manufacturing Technology Development of Advanced Solid State Lasers	2,400,000	McNerney, Carney	Casey
RDTE,A	Mariah II Hypersonic Wind Tunnel Development	3,200,000	Rehberg	Baucus, Tester
RDTE,A	Maritime C4ISR System	800,000	Shuster	
RDTE,A	Mary Bird Perkins Cancer Center (Note: A treatment Planning Research Laboratory for High Performance Computing and Radiation Dose Effects)	2,400,000	Cazayoux, Alexander	Landrieu, Vitter
RDTE,A	Maryland Proof of Concept Alliance for Defense Technologies	3,500,000		Mikulski
RDTE,A	Mass Scale Biosensor Threat Diagnostic for In-Theater Defense Utilization (FIU)	1,600,000	Ros-Lehtinen	
RDTE,A	Materials Applications Research Center	800,000	Bachus	
RDTE,A	MATRIC-Project National Shield Integration Center	2,000,000	Capito	
RDTE,A	MATRACKS	2,000,000	Peterson (MN)	
RDTE,A	Medical Errors Reduction Initiative	400,000	Rothman, Garrett	Lautenberg, Menendez
RDTE,A	Medical Modeling and Simulation Through Synthetic Digital Genes	1,000,000		Craig, Crapo
RDTE,A	Medical Resources Conservation Technology System	2,400,000	Visclosky	
RDTE,A	Medium Caliber Metal Parts Upgrade	2,600,000	Kanjorski	Casey, Specter
RDTE,A	Medium Sized Unmanned Ground Vehicles Platform	2,000,000	Diaz-Balart, Lincoln	

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,A	MEMS Antenna for Wireless Comms	2,400,000		Conrad, Dorgan
RDTE,A	Michigan Technological University's Project for Diverse Sensing for Synergistic Force Protection in Urban Threat Environments	800,000		Stabenow
RDTE,A	Micro Electrical Mechanical Systems (MEMS) Technology and Plastic Armor Applications	1,600,000	Ferguson	Lautenberg, Menendez
RDTE,A	Micromachined Switches in Support of Transformational Communications Architecture	2,400,000	Miller, George	
RDTE,A	Micro-systems Nanotechnology for Advanced Technology Development	1,000,000	Young (FL)	
RDTE,A	Midwest Traumatic Injury Rehabilitation Center	1,460,000	Ehlers	
RDTE,A	Military Adult Stem Cell Collection and Storage Project	800,000	Rothman	Schumer
RDTE,A	Military Burn Trauma Research Program	4,000,000	Lungren, Matsui	Boxer
RDTE,A	Military Fuels Research Program	1,600,000		McConnell
RDTE,A	Military Interoperable Digital Hospital Testbed	10,000,000	Murtha	
RDTE,A	Military Jet-Fueled Fuel Cell Generator	800,000		Smith, Wyden
RDTE,A	Military Low Vision Research	1,600,000	Lynch, Capuano	Kennedy, Kerry
RDTE,A	Military Nutrition Research: Personnel Readiness and Warfighter Performance	1,600,000	Alexander, Cazayoux	Landrieu, Vitter
RDTE,A	Military Photomedicine Program	2,800,000	Sanchez, Loretta	Boxer, Dole, Kennedy
RDTE,A	Miniature Cooling Unit for Electronic Devices	800,000	Johnson (IL)	Durbin
RDTE,A	Miniaturized Sensors for Small and Tactical Unmanned Aerial Vehicles (MINISENS)	1,200,000	Reyes	

RDTE,A	Mini-LRAS3 Scout Surveillance System	1,600,000		Gregg, Sununu
RDTE,A	Minimizing Health Effects of Air Toxics on Military Personnel	1,600,000	Yarmuth	
RDTE,A	Missile Attack Early Warning System (MAEWS)	2,000,000		Shelby
RDTE,A	Mission Execution Technology Implementation	3,200,000	Hulshof, Akin	Bond
RDTE,A	Mitigation of Energetic Single Point Failures	2,400,000	Frelinghuysen	
RDTE,A	MLRS Disposal System	3,000,000		Ensign, Reid
RDTE,A	Mobile Medic Training Program	800,000	Mica	
RDTE,A	Mobile Object Search Toolkit for Intelligence Analysts	3,200,000	Dicks	
RDTE,A	Mobile Optical Tracking System (MOTS) All Sky Imager (MASI)	1,200,000	Reyes, Rodriguez	
RDTE,A	Model-Based Engineering Environment	800,000	Capuano	
RDTE,A	Modeling and Testing of Next Generation Body Armor	2,000,000	Rush	Durbin
RDTE,A	Modular Ballistic System for Force Protection	800,000		Collins, Snowe
RDTE,A	Modular Stethoscope For Harsh Environments	1,200,000		Coleman
RDTE,A	Modular Universal TOC Packages for Vehicles and Shelters	2,400,000	Young (FL)	
RDTE,A	Moldable Fabric Armor	1,200,000		Graham
RDTE,A	Mosquito Born Disease Prevention : Malaria & Dengue Fever	800,000	DeLauro	Dodd, Lautenberg, Lieberman, Menendez
RDTE,A	Moving Vehicle BAT Face Recognition Surveillance System	1,200,000		Gregg, Sununu
RDTE,A	MRAP Supportability System (MSS)	4,000,000	Murtha	
RDTE,A	Multi-layer Coextrusion for High Performance Packaging	2,400,000	Obey	Kohl
RDTE,A	Multipurpose Nanosat Missile System (MNMS) formerly Integrated Nanosat Delivery System (INDS)	6,000,000	Cramer	Shelby

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,A	Munitions Evaluation for Composite Electric Armor	1,200,000		Coleman
RDTE,A	MUSC Cancer Genomics Research Collaborative	800,000	Brown (SC)	
RDTE,A	Nanocomposite Enhanced Radar and Aerospace Materials	1,200,000		Hutchison
RDTE,A	Nanocrystal Source Display	1,200,000	Markey	
RDTE,A	Nano-Crystalline Cement for High Strength, Rapid Curing Concrete with Improved Blast Resistance	1,440,000	Visclosky	
RDTE,A	Nanofabricated Bioartificial Kidney, Pancreas, and Liver	2,500,000	Knollenberg	
RDTE,A	Nanofluids for Advanced Military Mobility	800,000	Davis (KY)	Bunning
RDTE,A	Nano-Imaging Agents for Early Disease Detection	1,600,000	Green, Al; Culberson	
RDTE,A	Nanomanufacturing of Multifunctional Sensors	1,000,000	Tsongas, Olver	Kennedy, Kerry
RDTE,A	Nanophotonic Devices	1,600,000		Hutchison
RDTE,A	Nanoscale Biosensors	2,500,000		Lincoln, Pryor
RDTE,A	NanoSensor StageGate Accelerator (NSSA)	1,200,000	McNulty, Gillibrand	Schumer
RDTE,A	Nanostructured Materials For Photovoltaic Applications	1,600,000	McHugh	Schumer
RDTE,A	Nanosystems through Optical Biosensors	1,600,000	Slaughter	
RDTE,A	Nanotechnology for Potable Water and Waste Treatment	1,000,000	Murphy, Tim	
RDTE,A	Nanotechnology Fuze-On-A-Chip	2,800,000	Obey	Kohl

RDTE,A	Nanotechnology Manufacturing Center	2,000,000	Barrow	Chambliss
RDTE,A	Nanotubes Optimized for Lightweight Exceptional Strength Composite Materials	2,400,000	Boyd, Crenshaw	Martinez, Nelson (FL)
RDTE,A	National Biodefense Training	5,000,000		Hutchison
RDTE,A	National Eye Evaluation and Research Network (NEER) -Clinical Trials of Orphan Retinal Degenerative Diseases	800,000	Sessions	Harkin
RDTE,A	National Functional Genomics Center	6,000,000	Bilirakis, Castor, Young (FL)	Martinez, Nelson (FL)
RDTE,A	National Oncogenomics and Molecular Imaging Center	3,200,000	Knollenberg	
RDTE,A	National Warfighter Health Sustainment Study	800,000	Capuano, Price (NC)	
RDTE,A	Near-Net Shaped Direct-Sintered Silicon Carbide Torso Plates	1,600,000	Snyder	Lincoln, Pryor
RDTE,A	Networked Dynamic Spectrum Access Investigation Enhanced MBITR	2,400,000	Bartlett	Mikulski
RDTE,A	Neural Controlled Prosthetic Device for Amputees	1,600,000	Murtha	
RDTE,A	Neuroimaging and Neuropsychiatric Trauma in Warfighters	5,000,000	Pelosi	Boxer
RDTE,A	Neuroimaging of Brain Disorders	800,000	Jones (OH)	Voinovich
RDTE,A	Neuroscience Research Consortium to Study Spinal Cord Injuries	800,000	Wasserman Schultz	Nelson (FL)
RDTE,A	Neutron/Hadron Particle Therapy	1,200,000	Foster	Durbin
RDTE,A	New High Temperature Domestic Sourced PES Foam Fabrication/Certification for DOD Aerospace Applications	2,400,000	Johnson, Eddie Bernice	
RDTE,A	New Vaccines to Fight Respiratory Infection	4,000,000	Latham	Grassley, Harkin
RDTE,A	Next Generation Communications System	1,200,000	Altmire	Casey, Specter
RDTE,A	Next Generation Diesel Engine for Ground Vehicles	4,000,000	Emanuel	Durbin, Stabenow
RDTE,A	Next Generation High Performance Ballistic Materials and Technologies Providing 7.62mm Small Arms Protection for US Armed Forces Helmets	1,440,000	Myrick	

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,A	Next Generation Ice Protection Technologies	1,600,000		Roberts
RDTE,A	Next Generation Lightweight Drive System for Army Weapons Systems	1,600,000	Herseth Sandlin	Johnson, Thune
RDTE,A	Next Generation Non-Tactical Vehicle Propulsion	1,600,000	Hall (NY), Kuhl	Levin, Mikulski, Stabenow, Schumer
RDTE,A	Next Generation Protective Seat	2,400,000	Gerlach	Casey, Specter
RDTE,A	Next Generation Wearable Video Capture System	800,000	Stupak	
RDTE,A	Next-generation Combat Helmet Development	2,800,000	Butterfield	Dole
RDTE,A	Nickel Boron Coating Technology for Army Weapons	2,400,000	Mahoney, Boyd	
RDTE,A	No-Idle Climate Control for Military Vehicles	1,600,000	Brady (TX)	
RDTE,A	Non-communications ECM Technology Demo	1,200,000	Holt	
RDTE,A	Non-Hazardous Infrared Anti-Reflective Coatings for Army Aircraft Sensors	1,200,000	Hayes	
RDTE,A	Norfolk State University Center for Modeling and Simulation	2,400,000	Scott (VA)	
RDTE,A	Northern Ohio Integrated Command Operations Program	1,600,000	Kaptur	
RDTE,A	Novel Approaches to Reduce the Severity of Battlefield Combined Tissue Injury	1,600,000	Berkley, Porter	Ensign, Reid
RDTE,A	Novel Extremity Body Armor	600,000	Herseth Sandlin	Johnson, Thune
RDTE,A	Novel Flame Retardant Nylon Fabrics	1,200,000	Spratt	Chambliss
RDTE,A	Novel Guidance Kit—Phase 2 (NGK2) for M864 Projectile	4,000,000		Burr, Coleman, Leahy
RDTE,A	Novel Methods for Detecting and Inhibiting Corrosion	1,360,000		Conrad, Dorgan

RDTE,A	Novel Onboard Hydrogen Storage System Development	800,000		Levin
RDTE,A	Novel Zinc Air Power Sources for Military Applications	1,600,000	Rogers (AL)	Shelby
RDTE,A	N-STEP-Enabled Manufacturing Cell for Future Combat Systems	2,400,000	Jordan, Latta	
RDTE,A	OH-58D Kiowa Warrior Vehicle Health and Usage Management System (VHUMS) Demonstration	2,400,000	Welch, Herseth Sandlin	
RDTE,A	ONAMI Miniature Tactical Energy Systems Development	2,400,000	Walden, Blumenauer, DeFazio, Hooley, Wu	Smith, Wyden
RDTE,A	Oncology Group Pediatric Cancer Research (CH)	1,600,000	Young (FL)	
RDTE,A	One-Step JP-8 Bio-Diesel Fuel	1,600,000	Obey	
RDTE,A	Online Medical Training for Military Personnel	2,800,000		McConnell
RDTE,A	On-The-Move Telescoping Mast	2,400,000	Regula	
RDTE,A	Open Source Intelligence for Force Protection and Intelligence	1,600,000		Hutchison, Roberts
RDTE,A	Operator Situational Awareness System—MEDEVAC	1,750,000	Pelosi	
RDTE,A	Optical Neural Techniques for Combat / Post-Trauma Healthcare	1,600,000	Inslee, McDermott, Smith (WA)	Cantwell, Murray
RDTE,A	Optimized M-25 Soldier Fuel Cell System	2,000,000	Castle	Biden
RDTE,A	Organic Semiconductor Modeling and Simulation	1,200,000		Cornyn
RDTE,A	Orion High Altitude Long Loiter (HALL) UAV	5,000,000		Cochran, Wicker
RDTE,A	Parts on Demand for CONUS Operations	5,000,000		Conrad, Dorgan
RDTE,A	Passive IR Sensor for Persistent Wide Area Surveillance	2,000,000	Hodes	Gregg
RDTE,A	Payload and Advanced Development for Next Generation Robot Platform	2,000,000	Tierney	Kennedy, Kerry
RDTE,A	Peer Reviewed Orthopaedic Extremity Trauma Research	5,000,000		Bayh, Cornyn, Harkin, Hutchison, Landrieu
RDTE,A	Perpetually Available and Secure Information Systems (PASIS)	3,200,000	Doyle	

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Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,A	Personal Miniature Thermal Viewer	1,600,000	Michaud	
RDTE,A	Personal Status Monitor	2,000,000	McHugh, Walsh	
RDTE,A	Pharmaceutical Advanced Packaging	1,600,000	Holden	Specter
RDTE,A	Photovoltaic Tent Fabric	2,800,000	Kaptur	
RDTE,A	Plant-based Vaccine Research (Mitchell Memorial Cancer Center)	2,000,000	Lewis (KY)	
RDTE,A	Plasma Energy Pyrolysis System (PEPS) Clean Fuels	800,000	Davis (VA)	
RDTE,A	Plasma Sterilizer	3,200,000	Ellison, McCollum	Coleman, Klobuchar
RDTE,A	Plasma Technology Laboratory	800,000	Ortiz	
RDTE,A	Plug-In Architecture for DoD Medical Imaging	800,000	Moran (VA)	Warner, Webb
RDTE,A	Plug-In Hybrid Vehicle Electrification Program	3,200,000	Kilpatrick, Conyers, Dingell, Knollenberg	Levin, Stabenow
RDTE,A	Portable autonomous fluid-less near-infrared non-invasive alcohol testing devices	500,000		Bingaman
RDTE,A	Portable Emergency Broadband System	4,000,000	Gerlach, Sestak	Casey, Specter
RDTE,A	Portable Non-Magnetic Compass/Positioning/Timing Device	1,600,000	Allen, Michaud	Collins, Snowe
RDTE,A	Positron Sensors and Energy Applications	3,000,000		Cantwell, Murray
RDTE,A	Power and Energy Research Equipment Upgrades	6,000,000		Levin
RDTE,A	Power Dense Transmissions	1,280,000	Inglis, Barrett, Goode, Regula, Ryan (OH)	
RDTE,A	Prader-Willi Syndrome (PWS) Research	1,600,000	Royce	

RDTE,A	Precision Guided Airdropped Equipment	3,680,000	Clarke, Towns, Weiner	
RDTE,A	Precision Molding Manufacturing Technology for Infrared Aspheric Optics	2,320,000	Rothman, Andrews, Dent	Lautenberg, Menendez, Specter
RDTE,A	Press-Loaded Explosive Projectile Washout Line	800,000	Ellsworth	Coleman, Klobuchar, Lugar
RDTE,A	Prevention of Compartment Syndrome, Ultrafiltration Catheter	1,600,000	McCollum, Ellison	Coleman, Klobuchar
RDTE,A	Processing DNA Data Using Classical Discrimination Techniques (PRODDUCT)	2,000,000	Cramer	
RDTE,A	Project Kryptolite Force Implementation Phase	1,200,000	Smith (NJ)	Lautenberg, Menendez
RDTE,A	Prostate and Ovarian Cancer Biomarkers (Note: Department of Defense Military Health System Enhancement)	1,200,000	Murphy, Patrick	
RDTE,A	Protective Textile Fabric	800,000	Dingell	Stabenow
RDTE,A	Proteomics Project (CH-LA)	1,200,000	Schiff	
RDTE,A	QuickMEDS	800,000		Sessions
RDTE,A	Quiet, Low-Impact Alternative Energy Technology	2,240,000	Wilson (OH), Space	
RDTE,A	Radar Tag Emitters	2,400,000		Domenici
RDTE,A	Radiation Hardening Initiative	2,400,000	Cramer, Aderholt	Sessions, Shelby
RDTE,A	Raman Chemical ID System	1,600,000	Tierney	Kennedy
RDTE,A RDTE,A	RAND Arroyo Center Range Scrap Disposal, Hawthorne Army Depot	4,000,000 800,000	Brady (PA), Sestak	Feinstein
RDTE,A	Rapid and Accurate Pathogen Identification/Detection (RAPID) Program	1,600,000	Visclosky	Bayh, Lugar
RDTE,A	Rapid Insertion of Developmental Technology	2,400,000	Frelinghuysen, Sires	
RDTE,A	Rapid Prototyping for Special Projects	3,200,000	Frelinghuysen	
RDTE,A	Rapid Response Force Protection System	2,400,000	Rothman	

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Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,A	Rapid Response System for Active Protection of Ground and Air Vehicles	4,160,000	Cramer	
RDTE,A	Rapid Up-Armor Synthesis and Crashworthiness Design for Improved Soldier Survivability	1,200,000	Visclosky, Donnelly	
RDTE,A	Rapid Vaccine Discovery Technology	1,600,000	Visclosky, Capuano	
RDTE,A	Ration Packaging Materials and Systems for MREs	3,600,000	Obey	Kohl
RDTE,A	Reconfigurable Tooling System	1,600,000	Heller	
RDTE,A	Regional Integrated Command Center (RICC)	800,000	Doyle	
RDTE,A	Rehabilitation and Assistive Technologies to Enhance the Life of Individuals with Disabilities	800,000	Young (FL), Castor	
RDTE,A	Remote Bio-Medical Detector	2,000,000	Murtha	
RDTE,A	Remote Explosive Analysis and Detection System (READS)	2,240,000	Cramer	
RDTE,A	Remote Unmanned Vehicle Checkpoint System	1,000,000		Levin, Stabenow
RDTE,A	Remote Video Weapons Sight, USSOCOM SBIR	2,000,000	Radanovich	
RDTE,A	Remotely Operated Weapons Systems	5,000,000	Frelinghuysen	
RDTE,A	Renewable Energy for Military Applications	1,600,000		Bayh, Lugar
RDTE,A	Renewable Energy Testing Center	1,600,000	Lungren, Matsui	
RDTE,A	Renewable Jet Fuel from Lignocellulosic Feedstocks	3,200,000	Herseth Sandlin	Johnson, Thune
RDTE,A	Respiratory Biodefense Initiative	1,600,000		Allard, Salazar

RDTE,A	Returning Soldier Adjustment Assessment Remote Monitoring System Research Study	3,120,000	Bishop (GA)	
RDTE,A	Ripsaw Unmanned Ground Vehicle (UGV) Weaponization	1,200,000	Allen	Collins, Snowe
RDTE,A	Robotics Vehicle Secure Communications	2,000,000		Stabenow
RDTE,A	Rotary Valve Pressure Swing Absorption Oxygen Generator	800,000	Davis (CA)	
RDTE,A	Rugged Electronic Textile Vital Signs Monitoring	3,000,000	Kennedy	Reed, Whitehouse
RDTE,A	Ruggedized Cylinders for Expandable Mobile Shelters	2,400,000	Obey	Kohl
RDTE,A	Rural Health (CERMUSA) (Note: To serve remote and rural military retiree populations)	2,400,000	Shuster	Casey
RDTE,A	Safe Airway Access in Combat	2,000,000		Hagel
RDTE,A	Self Powered Prosthetic Limb Technology	2,400,000	Peterson (PA)	Casey, Specter
RDTE,A	Self Powered, Lightweight, Flexible Display Unit on a Plastic Substrate	1,600,000		Grassley, Harkin
RDTE,A	Self-Deploying Autonomous Sensor Platforms for Situational Awareness	4,000,000	Blunt	
RDTE,A	Semi-Autonomous or Unattended Psychological Operations and Reconnaissance Tool (SUPPORT)	2,400,000	Spratt	
RDTE,A	Shadow Tactical Unmanned Aerial System Flight in the National Airspace	4,000,000		Cardin, Mikulski
RDTE,A	Short Range Electro Optic (SREO)	1,600,000		Nelson (FL)
RDTE,A	Silver Fox and Manta UAS	2,000,000	Giffords	
RDTE,A	Small Agile Satellites	400,000		Feinstein
RDTE,A	Small Business Infrared Material Manufacturing-Silicon Alternative Substrates	5,600,000		Durbin
RDTE,A	Small Unmanned Aerial Vehicles and Sensors	500,000	Herseth Sandlin	Johnson, Thune
RDTE,A	Smart Data Project: Real-Time Geospatial Video Sensor Intelligence	800,000	Tierney	Kennedy
RDTE,A	Smart Machine Platform Initiative	4,000,000	Chabot, McNulty	Brown, Schumer, Voinovich

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Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,A	Smart Prosthetic Hand Technology	1,600,000		Craig, Crapo
RDTE,A	Smart Prosthetics Research	1,600,000	Kuhl, Walsh	Schumer
RDTE,A	Smart Sensor Supercomputing Center	5,800,000		Byrd
RDTE,A	SOCOM Lightweight Unmanned Ground Robot	1,600,000	Ross	
RDTE,A	Software Lifecycle Affordability Management Phase II (SLAM II)	800,000	Saxton	Lautenberg, Menendez
RDTE,A	Soldier Fuel Cell System	2,400,000	Visclosky	
RDTE,A	Soldier Portable Power Pack (SP3) for the 21st Century Warrior	1,700,000	Price (NC), Hayes	Dole
RDTE,A	Soldier Survival in Extreme Environments	2,960,000		Hagel, Nelson (NE)
RDTE,A	Soldier Worn Gunshot Detection System	2,400,000	Visclosky	
RDTE,A	Solid Oxide Fuel Cell Powered Tactical Smart Charger	1,600,000	Walsh	
RDTE,A	Solid State Processing of Titanium Alloys for Defense Materiel Armaments	1,440,000	Kaptur	
RDTE,A	Solid State Shelter Lighting System	384,000	Hill	Bayh
RDTE,A	Solutions for Infection Control in Military Hospitals	2,000,000		Nelson (NE)
RDTE,A	Southeast Nebraska Cancer Center/National Functional Genomics Center	1,200,000	Fortenberry	Nelson (NE)
RDTE,A	Specialized Compact Automated Mechanical Clearance Platform	1,600,000	Murphy, Patrick	
RDTE,A	Spectroscopic Materials Identification Center	800,000	Berry	Lincoln, Pryor
RDTE,A	Spinal Muscular Atrophy (SMA) Research Program	3,200,000	Pelosi, Nadler, Rangel	Schumer

RDTE,A	Spring Suspended Airless Tires for Convoy Protection	2,800,000	Obey	
RDTE,A	Stabilized Enzyme Biofuel Cell (SEBC) for Unmanned Ground Sensors	800,000		Bond
RDTE,A	Standoff Hazardous Agent Detection and Evaluation System	2,800,000	Berry	Lincoln, Pryor
RDTE,A	Standoff Improvised Explosive Device Detection Program	4,800,000	Boyd, Berry, Brown (FL), Hirono, Meek	Akaka, Lincoln, Martinez, Pryor
RDTE,A	Staph Vaccine	4,000,000		Conrad, Dorgan
RDTE,A	Strattice Dermal Matrix Research	2,400,000	Ferguson	
RDTE,A	Stryker Common Active Protection System (APS) Radar	1,600,000	Johnson, Sam; Hall (TX); Reyes	Cornyn
RDTE,A	Stryker Second Source Tire Research	800,000	Goode, Ryan (OH)	Voinovich, Warner, Webb
RDTE,A	Super High Accuracy Range Kit (SHARK)	3,600,000	Young (FL)	
RDTE,A	Superior Weapons Systems Through Castings	1,600,000		Brownback, Lincoln, Pryor, Roberts
RDTE,A	Superlattice Semiconductors for Mobile SS Lighting and Solar Power Applications	2,400,000	Hinchey	
RDTE,A	Sustainable Alternative Energy for DoD	2,400,000	Obey	
RDTE,A	Synchrotron-based Scanning Research Neuroscience and Proton Institute	5,000,000	Lewis (CA)	
RDTE,A	Synthetic Automotive Virtual Environments	2,400,000	Hodes	
RDTE,A	Systems Biology Biomarkers Toxicology Initiative	2,640,000	Dicks, Baird, McDermott	Murray
RDTE,A	Tactical Asset Visibility Enhancement	500,000		Reid
RDTE,A	Tactical Booster for Mobile Network Centric Warfare	1,600,000	Obey	Kohl
RDTE,A	Tactical Metal Fabrication System (TacFab)	2,000,000	Turner, Brown (SC), Clyburn, Markey, Ryan (OH), Tierney, Tsongas	Kerry, Lautenberg, Menendez
RDTE,A	Tactical RPG Airbag Protection System (TRAPS) Enhancement	800,000	Capps, Farr	
RDTE,A	Technologies for Metabolic Monitoring (TMM)	800,000	Gonzalez	Wicker

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,A	Technologies for Military Equipment Replenishment	3,600,000	Obey	Kohl
RDTE,A	Technology and Human Systems Integration	2,400,000		Kennedy
RDTE,A	Technology Commercialization and Management Network	1,600,000	Lewis (CA), Hinojosa	
RDTE,A	Technology for Rapid Foreign Language Acquisitions for Specialized Military and Intelligence Purposes	1,200,000		Sununu
RDTE,A	Telepharmacy Remote Medicine Device Unit (TRMDU)	1,400,000	Brady (PA), English	Casey
RDTE,A	Terahertz Spectrometer	800,000	Murphy (CT)	Dodd, Lieberman
RDTE,A	Test Support Infrastructure Darning and Trafficability Study	4,000,000		Bingaman, Domenici
RDTE,A	Thermal and Electrical Nanoscale Transport (TENT)	1,600,000	Honda	
RDTE,A	Thermoelectric Power Generation Materials and Devices	1,200,000		Hutchison
RDTE,A	Threat Detection and Neutralization Project	3,200,000	Mollohan	
RDTE,A	Titanium Extraction, Mining and Process Engineering Research (TEMPER)	3,000,000		Baucus
RDTE,A	Titanium Powder Advanced Forged Parts Program	1,600,000	Murtha	
RDTE,A	Total Quality System for FDA Regulated Activities Database	1,440,000	Bishop (GA)	
RDTE,A	Toxic Particles	800,000	Allen	Collins, Snowe
RDTE,A	Transportable Cryofracture/Plasma Arc	1,600,000	Doolittle	Baucus, Tester
RDTE,A	Trauma Care, Research and Training	2,400,000		Hutchison

RDTE,A	Trauma Hemostat	800,000	Cohen	
RDTE,A	Turbo Fuel Cell Engine	2,500,000	Murtha	
RDTE,A	UAS Sense and Avoid Concept Evaluation for Airspace Integration	2,400,000		Shelby
RDTE,A	UAV-Resupply BURRO	1,200,000	Larson	Dodd, Lieberman
RDTE,A	Ultra High Speed MEMS Electromagnetic Cell Sorter (UHSMECS)	2,400,000	Capps	
RDTE,A	Ultra Light Weight Transmission for FCS	1,600,000	Walberg	Stabenow
RDTE,A	Ultra-Endurance Coating	3,600,000	Hobson	
RDTE,A	Ultra-High Resolution Display for Army Medicine (UHRDARM)	4,000,000	Hall (NY)	Murray
RDTE,A	Ultrasonic Consolidation for Armor Applications	1,200,000	Dingell	Levin, Stabenow
RDTE,A	Ultrasonic Impact Technology	1,200,000		Shelby
RDTE,A	UMDNJ Cancer Initiative	2,400,000	Payne, Pallone, Sires, Smith (NJ)	
RDTE,A	Uncooled Metal-Oxide Semiconductor Field-Effect Transistor (MOSFET) Embedded Micro-cantilevers	2,400,000	Visclosky	
RDTE,A	Universal Control Full Authority Digital Engine Control (FADEC)	3,200,000	Larson	Dodd, Lieberman
RDTE,A	University Center for Disaster Preparedness and Emergency Response	1,600,000	Pallone, Payne, Smith (NJ)	Lautenberg, Menendez
RDTE,A	Unmanned Ground Vehicle Advanced Technology Development	2,500,000	Murtha	
RDTE,A	Unmanned Ground Vehicle Initiative (UGVI)	12,000,000		Levin
RDTE,A	Unserviceable Ammunition Demilitarization via Chemical Dissolution	800,000		Bennett, Hatch
RDTE,A	Urban Patterns and Signatures to Support Counter-Insurgency Operations	1,200,000		Gregg
RDTE,A	Use of Drugs to Reduce Hearing Loss from Acute Acoustic Trauma	1,280,000	McHugh	

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,A	UXO Detection and Classification in Volcanic Soil Using an Integrated Fully Polametic GPR and Chemical Sensor Technology	1,000,000	Hirono	Akaka
RDTE,A	Vectored Thrust Ducted Propeller Compound Helicopter	5,000,000	Castle	Biden, Carper, Casey, Specter
RDTE,A	Vehicle Armor Structure Development and Testing for Future Combat Systems and Joint Light Tactical Vehicle	800,000	Levin	Levin, Stabenow
RDTE,A	Vehicle Common Armor Manufacturing Process (VCAMP)	2,000,000	Saxton	
RDTE,A	Vertical Integration for Missile Defense Surveillance Data	3,280,000		Cochran
RDTE,A	Vertical/Horizontal Integration of Space Technologies and Applications (VISTA)	2,400,000	Aderholt	
RDTE,A	VideoArgus	2,000,000	Holt, Rothman	Lautenberg, Menendez
RDTE,A	Vigilant Sentinel Auto-ID and Access Control System	1,600,000	Tiahrt	
RDTE,A	VIPER Mobile Power Development Project	800,000	Harman	
RDTE,A	Virtual Opportunity and Information Center	1,000,000	Murphy, Tim	
RDTE,A	Vision Integrating Strategies in Ophthalmology and Neurochemistry (VISION)	3,200,000	Granger	Cornyn
RDTE,A	Visualization for Training and Simulation in Urban Terrains	1,200,000		McConnell
RDTE,A	Warfighter Cancer Care Engineering	2,400,000	Carson	Bayh, Lugar
RDTE,A	Wearable Gyro-Compensated Personnel Tracking During GPS Interference	800,000	Slaughter, Kuhl	
RDTE,A	Wearable Personal Area Network Technology	2,400,000	Spratt	
RDTE,A	Weight Measurements and Standards for Military Personnel	2,000,000		Vitter

RDTE,A	Western Hemisphere Security Analysis Center	1,600,000	Hastings (FL)	Nelson (FL)
RDTE,A	Wireless Analysis and Visualization Engines for Sensors (WAVES)	800,000	Stupak	
RDTE,A	Wireless Electronic Patient Records	3,200,000	Harman	Feinstein
RDTE,A	Wireless Medical Monitoring System (WiMed)	1,600,000	Boswell, Latham	Grassley, Harkin
RDTE,A	Wound Infection Treatment Program	2,400,000	Baldwin	Kohl
RDTE,A	Wyoming Valley Integrated Command Operations Program (ICOP)	1,600,000	Carney	
RDTE,AF	Accelerated Insertion of Advanced Materials and Certification for Military Aircraft Structure Material Substitution and Repair	3,000,000	Tiaht	Brownback, Roberts
RDTE,AF	Accelerator-Driven Non-Destructive Testing	2,000,000	Simpson	Crapo
RDTE,AF	ACES 5 Ejection Seat	5,600,000	Lamborn, Pastor	Allard, Bennett, Cochran, Dodd, Lieberman, Salazar, Wicker
RDTE,AF	Acquisition Data Repository (ADR)	2,800,000	Hobson	
RDTE,AF	Active Unmanned Air Vehicle (UAV) Phenomenology and Automatic Target Recognition Technology Transition (ATR)	2,000,000	Hobson	
RDTE,AF	Advance Casting and Coating Technologies for Aircraft Canopies	2,800,000	Sutton	Specter
RDTE,AF	Advance Threat Alert/Advance Technology Demonstration	4,880,000	Hodes	Gregg, Sununu
RDTE,AF	Advanced Aerospace Heat Exchangers	1,600,000	Wilson (OH)	Voinovich
RDTE,AF	Advanced Carbon Fiber Research and Test Initiative	2,400,000	Spratt, Inglis	Graham
RDTE,AF	Advanced Data Exploitation and Visualization	800,000		Brown
RDTE,AF	Advanced Electromagnetic Location of IEDs Defeat System	1,600,000	Kaptur	
RDTE,AF	Advanced Fiber Lasers Systems and Components	960,000		Murray
RDTE,AF	Advanced fuel cell based power system for small UAV applications	1,200,000		Reid

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,AF	Advanced Lithium Ion Battery Manufacturing	1,600,000	Scott (GA)	Isakson
RDTE,AF	Advanced Military Installations that Integrate Renewable Energy and Advanced Energy Storage Technologies	4,000,000		Bond
RDTE,AF	Advanced Modular Avionics for Operationally Responsive Space Use	2,400,000	Wilson (NM)	Bingaman, Domenici
RDTE,AF	Advanced Nanotube Micro-Munitions Weapon Technology Initiative	1,600,000	Bishop (GA)	
RDTE,AF	Advanced Staring Infrared Testbed (ASIRT) Technology Demonstration	960,000		Allard, Salazar
RDTE,AF	Advanced Technical Intelligence Center (ATIC)	2,000,000	Hobson	Voinovich
RDTE,AF	Advanced Thermal Control Coatings for Space Applications	1,600,000	Davis (IL)	
RDTE,AF	Advanced Vehicle Propulsion Center	1,200,000	McKeon	
RDTE,AF	Aerodynamic Wind Tunnel Upgrade Initiative	1,600,000	Giffords	
RDTE,AF	Aerospace Lab Equipment Upgrade	800,000	Napolitano	
RDTE,AF	Affordable Lightweight Power Supply Development	1,000,000	Gerlach	Casey, Specter
RDTE,AF	Air Cargo Tracking and Analysis/Secure Skies	1,360,000		Inouye
RDTE,AF	Air Force Minority Leaders Program	8,000,000		Alexander, Corker, Hutchison, Landrieu
RDTE,AF	Air Purification with Carbon Nanotube Nanostructured Material	5,000,000		Leahy
RDTE,AF	Aircraft Evaluation Readiness Initiative	2,400,000		Grassley, Harkin
RDTE,AF	Aircraft Fatigue Modeling and Simulation	3,000,000		Hutchison

RDTE,AF	Alternative Energy—Tin City	500,000		Stevens
RDTE,AF	Alternative Energy Fuel Cell Power	1,600,000	Ryan (OH), Sutton	Brown
RDTE,AF	Applications of LIDAR to Vehicles with Analysis	7,000,000		Inouye
RDTE,AF	Assessment of Alternative Energy for Aircraft Ground Equipment	1,600,000	Wu	Smith, Wyden
RDTE,AF	ASSET eWing and Data Fusion Technology Integration	4,000,000		Byrd
RDTE,AF	Assured Aerospace Fuels Research	1,600,000		Voinovich
RDTE,AF	AT-6B Capabilities Demonstration for the Air National Guard	6,000,000	Tiaht	Brownback
RDTE,AF	Automated Sensor-Communication Response Technology	1,600,000	Hobson	
RDTE,AF	B-1 Bomber 16-Carry Adapter Weapons Initiative	4,160,000	Herseth Sandlin	Johnson, Thune
RDTE,AF	B-2 Advanced Tactical Data Link	11,200,000		Feinstein, Inhofe
RDTE,AF	Ballistic Missile Technology	2,400,000	Young (FL)	
RDTE,AF	Base Facility Energy Independence	3,200,000	Kaptur	
RDTE,AF	BattleSpace: Reducing Military Decision Cycles	1,280,000		Hagel, Nelson (NE)
RDTE,AF	Big Antennas Small Structures Efficient Tactical (BASSET) UAV	1,200,000	Harman	
RDTE,AF	Bio-JP8 Fuel Development	800,000	Boyd	
RDTE,AF	Biothreat Test Pouch for Film Array System	800,000		Bennett
RDTE,AF	Body Armor Improved Ballistic Protection	2,000,000	Murtha	
RDTE,AF	Broad Area Multi-Intelligence Ubiquitous Surveillance Enterprise	1,600,000	Walsh, Kuhl	Schumer
RDTE,AF	C-130 Automated Inspection, Repair, Corrosion and Aircraft Tracking Condition-Based Maintenance Plus	3,200,000	Kingston, Marshall	Chambliss, Isakson
RDTE,AF	Carbon Nanotube Enhanced Power Sources for Space	2,400,000	Markey, Olver	

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Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,AF	Carbon Nanotube-based Radiation Hard Nano-Electronic Devices	7,200,000	Blunt	
RDTE,AF	Carbon Non-Materials for Advanced Aerospace Applications	2,400,000	Culberson	
RDTE,AF	Center for Microplasma Science and Technology (CMST)	2,000,000	Rothman, Sires	Lautenberg, Menendez
RDTE,AF	Center for Responsive Space Systems	800,000	Wilson (NM)	Bingaman
RDTE,AF	Center for Solar Electricity and Hydrogen	3,600,000	Kaptur	
RDTE,AF	Center of Excellence for Defense UAV Education	4,000,000	Pomeroy	Conrad, Dorgan
RDTE,AF	Ceramic Matrix Composite Turbine Blade Demonstration	4,000,000	Shays	Dodd
RDTE,AF	Chip Scale Atomic Clock	2,400,000	Young (FL)	
RDTE,AF	Close Proximity Space Situational Awareness	640,000	Edwards (TX)	
RDTE,AF	Coal Transformation Laboratory	800,000		Lugar
RDTE,AF	Combat Sent Wideband Sensor Upgrade Program	3,040,000		Ensign
RDTE,AF	Command and Control Service Level Management (C2SLM) program	4,000,000	Blunt	
RDTE,AF	Compact Laser Terminal for Airborne Network Centric Warfare	2,800,000	Visclosky	
RDTE,AF	Component Object Model Attitude Control System Simulation/Trainer	1,600,000		Murray, Warner, Webb
RDTE,AF	Compound Zoom for Airborne Reconnaissance (CZAR)	1,200,000	Sherman	
RDTE,AF	Conducting Polymer Stress and Damage Sensors for Composites	1,440,000		Cochran
RDTE,AF	Consortium for Nanomaterials for Aerospace Commerce and Technology	2,400,000	Hinojosa	Hutchison

RDTE,AF	Conventional Strike Mission Integration Demonstration	4,800,000	Lewis (CA)	
RDTE,AF	Core Component Jammer (CCJ)	9,000,000	Tiaht	Brownback, Roberts
RDTE,AF	COTS Analysis Tools for Navigational Warfare	1,200,000	Sestak	
RDTE,AF	COTS Technology for Situational Space Awareness	2,800,000	Gerlach	Specter
RDTE,AF	Cyber Attack Mitigation and Exploitation Laboratory (CAMEL) III	2,000,000	Arcuri	Schumer
RDTE,AF	Cyber Security Laboratory at Louisiana Tech University	3,000,000	Alexander, McCreary	Landrieu
RDTE,AF	Defensive Counterspace Testbed	800,000		Allard
RDTE,AF	Development and Testing of Advanced Paraffin-Based Hybrid Rockets for Space Applications	2,800,000	Lofgren	
RDTE,AF	Development and Validation of Advanced Design Technologies for Hypersonic Research	2,000,000		Coleman, Klobuchar
RDTE,AF	Diamond Substrate for Cooling of Micro-Electronics	2,000,000		Reed
RDTE,AF	Distributed Mission Interoperability Toolkit (DMIT)	1,600,000	Sestak, Andrews, LoBiondo	
RDTE,AF	Eglin AFB Range Operations Center (ROCC) Initiative	800,000	Miller (FL)	
RDTE,AF	Eielson Air Force Base Alternative Energy Source Program	2,400,000	Young (AK)	
RDTE,AF	Eielson Air Force Base Coal to Liquid Initiative	5,000,000		Stevens
RDTE,AF	Electromagnetic In-Flight Propeller Balancing System	2,000,000	English	Casey, Specter
RDTE,AF	Electronics Liquid Cooling for Advanced Military Ground and Aerospace Vehicle Projects	1,000,000	LaTourette	
RDTE,AF	EMI Grid Fabrication Technology	2,720,000	Bono Mack	
RDTE,AF	Energetic Device Quality and Reliability Improvements Using Computer Aided Process Control	2,400,000	Blunt	
RDTE,AF	Expeditionary 200 kW+ Alternative Power Generator	800,000	Lamborn	

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,AF	Expert Organization Development System (EXODUS)	1,000,000	Capito	
RDTE,AF	F-15 AESA Development and Demonstration	12,000,000		Cochran, Feinstein, Wicker
RDTE,AF	F-15 AN/ALR-56C RWR Digital Receiver Upgrade	3,200,000	Rothman, Pascrell	Lautenberg, Menendez
RDTE,AF	FEL Capabilities for Aerospace Microfabrication	1,120,000	Wittman	
RDTE,AF	Field Programmable Gate Arrays Mission Assurance Center	3,000,000		Bingaman, Domenici
RDTE,AF	Fire and Blast Resistant Materials for Force Protection	1,600,000	Moore (WI)	Kennedy, Kohl
RDTE,AF	Flash Hyper-Dimensional Imaging System for Space Situational Awareness and Ballistic Missile Defense	1,600,000	Hirono	Akaka, Inouye
RDTE,AF	Flexible Access Secure Transfer (FAST)	1,200,000	Pascrell, Rothman	
RDTE,AF	Florida National Guard Missile Range Safety Technology	1,600,000	Young (FL)	
RDTE,AF	FPS-16 Radar Mobilization Upgrade	2,800,000	Miller (FL)	
RDTE,AF	Freedom Fuels/Coal Fuels Alliance	3,200,000		Bunning
RDTE,AF	Gallium Nitride RF Power Technology	1,600,000	Coble	
RDTE,AF	Health Surveillance System	1,600,000	Inslee	Murray
RDTE,AF	High Power Broadly Tunable Middle-Infrared Laser Sources	2,400,000	Davis (AL)	
RDTE,AF	High Temperature Hydrogen Energy Production Facility	1,200,000		Hutchison
RDTE,AF	Holloman High Speed Test Track	4,000,000	Pearce	Bingaman, Domenici

RDTE,AF	Homeland Emergency Learning and Preparedness (HELP) Center	3,000,000	Hobson	
RDTE,AF	Hybrid Bearing	1,600,000	Coble, Hayes, Shuler, Turner	Dodd, Dole, Gregg, Lieberman, Voinovich
RDTE,AF	Hybrid Sounding Rocket Propulsion	800,000	Hunter	
RDTE,AF	Hydrocarbon Boost Technology Demonstrator	1,400,000	McCarthy (CA), Doolittle, Matsui, McKeon	
RDTE,AF	Imaging Tools for Human Performance Enhancement and Diagnostics	2,000,000	Hobson	Voinovich
RDTE,AF	Inductive Thermography Systems Inspection	2,400,000		Murray
RDTE,AF	Information Quality Tools for Persistent Surveillance Data Sets	1,600,000	Snyder	Lincoln, Pryor
RDTE,AF	Innovative Polymeric Materials for Three-Dimensional (3-D) Microdevice Construction	1,600,000	Emerson	
RDTE,AF	Institute for Science and Engineering Simulation (ISES)	3,360,000	Burgess	
RDTE,AF	Integrated Aircraft Energy Management	2,000,000	Hobson	
RDTE,AF	Integrated Electrical Starter/Generator (IES/G)	1,600,000	Turner	Voinovich
RDTE,AF	Integrated Power for Aircraft Technologies (INPACT II)	3,500,000	Manzullo	Durbin
RDTE,AF	Integrated Propulsion Analysis Tool	2,000,000	Lewis (CA)	
RDTE,AF	Integrated SAR/PI Evaluator for Critical Target and Activity Recogniton (INSPECTAR)	800,000	Hobson	
RDTE,AF	Integrated Spacecraft Engineering Tool (ISET)	1,600,000	Lewis (CA)	
RDTE,AF	Integrated Targeting Device	3,000,000		Nelson (FL)
RDTE,AF	Intelligent Manufacturing Initiative	2,400,000	Pryce	Voinovich
RDTE,AF	Internal Base Facility Energy Independence—Solar	1,600,000	Kaptur	
RDTE,AF	Joint Theater Air Ground Simulation System	2,400,000		Martinez
RDTE,AF	Large Aircraft Infrared Countermeasures for AFSOC AC/MC-130 Aircraft	4,400,000	Miller (FL)	Martinez, Nelson (FL)

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,AF	Large Area, APVT Materials Development for High Power Devices	800,000	Frelinghuysen	Lautenberg, Menendez
RDTE,AF	Laser Peening for Friction Stir Welded Aerospace Structures	1,600,000	Tiahrt	
RDTE,AF	Lean Management System Research Initiative at Air Mobility Wing MacDill AFB	800,000	Young (FL)	
RDTE,AF	LGX High Temperature Acoustic Wave Sensors	1,600,000		Collins, Snowe
RDTE,AF	Light Weight Organic Photovoltaic Technologies	1,200,000	Altmire	
RDTE,AF	Lightweight, High-Efficiency Solar Cells for Spacecraft	800,000		Durbin
RDTE,AF	Liquid Crystal Laser Eye Protection	1,600,000	Ryan (OH)	
RDTE,AF	Lithium Ion Domestic Materials Development	1,600,000	Courtney	Dodd
RDTE,AF	Low Profile Arresting Gear	800,000	Sestak	Casey
RDTE,AF	Low Voltage, Wideband Electro-Optic Polymer Modulators	3,000,000	Inslee	Cantwell, Murray
RDTE,AF	Low-Earth Orbit Nanosatellite Integrated Defense Autonomous Systems	5,000,000		Inouye
RDTE,AF	Manufacturing of High Energy Superior Lithium Battery Technology	6,000,000		Bond
RDTE,AF	Massively Parallel Optical Interconnects (MPOI) for ISR Satellites	1,600,000		Ensign
RDTE,AF	Massively Parallel Optical Interconnects for MicroSatellite Applications	1,600,000		Reid
RDTE,AF	Materials Integrity Management Research for Air Force Systems	800,000		Roberts
RDTE,AF	Microcomposite Coatings for Chrome Replacement	800,000	Jones (OH)	
RDTE,AF	Micro-Grid Energy Storage Utilizing a Deployable Zinc-Bromide Flow Battery	1,600,000	Marshall	

RDTE,AF	Micromachined Switches for Next Generation Modular Satellites	2,400,000	Miller, George	
RDTE,AF	Micro-Satellite Serial Manufacturing to Include Academic Outreach Educational Program	800,000	Harman, Lewis (CA)	
RDTE,AF	Mobile Wind Turbine Systems to Power Forward Bases	800,000		Brown
RDTE,AF	Moving Target Strike	2,000,000	Miller (FL)	
RDTE,AF	M-PACT High Pressure Pure Air Generator System	1,600,000	Frelinghuysen, Garrett	Lautenberg, Menendez
RDTE,AF	MPOI for Battlespace Information Exchange	3,900,000		Reid
RDTE,AF	MQ-9 Reaper—UAS AirPortal, Hancock Field	3,000,000	Walsh	
RDTE,AF	MSSS Operations & Research	22,000,000		Inouye
RDTE,AF	Multi Platform Radar Technology Improvement Program (MPRTIP) Integration and Test on JSTARS	20,000,000	Shays, Weldon	Chambliss, Dodd, Isakson, Lieberman
RDTE,AF	Multicontinuum Technology for Space Structures	2,880,000	Cubin	Enzi
RDTE,AF	Multi-mission Deployable Optical System	4,000,000		Inouye
RDTE,AF	Multi-Mode Space Propulsion	800,000	Gilcrest	Mikulski
RDTE,AF	Multiple UAS Cooperative Concentrated Observation and Engagement Against a Common Ground Objective	4,400,000	Bartlett, Sestak	
RDTE,AF	Multi-Sensor Detect, See and Avoid	6,000,000		Reid
RDTE,AF	Multi-Sensor Person-Borne Suicide Counter Bomber Detection Systems	1,200,000	Hobson	
RDTE,AF	Nano-Composite Structures Manufacturing Technology Development	800,000	Turner	Brown
RDTE,AF	Nanocomposites for Lightning Protection of Composite Airframe Structures	1,200,000	Tiahrt	Brownback
RDTE,AF	National Test Facility for Aerospace Fuels and Propulsion	1,360,000	Buyer	
RDTE,AF	Net-Centric Sensors Grid	800,000	Hill	Bayh, Lugar

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,AF	New Electronic Warfare Specialists Through Advanced Research by Students	1,600,000	Hobson	
RDTE,AF	Next Generation Casting Supplier Base Initiative	2,400,000	Blumenauer	Reid
RDTE,AF	Next Generation Manufacturing Processes	1,200,000	Smith (TX)	
RDTE,AF	Next Generation Tactical Environmental Clothing for AFSOC	2,000,000	Rogers (AL)	
RDTE,AF	NP 2000 Propeller System—Air National Guard Special Missions C-130	2,000,000	Murphy (CT)	Dodd, Schumer
RDTE,AF	Nuclear Test Seismic Research	2,000,000		Leahy, Kennedy, Kerry
RDTE,AF	ONAMI Safer Nanomaterials and Nanomanufacturing	4,000,000	Blumenauer, DeFazio, Walden, Wu	Smith, Wyden
RDTE,AF	Operational Responsive Space Architecture for Dual Use Applications	1,272,000	Perlmutter	
RDTE,AF	Optic Band Control Program	800,000	Bilirakis	
RDTE,AF	Optically Pumped Atomic Laser (OPAL)	2,800,000	Hobson, Grijalva	
RDTE,AF	PanSTARRS	8,000,000		Inouye
RDTE,AF	Partnership for Emerging Technologies	1,600,000	Duncan	Corker
RDTE,AF	Partnership in Innovative Preparation for Educators and Students and the Space Education Consortium	800,000		Allard, Salazar
RDTE,AF	Pennsylvania NanoMaterials Commercialization Center	2,000,000	Doyle	
RDTE,AF	Persistent Sensing Data Processing, Storage and Retrieval	1,600,000		Brown
RDTE,AF	PhasorBIRD Helmet Tracker	2,480,000		Leahy

RDTE,AF	Plasma-Sphere Array for Flexible Electronics	2,800,000	Kaptur	
RDTE,AF	Precision Image Tracking and Registration	1,600,000	Young (FL)	
RDTE,AF	Predator Mission Aircrew Training System (PMATS) Upgrade	2,400,000	Hinchey	Schumer
RDTE,AF	Prepreg Thickness Variability Reduction Program	1,600,000	Hall (TX)	
RDTE,AF	Production of Nanocomposites for Aerospace Applications	1,600,000	Turner	Voinovich
RDTE,AF	Project Air Force	3,000,000		Feinstein
RDTE,AF	Radiation Hardened Microelectronics (HX5000) Carbon Nanotube Sensors	2,000,000		Coleman, Klobuchar
RDTE,AF	Radiation Hardened Non-Volatile Memory Technology	1,600,000	Lamborn	Salazar
RDTE,AF	Rapid Automated Processing of Advanced Low Observables	1,600,000		Brown
RDTE,AF	Rapid Prototyping and Nanotechnology Initiative	800,000	Waters	
RDTE,AF	Rapid Replacement of Mission Critical Electronics to Support High Usage Wartime Aircraft Deployments	1,500,000	Marshall	Chambliss, Isakson
RDTE,AF	Real-time Optical Surveillance Applications	2,800,000		Inouye
RDTE,AF	Reconfigurable Electronics and Non-Volatile Memory Research	2,000,000		Craig, Crapo
RDTE,AF	Reconfigurable Secure Computing	1,200,000	Moran (VA)	Warner, Webb
RDTE,AF	Regional Telepathology Initiative at Keesler AFB	2,500,000		Cochran
RDTE,AF	Remote Suspect Identification	3,200,000	Alexander, McCreery	
RDTE,AF	Renewable Hydrocarbon Fuels for Military Applications (Great Lakes Region)	2,000,000	Kucinich	Brown
RDTE,AF	Rivet Joint ISR Network Integration	2,000,000	Hall (TX)	
RDTE,AF	Satellite Coherent Optical Receiver (SCORE)	1,750,000	Pelosi	
RDTE,AF	Science for Sustainment	1,600,000	Hobson	

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,AF	Scorpion Low Cost Helmet Mounted Cueing and Information Display System	4,000,000	LaHood	Durbin
RDTE,AF	Secure Network Centric Operations	1,600,000	Johnson, Sam	
RDTE,AF	Semiconductor Optical Amplifier for Responsive Space MPOI	2,200,000	Heller, Porter	
RDTE,AF	Sensor Fusion	2,400,000	Hobson	
RDTE,AF	Sewage-Derived Biofuels Project	2,400,000		Cochran
RDTE,AF	Shielding Rocket Payloads	400,000	Herseth Sandlin	Johnson, Thune
RDTE,AF	Silicon Carbide Electronics Material Producibility Initiative	4,800,000	Pickering	Cochran
RDTE,AF	Silicon Carbide Power Electronics for More Electric Aircraft	3,200,000	Pickering	Cochran, Wicker
RDTE,AF	Small Adaptive Cycle Turbine Engines	1,600,000	Kaptur	
RDTE,AF	Small Low-Cost Reconnaissance Spacecraft Components	1,600,000	Bishop (UT)	
RDTE,AF	Smart View Program (SVP)	800,000	Hobson	
RDTE,AF	Sonic Infrared Imaging Technology Development	800,000		Stabenow
RDTE,AF	Space Control Test Capabilities	1,600,000	Everett, Aderholt, Rogers (AL)	Sessions, Shelby
RDTE,AF	Space Qualification of the Common Data Link	1,600,000	Cannon	Bennett
RDTE,AF	Space Situational Awareness	1,200,000	Edwards (TX)	
RDTE,AF	Space Situational Awareness—TCN Demonstration and Deployment	3,000,000		Kennedy, Kerry
RDTE,AF	Strategic Biofuel Supply Program	1,000,000	Rodriguez	Hutchison

RDTE,AF	Super-Resolution Sensor System	2,000,000		Allard
RDTE,AF	Sustainable Energy Vermont National Guard Demonstration Projects	5,000,000		Leahy, Sanders
RDTE,AF	Synthetic Aperture Radar (SAR) Thunder Radar Pod (TRP)	3,200,000	Israel	Bond, Graham
RDTE,AF	Tactical Shelters Next Generation Composite Initiative	1,600,000		Reid
RDTE,AF	Technical Order Modernization Environment	1,440,000	Kaptur	
RDTE,AF	Technology Insertion Demonstration and Evaluation (TIDE)	3,200,000	Doyle	
RDTE,AF	Texas Research Institute for Environmental Studies	1,600,000	Brady (TX)	
RDTE,AF	Thermal IR Processing and Exploitation Cell (TPEC)	2,400,000	Hobson	
RDTE,AF	Thin Film Amorphous Solar Arrays	1,600,000		Levin
RDTE,AF	Tools and Technologies for Incident and Consequence Management	800,000	Moran (VA)	
RDTE,AF	Transportable Transponder Landing System	4,000,000		Smith, Wyden
RDTE,AF	Ultra High Resolution Deployable Projector for Simulation	3,200,000		Enzi
RDTE,AF	Ultra Low Power Electronics	3,200,000		Craig, Crapo
RDTE,AF	Ultralight Aerospace Nanotube Conductors	2,000,000	Hodes	Sununu
RDTE,AF	Unmanned Aerial Systems Mission Planning and Operation Center	400,000	Moran (KS)	
RDTE,AF	Vortex Low Cost Rocket Engine	2,400,000		Kohl
RDTE,AF	Warfighter Support Using HELIOS	2,400,000	Cramer	
RDTE,AF	Warner Robbins Air Logistics Center Special Operations Forces	800,000	Marshall	Chambliss, Isakson
RDTE,AF	WASH Oxygen Sensor and Cell-Level Battery Controller	800,000	Dreier	
RDTE,AF	Watchkeeper	800,000	Rehberg	Baucus, Tester

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,AF	Weather Sensors for CoT	1,600,000	Moran (VA)	
RDTE,AF	Wideband Digital Airborne Electronic Sensing Array	2,400,000		Reed, Whitehouse
RDTE,AF	WR-ALC Strategic Airlift Aircraft Availability Improvement	3,360,000	Kingston, Marshall	Chambliss, Isakson
RDTE,AF	XTC58F VAATE Small Turbo Fan Program	3,600,000	Pastor	
RDTE,DW	3-D Electronics and Power	2,400,000	Calvert	
RDTE,DW	3-D Technology for Advanced Sensor Systems	1,440,000	Simpson, Price (NC)	Craig, Crapo, Dole
RDTE,DW	Acinetobacter Baumannii Research	2,000,000	Pelosi	Boxer
RDTE,DW	Advanced Active Denial Planar Scanning Antenna System	1,600,000	Sherman, Gallegly	
RDTE,DW	Advanced Battery Technology	2,300,000	Young (FL)	
RDTE,DW	Advanced Craft Technology Demonstrators to Quantify and Mitigate Operator Injury	2,000,000	Davis (CA)	
RDTE,DW	Advanced Development of Mobile Rapid Response Prototypes	1,600,000		Lautenberg, Menendez
RDTE,DW	Advanced Emergency Response Integrated Environment (AERIE)	1,200,000	Sestak	
RDTE,DW	Advanced Information Discovery and Analysis Capability for NSA	1,200,000		Bennett, Hatch
RDTE,DW	Advanced Materials Research Institute	2,400,000	Jefferson	Landrieu, Vitter
RDTE,DW	Advanced Missile Simulation Technology for Intelligence Analysis	1,280,000		Cochran
RDTE,DW	Advanced Mobile Microgrid	2,720,000	Rogers (MI), Conyers, Dingell	Levin, Stabenow

RDTE,DW	Advanced SAM Hardware Simulator Development	5,000,000	Johnson (GA), Bishop (GA), Cramer, Gingrey, Scott (GA)	Chambliss, Isakson
RDTE,DW	Advanced Scientific Missile Intelligence Preparation of the Battlespace (IPB)	2,000,000	Cramer	
RDTE,DW	Advanced Tactical Laser Flashlight Devices	1,200,000	Kilpatrick	
RDTE,DW	Advanced Tactical Threat Warning Radio (ATTWR)	1,200,000	Lofgren	Boxer
RDTE,DW	Advanced Technology Sensors and Payloads	1,600,000	Lewis (CA)	
RDTE,DW	Advanced, Long Endurance Unattended Ground Sensor Technologies	3,600,000	Pickering	Cochran
RDTE,DW	AELED IED Electronic Signature Detection	3,200,000	Murtha	
RDTE,DW	Agile JTRS Integrated Circuits	1,600,000	Capps	
RDTE,DW	Agile Software Capability Interventions	1,600,000		Bond
RDTE,DW	Aging Systems Sustainment and Enabling Technologies	2,000,000	Lucas	Inhofe
RDTE,DW	Airborne Infrared Surveillance (AIRS) System	800,000	Sullivan, Boren	Inhofe
RDTE,DW	All-Source Content Management (ASCMAN) for Actionable Intelligence	1,600,000		Bond
RDTE,DW	Antibody-Based Therapeutic Against Smallpox	800,000	Van Hollen	Cardin
RDTE,DW	Antioxidant Micronutrient Therapeutic Countermeasures for Chemical Agents	800,000	McCarthy (NY)	
RDTE,DW	Arctic Regional Supercomputer	3,200,000		Stevens
RDTE,DW	Armed Forces Health and Food Supply Research	5,000,000		Roberts
RDTE,DW	Augmented Reality to enhance Special Warfare Domain Awareness	1,600,000	Allen	Collins, Snowe
RDTE,DW	Autonomous Rendezvous/Formation Flight	2,000,000		Reid
RDTE,DW	Bio Agent Early Warning Detector	2,000,000	Hoyer	Cardin
RDTE,DW	Bio-Butanol Production Research	2,000,000	Clyburn	

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,DW	Biodefense Vaccine Development and Engineering of Antiviral Peptides	1,600,000		Vitter
RDTE,DW	Biofuels Program	1,600,000		Levin
RDTE,DW	Biological Threat Antibody Research	1,600,000	King (IA), Herseth Sandlin	
RDTE,DW	Biometric Signatures Research	2,000,000		McConnell
RDTE,DW	Biometric Terrorist Watch-List Data Base Management Development	1,600,000	Ramstad, Shays, Tsongas	Coleman, Kerry, Lieberman
RDTE,DW	Biosurety Development and Management Program	1,200,000	Reyes	
RDTE,DW	BOPPER (Bioterrorism Operations Policy for Public Emergency Response)	1,200,000	Watt	Burr
RDTE,DW	Botulinum Neurotoxin Research	1,600,000	Baldwin	Kohl
RDTE,DW	Buoyancy Assisted Lift Air Vehicle	2,500,000	Napolitano, Sherman	
RDTE,DW	Camp Guernsey Joint Training and Experimentation Center	6,000,000		Barrasso
RDTE,DW	Carbon Nanotube Chemical Detector	800,000	Edwards (TX)	
RDTE,DW	Carbon Nanotube Thin Film Devices for Portable Power	1,600,000	Lewis (CA)	
RDTE,DW	Catalytic Oxidation Integrated Demonstration	2,400,000	LaTourette, Pastor	
RDTE,DW	Cellulosic-Derived Biofuels Research Project	4,000,000	Chandler	
RDTE,DW	Center for Advanced Emergency Response	4,400,000		Durbin
RDTE,DW	Center for Autonomous Solar Power (CASP) large-area, flexible PV energy research	4,000,000	Hinchev	Schumer
RDTE,DW	Center for Innovative Geospatial Technology	10,000,000	Lewis (CA)	

RDTE,DW	Center for Nonproliferation Studies, Monterey Institute for International Affairs	1,200,000	Berman	
RDTE,DW/GP	CEROS	10,000,000		Inouye
RDTE,DW	Chemical Warfare Agent Fate Appropriate Response Tool	1,600,000	Kildee	
RDTE,DW	Chemical/Biological Infrared Detection System	1,200,000		Collins
RDTE,DW	Chemical/Biological Preparedness Center for Advanced Development of Mobile Rapid Response Prototypes	4,000,000	Rothman	
RDTE,DW	Collaboration Gateway	1,200,000	Lewis (CA)	
RDTE,DW	Collection Management Tool Development	1,440,000	Cramer, Aderholt	Shelby
RDTE,DW	Combating Terrorism Technology Support Office/STAR-TEC Partnership Program	2,400,000	Young (FL)	
RDTE,DW	Commercial Denied Area Radargrammetry Mapping	800,000		Allard, Salazar
RDTE,DW	Commodity Management System Consolidation program	1,600,000		Byrd
RDTE,DW	Common UGV Command and Control for PSYOP Programs	800,000	Moran (VA)	
RDTE,DW	Communications-Capable Reconnaissance Imager	800,000		Leahy
RDTE,DW	Comprehensive Maritime Domain Awareness	4,500,000	Young (FL)	
RDTE,DW	Comprehensive National Incident Management System	2,000,000	Moran (VA), Goode	Warner, Webb
RDTE,DW	Connectory Expansion for Rapid Identification of Technology Sources for DoD	400,000	Hunter	
RDTE,DW	Contaminated Human Remains Pouch	1,600,000		Brownback, Roberts
RDTE,DW	Continuation of Advanced Materials (Mercuric Iodide) Research for Nuclear Detection, Counter-Proliferation and Imaging for CBRNE Special Operations	800,000	Young (FL)	
RDTE,DW	Continuation of Industry Based Research into Biological Agent Identifiers without Wet Reagents	1,600,000	Young (FL)	
RDTE,DW	Continued Expansion of Prototypes for the Destruction of Airborne Pathogens Project	800,000	Slaughter	

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,DW	Continuous Acquisition and Life-Cycle (CALS) and Integrated Data Environment and Defense Logistics Enterprise Services Program	3,200,000		Byrd
RDTE,DW	Copper-Based Casting Technology Applications	2,800,000	Perlmutter	Salazar
RDTE,DW	Corrosion Engineering Education Initiative	800,000	Regula, Ryan (OH), Sutton	
RDTE,DW	Countering Missile-related Technology Proliferation	2,000,000	Goode	
RDTE,DW	Countermeasures to Chemical/Biological Control-Rapid Response	2,400,000	Young (FL)	Nelson (FL)
RDTE,DW	Covert Communications for SOF Operations	1,600,000	Gingrey	Chambliss, Isakson
RDTE,DW	Covert Sensing and Tagging System (CSTS)	1,200,000	Moran (VA)	
RDTE,DW	C-Scout Container Security System	2,400,000		Reid
RDTE,DW	CV-22 Helmet Mounted Display	2,000,000	Young (FL)	Bayh, Lugar
RDTE,DW	Defense Command Integration Center	880,000	Moore (KS), Boyda	Brownback
RDTE,DW	Defense Fuelcell Locomotive	2,000,000		Brownback
RDTE,DW	Defense Leadership and Technology Initiative	2,400,000	Bishop (GA); Cummings; Davis (IL); Jackson-Lee; Johnson, Eddie Bernice; Lee; Meek; Norton; Ruppberger; Sestak; Watt	Schumer
RDTE,DW	Defense Support to Large Scale Disaster Preparedness	800,000		Landrieu, Vitter
RDTE,DW	Defense Through Early Containment	1,200,000	Towns	
RDTE,DW	Department of Defense Corrosion Program	12,000,000		Cochran, Wicker

RDTE,DW	Directed Energy Systems for UAV Payloads	800,000	Tiaht	
RDTE,DW	Disaster Response: Communications and Other Infrastructure Restoration	4,000,000		Crapo
RDTE,DW	Distributed Network Switching	2,000,000	Sanchez, Loretta	Boxer
RDTE,DW	DNA Safeguard	1,200,000		Craig, Crapo
RDTE,DW	Document Analysis and Exploitation	1,600,000	Dent	Casey, Specter
RDTE,DW	Document and Media Search and Discovery (DMSD)	1,440,000		Cochran, Wicker
RDTE,DW	Dual Use Technologies for Bio-Defense: Drug Design and Delivery of Novel Therapeutics	1,200,000	Diaz-Balart, Mario	
RDTE,DW	EDIT Technology for Counter-Tunnel Operations and Cache Detection	800,000	Udall (NM)	Domenici
RDTE,DW	Electric Grid Reliability/Assurance	1,200,000	Simpson	Craig, Crapo
RDTE,DW	Electronics and Materials for Flexible Sensors and Transponders	3,200,000	Pomeroy	Conrad, Dorgan
RDTE,DW	Emerging Critical Interconnection Tech	2,000,000	Ellsworth	Bayh, Lugar
RDTE,DW	Enhanced Simulation for IO Capabilities	5,120,000		Cochran, Wicker
RDTE,DW	Environmentally Friendly Aircraft Decontamination Systems	1,600,000	LaTourette	
RDTE,DW	Environmentally Friendly Nanometal Electroplating Processes for Cadmium and Chromium Replacement	5,304,000	Obey	
RDTE,DW	Environmentally Intelligent Moisture and Corrosion Control	2,000,000	Visclosky	Lautenberg, Menendez
RDTE,DW	Expeditionary Persistent Power (USSOCOM)	1,600,000	Shuster	
RDTE,DW	Explosively Formed Projectile Iron Curtain	800,000	Moran (VA)	
RDTE,DW	Ex-Rad Radiation Protection Program	5,000,000		Lautenberg, Menendez
RDTE,DW	Extended-Lifetime Radioisotope Batteries	1,600,000	Price (NC)	Burr
RDTE,DW	Eye-Safe Long Range Stand-off System for Detection of Chemical and Biological Weapons	1,500,000	Cubin	Enzi

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,DW	Facial Recognition Technology Initiative	2,000,000	Klein	
RDTE,DW	Facility Security Using Tactical Surveys	2,400,000	Lewis (CA)	
RDTE,DW	Feature Size Migration at DMEA AMRS Boundary	2,000,000	Lungren, Matsui	
RDTE,DW	Ferroelectric Component Technology	1,200,000	Peterson (PA)	Casey, Specter
RDTE,DW	Field Experimentation Program for Special Operations	1,600,000	Farr	
RDTE,DW	First Link	2,000,000	Murtha	
RDTE,DW	Flashlight Soldier-to-Soldier Combat Identification System (FSCIS)	5,600,000	Granger, Rodriguez	Cornyn
RDTE,DW	Florida Defense Manufacturing Supply Chain Initiative	2,000,000	Brown (FL)	
RDTE,DW	Foliage Penetrating Reconnaissance and Surveillance System	3,200,000		Akaka
RDTE,DW	Full Scale Impact and Blast Loading Laboratory Testing Program	1,600,000	Davis (CA)	Boxer
RDTE,DW	Generation II Special Operation Forces Internally Transported Vehicle (SOF-ITV)	1,600,000	Waters	
RDTE,DW	Gulf Range Mobile Instrumentation Capability	800,000	Miller (FL)	
RDTE,DW	Helicopter Cable Warning and Obstacle Avoidance	800,000	Harman	Isakson
RDTE,DW	High Assurance Cross Domain Solutions for High Performance Computing Center Net-Centric Operations	2,000,000		Sununu
RDTE,DW	High Assurance Cross Domain Technology Development	2,000,000	Bilirakis	Sununu
RDTE,DW	High Performance Computational Design of Novel Materials	2,480,000		Cochran

RDTE,DW	High Performance Tunable Materials	2,400,000		Conrad, Dorgan
RDTE,DW	High Speed, High Volume Laboratory Network for Infectious Diseases	5,000,000	Pelosi, Udall (NM)	Boxer, Domenici
RDTE,DW	High-Pressure Mobile Water Delivery System	800,000	Walberg	
RDTE,DW	Hostile Fire Indicating System	800,000	Barton, Sestak	
RDTE,DW	Hybrid Power Generation System	1,200,000	Simpson	Crapo
RDTE,DW	HyperAcute Vaccine Development	2,400,000	Latham	Grassley, Harkin
RDTE,DW	IM Formulation Development of Anthrax Therapeutic	800,000	Frelinghuysen	Lautenberg, Menendez
RDTE,DW	Improved Chemical, Biological, and Radiological Filters	1,600,000		Warner, Webb
RDTE,DW	Improved Collapsible Urethane-Fuel Storage Tanks (ICU-FST)	1,600,000	Regula; Davis, David; Ryan (OH)	
RDTE,DW	Improved Commercial Integration (ICI)	800,000		Allard
RDTE,DW	Improved Information Transfer for Special Forces	2,400,000	Young (FL)	
RDTE,DW	Improved LAS Glass-Ceramic Laminated Armored Window Systems	1,600,000	Duncan	
RDTE,DW	In Transit Visibility System	800,000	Brady (PA)	
RDTE,DW	In Vitro Models for Biodefense Vaccines	1,000,000	Brown (FL)	Martinez, Nelson (FL)
RDTE,DW	Indiana Complex Operations Partnership	2,000,000	Hill	Bayh, Lugar
RDTE,DW	Indium Based Nitride Technology Development	3,000,000	Clyburn	
RDTE,DW	Infections Disease Research (AMNH) for Defense Research Sciences	2,000,000	Lowey, Nadler	
RDTE,DW	Inland Empire Perchlorate Wellhead Treatment	2,000,000	Baca	Boxer
RDTE,DW	Institute for Collaborative Sciences Research	1,200,000	Meek	
RDTE,DW	Institute for Information Security	2,500,000		Inhofe

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,DW	Institute of Advanced Flexible Manufacturing Systems	7,000,000		Byrd
RDTE,DW	Integrated Analysis Environment	1,200,000	Moran (VA)	
RDTE,DW	Integrated Bridge System	1,200,000	Mollohan	
RDTE,DW	Integrated Cryo-cooled High Power Density Systems	1,600,000	Boyd	Nelson (FL)
RDTE,DW	Integrated Signature Production and Exploitation	800,000	Johnson (IL)	
RDTE,DW	Integration of Force XXI Battle Command, Brigade & Below (FBCB2) with Tactical Handheld Digital Devices (THDD)	1,200,000		Shelby
RDTE,DW	Intelligence Analyst Education and Training	3,900,000		Cochran, Wicker
RDTE,DW	Intelligent Decision Exploration	3,600,000		Inouye
RDTE,DW	Intelligent Remote Sensing for Urban Warfare Operations	2,400,000	Sestak, Fattah	
RDTE,DW	Joint Ground Robotics Enterprise Modeling, Simulation, Analysis Project	800,000	Emerson	
RDTE,DW	Joint Gulf Range Complex Upgrade	1,200,000	Miller (FL)	
RDTE,DW	Joint Services Aircrew Mask Don/Doff In-flight Upgrade	1,600,000	Castle	Biden, Carper
RDTE,DW	Laboratory for High Performance Computational Systems	1,600,000	Cramer	
RDTE,DW	Large Scale Single-Use Bioreactor for Rapid Response to Bioterrorism	800,000	Rogers (MI)	
RDTE,DW	Liquid Crystal Sensor Technology Research and Development for Force Protection	2,400,000	Baldwin	Kohl
RDTE,DW	Lithium Ion Battery Safety Detection and Control of Impending Catastrophic Failures	1,600,000		Bayh, Lugar

RDTE,DW	Long-range Tagging and Locating System	800,000		Hutchison
RDTE,DW	Low Cost Stabilized Turret	1,600,000	Crenshaw	
RDTE,DW	Machine Augmented Composite Armor	800,000	Rodriguez	
RDTE,DW	Managing and Extending DoD Asset Lifecycles	2,500,000	Abercrombie	Akaka
RDTE,DW	Maritime UAS Demonstration for the SOUTHCOM Region	3,000,000		Cochran
RDTE,DW	MDIOC Modeling and Simulation	10,000,000	Lamborn	Allard, Salazar
RDTE,DW	MHPCC	5,000,000		Inouye
RDTE,DW	Micro-Power Special Operations Generator	1,600,000	Capuano	
RDTE,DW	Military/Law Enforcement Counterterrorism Test Bed	2,400,000	Young (FL)	
RDTE,DW	MilTech Expansion Program	1,600,000		Baucus, Tester
RDTE,DW	Miniature, Remote Wideband Survey, Collection, and Recording System	800,000	Cramer	
RDTE,DW	Miniaturized Chemical Detector for Chemical Warfare Protection (ChemPen)	1,600,000	McGovern, Olver	
RDTE,DW	Mismatch Repair Derived Antibody Medicines to Treat Staphylococcus-derived Bioweapons	1,600,000	Gerlach, Sestak	Specter
RDTE,DW	Mixed Oxidants for Chem Bio Decontamination	2,800,000	Boyd	
RDTE,DW	Mobile Continuous Air Monitor (MCAM)	1,600,000	Brown (FL)	
RDTE,DW	Mobile Sensor Enhancement to BMD Sensors Network	4,000,000	Langevin	Kennedy, Vitter
RDTE,DW	Modeling and Simulation Standards Development	640,000	Forbes	
RDTE,DW	Morehouse College, John Hopps Program	1,600,000	Bishop (GA), Lewis (GA)	Chambliss, Isakson
RDTE,DW	Multiple Applications for Light Activated, Reactive Materials for the Protection of the Warfighter, First Responder, and Public Health	1,600,000	Graves	
RDTE,DW	Multiple Target Tracking Optical Sensor Array Technology	5,000,000		Akaka

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,DW	Multi-Purpose Biodefense Immunoarray	800,000	DeLauro	Dodd, Mikulski
RDTE,DW	Multi-Spectral Laboratory (UML) and Analytical Services Center (ASCENT) Program	1,600,000	Lucas	Inhofe
RDTE,DW	Multivalent Marburg, Ebola Filovirus Vaccine Program	3,500,000	Brown (SC)	Graham
RDTE,DW	Nano Porous Hollow Fiber Regenerative Chemical Filter	1,000,000	Hayes	
RDTE,DW	National Biometrics Security Project	3,200,000		Byrd
RDTE,DW	National Consortium for MASINT Research	3,000,000		Bingaman, Cardin
RDTE,DW	National Nuclear Security Agency (NNSA) Metals Declassification for Reuse by DoD in Armaments	2,720,000	Granger	
RDTE,DW	National Repository of Digital Forensic Intelligence (NRDFI) and the Center for Telecommunications and Network Security (CTANS)	1,200,000	Lucas	Inhofe
RDTE,DW	Naval Research Lab Supercomputing Information Prototype	2,800,000	Obey	
RDTE,DW	Networked Standoff Biological LIDAR	1,200,000	Moran (VA)	
RDTE,DW	New England Defense Manufacturing Supply Chain Initiative	800,000	Michaud, Allen, Hodes, McGovern	Collins, Dodd, Kennedy, Kerry, Leahy, Lieberman, Reed, Sanders, Snowe, Whitehouse
RDTE,DW	New Mexico State University Institute for Defense and Public Policy	10,000,000		Bingaman
RDTE,DW	Next Generation Intelligent Portable Radionuclide Detection and Identification Systems	1,600,000	English	Specter
RDTE,DW	Next Generation Respiratory Protection	2,400,000		Johnson, Thune
RDTE,DW	NIDS Improved Handheld Biological Agent Detector	1,600,000	Castle	Biden, Carper

RDTE,DW	Night Vision Sensor	1,000,000	Hirono	
RDTE,DW	Northwest Defense Manufacturing Initiative	1,600,000	Walden, Blumenauer, DeFazio, Hooley, Wu	Murray, Smith, Wyden
RDTE,DW	Northwest Maritime Information and Littoral Operations Program	2,800,000	Dicks	
RDTE,DW	Novel System for Developing Therapeutics Against Botulism	4,000,000	Fortenberry	Hagel, Nelson (NE)
RDTE,DW	Novel Viral Biowarfare Agent Identification and Treatment (NOVBAIT)	4,000,000	Pelosi	
RDTE,DW	On-Site Alternative Fuel Manufacturing System	1,200,000	Carney	
RDTE,DW	Pacific Data Conversion and Technology Program	1,000,000		Akaka, Inouye
RDTE,DW	Pacific Region Interoperability Test and Evaluation Capability	3,000,000		Inouye
RDTE,DW	Partnership for Defense Innovation Wi-Fi Laboratory Testing and Assessment Center	2,000,000	Hayes	Burr
RDTE,DW	Pat Roberts Intel Scholars Program (PRISP)	2,000,000		Roberts
RDTE,DW	Photo Catalytic Oxidation (PCO) Demonstration for Water Reuse	2,400,000	Visclosky	
RDTE,DW	Photovoltaic Power Supply for Autonomous Sensors	2,400,000	Etheridge	
RDTE,DW	Picoceptor and Processor for Man-portable Threat Warning	3,500,000		Gregg
RDTE,DW	Plant Vaccine Development	1,600,000	Castle	Biden, Carper
RDTE,DW	Playas Training and Research Center Joint Training Experiment	4,800,000	Wilson (NM)	Bingaman, Domenici
RDTE,DW	Port and Hull Security 3D, Real Time Sonar System—Echoscope	1,600,000	Young (FL)	
RDTE,DW	Portable Rapid Bacterial Warfare Detection Unit	4,000,000	Boswell, Latham	Grassley, Harkin
RDTE,DW	Preventing Long-Term Brain and Lung Damage Caused by Battlefield Trauma Project	2,900,000	Slaughter, Higgins	Schumer
RDTE,DW	Protection from Oxidative Stress	1,600,000		Harkin
RDTE,DW	Protective Self-Decontaminating Surfaces	1,600,000	Grijalva, Aderholt	Shelby

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,DW	Radio Inter-Operability System (RIOS)	800,000	Moran (VA)	
RDTE,DW	Random Obfuscating Compiler Anti-Tamper Software	1,600,000	Michaud	Collins, Snowe
RDTE,DW	Range Element Network Enterprise Technology (RE-NET)	4,000,000	Kingston, Bishop (GA)	Chambliss, Isakson
RDTE,DW	Rapid Forensic Evaluation of Microbes in Biodefense	1,000,000	Murtha	
RDTE,DW	Rapid Response Institute	3,200,000	Pallone, Saxton, Smith (NJ)	Lautenberg, Menendez
RDTE,DW	Reactive Overlay and Removable CBRN Coatings	1,600,000	McDermott	Murray
RDTE,DW	Recombinant BChE Formulation Program	1,600,000	Sarbanes	Cardin
RDTE,DW	Reliability Testing of Lead-Free Circuits/Components	1,440,000	Visclosky	
RDTE,DW	Remote Sensor Network Services Platform	2,000,000		Conrad, Dorgan
RDTE,DW	Renewable Fuel Systems for Defense Applications	3,200,000	Andrews, Sires	Lautenberg, Menendez
RDTE,DW	Research of Chemical and Biological Warfare Agents	800,000	Rangel	
RDTE,DW	Research on a Molecular Approach to Hazardous Materials Decontamination	1,200,000		Craig, Crapo
RDTE,DW	Robotic Mobility Platform System	1,200,000	Boyd	Gregg
RDTE,DW	Roll-On, Roll-Off Reconnaissance, Surveillance, and Special Mission Palletized System	4,000,000	Murtha	
RDTE,DW	Scalable Topside Array Radar Demonstrator	800,000	Gilchrest, Bartlett, Ruppertsberger, Sarbanes	Cardin, Mikulski
RDTE,DW	SeaCatcher UAS Launch and Recovery System	1,600,000	Sarbanes	

RDTE,DW	SEAL Delivery Vehicle (SDV) Integrated Combat System (ICS)	3,200,000	Murtha	
RDTE,DW	Secure Media and ID Card Development	240,000		Reid
RDTE,DW	Secure, Miniaturized, Free Space, Optical Communications	2,000,000	Rothman	Lautenberg, Menendez
RDTE,DW	Security for Critical Communication Networks	3,600,000	Rothman, Sires	Lautenberg, Menendez
RDTE,DW	Semiconductor Photomask Technology Infrastructure Initiative	2,400,000	Tauscher	
RDTE,DW	Shock Trauma Research Center	2,000,000	Cleaver	
RDTE,DW	Signal Intelligence and Electronic Warfare Developments for Integration of SOF Systems	1,600,000	Brown (SC)	Graham
RDTE,DW	Simultaneous Field Radiation Technology (SFRT)	2,300,000	Pickering	Cochran, Wicker
RDTE,DW	Small Assault Vehicle Expeditionary (SAVE)	800,000		Landrieu
RDTE,DW	Smart Bomb Millimeter Wave Radar Guidance System	2,000,000		Cochran
RDTE,DW	Smart, Modular Regenerative Off-Grid Hydrogen Fuel Cell	1,000,000	Larson	Dodd
RDTE,DW	SOF Mission Training and Preparation Systems Interoperability	1,600,000	Young (FL)	
RDTE,DW	Software Assurance Education and Research Institute	800,000	Kilpatrick, Conyers	
RDTE,DW	Space-Based Interceptor Study	5,000,000		Allard, Inhofe, Kyl, Sessions
RDTE,DW	Spartan Advanced Composite Technology	1,600,000		Conrad, Dorgan
RDTE,DW	Spintronics Memory Storage Technology	2,400,000	Lewis (CA)	
RDTE,DW	Strategic Materials and Silicon Carbide Optics	4,400,000		Inouye
RDTE,DW	Superlattice Nanotechnology	2,000,000	Hayes	Burr, Dole
RDTE,DW	Superstructural Particle Evaluation and Characterization with Targeted Reaction Analysis (SPECTRA)	1,200,000		Burr, Dole
RDTE,DW	Surface Enhanced Infrared Detection of Threats	1,200,000	Edwards (TX)	

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,DW	Synthetic Fuel Innovation	4,000,000		Byrd
RDTE,DW	Tactical Biometrics Operating and Surveillance System (TBOSS)	1,600,000	Capito	
RDTE,DW	Technology for Shallow Water Special Operations Forces Mobility	2,400,000	Boyd	Nelson (FL)
RDTE,DW	Technology Infusion Cell (TIC)	1,000,000	Hayes	
RDTE,DW	Terahertz High-Resolution Portable Explosives Detector	800,000	Schiff	
RDTE,DW	Total Perimeter Surveillance	1,000,000	Walberg	Stabenow
RDTE,DW	Tunable MicroRadio for Military Systems	4,800,000		Conrad, Dorgan
RDTE,DW	UAV Situational Awareness System	1,000,000	Drake	
RDTE,DW	UAV Systems Operations Validation Program (USOVP)	5,000,000	Pearce, Wilson (NM)	Bingaman, Domenici
RDTE,DW	Ultra Low Power Electronics for Special Purpose Computers	1,600,000		Craig, Crapo
RDTE,DW	Ultra Photonics Program	1,280,000	Barrett	
RDTE,DW	Ultra Portable Unmanned Surveillance Helicopter	1,000,000	Murtha	
RDTE,DW	Ultrahigh-Strength Steel for Landing Gear	2,000,000	Hobson	
RDTE,DW	Ultra-rapid Next Generation Pathogen Identification	2,000,000		Cochran
RDTE,DW	UML UAV/UAS Test Facility	2,400,000	Cole	
RDTE,DW	Unified Management Infrastructure System	1,200,000	Schakowsky	
RDTE,DW	University Strategic Partnership	3,200,000	Wilson (NM)	Bingaman, Domenici

RDTE,DW	Unmanned Aerial Vehicle Avionics Upgrade (UAVAU)	1,200,000		Specter
RDTE,DW	Unmanned Aerial Vehicles	1,200,000		Stevens
RDTE,DW	Vaccine Development Program	800,000	Pascrell	Lautenberg, Menendez
RDTE,DW	Vacuum Sampling Pathogen Collection and Concentration	3,200,000	Simpson	Craig, Crapo
RDTE,DW	Validation of an Enhanced Urban Air Blast Tool	2,400,000	Nadler	Schumer
RDTE,DW	Vehicle Fuel Cell and Hydrogen Logistics Program	8,000,000		Levin
RDTE,DW	Vet-Biz Initiative for National Sustainment (VINS)	2,000,000	Sarbanes	Mikulski
RDTE,DW	ViriChip Rapid Virus Detection Systems	1,600,000		Harkin
RDTE,DW	Weapons Shot Counter	1,400,000		McConnell
RDTE,DW	Wiring Integrity Technology	1,600,000	Bishop (GA), Marshall	
RDTE,DW	X-Band/W-Band Solid State Power Amplifier	1,600,000	Young (FL)	
RDTE,DW	Zumwalt National Program for Countermeasures to Biological and Chemical Threats	1,200,000	Neugebauer	
RDTE,N	76mm Swarbuster Capability	1,600,000	Crenshaw	
RDTE,N	Accelerated Improvement for Active Surface Electronic Warfare Systems	1,600,000	Moran (VA)	
RDTE,N	Accelerating Fuel Cells Manufacturability and their Application in the Armed Forces	2,400,000	Slaughter	Schumer
RDTE,N	ACINT (MASINT) Tape Digitization Program	2,000,000		Inhofe
RDTE,N	Acoustic Research Detachment Large Scale Vehicles Operations Enhancement	480,000	Sali	Craig, Crapo
RDTE,N	Acoustic Research Detachment Test Support Platform Upgrade	1,500,000	Sali	Craig, Crapo
RDTE,N	Adaptive Diagnostic Electronic Portable Testset (ADEPT)	800,000	Schwartz	
RDTE,N	Adelos National Security Sensor System	2,000,000		Baucus, Tester

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,N	Advanced Airship Flying Laboratory, AAFL Phase 2	1,600,000		Smith, Wyden
RDTE,N	Advanced Composite Maritime Manufacturing	2,000,000	Castle	Biden, Carper
RDTE,N	Advanced Continuous Active Sonar for UUVs	2,500,000		Craig, Crapo
RDTE,N	Advanced Fluid Controls for Shipboard Applications Phase III	2,500,000	Garrett	Lautenberg, Menendez
RDTE,N	Advanced High Energy Density Surveillance Power Module	2,400,000	Baldwin	Kohl
RDTE,N	Advanced Linear Accelerator (LINAC) Facility	3,200,000	Hill	Bayh, Lugar
RDTE,N	Advanced Logistics Fuel Reformer for Fuel Cells	2,400,000	DeLauro	Dodd
RDTE,N	Advanced Molecular Medicine Initiative	2,000,000	Solis, Dreier	
RDTE,N	Advanced Naval Logistics	1,600,000		Casey, Specter
RDTE,N	Advanced Repair Technology for the Expeditionary Navy	800,000	Capps	
RDTE,N	Advanced Ship Self Defense Technology Testing	4,000,000	Bishop (UT)	Bennett, Hatch
RDTE,N	Advanced Simulation Tools for Aircraft Structures Made of Composite Materials	1,200,000	Clay	Bond
RDTE,N	Advanced Steam Turbine	1,600,000	Kuhl	Schumer
RDTE,N	Advanced Tactical Control System (ATCS)	1,600,000	Frank, Oliver	Kennedy, Kerry, Reed
RDTE,N	AEGIS Combat Information Center Modernization	4,000,000	Murtha	
RDTE,N	Affordable Weapons System	11,200,000	Hunter, Gallegly	
RDTE,N	Agile Laser Eye Protection	800,000	Walsh	Schumer

RDTE,N	Agile Port and High Speed Ship Technology	6,000,000	Sánchez, Linda	
RDTE,N	Aging Military Aircraft Fleet Support	1,600,000	Tiaht	Brownback, Roberts
RDTE,N	Air Combat Environment Test and Evaluation Facility Upgrade	3,000,000	Hoyer	Cardin, Mikulski
RDTE,N	Air Sentinel	1,000,000		Inouye
RDTE,N	Airborne Mine Countermeasures Open Architecture Technology Insertion	2,000,000	Davis (VA)	
RDTE,N	Aircraft Composite Rocket Launcher Improvement	2,500,000	McCarthy (NY)	
RDTE,N	All Weather Sense and Avoid Sensors for UAVs	2,500,000	Hoyer	Cardin, Mikulski
RDTE,N	Amelioration of Hearing Loss	1,000,000		Baucus, Tester
RDTE,N	Analytics for Shipboard Monitoring Systems	1,600,000	Drake	
RDTE,N	Arc Fault Circuit Breaker with Arc Location System	1,000,000	Matheson	Bennett, Hatch
RDTE,N	Assault Directed Infrared Countermeasures	2,000,000	Rothman	
RDTE,N	Assistive Technologies for Injured Servicemembers	1,600,000		Martinez
RDTE,N	ASW Training Interoperability Enterprise Demonstration Test Bed	1,600,000	Dicks	
RDTE,N	Automated Fiber Optic Manufacturing Initiative	2,800,000	Drake, Scott (VA)	Warner, Webb
RDTE,N	Automated Readiness Measurement System (ARMS)	2,800,000	Davis (VA), Courtney, Drake	Warner, Webb
RDTE,N	Autonomous Acoustic Array Advanced Tubular Solid Oxide Fuel Cell	2,000,000	Olver	Kennedy
RDTE,N	Autonomous Anti-Submarine Vertical Beam Array	1,600,000	Miller (NC), Coble	Burr
RDTE,N	Autonomous Marine Sensors and Networks for Rapid Littoral Assessment	1,600,000	Young (FL)	
RDTE,N	Autonomous Power Management for Distributed Operation	400,000		Conrad, Dorgan
RDTE,N	Autonomous Unmanned Surface Vessel	1,200,000		Akaka

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,N	Autonomous Unmanned Undersea Vehicle (UUV) Delivery and Communication (AUDAC) Implementation	2,800,000	Dicks, Insee	Murray
RDTE,N	Base Level Inventory Tracking System Enhancements	2,800,000		Vitter
RDTE,N	Bio/Nano-MEMS for Defense Applications	1,500,000		McConnell
RDTE,N	Biochemical Agent Detection	800,000	Edwards (TX)	
RDTE,N	Biosensors for Defense Applications	2,000,000		Landrieu
RDTE,N	Boat Trap System for Port Security/Water Craft Interdiction	2,400,000	Markey, Welch	Leahy
RDTE,N	Bow Lifting Body Ship Research	6,240,000	Kagen, Stupak	Inouye
RDTE,N	C-Band Radar Replacement Development	4,000,000	Young (FL)	
RDTE,N	Center for Applied Research in Intelligent Autonomous Systems	2,400,000	Sestak, Fattah	Casey, Specter
RDTE,N	Center for Commercialization of Advanced Technology	2,500,000	Lewis (CA), Davis (CA)	
RDTE,N	Center for Quantum Studies	1,200,000		Warner, Webb
RDTE,N	Chafing Protection System	1,200,000	Pomeroy	Conrad, Dorgan
RDTE,N	Collective Aperture Multi-Band Sensor System	3,500,000		Gregg, Sununu
RDTE,N	Combustion Light Gas Gun Projectile	4,000,000		Byrd
RDTE,N	Common Architecture Imaging System (CAIS) Program	800,000	Sherman	
RDTE,N	Common Below Decks Affordable Architecture	3,200,000	Young (FL)	

RDTE,N	Common Expeditionary Force Protection System Architecture	4,000,000	Kennedy	Reed
RDTE,N	Compact Ultra-fast Laser System Development	1,600,000	Ellsworth	Bayh, Lugar
RDTE,N	Composite Materials Enhancements through Polymer Science Research and Development	2,240,000		Cochran
RDTE,N	Composite Tissue Transplantation for Combat Wounded Repair	2,000,000		Chambliss
RDTE,N	Computational Modeling and High Performance Computing in Advanced Material Processing, Synthesis and Design	1,200,000	Watt	
RDTE,N	Condition-based Maintenance Enabling Technologies Program	2,400,000		Byrd
RDTE,N	Cooperative Engagement Capability	4,800,000	Young (FL)	
RDTE,N	Countermine Lidar UAV-based System	1,200,000	Taylor	Cochran
RDTE,N	Covert Robust Location Aware Wireless Network	1,600,000	Sanchez, Loretta	
RDTE,N	Cross-Domain Network Access System	800,000	Johnson (IL)	Durbin
RDTE,N	Data Acquisition Reporting and Trending System (DARTS)	2,400,000	Brady (PA)	
RDTE,N	DDG 51 Permanent Magnet Hybrid Electric Propulsion System	7,600,000	Bartlett, Murphy (CT), Olver, Tsongas	Dodd, Kennedy, Kohl, Lieberman
RDTE,N	DDG-51 Hybrid Drive System	6,600,000		Cochran, Wicker
RDTE,N	Defense Modernization and Sustainment Initiative	5,000,000	Kuhl	
RDTE,N	Deployable Command and Control Vehicle	1,200,000	Boyd	
RDTE,N	DEPUTEE—High Powered Microwave Non-Lethal Vehicle/Vessel Engine Disabling	1,600,000		Baucus, Bingaman
RDTE,N	Desktop Virtual Trainer Follow-On	2,400,000	Murtha	
RDTE,N	Detection and Neutralization of Electronically Initiated Improvised Explosive Devices	2,000,000	Emerson	
RDTE,N	Detection, Tracking, and Identification for ISRTE of Mobile and Asymmetric Targets	1,600,000		Akaka
RDTE,N	Digital Directed Manufacturing Project	1,700,000	Yarmuth	McConnell

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,N	Digital Modular Radio (DMR)	2,000,000	Pastor	
RDTE,N	Digitization, Integration, and Analyst Access of Investigative Files, NCIS	1,600,000		Byrd
RDTE,N	Directed Energy Initiative	1,760,000		Warner, Webb
RDTE,N	Disposable Biocidal Medical Masks for NAMRU Evaluation	800,000		Leahy
RDTE,N	Distributed Maritime Surveillance System	1,600,000		Hutchison
RDTE,N	Distributed Targeting Processor	2,400,000	Weldon	
RDTE,N	Domain Specific Knowledge Capture Interface	1,360,000	Carney	
RDTE,N	Durability, Energy Saving and Sustainability of Oceanic Vehicles and Support Infrastructure Through Use of Nanotech Lubricants	800,000		Lincoln, Pryor
RDTE,N	E-Beam Free Form Repair Qualification	1,200,000	Lipinski, Inslee	
RDTE,N	Electrochemical Field Deployable System for Water Generation	2,800,000	Berkley	Ensign, Reid
RDTE,N	Electromagnetic Signature Assessment System using Multiple AUVs	1,600,000		Craig, Crapo
RDTE,N	Electronic Motion Actuation Systems	800,000	Latta, Higgins, Shuler, Sutton	Bennett, Dole, Hatch, Voinovich
RDTE,N	Energetics S&T Workforce Development	4,500,000	Hoyer	Cardin, Mikulski
RDTE,N	Energy Efficient Gallium Nitride Semiconductor Technology	1,040,000	Visclosky, Capps	
RDTE,N	Enhanced Special Weapons/Nuclear Weapons Security program	1,600,000	Hooley, Wu	Smith, Wyden
RDTE,N	Environmentally Sealed, Ruggedized Avionics Displays	4,000,000	Butterfield, Hayes, McIntyre	Burr, Dole

RDTE,N	EP-3E Requirements Capability Migration Technology Integration Lab	4,800,000	Edwards (TX)	
RDTE,N	Evaluating ELF Signals in Maritime Environments	1,600,000	Sali	Craig, Crapo
RDTE,N	Expeditionary Swimmer Defense System	2,400,000		Murray
RDTE,N	Extended Underwater Optical Imaging	2,000,000	Mahoney, Hastings (FL)	Martinez, Nelson (FL)
RDTE,N	Extensible Launching System	3,000,000	Cummings, Ruppertsberger	Cardin, Mikulski
RDTE,N	Extreme Torque Density (XTM) Propulsion Motor	800,000	Altmire	Casey, Specter
RDTE,N	F/A-18 Avionics Ground Support System	2,400,000	Peterson (PA)	Casey, Specter
RDTE,N	Fiber Optic Conformal Acoustic Velocity Sensor (FOCAVES)	2,000,000	Cannon, Bishop (UT)	Bennett, Hatch
RDTE,N	Field Support of Fiber Optic Cable	1,600,000	Schwartz	
RDTE,N	Floating Area Network Littoral Sensor Grid	4,800,000	Dicks	
RDTE,N	Friction Stir Welding	800,000		Bennett
RDTE,N	Fusion, Exploitation, Algorithm, Targeting High-Altitude Reconnaissance	6,000,000		Bennett
RDTE,N	Future Fuel Non-Tactical Vehicle Initiative	1,600,000	Kuhl	Levin, Stabenow, Schumer
RDTE,N	Galfenol Energy Harvesting	1,600,000	Latham	Grassley, Harkin
RDTE,N	Gallium Nitride RF Power Technology	1,600,000	Coble, Watt	Burr, Dole
RDTE,N	Guillotine	1,600,000		Warner, Webb
RDTE,N	Hampton University Cancer Treatment Initiative	8,000,000	Scott (VA), Moran (VA)	
RDTE,N	Harbor Shield—Homeland Defense Port Security Initiative	3,500,000		Reed, Voinovich, Whitehouse
RDTE,N	HealthForces	2,800,000		Byrd
RDTE,N	High Awareness Littoral Observing (HALO) Sensor—360 Degree Imaging for Submarines	1,200,000	Neal, Olver	Kerry, Leahy

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Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,N	High Energy Conventional Energetics (Phase II)	3,200,000	Hoyer	Bingaman, Cardin, Domenici, Mikulski
RDTE,N	High Power Density Motor Drive	1,000,000	Murphy, Tim	
RDTE,N	High Power Density Propulsion and Power for USSVs	1,600,000	Allen	Collins, Snowe
RDTE,N	High Power Free Electron Laser Development for Naval Applications	2,400,000	Wittman	Warner, Webb
RDTE,N	High Speed ACRC & Composites Sea Lion Craft Development	2,000,000		Cochran, Wicker
RDTE,N	High Speed Anti-radiation Demonstration (HSAD)	800,000	Davis (VA), McKeon	
RDTE,N	High Speed Blood and Fluid Transfusion Equipment	3,100,000		Reid
RDTE,N	High Strength Welded Structures	800,000	Moran (VA)	
RDTE,N	High Temperature Superconductor Trap Field Magnet Motor	2,000,000	Carter	
RDTE,N	Highly Corrosive-Resistant Alloy Joining for Nuclear Applications	800,000	Simpson	Craig, Crapo
RDTE,N	Highly Integrated Optical Interconnect for Military Avionics	1,600,000	Stupak	Levin, Stabenow
RDTE,N	Holographic Optical Filter for Light Detection and Ranging (LIDAR)	2,000,000	Schwartz; Murphy, Patrick; Sestak	Casey, Specter
RDTE,N	HTDV	10,000,000		Inouye
RDTE,N	Human Neural Cell-Based Biosensor	1,000,000		Isakson
RDTE,N	Hydrogen Fuel Cell Development	1,200,000	Butterfield	Dole
RDTE,N	Hydrokinetic Power Generator	1,600,000	Dingell	Levin, Stabenow
RDTE,N	Immersive Naval Officer Training Systems	3,000,000		Reed, Whitehouse

RDTE,N	Implementation of Formable Textile for Composite Shaped Aerospace Composite Structures	1,600,000	Michaud, Allen	Collins, Snowe
RDTE,N	Improved Corrosion Protection for Electromagnetic Aircraft Launch System (EMALS) for CVN-21 Class Carriers	2,000,000	LoBiondo, Sestak, Smith (NJ)	
RDTE,N	Improved Interoperability Research and Development to support NAVAIR and GWOT	2,000,000	Hoyer	
RDTE,N	Improved Stealth and Lower Cost Operations for Ships Using High Strength Flame Resistant LCP Reinforced Netting	1,600,000		Murray
RDTE,N	In Buoy Processor for Trigger and Alert Sonobuoy System (TASS)	2,000,000	Abercrombie	
RDTE,N	Infrared LED Free Space Optics Communications Advancement	400,000	Hunter	
RDTE,N	Infrared Materials Laboratories	2,500,000	Cole	Inhofe
RDTE,N	Integrated Advanced Ship Control (IASC)	1,200,000	Tierney	
RDTE,N	Integrated Manufacturing Enterprise	2,400,000	McCreary	Landrieu, Vitter
RDTE,N	Integrated Naval Electronic Warfare	1,000,000	Drake	
RDTE,N	Integrated Power System Converter	2,000,000	Murphy, Tim	Casey, Specter
RDTE,N	Integrated Product Support Data Management System	1,000,000	Rogers (KY)	
RDTE,N	Integrated Ship and Motion Control Technology	3,440,000	Courtney, Gillibrand	Dodd, Lieberman, Schumer
RDTE,N	Integrated Warfighter Biodefense Program	3,000,000	Castle	Biden, Carper
RDTE,N	Integration of Electro-Kinetic Weapons into Next Generation of Navy Ships	4,500,000	Boyd	Martinez, Nelson (FL)
RDTE,N	Integration of Logistics Information for Knowledge Projection and Readiness Assessment	1,600,000		Byrd
RDTE,N	Intelligent Retrieval of Imagery	2,400,000	Moran (VA)	
RDTE,N	Intelligent Work Management for Class Squadrons (CLASSRONS)	2,000,000	Brown (FL)	
RDTE,N	Joint Explosive Ordnance Disposal Diver Situational Awareness System	1,200,000	Moran (VA)	

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Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,N	Joint Integrated Systems Technology for Advanced Digital Networking (JIST-NET)	800,000	Hunter	
RDTE,N	JSF F-35B Lift Fan Component Manufacturing	1,600,000	Smith (TX), Rodriguez	
RDTE,N	Kinetic Hydropower System (KHPS) Turbine	2,400,000	Inslee, Engel, Maloney, Towns	Murray, Schumer
RDTE,N	Landing Craft Composite Lift Fan	1,000,000	Dent, Garrett	Lautenberg, Menendez
RDTE,N	Large-Scale Demonstration Item for Virginia Class Submarine Bow Dome	1,800,000	Taylor	Cochran
RDTE,N	Laser Perimeter Awareness System	1,500,000		Coleman
RDTE,N	Layered Surveillance/Sensing	1,600,000	Young (FL)	
RDTE,N	LCS Common Mission Package Training Environment	4,500,000	Murtha	
RDTE,N	Lightweight Composite Structure Development for Aerospace Vehicles	800,000	Sullivan	Inhofe
RDTE,N	Lithium Batteries	1,600,000	Bishop (GA)	Chambliss, Isakson
RDTE,N	Lithium/Sulfur Chemistry Validation for Sonobuoy Application	1,600,000	Boyda	Brownback, Roberts
RDTE,N	Lithium-Ion Cell Development with Electro Nano Materials	4,000,000		Bond
RDTE,N	Littoral Battlespace Sensing-Autonomous UUV	800,000	Alexander	Landrieu
RDTE,N	Long Range Synthetic Aperture Sonar for ASW	800,000	Moran (VA)	Warner, Webb
RDTE,N	Long Wavelength Array	2,800,000	Wilson (NM)	Bingaman, Domenici
RDTE,N	Low Acoustic and Thermal Signature Battlefield Power Source	2,000,000		Baucus, Tester
RDTE,N	Low Cost Laser Module Assembly for Acoustic Sensors	1,600,000	Sestak	Specter

RDTE,N	Low Cost Multi-Channel Camera System	2,400,000	Bonner	
RDTE,N	Low Cost, Expendable, Fiber Optic Sensor Array	5,000,000	Murtha	Specter
RDTE,N	Low-Cost Image-Based Navigation and Precision Targeting	800,000	Markey	Kerry
RDTE,N	Low-Signature Modular Weapon Platform	3,200,000	Blumenauer, Baird, DeFazio, Hooley, Wu	Murray, Smith, Wyden
RDTE,N	M65 Bismaleimide Carbon Fiber Prepreg	1,600,000	Aderholt, Bishop (UT), Tauscher	Bennett, Dodd, Hatch
RDTE,N	Magnetic Refrigeration Technology	2,400,000	Baldwin	Kohl
RDTE,N	MARCOM Computer Research	1,000,000		Hutchison
RDTE,N	Marine Mammal Awareness, Alert and Response Systems (MMAARS)	2,400,000	Abercrombie	
RDTE,N	Marine Mammal Hearing and Echolocation Research	1,600,000	Abercrombie	
RDTE,N	Maritime Security—Surface and Sub-surface Surveillance System and Expeditionary Test-Bed	3,600,000	Boyd	
RDTE,N	Micro-munitions Interface for Tactical Unmanned Systems (MITUS)	1,600,000	Ehlers, McCarthy (CA)	Stabenow
RDTE,N	Millimeter Wave Imaging	1,600,000	Castle	Biden, Carper
RDTE,N	Mk 48 Torpedo Post-Launch Communication System	800,000	Arcuri	Schumer
RDTE,N	Mk V.1 MAKO for Improved Signature and Weight Performance	2,000,000	Allen	Collins, Snowe
RDTE,N	Mobile Acoustic Decoys for Surface Ship Defense	960,000	Price (NC)	Dole
RDTE,N	Mobile Manufacturing and Repair Cell/Engineering Education Outreach Program	2,400,000	Conyers, Dingell, Kilpatrick, Knollenberg, Levin	Levin
RDTE,N	Mobile Oxygen, Ventilation and External Suction (MOVES)	1,200,000	Johnson, Sam	Cornyn
RDTE,N	Mobile Valve and Flex Hose Maintenance (MVFM)	1,000,000	Allen	Collins, Snowe
RDTE,N	Modular Advanced Vision System	2,000,000		Casey, Specter

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Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,N	Molten Carbonate Fuel Cell Demonstrator	3,500,000		Dodd, Lieberman
RDTE,N	Multi-Function Laser System	1,200,000	English	Casey, Specter
RDTE,N	Nanotechnology Engineering and Manufacturing Operations	1,600,000	Hirono	
RDTE,N	National Initiatives for Applications of Multifunctional Materials	1,600,000		Hutchison
RDTE,N	National Radio Frequency Research and Development and Technology Transfer Center	4,000,000	Buyer, Ellsworth	Bayh, Lugar
RDTE,N	National Security Training	1,600,000	Serrano	
RDTE,N	National Sensor Fusion Support for Puget Sound Port Security	1,600,000	Dicks	
RDTE,N	National Terrorism Preparedness Institute Anti-Terrorism/Counter-Terrorism Technology Development and Training	3,000,000	Young (FL)	
RDTE,N	NAVAIR Distance Support Environment	800,000	Pascrell	
RDTE,N	Naval Ship Hydrodynamic Test Facilities	4,000,000	Van Hollen	Cardin, Mikulski
RDTE,N	Naval Special Warfare 11m RIB Replacement Craft Design	800,000	Michaud, Allen	Collins, Snowe
RDTE,N	Navy Multi-Fuel Combustor for Shipboard Fuel Cell Systems	1,600,000	Lampson	
RDTE,N	Navy Science and Technology Outreach (N-STAR)—Maryland	1,000,000		Cardin
RDTE,N	Network Expansion and Integration of Navy/NASA RDT&E Ranges and Facilities	4,800,000		Cardin, Mikulski
RDTE,N	Next Generation Automated Technology for Landmine Detection	1,600,000		Hagel, Nelson (NE)
RDTE,N	Next Generation Electronic Warfare Simulator	1,200,000	McCarthy (CA)	

RDTE,N	Next Generation Phalanx with Laser Demo	10,700,000	Crowley, Walsh, Bishop (UT), Obey	Bunning, Hatch, Kohl, McConnell, Schumer
RDTE,N	Next Generation Scalable Lean Manufacturing Initiative	2,400,000	Young (FL)	
RDTE,N	Novel Coating Technologies for Military Equipment	4,800,000	Fortenberry	Hagel, Nelson (NE)
RDTE,N	NULKA Decoy and Mk 53 Decoy Launch System	1,600,000		Kennedy
RDTE,N	ONAMI Nanoelectronics and Nanometrology Initiative	4,000,000	Wu, Blumenauer, DeFazio, Hooley, Walden	Smith, Wyden
RDTE,N	On-Board Vehicle Power Systems Development	2,400,000		Shelby
RDTE,N	On-Demand Custom Body Implants/Prosthesis for Injured Personnel	1,600,000	Dingell	Levin, Stabenow
RDTE,N	Open Architecture/Maintenance Free Operating Period (MFOP)	2,800,000	Moran (VA)	
RDTE,N	Optimization of New Marine Coatings	1,600,000		Conrad, Dorgan
RDTE,N	Out of Autoclave Composite Processing	1,600,000	Clay, Akin	
RDTE,N	Over-the-Horizon Vessel Tracking	800,000	Wittman, Scott (VA)	
RDTE,N	Pacific Airborne Surveillance and Testing	15,000,000		Inouye
RDTE,N	Paragon System Upgrades	1,600,000	Moran (VA)	
RDTE,N	Penn State Cancer Institute	2,800,000	Holden	
RDTE,N	Permanent Magnet Linear Generator Power Buoy System	2,000,000	Hooley	Smith, Wyden
RDTE,N	Persistent Surveillance Wave PowerBuoy System	3,000,000		Lautenberg, Menendez
RDTE,N	Planar Solid Oxide Fuel Cell System Demonstration at UTC SimCenter	3,500,000	Wamp	
RDTE,N	PMRF Force Protection Lab	2,000,000		Inouye
RDTE,N	Point Mugu Electronic Warfare Laboratory Upgrade	1,600,000	Gallegly	
RDTE,N	Portable Launch and Recovery System for Unmanned Aerial Vehicle Operation	3,200,000	Hastings (WA)	Cantwell, Murray, Smith, Wyden

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,N	Power Dense Integrated Power System for CG(X)	3,000,000	Bartlett	Mikulski
RDTE,N	Precision Terrain Aided Navigation (PTAN)	1,600,000	Young (FL)	
RDTE,N	Predicting Bio-Agent Threat Profiles Using Automated Behavior Analysis	1,600,000	Herseth Sandlin	Johnson
RDTE,N	Puget Sound Anoxia Research for the Department of the Navy	1,200,000	Dicks	
RDTE,N	Pulse Virtual Clinical Learning Lab	2,400,000	Ortiz	
RDTE,N	Quiet Drive Advanced Rotary Actuator	2,000,000	Richardson, Harman, Higgins	Schumer, Warner, Webb
RDTE,N	Radiation Hardness and Survivability of Electronic Systems	800,000		Bayh, Lugar
RDTE,N	Real-Time Hyperspectral Targeting Sensor	2,400,000	Hunter	Gregg, Sununu
RDTE,N	Reduction of Weapon System Downtime Rapid Repair Structural Adhesives	2,400,000	Langevin	Reed, Whitehouse
RDTE,N	Regenerative Fuel Cell Back-up Power	1,200,000	Larson	Dodd
RDTE,N	Remote Continuous Energetic Material Manufacturing for Pyrotechnic IR Decoys	1,600,000	McCrery	Vitter
RDTE,N	Repair of Massive Tissue Loss and Amputation through Composite Tissue Allotransplantation	3,200,000	Cummings	Cardin
RDTE,N	Reparative Core Medicine	800,000	Young (FL)	
RDTE,N	Research Support for Nanoscale Research Facility	2,800,000	Stearns	Martinez
RDTE,N	RFID TECH Program	800,000		McConnell
RDTE,N	Rotor Blade Protection Against Sand and Water Erosion	800,000	Edwards (TX)	

RDTE,N	Sacrificial Film Laminates for Navy Helicopter Windscreens	960,000	Spratt	Graham
RDTE,N	Scalable Open Architecture Upgradeable Reliable Computing Environment	3,000,000		Murray
RDTE,N	Sea Base Mobility and Interfaces	5,000,000		Stevens
RDTE,N	Self Healing Target System for Laser and Sniper Ranges	1,600,000	Porter	Reid
RDTE,N	Semi-Submersible UUV	1,600,000		Vitter
RDTE,N	Sensor Integration Framework	1,200,000	Boyd	
RDTE,N	Sensorless Control of Linear Motors in EMALS	2,800,000		Reed
RDTE,N	Ship Affordability Through Advanced Aluminum	2,000,000	Carter, Braley	Grassley, Harkin
RDTE,N	Shipboard Electronic Warfare Sustainment Training	3,200,000	Mollohan	
RDTE,N	Shipboard Production of Synthetic Aviation Fuel	1,000,000		Bennett, Hatch
RDTE,N	Single Generator Operations Lithium Ion Battery	4,000,000		Lugar, Reid
RDTE,N	SKYBUS 80K and 130K LTA-UAS Multirole Technologies	2,000,000		Collins
RDTE,N	Smart Instrument Development for the Magdalena Ridge Observatory (MRO)	7,000,000	Pearce, Wilson (NM)	Bingaman, Domenici
RDTE,N	Smart Machinery Spaces System	2,400,000	Granger	
RDTE,N	Smart Valve	800,000	Allen	Collins, Snowe
RDTE,N	SOF Test Environment for Advanced Team Collaboration Missions	2,000,000	Hoyer	Cardin, Mikulski
RDTE,N	Solid Oxide Fuel Cell	800,000		Corker
RDTE,N	Solid-State DC Protection System	1,200,000	Moore (WI), Bartlett, Murphy (CT)	Dodd, Lieberman
RDTE,N	Sonobouy Wave-Energy Module	3,000,000		Landrieu, Vitter
RDTE,N	Stabilized Laser Designation Capability	2,000,000	Thompson (CA)	

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,N	Standoff Explosive Detection System (SEDS)	1,200,000	Knollenberg	Stabenow
RDTE,N	Strategic/Tactical Resource Interoperability Kinetic Environment Program	1,120,000		Cochran
RDTE,N	Strike Weapon Propulsion (SWEAP)	2,400,000	Barton, Doolittle	
RDTE,N	Submarine Automated Test and Re-Test (ATRT)	2,000,000	Moran (VA)	
RDTE,N	Submarine Environment for Evaluation and Development	2,400,000		Reed
RDTE,N	Submarine Fatline Vector Sensor Towed Array	800,000	Gilchrest, Bartlett, Courtney	Dodd, Lieberman
RDTE,N	Submarine Littoral Defense System	1,600,000	Langevin, Courtney, Kennedy	Reed
RDTE,N	Submarine Maintenance Automation and Communication System (SMACS)	1,600,000	Moran (VA)	
RDTE,N	Submarine Panoramic Awareness System Program	1,600,000		Durbin
RDTE,N	Supply Chain Logistics Capability at the ABL NIROP	8,000,000		Byrd
RDTE,N	Supportability Training Services Infrastructure	1,600,000	Rehberg	
RDTE,N	Sure Trak Re-Architecture and Sensor Augmentation	2,000,000	Hoyer, Cummings, Ruppersberger, Sarbanes	Cardin
RDTE,N	Sustainability of AN/SPS-49 Common Signal Data Processor	2,800,000	Obey	
RDTE,N	Swimmer Detection Sonar Network for the Portsmouth Naval Shipyard	3,200,000	Hodes, Shea-Porter	Collins, Snowe, Sununu
RDTE,N	System for Intelligent Task Assignment and Readiness (SITAR)	800,000	Hunter	
RDTE,N	Tactical E-Field Buoy Development	1,600,000	Hunter	

RDTE,N	Testing of Critical Components for Ocean Alternate Energy Options for the Department of the Navy	2,000,000	Abercrombie	
RDTE,N	Texas Microfactory	3,000,000		Hutchison
RDTE,N	Theater Undersea Warfare Initiative	2,400,000		Inouye
RDTE,N	Thin Film Materials for Advanced Applications, Advanced IED and Anti-Personnel Sensors	3,000,000		Leahy
RDTE,N	Tomahawk Cost Reduction Initiatives	1,600,000	Bishop (UT)	Bennett, Hatch
RDTE,N	Topical Hemostat Effectiveness Study	800,000		Coleman, Klobuchar
RDTE,N	Torpedo Composite Homing Array	1,600,000	Tsongas	Kerry
RDTE,N	Total Ship Training System	1,040,000	Moran (VA)	
RDTE,N	TSG Technology Accreditation	2,400,000		Bond
RDTE,N	U.S. Navy Metrology and Calibration (METCAL)	2,800,000	Calvert	
RDTE,N	UAS Optimization Technologies	2,000,000		Byrd
RDTE,N	Ultra-Wide Coverage Visible Near Infrared Sensor for Force Protection	1,200,000	Bean	
RDTE,N	Underground Coordination of Managed Mesh-networks (UCOMM)	2,400,000	Moran	
RDTE,N	Undersea Launched Missile Study	3,200,000	Courtney, Kennedy, Langevin, Scott (VA)	Dodd, Lieberman, Reed
RDTE,N	Undersea Weapons Enterprise Common Automated Test Equipment	3,200,000	Dicks	
RDTE,N	Unique Identification of Tangible Items	3,000,000		Wicker
RDTE,N	Universal Description, Discovery and Integration	4,300,000		Conrad, Dorgan
RDTE,N	Unmanned Aerial Vehicle Fuel Cell Power Source with Hybrid Reforming	1,600,000	Higgins	Schumer
RDTE,N	Unmanned Air Systems Tactical Control System	2,500,000	Hoyer, Porter	
RDTE,N	Unmanned Force Augmentation System	2,400,000	Sessions, Burgess	

DEFENSE—Continued

Account	Project	Amount	Requester(s)	
			House	Senate
RDTE,N	Unmanned Ground Vehicle Mobility and Coordination in Joint Urban/Littoral Environments	1,200,000	Carney	
RDTE,N	Unmanned Undersea Vehicles Near Term Interim Capability	4,000,000	Kennedy	
RDTE,N	US Navy Cancer Vaccine Program	2,400,000	Hunter, Jones (NC)	Landrieu, Vitter
RDTE,N	US Navy Pandemic Influenza Vaccine Program	1,600,000	McHugh	
RDTE,N	USMC Electronic Warfare (EW) Training	2,400,000	Mica	
RDTE,N	Validation of Lift Fan Engine Systems	2,000,000	Doolittle	
RDTE,N	Vet-Biz Initiative for National Sustainment (VINS-Navy)	1,600,000	Brown (SC), Clyburn, Salazar	Allard
RDTE,N	Video and Water Mist Technologies for Incipient Fire Detection on Ships	3,200,000	DeLauro, Larson	Dodd
RDTE,N	Virtual Onboard Analyst (VIRONA) for Multi-Sensor Mine Detection	1,000,000		Inouye
RDTE,N	Water Security Program (Inland Water Quality and Desalination)	2,400,000		Bingaman, Domenici
RDTE,N	Water Space Management Navigation Decision Aid	2,400,000	Dicks	
RDTE,N	Wave Energy PowerBuoy Generating System for the Department of the Navy	1,600,000	Abercrombie	
RDTE,N	Wide Area Sensor for Force Protection Targeting	1,600,000	Bean	
RDTE,N	Wireless Sensors for Navy Aircraft	2,400,000	Welch	Leahy
RDTE,N	Zero-Standoff HERO-compliant RFID Systems	1,600,000		Conrad, Dorgan
RDTE,N (MC)	Anti-Sniper Infrared Targeting System	2,000,000	Rogers (KY)	Bunning, McConnell
RDTE,N (MC)	Ballistic Helmet Development	1,200,000	King (NY)	

RDTE,N (MC)	Battlefield Sensor Netting	2,400,000	Young (FL)	
RDTE,N (MC)	Center for Geospatial Intelligence and Investigation (GII)	1,520,000	Granger, Carter	
RDTE,N (MC)	Craft Integrated Electronic Suite (CIES)	2,880,000	Mollohan	
RDTE,N (MC)	Eye Safe Laser Warning Systems	2,000,000	Baird, Wu	Smith, Wyden
RDTE,N (MC)	Global Supply Chain Management	1,600,000	Bishop (GA)	
RDTE,N (MC)	Ground Warfare Acoustical Combat System of Netted Sensors	2,000,000	Sullivan, Boren	Inhofe
RDTE,N (MC)	High Power, Ultra-Lightweight Zinc-Air Battery	2,500,000	Welch, Akin, Coble, Graves, Kucinich, Ryan (OH), Sutton	Dole, Leahy
RDTE,N (MC)	Hybrid Capacitor Supercell for Marine Combat Vehicle	1,200,000	Altmire	Casey, Specter
RDTE,N (MC)	Logistics Technology Improvements	1,600,000	Bishop (GA)	Chambliss, Isakson
RDTE,N (MC)	M2C2	3,800,000		Inouye
RDTE,N (MC)	Marine Air-Ground Task Force Situational Awareness	1,000,000		Inouye
RDTE,N (MC)	Marine Corps Shotgun Modernization Program	3,000,000	Hoyer	Mikulski
RDTE,N (MC)	Marine Expeditionary Rifle Squad—Sensor Integrated, Modular Protection, Combat Helmet (MERS-SIMP)	1,600,000	Rehberg	Baucus, Tester
RDTE,N (MC)	Near Infrared Optical (NIRO) Augmentation System	800,000	Moran (VA)	
RDTE,N (MC)	Urban Operations Laboratory	1,600,000	Boyda	Brownback, Roberts
RDTE,N (MC)	USMC Logistics Analysis and Optimization	2,400,000	Bishop (GA)	
RDTE,N (MC)	Warfighter Rapid Awareness Processing Technology	4,000,000	Abercrombie, Hirono	Akaka
SCN	AGS Pallets	6,000,000		McConnell
SCN	Large Harbor Tugs	11,800,000		Murray