

TITLE IV

RESEARCH, DEVELOPMENT, TEST AND EVALUATION

The fiscal year 2008 Department of Defense Research, Development, Test and Evaluation budget request totals \$75,117,194,000. The accompanying bill recommends \$76,231,440,000. The total amount recommended is an increase of \$1,114,246,000 above the fiscal year 2008 budget estimate and is \$509,836,000 above the total provided in fiscal year 2007. The table below summarizes the budget estimate and the Committee's recommendations.

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST

RECAPITULATION			
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY.....	10,589,604	11,509,540	+919,936
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, NAVY.....	17,075,536	17,718,624	+643,088
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, AIR FORCE.	26,711,940	26,163,917	-548,023
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, DEFENSE-WIDE.....	20,559,850	20,659,095	+99,245
OPERATIONAL TEST AND EVALUATION, DEFENSE.....	180,264	180,264	---
GRAND TOTAL, RDT&E.....	75,117,194	76,231,440	+1,114,246

CRUISE MISSILE DEFENSE

The Committee remains concerned about the lack of an integrated defense of the homeland against cruise missile, other low-altitude aircraft and short range missile attacks. While the Committee endorses the plan for the Commander, United States Strategic Command, to be the Air and Missile Defense Integrating Authority, and for the United States Northern Command to retain responsibility for the Homeland Air and Cruise Missile Defense mission, the Committee believes sufficient progress has not been made with respect to developing and fielding the capabilities necessary for defense against such threats. To ensure progress toward fielding this critical capability, the Committee directs the Secretary of Defense to provide a report to the congressional defense committees within 90 days of the enactment of this Act. The report shall include a plan for development of the cruise missile defense capabilities needed, deployment of those capabilities, and integration of those capabilities into the ballistic missile defense system when feasible. The plan shall specify an organization within the Department of Defense responsible for budgeting for and developing an overall architecture definition, acquisition planning, integration and testing of recommended deployment options, and execution of the acquisition plan. This office will also be responsible for coordinating with U.S. Strategic Command and U.S. Northern Command. In addition, this plan will identify each element of the Department of Defense that will be responsible under the plan for individual element program acquisition execution in order to achieve an integrated homeland defense capability. The Committee strongly recommends leveraging both the existing ballistic missile defense command and control capabilities where applicable and the ongoing asymmetric missile defense architecture definition activity.

JOINT COMMON MISSILE/JOINT AIR-TO-GROUND MISSILE

The Joint Air-to-Ground Missile (JAGM), formerly known as the Joint Common Missile (JCM), is a fixed and rotary wing aviation-launched missile system that provides advanced line-of-sight and non-line-of-sight capabilities, including precision strike, passive, and fire-and-forget seeker technologies with increased range and lethality. JAGM provides double the range of Hellfire (16,000 v. 8,000 meters for helicopter launches) allowing flight crews to take full advantage of target acquisition and guidance systems.

The Joint Common Missile (JCM) program was designed to mitigate missile credibility gaps identified by the Joint Capabilities Integration and Development System (JCIDS). The program has performed on schedule and on budget. In December 2004, the Department of Defense terminated the program choosing to assume temporary risk, and rely on less capable legacy missiles, or other guided munitions, which address some of the same targets. In August of 2005, the Joint Requirements Oversight Council revalidated the requirement for Joint Common Missile. A technology maturation effort began in February 2005. In September 2006 the Joint Staff published Joint Requirements Oversight Memorandum 185-06, re-establishing the program. The Joint Common Missile has been renamed the Joint Air-to-Ground Missile. On May 14, 2007, the

Army notified the JCM/JAGM contractor of a “Limitation of Funds”, that no additional funding would be added to the contract, and provided the contractor with close out instructions. The Department of Defense has indicated plans for a JCM/JAGM re-competition.

Congress added funds in the Department of Defense Appropriations Acts for fiscal years 2006 and 2007 to keep the JCM program going, recognizing the advanced capabilities offered by the JCM program and also recognizing that the legacy Maverick, Hellfire and TOW missiles offered less capability and an aging inventory. The fiscal year 2008 budget request includes \$53,500,000 in Research, Development, Test and Evaluation, Army; and \$15,000,000 in Research Development, Test and Evaluation, Navy for JAGM.

The Committee encourages the Department of Defense to continue to pursue the Joint Air-to-Ground Missile program and to fully resource the program in order to provide flight crews with a weapon system that has greater engagement range, insensitive munitions technology, and improved seeker, warhead and rocket motor technologies. The Committee notes with considerable frustration that the Department of Defense has poorly managed and finally terminated a highly successful program. The Department chose to terminate a program with a validated requirement that was performing on cost and schedule, and the Department did not execute the additional funding that the Congress provided to continue this successful program.

The Committee recommendation fully funds the fiscal year 2008 request for Joint Air-to-Ground Missile. The Committee strongly encourages the Department of Defense to fully fund the Joint Air-to-Ground Missile program in future budget requests. Additionally, the Committee directs the Government Accountability Office (GAO) to conduct a review of the management by the Department of Defense of the Joint Common Missile program to include program requirements validation; program performance; the decision to terminate the program; subsequent requirements revalidation; the execution of additional funding provided by Congress in order to continue the program; and the decision to re-compete the program under a new name, Joint Air-to-Ground Missile. The GAO shall provide a report to the congressional defense committees not later than January 30, 2008.

SMALL BUSINESS TECHNOLOGY INSERTION

The Committee notes that several major acquisition programs under the purview of the Department of Defense have been plagued by cost growth. The Committee is troubled by the seemingly increasing trend in the number of programs that breach the Nunn-McCurdy thresholds each year. A clear cut cause for this trend is not immediately obvious. The Department often preaches transformation and acquisition reform in its acquisition policies and procedures, however the cost growth trend continues. The Committee recognizes that transformation combined with a smart acquisition process should result in affordable and interoperable weapon systems and platforms. Open architecture systems are an example of a transformational technology that has resulted in cost savings or avoidance to the Department. The Committee believes

that an untapped source for similar technologies and ideas is the small business community which harbors many of the Nation’s innovative thinkers and creative minds. In an effort to tap this source for transformational technologies and ideas that should lead to cost reduction measures such as improved manufacturing processes, open architecture technologies, software development and a host of others, the Committee provides \$100,000,000 to the Research and Development accounts of the services. This funding will be available only to fund small business efforts for high risk/high reward component and technology development for inclusion in the major program acquisition process.

SPECIAL 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” in this report are congressional interest items for the purpose of the Base for Reprogramming (DD 1414). Each of these items must be carried on the DD Form 1414 at the stated amount, specifically addressed in the conference report. These items remain special interest items whether or not they are repeated in a subsequent conference report.

REPROGRAMMING GUIDANCE FOR ACQUISITION ACCOUNTS

The Committee directs the Department of Defense to continue to follow the reprogramming guidance specified in the report accompanying the House version of the fiscal year 2006 Department of Defense Appropriations Bill (H.R. 109–110). 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 report.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY

Fiscal year 2007 appropriation	\$11,054,958,000
Fiscal year 2008 budget request	10,589,604,000
Committee recommendation	11,509,540,000
Change from budget request	+919,936,000

This appropriation finances the research, development, test and evaluation activities of the Department of the Army.

The Committee recommends an appropriation of \$11,509,540,000 for Research, Development, Test and Evaluation, Army, which is \$454,582,000 more than the amount provided in fiscal year 2007 and \$919,936,000 more than the request for fiscal year 2008.

PROGRAM RECOMMENDED

The total amount recommended in the bill will provide the following program in fiscal year 2008:

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST	
RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY				
BASIC RESEARCH				
1	IN-HOUSE LABORATORY INDEPENDENT RESEARCH.....	19,266	19,266	---
2	DEFENSE RESEARCH SCIENCES.....	137,676	161,176	+23,500
3	UNIVERSITY RESEARCH INITIATIVES.....	64,843	74,743	+9,900
4	UNIVERSITY AND INDUSTRY RESEARCH CENTERS.....	84,034	96,784	+12,750
	TOTAL, BASIC RESEARCH.....	305,819	351,969	+46,150
APPLIED RESEARCH				
5	MATERIALS TECHNOLOGY.....	18,614	47,989	+29,375
6	SENSORS AND ELECTRONIC SURVIVABILITY.....	39,826	62,826	+23,000
7	TRACTOR HIP.....	4,367	4,367	---
8	AVIATION TECHNOLOGY.....	42,567	46,567	+4,000
9	ELECTRONIC WARFARE TECHNOLOGY.....	16,411	25,411	+9,000
10	MISSILE TECHNOLOGY.....	53,038	60,538	+7,500
11	ADVANCED WEAPONS TECHNOLOGY.....	19,342	21,342	+2,000
12	ADVANCED CONCEPTS AND SIMULATION.....	16,654	19,654	+3,000
13	COMBAT VEHICLE AND AUTOMOTIVE TECHNOLOGY.....	53,342	93,842	+40,500
14	BALLISTICS TECHNOLOGY.....	55,014	64,014	+9,000
15	CHEMICAL, SMOKE AND EQUIPMENT DEFEATING TECHNOLOGY....	2,235	7,735	+5,500
16	JOINT SERVICE SMALL ARMS PROGRAM.....	7,008	7,008	---
17	WEAPONS AND MUNITIONS TECHNOLOGY.....	40,469	87,669	+47,200
18	ELECTRONICS AND ELECTRONIC DEVICES.....	43,391	88,791	+45,400
19	NIGHT VISION TECHNOLOGY.....	24,391	40,391	+16,000
20	COUNTERMINE SYSTEMS.....	21,795	21,795	---
21	HUMAN FACTORS ENGINEERING TECHNOLOGY.....	17,426	44,426	+27,000
22	ENVIRONMENTAL QUALITY TECHNOLOGY.....	15,809	25,309	+9,500
23	COMMAND, CONTROL, COMMUNICATIONS TECHNOLOGY.....	22,215	38,465	+16,250
24	COMPUTER AND SOFTWARE TECHNOLOGY.....	5,368	11,368	+6,000
25	MILITARY ENGINEERING TECHNOLOGY.....	51,120	54,620	+3,500
26	MANPOWER/PERSONNEL/TRAINING TECHNOLOGY.....	16,208	16,208	---
27	WARFIGHTER TECHNOLOGY.....	23,083	33,583	+10,500
28	MEDICAL TECHNOLOGY.....	76,544	183,334	+106,790
	TOTAL, APPLIED RESEARCH.....	686,237	1,107,252	+421,015
ADVANCED TECHNOLOGY DEVELOPMENT				
29	WARFIGHTER ADVANCED TECHNOLOGY.....	47,065	57,495	+10,430

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
30 MEDICAL ADVANCED TECHNOLOGY.....	53,274	287,474	+234,200
31 AVIATION ADVANCED TECHNOLOGY.....	53,890	77,390	+23,500
32 WEAPONS AND MUNITIONS ADVANCED TECHNOLOGY.....	59,389	85,889	+26,500
33 COMBAT VEHICLE AND AUTOMOTIVE ADVANCED TECHNOLOGY.....	131,436	197,386	+65,950
34 COMMAND, CONTROL, COMMUNICATIONS ADVANCED TECHNOLOGY..	12,255	14,255	+2,000
35 MANPOWER, PERSONNEL AND TRAINING ADVANCED TECHNOLOGY..	6,783	6,783	---
36 ELECTRONIC WARFARE ADVANCED TECHNOLOGY	49,199	58,449	+9,250
37 TRACTOR HIKE.....	12,633	12,633	---
38 NEXT GENERATION TRAINING & SIMULATION SYSTEMS.....	18,723	22,223	+3,500
39 TRACTOR ROSE.....	6,526	6,526	---
40 IED DEFEAT TECHNOLOGY DEVELOPMENT (0603100A).....	---	3,000	+3,000
41 EXPLOSIVES DEMILITARIZATION TECHNOLOGY.....	10,349	13,349	+3,000
42 MILITARY HIV RESEARCH.....	6,998	16,998	+10,000
43 COMBATING TERRORISM, TECHNOLOGY DEVELOPMENT.....	13,061	13,061	---
45 ELECTRONIC WARFARE TECHNOLOGY.....	17,419	44,919	+27,500
46 MISSILE AND ROCKET ADVANCED TECHNOLOGY.....	60,353	72,353	+12,000
47 TRACTOR CAGE.....	18,448	18,448	---
48 LANDMINE WARFARE AND BARRIER ADVANCED TECHNOLOGY.....	25,315	27,315	+2,000
49 JOINT SERVICE SMALL ARMS PROGRAM.....	8,097	9,347	+1,250
50 NIGHT VISION ADVANCED TECHNOLOGY.....	35,892	44,892	+9,000
51 ENVIRONMENTAL QUALITY TECHNOLOGY DEMONSTRATIONS.....	14,982	14,982	---
52 MILITARY ENGINEERING ADVANCED TECHNOLOGY.....	6,837	22,037	+15,200
53 ADVANCED TACTICAL COMPUTER SCIENCE & SENSOR TECHNOLOGY	67,011	78,511	+11,500
TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT.....	735,935	1,205,715	+469,780

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST	

DEMONSTRATION & VALIDATION				
54	UNIQUE ITEM IDENTIFICATION (UID).....	668	668	---
55	ARMY MISSILE DEFENSE SYSTEMS INTEGRATION.....	14,389	59,389	+45,000
56	ARMY MISSILE DEFENSE SYSTEMS INTEGRATION (SPACE).....	17,421	29,321	+11,900
57	AIR AND MISSILE DEFENSE SYSTEMS ENGINEERING.....	176,142	178,142	+2,000
58	JOINT AIR-TO-GROUND MISSILE (JAGM).....	53,500	53,500	---
59	LANDMINE WARFARE AND BARRIER - ADV DEV.....	24,737	24,737	---
60	SMOKE, OBSCURANT AND TARGET DEFEATING SYS-ADV DEV.....	19,449	19,449	---
61	TANK AND MEDIUM CALIBER AMMUNITION.....	44,578	44,578	---
62	ADVANCED TANK ARMAMENT SYSTEM (ATAS).....	142,486	144,986	+2,500
63	SOLDIER SUPPORT AND SURVIVABILITY.....	4,787	4,787	---
65	NIGHT VISION SYSTEMS ADVANCED DEVELOPMENT.....	3,454	3,454	---
66	ENVIRONMENTAL QUALITY TECHNOLOGY.....	6,149	20,799	+14,650
67	WARFIGHTER INFORMATION NETWORK-TACTICAL.....	222,296	356,296	+134,000
68	NATO RESEARCH AND DEVELOPMENT.....	4,959	4,959	---
69	AVIATION - ADV DEV.....	6,481	6,481	---
70	LOGISTICS AND ENGINEER EQUIPMENT - ADV DEV.....	27,499	27,499	---
71	COMBAT SERVICE SUPPORT CONTROL SYSTEM EVALUATION.....	19,054	19,054	---
72	MEDICAL SYSTEMS - ADV DEV.....	12,479	23,479	+11,000
73	SOLDIER SYSTEMS - ADVANCED DEVELOPMENT.....	18,178	22,478	+4,300

	TOTAL, DEMONSTRATION & VALIDATION.....	818,706	1,044,056	+225,350

ENGINEERING & MANUFACTURING DEVELOPMENT				
76	AIRCRAFT AVIONICS.....	57,786	57,786	---
77	ARMED, DEPLOYABLE OH-58D.....	82,310	129,310	+47,000
78	ELECTRONIC WARFARE DEVELOPMENT.....	55,716	55,716	---
81	TRACTOR CAGE.....	17,821	17,821	---
83	INFANTRY SUPPORT WEAPONS.....	45,229	53,229	+8,000
84	MEDIUM TACTICAL VEHICLES.....	1,994	4,794	+2,800
85	SMOKE, OBSCURANT AND TARGET DEFEATING SYS-SDD.....	1,347	1,347	---
86	FAMILY OF HEAVY TACTICAL VEHICLES.....	1,947	2,947	+1,000
87	AIR TRAFFIC CONTROL.....	8,956	8,956	---
88	LIGHT TACTICAL WHEELED VEHICLES.....	82,300	55,300	-27,000
90	NON-LIGHT OF SIGHT LAUNCH SYSTEM.....	253,410	253,410	---
91	NON-LINE OF SIGHT CANNON.....	137,802	137,802	---
92	FCS MANNED GRD VEHICLES & COMMON GRD VEHICLE.....	696,333	506,033	-190,300

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
93 FCS SYSTEMS OF SYSTEMS ENGR & PROGRAM MGMT.....	1,589,466	1,422,466	-167,000
94 FCS RECONNAISSANCE (UAV) PLATFORMS.....	41,164	42,264	+1,100
95 FCS UNMANNED GROUND VEHICLES.....	90,667	87,567	-3,100
96 FCS UNATTENDED GROUND SENSORS.....	10,999	10,999	---
97 FCS SUSTAINMENT & TRAINING R&D.....	678,781	631,781	-47,000
98 MODULAR BRIGADE ENHANCEMENT.....	64,796	64,796	---
99 NIGHT VISION SYSTEMS - SDD.....	44,619	44,619	---
100 COMBAT FEEDING, CLOTHING, AND EQUIPMENT.....	2,501	2,501	---
101 NON-SYSTEM TRAINING DEVICES - SDD.....	35,992	35,992	---
102 AIR DEFENSE COMMAND, CONTROL AND INTELLIGENCE -SDD....	21,513	21,513	---
103 CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT.....	31,962	31,962	---
104 AUTOMATIC TEST EQUIPMENT DEVELOPMENT.....	18,025	18,025	---
105 DISTRIBUTIVE INTERACTIVE SIMULATIONS (DIS) - SDD.....	16,594	18,744	+2,150
106 COMBINED ARMS TACTICAL TRAINER (CATT) CORE.....	37,035	37,035	---
107 JOINT NETWORK MANAGEMENT SYSTEM.....	2,786	2,786	---
108 WEAPONS AND MUNITIONS - SDD.....	55,368	68,368	+13,000
109 LOGISTICS AND ENGINEER EQUIPMENT - SDD.....	45,009	48,009	+3,000
110 COMMAND, CONTROL, COMMUNICATIONS SYSTEMS - SDD.....	10,047	10,047	---
111 MEDICAL MATERIEL/MEDICAL BIOLOGICAL DEFENSE EQUIPMENT	15,823	22,323	+6,500
112 LANDMINE WARFARE/BARRIER - SDD.....	142,315	146,315	+4,000
114 ARTILLERY MUNITIONS	63,039	65,039	+2,000
115 COMBAT IDENTIFICATION.....	11,362	11,362	---
116 ARMY TACTICAL COMMAND & CONTROL HARDWARE & SOFTWARE...	99,202	99,202	---
117 RADAR DEVELOPMENT.....	7,067	7,067	---
118 GENERAL FUND ENTERPRISE BUSINESS SYSTEM (GFEBS).....	53,559	112,600	+59,041
119 FIREFINDER.....	77,279	77,279	---
120 SOLDIER SYSTEMS - WARRIOR DEM/VAL.....	---	2,000	+2,000
121 ARTILLERY SYSTEMS	24,221	24,221	---
122 PATRIOT/MEADS COMBINED AGGREGATE PROGRAM (CAP).....	372,146	372,146	---
123 NUCLEAR ARMS CONTROL MONITORING SENSOR NETWORK.....	7,300	7,300	---

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
124 INFORMATION TECHNOLOGY DEVELOPMENT.....	103,485	106,485	+3,000
TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT.....	5,217,073	4,937,264	-279,809
RD&E MANAGEMENT SUPPORT			
126 THREAT SIMULATOR DEVELOPMENT.....	21,887	23,887	+2,000
127 TARGET SYSTEMS DEVELOPMENT.....	13,499	15,999	+2,500
128 MAJOR T&E INVESTMENT.....	66,921	66,921	---
130 RAND ARROYO CENTER.....	16,342	18,342	+2,000
131 ARMY KWAJALEIN ATOLL.....	182,136	182,136	---
132 CONCEPTS EXPERIMENTATION PROGRAM.....	34,004	38,004	+4,000
133 SMALL BUSINESS INNOVATIVE RESEARCH (0605502A).....	---	3,000	+3,000
134 ARMY TEST RANGES AND FACILITIES.....	357,964	357,964	---
135 ARMY TECHNICAL TEST INSTRUMENTATION AND TARGETS.....	74,391	76,391	+2,000
136 SURVIVABILITY/LETHALITY ANALYSIS.....	40,343	41,843	+1,500
137 DOD HIGH ENERGY LASER TEST FACILITY.....	2,801	2,801	---
138 AIRCRAFT CERTIFICATION.....	4,688	4,688	---
139 METEOROLOGICAL SUPPORT TO RD&E ACTIVITIES.....	8,346	8,346	---
141 MATERIEL SYSTEMS ANALYSIS.....	16,526	16,526	---
142 SUPPORT OF OPERATIONAL TESTING.....	75,293	77,293	+2,000
143 ARMY EVALUATION CENTER.....	61,694	61,694	---
144 SIMULATION & MODELING FOR ACQ, ROTS, & TNG (SMART)....	5,342	6,342	+1,000
145 PROGRAMWIDE ACTIVITIES.....	73,718	73,718	---
146 TECHNICAL INFORMATION ACTIVITIES.....	41,607	41,607	---
147 MUNITIONS STANDARDIZATION, EFFECTIVENESS AND SAFETY...	19,606	29,606	+10,000
148 ENVIRONMENTAL QUALITY TECHNOLOGY MGMT SUPPORT.....	4,958	4,958	---
149 MANAGEMENT HEADQUARTERS (RESEARCH AND DEVELOPMENT)....	14,889	14,889	---
TOTAL, RD&E MANAGEMENT SUPPORT.....	1,136,955	1,166,955	+30,000
OPERATIONAL SYSTEMS DEVELOPMENT			
151 MLRS PRODUCT IMPROVEMENT PROGRAM.....	54,055	54,055	---
152 WEAPONS CAPABILITY MODIFICATIONS UAV.....	3,900	3,900	---
153 AEROSTAT JOINT PROJECT OFFICE.....	481,251	481,251	---
154 ADV FIELD ARTILLERY TACTICAL DATA SYSTEM.....	16,837	16,837	---
155 COMBAT VEHICLE IMPROVEMENT PROGRAMS.....	27,615	35,115	+7,500
156 MANEUVER CONTROL SYSTEM.....	43,961	45,961	+2,000
157 AIRCRAFT MODIFICATIONS/PRODUCT IMPROVEMENT PROGRAMS...	325,643	330,143	+4,500
158 AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM.....	476	1,476	+1,000

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
159 DIGITIZATION.....	9,737	9,737	---
160 FORCE XXI BATTLE COMMAND, BRIGADE AND BELOW (FBCB2)...	32,446	32,446	---
162 MISSILE/AIR DEFENSE PRODUCT IMPROVEMENT PROGRAM.....	30,219	30,219	---
163 OTHER MISSILE PRODUCT IMPROVEMENT PROGRAMS.....	1,897	1,897	---
164 TRACTOR CARD.....	16,573	16,573	---
165 JOINT TACTICAL COMMUNICATIONS PROGRAM (TRI-TAC).....	1,536	1,536	---
166 JOINT TACTICAL GROUND SYSTEM.....	23,462	23,462	---
167 JOINT HIGH SPEED VESSEL (JHSV).....	5,148	5,148	---
169 SECURITY AND INTELLIGENCE ACTIVITIES.....	---	5,500	+5,500
170 INFORMATION SYSTEMS SECURITY PROGRAM.....	28,332	32,282	+3,950
171 GLOBAL COMBAT SUPPORT SYSTEM.....	129,689	94,689	-35,000
172 SATCOM GROUND ENVIRONMENT (SPACE).....	107,849	107,849	---
173 WWMCCS/GLOBAL COMMAND AND CONTROL SYSTEM.....	24,836	24,836	---
174 JOINT COMMAND AND CONTROL PROGRAM (JC2).....	10,415	10,415	---
175 TACTICAL UNMANNED AERIAL VEHICLES.....	97,947	97,947	---
177 DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS.....	---	6,000	+6,000
178 AVIONICS COMPONENT IMPROVEMENT PROGRAM.....	1,024	1,024	---
179 END ITEM INDUSTRIAL PREPAREDNESS ACTIVITIES.....	66,869	78,869	+12,000
TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT.....	1,541,717	1,549,167	+7,450
999 CLASSIFIED PROGRAMS.....	147,162	147,162	---
TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY.....	10,589,604	11,509,540	+919,936

The adjustments to the budget activities for Research, Development, Test and Evaluation, Army, are shown below:

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[in thousand of dollars]

R-1		Budget Request	Committee Recommended	Change from Request
2	DEFENSE RESEARCH SCIENCES	137,676	161,176	23,500
	Perpetually Available and Secure Information Systems (PASIS)		5,000	
	Functionally Integrated Reactive Surface Technologies (FIRST) Program		3,000	
	UT-Tyler Organic Semiconductor Modeling and Simulation		1,000	
	John H. Hopps, Jr. Defense Research Scholars Program		2,000	
	Innovative, Computational Water-borne Pathogen Research for Chemical/Biological Detection		1,000	
	Direct Methanol Fuel Cell – Battery Recharger Program		2,000	
	Combat Mental Health Initiative		3,500	
	Technology Commercialization and Management Network		2,000	
	Cyber Threat Analytics		3,000	
	Activated Nanostructures for De-icing		1,000	
3	UNIVERSITY RESEARCH INITIATIVES	64,843	74,743	9,900
	University and Industry Research Centers, Automotive Research Center		2,000	
	Laboratory for Engineered Human Protection (LEHP)		2,000	
	Massively Broadband Wireless Integrated Circuits		1,500	
	Consortium for Bone and Tissue Repair and Regeneration		1,000	
	Nanomedical Technologies Research		2,500	
	Imaging Research Center		900	
4	UNIVERSITY AND INDUSTRY RESEARCH CENTERS	84,034	96,784	12,750
	NAC University Automotive Research Coalitions		2,000	
	Florida Collaborative Development of Advanced Materials for Strategic Applications		950	
	Transparent Nanocomposite Armor		300	
	Development of Enabling Chemical Technologies for Power from Green Sources		2,000	
	Center of Excellence in Industrial Metrology & 3D Imaging Research		2,000	
	Research Support for Nanoscale Sciences and Technologies		1,000	
	Nanotubes Optimized for Lightweight Exceptional Strength Composite Materials		3,500	
	Manufacturing and Industrial Technology Center		1,000	

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[in thousand of dollars]

R-1	Budget Request	Committee Recommended	Change from Request
5 MATERIALS TECHNOLOGY	18,614	47,989	29,375
Ultra Lightweight Metallic Armor		1,000	
Enhanced Holographic Imaging Program		2,000	
Control System for Laser Powder Deposition		350	
Improvised Explosive Device Simulation in Different Soils		425	
Next Generation Lightweight Drive System for Army Weapon Systems		2,000	
Novel Extremity Body Armor		600	
Advanced Materials Development and Manufacturing of Body Armor		2,500	
Nickel Boron Coating Technology for Army Weapons		3,000	
Lightweight Motors for the Future Combat System		2,000	
Project Kryptolite		1,500	
Advanced Lightweight Transparent Armor for Tactical Wheeled Vehicles and Force Protection		1,000	
Future Affordable Multi-Utility Materials for the Army Future Combat Systems		5,000	
Cold Spray Wear Coating for FCS		1,000	
Polymer Center of Excellence for Blast-Ballistic Protective Armor		2,500	
Cutting Tools for Aerospace Materials		1,500	
Ultra-Endurance Coating		3,000	
6 SENSORS AND ELECTRONIC SURVIVABILITY	39,826	62,826	23,000
High Brightness Diode-pumped Fiber Laser (HiBriD-FL)		2,000	
Electromagnetic Geolocation		1,000	
Urban Warfare Analysis Center (UWAC)		2,500	
Urban Warfare Knowledge Base		1,000	
Single Crystal Chemical Vapor Deposition Diamond			
Thermal Management Elements for high-energy lasers		1,000	
Terahertz Spectrometer Technology		2,000	
Network Enabled Combat Identification (CID)		3,000	
Wearable Video Capture System		1,000	
Land and Sea Special Operations (LASSO)		1,000	
One-Step JP-8 Bio Diesel Fuel		5,000	
Advanced Detection of Explosives Program		1,000	
Advanced Bonded Diamond for optical applications		2,500	
8 AVIATION TECHNOLOGY	42,567	46,567	4,000
Aircraft Structural Condition Monitoring (ASCM) for Diagnostics and Prognostics		3,000	
Composite Small Main Rotor Blades		1,000	
9 ELECTRONIC WARFARE TECHNOLOGY	16,411	25,411	9,000
Silver Fox and Manta UAS		3,000	
Electromagnetic Gun Initiative		2,000	
Integrated Information Technology Policy Analyses Research		2,000	
Battlefield Connectivity, Multi-Level Secure Networks		2,000	

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousand of dollars]

R-1	Budget Request	Committee Recommended	Change from Request
10 MISSILE TECHNOLOGY	53,038	60,538	7,500
Materials Application Research Center		1,000	
LENS XX Hypervelocity Ground Testing		1,000	
Mariah II Hypersonic Wind Tunnel Development		3,500	
Jam Resistent Technology for INS/GPS Precision		2,000	
11 ADVANCED WEAPONS TECHNOLOGY	19,342	21,342	2,000
Remote Video Weapn Sight, USSOCOM Phase III		1,000	
Missile Aero-propulsion Computer System (MACS) Modernization		1,000	
12 ADVANCED CONCEPTS AND SIMULATION	16,654	19,654	3,000
Development and Simulation for Advanced Troop Protection Concepts in Urban Warfare		1,000	
Mobile Medic Training Program		2,000	
COMBAT VEHICLE AND AUTOMOTIVE			
13 TECHNOLOGY	53,342	93,842	40,500
Development of Logistical Fuel Processors to Meet Army/TARDEC/TACOM Needs		3,500	
Tactical Metal Fabrication System (TacFab)		3,000	
Light Utility Vehicle		1,000	
Institute for Advanced Materials and Manufacturing Strategies (IAMMS)		3,000	
Quick Reaction Advanced Tactical Vehicle Technology		3,000	
Globally Accessible Manufacturing and Maintenance Activity (GAMMA)		3,000	
DoD Hydrogen PEM Fuel Cell Medium/Heavy Duty Vehicle Demonstration Program		4,000	
Extreme-Condition Vehicle Tribology for Military Vehicle Technology at Northwestern University		1,000	
Secure Mobile MANET System		1,500	
Digital Engine/Hydraulic Valve Actuation Technology		1,000	
Advanced Digital Hydraulic Hybrid Drive System		2,500	
Center for Advanced Vehicle Design and Simulations		2,000	
Hydraulic Hybrids, Advanced Materials, and Multi-fuel Engine Research (HAMMER) program		5,000	
Spring-Suspended Airless Tires for Convoy Protection		5,000	
Rapid Up-Armor Synthesis and Crashworthiness Design for Improved Soldier Survivability		2,000	

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[in thousand of dollars]

R-1	Budget Request	Committee Recommended	Change from Request
14 BALLISTICS TECHNOLOGY	55,014	64,014	9,000
Small Unmanned Aerial Vehicles (UAVs) and Sensors		500	
Multi Mission Armored Watercraft (MMAW) Project		1,500	
Advanced Composite Materials Research for Air and Ground Vehicles		2,000	
Beneficial Infrastructure for Rotorcraft Risk Reduction Demonstrations (BIRRRD)		1,000	
Super High Accuracy Range Kit - 105mm Artillery Technology		4,000	
CHEMICAL, SMOKE AND EQUIPMENT DEFEATING 15 TECHNOLOGY	2,235	7,735	5,500
Paint Shield for Protecting People from Microbial Threats		2,000	
Systems Biology Biomarker Molecular Toxicology Initiative		2,000	
Rapid and Accurate Pathogen Identification/Detection (RAPID) Program		1,500	
17 WEAPONS AND MUNITIONS TECHNOLOGY	40,469	87,669	47,200
CZT-Based Liquid Explosives Detections Systems		1,700	
SLEUTH Tungsten Heavy Alloy Penetrator and Warhead Development		2,000	
Effects Based Operations Decision Support Services (EBODSS)		1,000	
Renewable Energy Testing Center		2,500	
Long Range Initiator		2,000	
Hospital Emergency Planning and Integration (HEPI) Letterkenny Army Depot and Chambersburg Hospital		2,000	
Advanced Materials & Process for Armament Structures (AMPAS)		7,000	
Remotely Operated Weapons and Sensor Technology		4,000	
Energetic Formulation and Fabrication		5,000	
Developmental Mission Integration		5,000	
Mitigation of Energetics Single Point Failures		3,000	
Strategic Technology Development and Integration for the Joint Munitions and Lethality Life Cycle Management Command		1,000	
Green Armaments/RangeSafe		2,000	
Armament System Engineering and Integration Initiative (ASEI2)		3,000	
Advanced Rarefaction Weapon Engineered System		2,000	
Rapid Response Force Protection System (Remote Weapons Platform)		4,000	

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
 [in thousand of dollars]

R-1	Budget Request	Committee Recommended	Change from Request
18 ELECTRONICS AND ELECTRONIC DEVICES	43,391	88,791	45,400
Non-Flammable, High Energy Density, Low temperature Warrior Battery		1,000	
Advanced Portable Power Institute (APPI)		2,000	
Miniature Cooling Unit for Electronic Devices		1,000	
Revolutionary Self-Sealing Plastic Enclosure for Military Batteries		2,000	
Defense Modernization and Sustainment Initiative, Rochester Institute of Technology		2,000	
Roll-to-Roll Microelectronics Manufacturing in Support of the Flexible Display Initiative		2,000	
Low Signature Portable Fuel Cell Power Systems		3,000	
Mega-Capacity Hybrid Chemistry Lithium Primary Portable Batteries		1,000	
Manufacturing Technology Development of Advanced Components for High Power Solid-State Lasers		2,000	
Micromachined Switches in Support of Transformational Communications Architecture		2,000	
Lithium Ion Metal Battery		2,000	
Soldier Portable Solid Fuel Hydrogen Generator Cartridge		3,000	
Silicon Carbide MOSFETs for Electric Power Systems		2,000	
High-Frequency, High-Power Electronic and Optoelectronic Devices on Aluminum Nitride (AlN)		2,000	
Novel Zinc Air Power Sources for Military Applications		2,500	
Ceramic Membrane - 10(X) More Energy for Battery Systems		1,000	
Miniature Tactical Energy Systems Development		3,000	
Advanced Lithium-Carbon Monofluoride Combat Portable Batteries		4,900	
Advanced Wearable Microcell Power System Process Development		2,500	
Bio-Battery		1,500	
Soldier Fuel Cell System		1,000	
Blast Risk Analysis and Mitigation Application (BRAMA)		2,000	

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[in thousand of dollars]

R-1	Budget Request	Committee Recommended	Change from Request
19 NIGHT VISION TECHNOLOGY	24,391	40,391	16,000
Next Generation Communications System		1,000	
Standoff Improvised Explosive Device Detection Program (SIEDP)		3,000	
Enhanced Micro-Image Display Technology		2,000	
Power Efficient Microdisplay Development for US Army Night Vision		3,000	
Personal Miniature Thermal Viewer (PMTV)		1,000	
Hyperspectral Sensor for UAV Surveillance/Targeting		2,000	
Miniaturized Sensors for Small and Tactical Unmanned Aerial Vehicles (MINISENS)		1,000	
Robotics Workforce and Military Curriculum		1,000	
Next Generation FPA Development		2,000	
HUMAN FACTORS ENGINEERING			
21 TECHNOLOGY	17,426	44,426	27,000
High Optempo Performance Soldier Training		2,000	
LWI Training-Based Collaborative Research		25,000	
22 ENVIRONMENTAL QUALITY TECHNOLOGY	15,809	25,309	9,500
Hawaii Undersea Chemical Weapons Assessment Program		5,500	
Biowaste to Bioenergy: Phase Two		2,000	
Vanadium Technology Program		2,000	
COMMAND, CONTROL, COMMUNICATIONS			
23 TECHNOLOGY	22,215	38,465	16,250
Integrated Lightweight Electronics Shelter		1,750	
Dynamically Managed Data Dissemination		1,000	
Advanced 3-D Locator (A3DL) Technology		4,000	
C4ISR Integrated Digital Environment Service Model (IDESM)		2,000	
Development of a High Performance Computing System Based on a Modern High Speed Switch Fabric		1,000	
Research of Advanced Communications Technologies for enhanced secure, mobile, networked communications		1,000	
Lightweight Theater Transportable TOC		3,000	
Intelligent Distributed Command & Control (IDC2)		2,500	
COMPUTER AND SOFTWARE			
24 TECHNOLOGY	5,368	11,368	6,000
Biologically Inspired Security Infrastructure for Tactical Environments		1,000	
Ruggedized Cylinders for Expandable Mobile Shelters		5,000	
25 MILITARY ENGINEERING TECHNOLOGY	51,120	54,620	3,500
C-RAM Armor Development		1,500	
Nano-Crystalline Cement for High Strength, Rapid Curing Concrete with Improved Blast Resistance		2,000	

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
 [In thousand of dollars]

R-1	Budget Request	Committee Recommended	Change from Request
27 WARFIGHTER TECHNOLOGY	23,083	33,583	10,500
Chemical And Biological-Protective Hangars (CAB-PH)		2,000	
Modular Ballistic System for Force Protection		4,000	
Active and Smart Packaging for Combat Feeding		1,000	
Advanced Fabric Treatment for Flame Resistant Uniforms		1,000	
Injection Molded Ceramic Body Armor		500	
Center for Geosciences/Atmospheric Research (CG/AR)		2,000	
28 MEDICAL TECHNOLOGY	76,544	183,334	106,790
Advanced Bio-engineering for Enhancement of Soldier Survivability		2,000	
Armed Services Gynecological Cancer Health Program		2,000	
BioFoam Protein Hydrogel for Battlefield Trauma		2,500	
Bone Health and Military Medical Readiness Program		1,000	
Cancer Prevention through Remote Biological Sensing		2,000	
Cedars-Sinai Core Imaging Center		3,000	
Center for Advanced Surgical and Interventional Technology (CASIT)		1,000	
Center for Vaccine Scale-Up Process Research (Phase I)		1,000	
Center for Injury Biomechanics		4,000	
Center for Ophthalmic Innovation		2,000	
Center for Research on Integrative Medicine for the Military (CRIMM)		1,000	
Center for Resuscitation Research		3,000	
Cold Spring Harbor Laboratory Women's Cancer Genomics Center		4,000	
Cone Beam CT Scanners		4,000	
Copper Air Quality Program		2,000	
Defense Against Viral Infection (DAVI)		2,000	
Disposable Unit Dose Drug Pumps for Anesthesia and Antibiotics		2500	
Electronic Technology Infrastructure in Support of Military Missions		2,000	
Epigenetic Disease Research		2,000	
Fibrin Adhesive Stat (FAST) Dressing		2,000	
Impact of Intensive Lifestyle Modification on Chronic Medical Conditions		2,500	
Improving Musculoskeletal Health & Function		1,500	
Injury Research Center-Ryder Trauma Center		3,500	
Integrated Medicine, Communications, Compassion, Chronic Care Program		2,000	
Mass Decontamination and Biosecurity Initiative		350	
Medical Image Database Holographic Archiving Library System (MIDHALS)		1,000	
Medical Resources Conservation Technology Pilot Energy Cost Control Evaluation (PECCE)		1,500	

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
 [In thousand of dollars]

R-1	Budget Request	Committee Recommended	Change from Request
Military Interoperable Digital Hospital Testbed		5,000	
Molecular Switch Vaccines for Biodefense and Cancer		2,000	
Nanofabricated Bioartificial Kidney and Bioterrorism		1,000	
Neuroscience Research Consortium to Study Spinal Cord Injury		1,000	
Neutron/Hadron Particle Therapy		2,000	
Orthopedic Implant Design and Manufacturing for Traumatic Injuries		2,000	
Oxygen Diffusion Dressings for the Accelerated Healing of Battlefield Wounds and Burns		500	
Pain and Neuroscience Center Research Center		7,000	
Plant-based Vaccine Research		2,500	
Prevention of Radiation Injury by use of Statins		2,000	
Proton Therapy		3,000	
Rapid Vaccine Discovery Technology		2,500	
Rapid Wound Healing Technology Development Project		1,500	
Rare Blood Program		1,000	
Regional NMR Facility		1,000	
Remote Robotic Teleproctoring to Promote Rapid Surgical Skills Acquisition		1,000	
Respiratory Biodefense Initiative		1,000	
Storage Area Network		1,000	
Synchrotron-Based Scanning Research		5,000	
Synthetic Malaria Vaccine		3,000	
Technological Regional Center of Excellence for PTSD		2,000	
West Nile Virus Vaccine		940	
Wound Infection Treatment Program		1,500	
29 WARFIGHTER ADVANCED TECHNOLOGY	47,065	57,495	10,430
High Pressure Airbeam Shelter Cost Reduction Technology Improvements		1,800	
Flame & Thermal Protection for Individual Soldier		2,000	
Remote Environmental Monitoring and Diagnostics in the Perishables Supply Chain		5,630	
Extended Shelf Life Produce for Remotely Deployed Forces		1,000	
30 MEDICAL ADVANCED TECHNOLOGY	53,274	287,474	234,200
Acellular Matrix Constructs for Military Casualties		2,500	
Advanced Diagnostic and Therapeutic Digital Technologies		2,000	
Advanced Non-Invasive Glucose Monitoring		1,000	
Advanced Proteomics Program		1,500	
Advanced Regenerative Medicine (ARM) Skin Cell Therapies, Limb and Digit Treatment		2,000	
Advanced Regenerative Medicine Development		2,500	
Advanced Restoration Therapies in Spinal Cord Injuries		1,000	
Alliance for NanoHealth		4,000	

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[in thousand of dollars]

R-1	Budget Request	Committee Recommended	Change from Request
ALS Therapy Development for Gulf War Illness Research		1,500	
Angiogenesis and Tissue Engineering Research		1,500	
Assistive Technology Research Center at the National Rehabilitation Hospital		3,000	
National Oncogenomics and Molecular Imaging Center		3,000	
Battlefield Exercise and Combat Related Spinal Cord Injury Research		3,000	
Bioceramic Bones for Battlefield Trauma		1,500	
Blood Safety and Decontamination Technology		2,500	
Cartledge Infuser		1,000	
Cellular Therapy for Battlefield Medical Care		1,000	
Center for Genetic Origins of Cancer		3,000	
Center for Integration of Medicine and Innovative Technology (CIMIT)		10,000	
Christian Sarkine Autism Treatment Center		2,500	
COG/USOC Pediatric Cancer Center		2,000	
Composite Tissue Allotransplantation Research and Clinical Program		2,000	
Cooperative International Neuromuscular Research Group (CINRG)		6,500	
Dangerous Pathogens DNA Forensics Center		2,500	
Electronic Medical Records Technology Infrastructure		1,500	
Feeding Tube for Trauma and Burn Patients		1,000	
Health Science Center Rapid Bio-Pathogen Detection Technology		2,000	
Human Genomics, Molecular Epidemiology and Clinical Diagnostics for Infectious Diseases		1,500	
Immersive Medical Environment for Distributed Intuitive Consultation (iMedic)		2,000	
Indiana-Ohio Traumatic Amputation Rehabilitation Research		1,000	
Integrated Functional Materials Initiative		1,000	
Joint Medical Simulation Technology Research & Development Center		1,600	
Medical Information Network Decision Support (MINDS) Tool Development		1,000	
Medical Surveillance Initiative-Clinical Looking Glass		1,000	
Military Biomaterials Institute for Acute and Regenerative Care		1,000	
Military Low Vision Research		2,000	
Military Molecular Medicine Initiative		15,000	
Mobile Integrated Diagnostic and Data Analysis System (MIDDAS)		1,000	
Multifunctional Protective Packaging Technology		3,000	
National Bioterrorism Civilian Medical Response Center (CIMERC)		2,500	
National Center of Ophthalmology Training and Education at Wills Eye Health System		2,500	
National Functional Genomics Center		7,500	
National Warfighter Health Sustainment Study		1,000	

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[in thousand of dollars]

R-1	Budget Request	Committee Recommended	Change from Request
Neural Control of External Devices		1,000	
Neurofibromatosis (NF) Research		10,000	
Neuroimaging & Neuropsychiatric Trauma in US Warfighters		5,000	
Neurotoxin Exposure Treatment Research Program		25,000	
Norfolk State University Center for Systems and Modeling & Simulation		3,100	
Nursing Clinical Simulation Lab		1,000	
Obesity and Cancer in the Military Medical Research Program at WRAMC		2,000	
PBRC Four Tasks to Address Personnel Readiness and Warfighter Performance		2,500	
Pediatric Brain Tumor & Neurological Disease Institute		2,000	
Peoria Robotics		1,000	
Personalized Orthopedic Implants for Combat Trauma Induced Orthopedic Surgery		500	
Portable Burn Debridement Laser Demonstration		3,000	
Portable Digital X-Ray		4,000	
Host Pathogen Interaction Study		1,000	
Prader-Willi Syndrome (PWS) Research		1,500	
Proton Beam Therapy		10,000	
Ration Packaging Materials and Systems for Meals Ready-to-Eat		5,000	
Remote Bio-Medical Detector		1,000	
Gulf War Illness Peer Reviewed Research		7,500	
Rural Health - CERMUSA		2,000	
Severe Battlefield Injury Treatment (Note: Technology to Prevent Compartment Syndrome)		2,000	
Spinal Muscular Atrophy (SMA) Research Program		4,000	
Technologies for Metabolic Monitoring (TMM)		2,000	
Telehealth Access and Infrastructure Expansion		2,000	
Telepharmacy Robotic Medicine Device Unit		2,000	
The Institute for the Advancement of Bloodless Medicine		2,000	
Three Dimensional Projection Environment for Molecular Design and Surgical Simulation		1,000	
Tracking of Health of Soldiers with Advanced Implantable Nanosensors		2,000	
National Eye Evaluation and Research Network - Clinical Trial of Orphan Retinal Degenerative Disease		3,000	
Ultra High-Speed MEMS Electromagnetic Cell Sorter		3,000	
Ultra-High Resolution Display for Army Medicine		4,500	
UMDNJ Cancer Initiative (Note: includes continuation of the Gallo Prostate Cancer Center)		3,000	
Warfighter Cancer Care Engineering		1,500	
Wireless Electronic Patient Records, WPIC-Personal Information Center		2,000	

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
 [In thousand of dollars]

R-1	Budget Request	Committee Recommended	Change from Request
31 AVIATION ADVANCED TECHNOLOGY	53,890	77,390	23,500
Drive System Composite Structural Component Risk Reduction Program		3,000	
Fuel Cells for Mobile Robotic Systems Project		1,000	
Universal Control Full Authority Digital Engine Control		3,000	
UAV-Resupply BURRO		2,000	
Night Vision Goggle Compatible Electrostatically Conductive Windscreen Laminates for use on Acrylic/polycarbonate windscreens on helicopters		1,500	
Power Dense Transmissions		1,000	
Inter Turbine Burner for Turbo Shaft Engines		5,000	
Technologies for Military Equipment Replenishment		4,000	
Autonomous Cargo Acquisition for Rotorcraft Unmanned Aerial Vehicles		3,000	
WEAPONS AND MUNITIONS ADVANCED TECHNOLOGY	59,389	85,889	26,500
Micro Electrical Mechanical Systems (MEMS) Application for Armor and Munitions		2,500	
Lightweight Munitions and Surveillance System (LMSS) for Unmanned Air & Ground Vehicles		2,000	
Reactive Nanocomposite Materials		1,000	
Production of Affordable New Shaped MER Titanium		4,000	
Advanced Tungsten Penetrators and Ballistic Materials		2,000	
Nanotechnology Fuze-on-a-Chip		4,000	
Rapid Prototyping for Special Projects		5,000	
Rapid Insertion of Developmental Technologies		3,000	
Common Smart Submunition (CSS)		1,000	
Disruptive Technology Acceleration		2,000	
COMBAT VEHICLE AND AUTOMOTIVE ADVANCED TECHNOLOGY	131,436	197,386	65,950
Tactical Wheeled Vehicle Structures for Improved Survivability and Performance		4,000	
Special Operations Vehicle - lightweight, Armored, Hybrid, Power Generating, Tactical Vehicle		2,000	
Tactical Rocket Propelled Grenade Airbag Protection System (TRAPS) Enhancement		2,000	
LEAN Digital Product Development		1,000	
Networked Reliability and Safety Early Evaluation System (NRSEES)		2,000	
Advance Lithium Iron Phosphate Battery System for Army Combat Hybrid HMMVV and Other Army Vehicle Platforms		2,000	
Antiballistic Windshield Armor (AWA)		3,000	
Center for Tribology and Coatings		2,000	
Defect-Free Commercially Viable Si/C Semiconductor Using Superlattice Technology		4,000	
On-Board Vehicle Power Management		2,000	

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[in thousand of dollars]

R-1	Budget Request	Committee Recommended	Change from Request
IED DEFEAT TECHNOLOGY			
40 DEVELOPMENT	0	3,000	3,000
Compact Pulse Power Initiative		3,000	
EXPLOSIVES DEMILITARIZATION			
41 TECHNOLOGY	10,349	13,349	3,000
Sierra Army Depot Cryofracture/Plasma Arc Transportable System		3,000	
42 MILITARY HIV RESEARCH	6,998	16,998	10,000
HIV Research		10,000	
45 ELECTRONIC WARFARE TECHNOLOGY	17,419	44,919	27,500
Advanced IED Jammer Research and Development Program		3,000	
WIZARD - Remotely Controlled Improvised Explosive Device Countermeasures		2,000	
Advanced Communications ECM Demonstration (Augments current program)		12,000	
Non-communications ECM Technology Demonstration (Augments current program)		8,000	
US Army Future Force ELINT		2,500	
MISSILE AND ROCKET ADVANCED			
46 TECHNOLOGY	60,353	72,353	12,000
Waterside Wide Area Tactical Coverage & Homing (WaterWATCH)		3,000	
Smart Energetics Architecture for Missile Systems		2,000	
Rapid Response System for Protection of Air and Ground Vehicles		5,000	
Nanosystem Engineering for Missile Applications (NEMA)		1,000	
High Fidelity Virtual simulation and Analysis (HFVSA)		1,000	
LANDMINE WARFARE AND BARRIER ADVANCED			
48 TECHNOLOGY	25,315	27,315	2,000
Enhanced Landmine and IED Detection Technology		2,000	
49 JOINT SERVICE SMALL ARMS PROGRAM	8,097	9,347	1,250
Modular Individual Weapon Sight and Low Cost Remote Weapon Station		1,250	
50 NIGHT VISION ADVANCED TECHNOLOGY	35,892	44,892	9,000
Hyperspectral Sensors for Improved Force Protection (Hyper-IFP)		2,000	
Advanced Night Vision Sensors		2,500	
Cable Warning and Obstacle Avoidance System		1,500	
Hand Launched Unmanned Aerial System High Performance Payload (SUAS HPP)		3,000	

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[in thousand of dollars]

R-1	Budget Request	Committee Recommended	Change from Request
MILITARY ENGINEERING ADVANCED			
52 TECHNOLOGY	6,837	22,037	15,200
Gas Engine Driven Air Conditioning Demonstration		1,500	
Synthetic Auto Virtual Environment (SAVE)		2,000	
Defense Applications of Carbonate Fuel Cells		2,000	
Zero Energy Homes at Ft. Knox, Kentucky		1,200	
Natural Gas Firetube Boiler Demonstration		500	
JGES for Improved Combat Situational Awareness		5,000	
Fireproofing/Corrosion Resistant Coating System for Military Infrastructure		1,000	
Army Applications of Direct Carbon Fuel Cells		2,000	
ADVANCED TACTICAL COMPUTER SCIENCE & SENSOR TECHNOLOGY			
53	67,011	78,511	11,500
Advanced Radar Transceiver Integrated Circuits Development		1,000	
Sensor Visualization and Data Fusion (SVDF)		1,500	
X-band Interferometric Radar		2,000	
1 Megawatt Molten Carbonate Fuel Cell Demonstrator at 29 Palms		2,000	
Aviation Responsive Maintenance System		2,000	
Advanced Battery Technology		1,000	
Software Lifecycle Affordability Management (SLAM)		2,000	
ARMY MISSILE DEFENSE SYSTEMS			
55 INTEGRATION	14,389	59,389	45,000
Standoff Hazardous Agent Detection & Evaluations System (SHADES)		2,000	
BAFST (Biological Air Filtration System Technology)		2,000	
Advanced Standoff Technologies for National Security		1,000	
Micro Seeker System for Small Steerable Projectiles		2,000	
Full Spectrum Active Protection Close-In Layered Shield (FCLAS) for Thin-Skinned Vehicles		2,000	
Advanced Hypersonic Weapon Mission Planning		3,000	
Next Generation Interceptors Materials Research		2,000	
Thermal and Electrical Nanoscale Transport (TENT)		2,000	
Integrated Composite Mounting Hardware		1,000	
Transfer Missile Power System		2,000	
Advanced Fuel Cell Research Program, also known as Advanced Laser Electric Power (ALEP)		3,000	
Radiation Hardening Initiative (RHI)		2,000	
Remote Explosive Analysis and Detection System (READS)		2,000	
Micro-systems and nano-technology for Advanced Technology Development		1,000	
Orion High Altitude Long Endurance UAV		7,500	
Next Generation Passive Sensors (NGPS)		5,000	
Dielectrically Enhanced Sensor System (DESS)		5,500	

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousand of dollars]

R-1	Budget Request	Committee Recommended	Change from Request
ARMY MISSILE DEFENSE SYSTEMS INTEGRATION			
56 (SPACE)	17,421	29,321	11,900
Simulation and Design of Large Electromagnetic Systems		1,900	
Spatial Acquisition and Measurement of Power Sources		1,000	
Integrated Modeling of Air & Ground Environments (IMAGE)		3,000	
Geospatial Airship Research Platform (GARP)		4,000	
Ultra Light UAV Sensor Platform (ULSP)		2,000	
AIR AND MISSILE DEFENSE SYSTEMS			
57 ENGINEERING	176,142	178,142	2,000
Army Extended Range Attack Missile (AERAM) Turbine Engine Development		2,000	
ADVANCED TANK ARMAMENT SYSTEM			
62 (ATAS)	142,486	144,986	2,500
Northern Ohio Integrated Command Operations Program		2,500	
ENVIRONMENTAL QUALITY TECHNOLOGY			
66	6,149	20,799	14,650
Western Hemisphere Information Exchange Program (WHIX)		3,000	
Hawaii Undersea Chemical Weapons Assessment Program		5,500	
National Defense Center for Environmental Excellence		1,500	
Integrated Mission Critical Environment, Safety and Occupational Health Technology and Regional Sustainability Solutions Program		3,000	
Battlefield Plastic Biodiesel		1,650	
WARFIGHTER INFORMATION NETWORK-			
67 TACTICAL	222,296	356,296	134,000
Transfer from Other Procurement, Army, Line 38		134,000	
MEDICAL SYSTEMS ADVANCED			
72 DEVELOPMENT	12,479	23,479	11,000
Total Quality System for FDA Regulated Activities at U.S. Army Medical Research and Materiel Command		1,000	
Lightweight Trauma Module (LTM)		3,000	
Future Medical Shelter System		2,500	
Pneumothorax Detection Device		1,500	
Electroosmotic Pain Therapy System		2,000	
Leishmaniasis Skin Test Antigen		1,000	

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
 [In thousand of dollars]

R-1	Budget Request	Committee Recommended	Change from Request
SOLDIER SYSTEMS - ADVANCED			
73 DEVELOPMENT	18,178	22,478	4,300
Acid Alkaline Direct Methanol Fuel Cell Technology		2,000	
Warrior SIGINT Capability		2,300	
77 ARMED, DEPLOYABLE OH-58D	82,310	129,310	47,000
Transfer from Aircraft Procurement, Army, Line 3		47,000	
83 INFANTRY SUPPORT WEAPONS	45,229	53,229	8,000
Integration of the Javelin Antitank Missile onto the US Army Common Remotely Operated Weapon Station		2,000	
Integration of MK47, 40mm Air Burst Fuse Capability onto U.S. Army Common Remotely Operated Weapon Station		1,000	
Common Remotely Operated Weapon Station (CROWS) with Acoustic Target Recognition and Cueing Control		1,000	
Protector Enhancements and Integration on New Vehicle Platforms Program		2,000	
Enhanced Flame Retardant Body Protection		2,000	
84 MEDIUM TACTICAL VEHICLES	1,994	4,794	2,800
Track Over Tire System		800	
Universal Diagnostic Data Management System - Deployment		2,000	
86 FAMILY OF HEAVY TACTICAL VEHICLES	1,947	2,947	1,000
High Performance Aluminum Military Trailers		1,000	
88 LIGHT TACTICAL WHEELED VEHICLES	82,300	55,300	-27,000
Program delay		-27,000	
FCS MANNED GROUND VEHICLES AND COMMON			
92 GROUND VEHICLE	696,333	506,033	-190,300
Program Adjustment		-190,300	
FCS SYSTEMS OF SYSTEMS ENGINEERING AND PROGRAM MANAGEMENT			
93 PROGRAM MANAGEMENT	1,589,466	1,422,466	-167,000
Program Adjustment		-192,000	
Small Business Technology Insertion		25,000	
FCS RECONNAISSANCE (UAV)			
94 PLATFORMS	41,164	42,264	1,100
FC3, FCS Reconnaissance (UAV) Platforms		2,500	
Program Adjustment		-1,400	
95 FCS UNMANNED GROUND VEHICLES	90,667	87,567	-3,100
Program Adjustment		-3,100	

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[in thousand of dollars]

R-1		Budget Request	Committee Recommended	Change from Request
97	FCS SUSTAINMENT & TRAINING R&D	678,781	631,781	-47,000
	Program Adjustment		-47,000	
	DISTRIBUTIVE INTERACTIVE SIMULATIONS (DIS) -			
105	SDD	16,594	18,744	2,150
	Joint Training Integration and Evaluation Center		2,150	
108	WEAPONS AND MUNITIONS - SDD	55,368	68,368	13,000
	Mortar Anti-Personnel/Anti-Materiel (MAPAM) Development		3,000	
	HYBRID Propellant for Medium and Large Caliber Ammunition		8,000	
	Lightweight Multi-Functional Material Technology		2,000	
	LOGISTICS AND ENGINEER EQUIPMENT -			
109	SDD	45,009	48,009	3,000
	2kW Military Tactical Generator Product Improvement		3,000	
	MEDICAL MATERIEL/MEDICAL BIOLOGICAL DEFENSE			
111	EQUIPMENT	15,823	22,323	6,500
	Advanced Packaging Solutions for Biotherapeutics		1,000	
	Plasma Sterilizer		3,000	
	Rotary Valve Pressure Swing Absorption Oxygen Generator		2,000	
	Veterinary Research Manpower Development for Defense		500	
112	LANDMINE WARFARE/BARRIER - SDD	142,315	146,315	4,000
	Magneto Inductive Remote Activation Munitions Systems MI-RAMS		4,000	
114	ARTILLERY MUNITIONS	63,039	65,039	2,000
	Advanced Cargo Projectile Technology		2,000	
	GENERAL FUND ENTERPRISE BUSINESS SYSTEM			
118	(GFEBs)	53,559	112,600	59,041
	Transfer from Operation and Maintenance, Army, line 432		29,822	
	Transfer from Other Procurement, Army, line 107		29,219	
120	SOLDIER SYSTEMS - WARRIOR DEM/VAL	0	2,000	2,000
	Optimized M-25 Soldier Fuel Cell System		2,000	
	INFORMATION TECHNOLOGY			
124	DEVELOPMENT	103,485	106,485	3,000
	Health Informatics Initiative		3,000	
126	THREAT SIMULATOR DEVELOPMENT	21,887	23,887	2,000
	Electronic Combat and Counter Terrorism Training		2,000	

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[in thousand of dollars]

R-1		Budget Request	Committee Recommended	Change from Request
127	TARGET SYSTEMS DEVELOPMENT	13,499	15,999	2,500
	Next Generation Ice Protection Technologies System for UAVs		2,500	
130	RAND ARROYO CENTER	16,342	18,342	2,000
	Analytical Support		2,000	
	CONCEPTS EXPERIMENTATION			
132	PROGRAM	34,004	38,004	4,000
	Gunfire Detection System for Unmanned Aerial Vehicles		2,000	
	Development of a Robust, Mobile Multispectral Fingerprint Capture Device Employing Multispectral Imaging Technology		2,000	
133	SMALL BUSINESS INNOVATIVE RESEARCH	0	3,000	3,000
	Electro-Magnetic Flak Impulse System		3,000	
	ARMY TECHNICAL TEST INSTRUMENTATION AND TARGETS			
135	TARGETS	74,391	76,391	2,000
	Mobile Optical Tracking System (MOTS)		2,000	
136	SURVIVABILITY/LETHALITY ANALYSIS	40,343	41,843	1,500
	Rotorcraft Survivability Assessment Facility		1,500	
142	SUPPORT OF OPERATIONAL TESTING	75,293	77,293	2,000
	EQUATE at Army Operational Test Command		2,000	
	SIMULATION & MODELING FOR ACQUISITION, REQUIREMENTS, & TRAINING (SMART)			
144	REQUIREMENTS, & TRAINING (SMART)	5,342	6,342	1,000
	Passive Walking Beam Tracked Platform for Unmanned Ground Vehicles		1,000	
	MUNITIONS STANDARDIZATION, EFFECTIVENESS AND SAFETY			
147	AND SAFETY	19,606	29,606	10,000
	Medium Caliber Metal Parts Upgrade		2,000	
	Advanced Cluster Energetics		4,000	
	Defense Metals Technology Center		2,000	
	National Polymer Innovation Center (NPIC)		1,000	
	Domestically Produced Atomized Magnesium for Defense		1,000	
	COMBAT VEHICLE IMPROVEMENT PROGRAMS			
155	PROGRAMS	27,615	35,115	7,500
	Component Optimization for Ground Systems		2,000	
	Ground Combat Systems Open Architecture Electronic Enhancements		3,500	
	Virtual Simulation and Modernization of Bradley Fighting Vehicle		2,000	

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousand of dollars]

R-1	Budget Request	Committee Recommended	Change from Request
156 MANEUVER CONTROL SYSTEM	43,961	45,961	2,000
ARH-70A Armed Reconnaissance Helicopter Vehicle Health and Usage Management System (VHUMS) Demonstration		2,000	
AIRCRAFT MODIFICATIONS/PRODUCT IMPROVEMENT			
157 PROGRAMS	325,643	330,143	4,500
Operator Situational Awareness System - MEDEVAC Advanced Communications Intelligence (COMINT)		2,500 2,000	
AIRCRAFT ENGINE COMPONENT IMPROVEMENT			
158 PROGRAM	476	1,476	1,000
Fort Hood Digitization		1,000	
169 SECURITY AND INTELLIGENCE ACTIVITIES	0	5,500	5,500
Biometrics Automated Toolset Enhancements Mobile Object Search Toolkit for Intelligence Analysts ISR Synchronization and Visualization Tool for the Battle Command Laboratory Collection		2,000 2,500 1,000	
INFORMATION SYSTEMS SECURITY			
170 PROGRAM	28,332	32,282	3,950
Multiple Independent Levels of Security (MILS) Separation Kernel Technology Development Information Assurance Development		950 3,000	
171 GLOBAL COMBAT SUPPORT SYSTEM	129,689	94,689	-35,000
Authorization Adjustment		-35,000	
DISTRIBUTED COMMON GROUND/SURFACE			
177 SYSTEMS	0	6,000	6,000
Asymmetric Threat Response and Analysis Project (ATRAP) Defense Common Ground Station - Army All Source Analysis System Integration		3,000 3,000	
END ITEM INDUSTRIAL PREPAREDNESS			
179 ACTIVITIES	66,869	78,869	12,000
Smart Machine Platform Initiative Ceramic Manufacturing Technology for Helicopter Rotor Blade Erosion Protection Specialized Compact Automated Mechanical Clearance Platform (SCAMP) SuperPulse Laser System Development for Turbine Engine Applications Solid State Processing of Titanium Alloys for Defense Materiel Armaments National Center for Defense Manufacturing and Machining Advanced Materials Processing for Ultra-Efficient Power Systems		3,000 2,500 500 2,000 1,000 1,000 2,000 1,000	

FUTURE COMBAT SYSTEMS

The Army began the Future Combat Systems (FCS) program in May 2003 with the aggressive and somewhat risky strategy of defining requirements and maturing technology simultaneously. The fiscal year 2008 request includes nearly \$3,600,000,000 in research, development, test and evaluation funding, an increase of \$137,000,000 above the fiscal year 2007 appropriated amount. The budget request for FCS includes for the first time procurement funds in the amount of \$99,606,000 for facilitization and long lead items. FCS requested fiscal year 2008 funding supports the first of three planned technology spin outs which will deliver the benefits of FCS technology to other Army elements. Milestone 1 spin outs are planned to include Network Capability Integration kits for Abrams Tanks, Bradley Fighting Vehicles and HMMWVs. In preparing the fiscal year 2008 request, the Army reduced FCS funding by \$266,800,000, seeking efficiencies and improved management oversight in cost control. The Army also deferred four of the original 18 systems: Class II and Class III unmanned aerial vehicles; intelligent munitions systems; and large unmanned ground vehicles. A recurring concern in the program has been the demonstrated levels of technology readiness. However the Government Accountability Office reports that about 80 percent of FCS technologies can be assessed as mature, double the number assessed as mature a year ago. The Committee remains committed to Army force modernization and understands that the centerpiece and primary effort in Army modernization is FCS. The Committee encourages the Army to enhance program stability and achieve advancements in technology to benefit the current and near term force. The Committee recommends full funding of \$99,606,000 for FCS procurement. The Committee recommends reductions totaling \$433,800,000 in FCS research, development, test and evaluation lines as detailed in the Project Level Adjustment tables. The Committee recommends an additional \$25,000,000 for FCS in System of Systems Engineering and Program Management for Small Business Technology Insertion.

TACTICAL METAL FABRICATION SYSTEM (TAC FAB)

The Committee recognizes the successful implementation of the Army's Rapid Manufacturing System, formerly known as Mobile Parts Hospital, but is concerned that the program is unable to address the significant need for cast parts for tanks, vehicles, guns and other weapons systems. The Committee is aware that Soldiers and Marines in Iraq have expressed a need for a mobile foundry, co-located with deployed forces. The Committee understands that the Tactical Metal Fabrication System would provide a mobile, containerized foundry to serve as companion and complement to the Rapid Manufacturing System. The Committee also understands that such an asset can significantly contribute to easing current reset demands. The Committee, therefore, recommends an additional \$3,000,000 in PE 0602601A, Research, Development, Test and Evaluation, Army, Combat Vehicle and Automotive Technology, for the Tactical Metal Fabrication System.

WARFIGHTER INFORMATION NETWORK—TACTICAL

On March 5, 2007, congressional notification was made of a Nunn-McCurdy cost growth breach for the Warfighter Information Network—Tactical (WIN-T). On June 5, 2007, the Under Secretary of Defense for Acquisition, Technology and Logistics provided to the Congress certification that the WIN-T program satisfied the requirements for continuation. The WIN-T program was restructured to absorb the Joint Network Node (JNN) program as an Acquisition Category 1D Major Defense Acquisition Program. The restructured WIN-T program consists of four progressively more capable increments. The Committee fully supports the Army's efforts to stabilize the WIN-T and JNN programs through one overarching Acquisition Strategy emphasizing an incremental approach. The Committee understands that each element of the restructured WIN-T/JNN program will report via a separate Selected Acquisition Report for enhanced accountability. The budget request included \$222,296,000 for WIN-T. The Committee recommends \$356,296,000, an increase of \$134,000,000. The additional funds are transferred from Other Procurement, Army line 67 for JNN procurement in order to stabilize the WIN-T program and the incremental approach for the combined JNN and WIN-T program.

GLOBAL COMBAT SUPPORT SYSTEM—ARMY

The Committee recommends \$94,689,000 for Global Combat Support System—Army, instead of \$129,689,000 as proposed in the budget request. GCSS-A is the tactical component of the Single Army Logistics Enterprise, and will implement a comprehensive logistics automation solution for deployed units that provides streamlined supply operations, maintenance operations, property accountability and logistics management, and integration procedures. The Committee notes, however, that the Army is encountering problems in executing the acquisition and test strategies for this program, which will likely affect the Army's ability to execute funds in a timely manner.

HYBRID PROPELLANT FOR MEDIUM AND LARGE CALIBER AMMUNITION

The Committee recommends \$8,000,000 in Research, Development, Test and Evaluation, Army, Line 108, only to continue the development of a HYBRID propellant to be used in small, medium and large caliber munitions. HYBRID propellant combines the properties of chemical deterrents with the geometry of perforated propellants, resulting in the highest possible ballistic performance that can be tailored to meet specific gun applications. This additional funding will allow the Army to qualify the 105mm Artillery XM350 HYBRID propellant charge and support the Extended Range Guided Munitions propellant testing and shipboard qualification. The XM350 HYBRID propellant charge will replace both the M200 and the M67 propellant charges with one propellant due to the HYBRID propellant's flexibility and superior ballistic properties and thereby simplify battlefield management. Furthermore, successful implementation of the HYBRID propellant will significantly reduce the Army logistics burden and the corresponding procurement and life cycle costs via the highest possible muzzle veloc-

ity for extended ranges/lethality, lighter barrels with less recoil and extended wear characteristics.

RAPID RESPONSE SYSTEM FOR ACTIVE PROTECTION OF GROUND AND AIR VEHICLES

The Committee recommends \$5,000,000 in Research, Development, Test and Evaluation, Army, Line 46, only for the Rapid Response System for Active Protection of Ground and Air Vehicles. The technology underlying this initiative has been demonstrated as part of the Overwatch Advanced Concept Technology Demonstration and the Weapons Surveillance System program. The Committee recognizes the need to extend this technology in order to provide a Rapid Response Sensor System for immediate detection, warning and cueing as part of an active protection countermeasure system for protecting ground and airborne vehicles against projectile and missile threats. This program will provide key advances in hostile fire detection and classification in support of air and ground vehicle protection and next generation hostile fire detection for manned and unmanned platforms.

RESEARCH OF ADVANCED COMMUNICATIONS TECHNOLOGIES

The Committee recommends \$5,000,000 in Research, Development, Test and Evaluation, Army, Line 23, PE 0602782A, only for the research of advanced communications technologies for the purpose of providing the Army with enhanced capabilities for secure, mobile, networked communications, assured information delivery and presentation of information that enables decision making. This activity includes but is not limited to Project 779 (C2 and Platform Electronic technology) and Project H92 (Communications Technology).

TACTICAL WHEELED VEHICLE COMPOSITE COMPONENT WEIGHT REDUCTION PROGRAM

The Committee has provided an additional \$3,000,000 in Research, Development, Test and Evaluation, Army, line 33, to design, optimize, fabricate, and test composite components that can be applied to the Army's Family of Medium Tactical Vehicles (FMTV) and other interim vehicles in order to decrease weight and increase protection. The Army's Tank Automotive Command has completed work with industry to make a lighter and stronger composite hood for the HMMWV as well as other components for light vehicle platforms. Technology and processes used in this program will be applied to components on FMTV trucks and other vehicles that are being created for the purpose of replacing the HMMWV in combat situation. Larger logistics trucks have the same weight reduction and protection enhancement needs as the HMMWV. Such a program will enhance the military's industrial base and result in an Army fleet of larger and better armored trucks.

NEUROTOXIN EXPOSURE TREATMENT RESEARCH PROGRAM

The Committee is aware that the United States Army Medical Research and Materiel Command (USAMRMC) is conducting excellent research in investigating the underlying biologic mechanisms

and therapeutic interventions of neuro-degenerative effects caused by deployment, environmental, and occupational exposures. Therefore, the Committee recommends \$25,000,000 for the continuation of this vital research into Parkinson's and other neurological disorders through collaborative work between the military, a non-profit organization and an academic laboratory with distinguished scientific credentials in this field.

PAIN AND NEUROSCIENCE CENTER RESEARCH PROGRAM

The Committee is aware of the exceptional research outcomes of the Pain and Neuroscience Center Research Program, including the development of protocols for appropriate peripheral nerve block catheterization use for severe peripheral limb loss and damage, and the development of a comprehensive research, clinical and educational program to address a variety of neurological conditions with military and civilian relevance, focusing on acute neurology and neuromuscular disorders. The Committee continues to support this effort to increase the quality of battlefield and post-deployment pain management and neurological care.

SUSTAINING SUPPORT FOR ONGOING OPERATIONS

The Committee is concerned that the Army's C4ISR research, development, test and evaluation acquisition and sustainment assets are suffering workforce attrition at an unacceptably high rate. To ensure the continuity of support for ongoing operations, the Committee provides robust funding for critical C4ISR research and development to ensure that workforce attrition is mitigated. The Committee will examine both the reasons for and potential solutions to this attrition problem.

UNDERSEA UXO CLEANUP

The Committee applauds the Army's efforts to characterize, monitor and clean up undersea munitions off the coast of Oahu. The Committee encourages the Army to capitalize on the work being done by the University of Hawaii and their partners to conduct investigations and clean up at ocean dumping sites around the United States. The Committee believes that the Hawaii Undersea Chemical Weapons Assessment Program off Pearl Harbor and the coast of Wainae could serve as a template for work at other undersea clean up sites and encourages the Army to monitor project activities for possible use of duplication elsewhere.

ADVANCED AFFORDABLE TURBINE ENGINE (AATE)

The Committee is aware that the Army recently conducted a competition for design and concept demonstration of an advanced technology 3000 shaft horsepower turbine engine for the application to H-60 Black Hawks, AH-64 Apaches and other future force rotorcraft. The Committee, however, is concerned that the Army's current engine development approach may lead to selecting a single engine supplier prematurely. For these reasons, the Committee believes it is imperative for the Army to pursue and alternate engine design and test demonstration from a second manufacturer. As such, the Committee directs that, from funds available under

this heading, \$5,000,00 may be used to pursue an alternative AATE engine.

CVP DESIGN

The Committee is aware that the “CVP Design for Commonality Across Platforms and Applications” technology, which is designed to greatly reduce wear and tear on vehicle transmissions, is proving to be an effective tool to reduce consumption. The Committee encourages the Army to provide fundign for this activity in fiscal year 2008.

NATIONAL EYE EVALUATION AND RESEARCH NETWORK

The Committee recognizes the need for a nationwide infrastructure to provide readily accessible evaluation and testing for serious retinal injuries and diseases, as well as a central repository for clinical trial research data. The Committee directs \$3,000,00 to be appropriated for use by the National Eye Evaluation and Research Network, to be managed by the National Neurovision Research Institute.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, NAVY

Fiscal year 2007 appropriation	\$18,673,894,000
Fiscal year 2008 budget request	17,075,536,000
Committee recommendation	17,718,624,000
Change from budget request	+643,088,000

This appropriation provides funds for the research, development, test and evaluation activities of the Department of the Navy, which includes the Marine Corps.

The Committee recommends an appropriation of \$17,718,624,000 for Research, Development, Test and Evaluation, Navy, which is \$955,270,000 less than the amount provided in fiscal year 2007 and \$643,088,000 more than the request for fiscal year 2008.

PROGRAM RECOMMENDED

The total amount recommended in the bill will provide the following program in fiscal year 2008:

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST	
RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY				
BASIC RESEARCH				
1	UNIVERSITY RESEARCH INITIATIVES.....	76,637	93,137	+16,500
2	IN-HOUSE LABORATORY INDEPENDENT RESEARCH.....	16,556	16,556	---
3	DEFENSE RESEARCH SCIENCES.....	374,052	380,052	+6,000
	TOTAL, BASIC RESEARCH.....	467,245	489,745	+22,500
APPLIED RESEARCH				
4	POWER PROJECTION APPLIED RESEARCH.....	83,419	102,019	+18,600
5	FORCE PROTECTION APPLIED RESEARCH.....	155,936	167,436	+11,500
6	MARINE CORPS LANDING FORCE TECHNOLOGY.....	26,785	27,785	+1,000
7	MATERIALS, ELECTRONICS AND COMPUTER TECHNOLOGY.....	---	2,500	+2,500
8	COMMON PICTURE APPLIED RESEARCH.....	93,376	99,376	+6,000
9	WARFIGHTER SUSTAINMENT APPLIED RESEARCH.....	88,297	102,297	+14,000
10	RF SYSTEMS APPLIED RESEARCH.....	45,451	51,451	+6,000
11	OCEAN WARFIGHTING ENVIRONMENT APPLIED RESEARCH.....	49,869	55,369	+5,500
12	JOINT NON-LETHAL WEAPONS APPLIED RESEARCH.....	6,081	6,081	---
13	UNDERSEA WARFARE APPLIED RESEARCH.....	68,455	70,955	+2,500
14	MINE AND EXPEDITIONARY WARFARE APPLIED RESEARCH.....	59,874	68,374	+8,500
	TOTAL, APPLIED RESEARCH.....	677,543	753,643	+76,100
ADVANCED TECHNOLOGY DEVELOPMENT				
15	POWER PROJECTION ADVANCED TECHNOLOGY.....	49,684	54,684	+5,000
16	FORCE PROTECTION ADVANCED TECHNOLOGY.....	70,850	106,100	+35,250
17	COMMON PICTURE ADVANCED TECHNOLOGY.....	40,782	43,782	+3,000
18	WARFIGHTER SUSTAINMENT ADVANCED TECHNOLOGY.....	102,124	113,624	+11,500
19	RF SYSTEMS ADVANCED TECHNOLOGY.....	22,676	27,676	+5,000
20	MARINE CORPS ADVANCED TECHNOLOGY DEMONSTRATION (ATD)...	70,968	76,468	+5,500
21	JOINT NON-LETHAL WEAPONS TECHNOLOGY DEVELOPMENT.....	10,938	13,438	+2,500
23	WARFIGHTER PROTECTION ADVANCED TECHNOLOGY.....	12,145	43,645	+31,500
24	UNDERSEA WARFARE ADVANCED TECHNOLOGY.....	73,626	74,626	+1,000
25	NAVY WARFIGHTING EXPERIMENTS AND DEMONSTRATIONS.....	41,196	41,196	---
26	MINE AND EXPEDITIONARY WARFARE ADVANCED TECHNOLOGY....	26,840	27,840	+1,000
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT.....	521,829	623,079	+101,250

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST	
DEMONSTRATION & VALIDATION				
27	AIR/OCEAN TACTICAL APPLICATIONS.....	47,914	44,914	-3,000
28	AVIATION SURVIVABILITY.....	6,252	20,252	+14,000
29	DEPLOYABLE JOINT COMMAND AND CONTROL.....	9,475	9,475	---
30	ASW SYSTEMS DEVELOPMENT.....	16,706	21,706	+5,000
31	TACTICAL AIRBORNE RECONNAISSANCE.....	4,063	4,063	---
32	ADVANCED COMBAT SYSTEMS TECHNOLOGY.....	9,331	9,331	---
33	SURFACE AND SHALLOW WATER MINE COUNTERMEASURES.....	91,122	92,722	+1,600
34	SURFACE SHIP TORPEDO DEFENSE.....	15,967	28,967	+13,000
35	CARRIER SYSTEMS DEVELOPMENT.....	84,806	89,306	+4,500
36	SHIPBOARD SYSTEM COMPONENT DEVELOPMENT.....	9,450	27,050	+17,600
37	PILOT FISH.....	132,131	132,131	---
38	RETRACT LARCH.....	89,601	89,601	---
39	RETRACT JUNIPER.....	37,405	37,405	---
40	RADIOLOGICAL CONTROL.....	1,546	1,546	---
41	SURFACE ASW.....	25,560	50,560	+25,000
43	ADVANCED SUBMARINE SYSTEM DEVELOPMENT.....	134,882	139,382	+4,500
44	SUBMARINE TACTICAL WARFARE SYSTEMS.....	9,865	10,865	+1,000
45	SHIP CONCEPT ADVANCED DESIGN.....	30,858	32,858	+2,000
46	SHIP PRELIMINARY DESIGN & FEASIBILITY STUDIES.....	18,736	18,736	---
47	ADVANCED NUCLEAR POWER SYSTEMS.....	166,196	166,196	---
49	CHALK EAGLE.....	211,201	211,201	---
50	LITTORAL COMBAT SHIP (LCS).....	217,502	229,002	+11,500
51	COMBAT SYSTEM INTEGRATION.....	53,427	58,427	+5,000
52	CONVENTIONAL MUNITIONS.....	8,941	8,941	---
53	MARINE CORPS ASSAULT VEHICLES.....	288,220	288,220	---
54	MARINE CORPS MINE/COUNTERMEASURES SYSTEMS - ADV DEV...	657	657	---
55	MARINE CORPS GROUND COMBAT/SUPPORT SYSTEM.....	80,403	83,903	+3,500
56	JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT.....	83,361	83,361	---
57	COOPERATIVE ENGAGEMENT.....	33,283	38,283	+5,000
58	OCEAN ENGINEERING TECHNOLOGY DEVELOPMENT.....	5,122	5,122	---
59	ENVIRONMENTAL PROTECTION.....	19,850	21,350	+1,500
60	NAVY ENERGY PROGRAM.....	5,335	6,335	+1,000
61	FACILITIES IMPROVEMENT.....	4,131	10,581	+6,450
62	CHALK CORAL.....	28,297	28,297	---

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
63 NAVY LOGISTIC PRODUCTIVITY.....	3,547	15,547	+12,000
64 RETRACT MAPLE.....	346,144	346,144	---
65 LINK PLUMERIA.....	88,748	88,748	---
66 RETRACT ELM.....	79,144	79,144	---
67 SHIP SELF DEFENSE.....	10,954	10,954	---
68 LINK EVERGREEN.....	31,607	31,607	---
69 SPECIAL PROCESSES.....	40,940	40,940	---
70 NATO RESEARCH AND DEVELOPMENT.....	9,934	9,934	---
71 LAND ATTACK TECHNOLOGY.....	31,021	62,021	+31,000
72 NONLETHAL WEAPONS.....	45,892	48,892	+3,000
74 JOINT PRECISION APPROACH AND LANDING SYSTEMS.....	70,811	70,811	---
75 SINGLE INTEGRATED AIR PICTURE (SIAP) SYSTEM ENGINEER..	46,450	46,450	---
76 COUNTER-DRUG RDT&E PROJECTS.....	---	10,000	+10,000
77 DIRECTED ENERGY AND ELECTRIC WEAPON SYSTEMS.....	---	2,500	+2,500
78 TACTICAL AIR DIRECTIONAL INFRARED COUNTERMEASURES....	27,569	34,569	+7,000
79 HARD AND DEEPLY BURIED TARGET DEFEAT SYSTEM (HDBTDS)..	126,434	---	-126,434
80 JOINT AIR-TO-GROUND MISSILE (JAGM).....	15,000	15,000	---
81 SPACE & ELECTRONIC WARFARE (SEW) ARCHITECTURE/ENGINE..	42,295	42,295	---
TOTAL, DEMONSTRATION & VALIDATION.....	2,998,086	3,056,302	+58,216
ENGINEERING & MANUFACTURING DEVELOPMENT			
83 OTHER HELO DEVELOPMENT.....	46,815	42,815	-4,000
84 AV-8B AIRCRAFT - ENG DEV.....	17,360	17,360	---
85 STANDARDS DEVELOPMENT.....	106,242	110,242	+4,000
86 MULTI-MISSION HELICOPTER UPGRADE DEVELOPMENT.....	78,151	78,151	---
87 AIR/OCEAN EQUIPMENT ENGINEERING.....	5,162	5,162	---
88 P-3 MODERNIZATION PROGRAM.....	8,621	4,621	-4,000
89 WARFARE SUPPORT SYSTEM.....	2,911	4,911	+2,000
90 TACTICAL COMMAND SYSTEM.....	86,921	89,421	+2,500
91 ADVANCED HAWKEYE.....	808,993	808,993	---
92 H-1 UPGRADES.....	3,608	3,608	---
93 ACOUSTIC SEARCH SENSORS.....	18,325	19,325	+1,000
94 V-22A.....	117,997	117,997	---
95 AIR CREW SYSTEMS DEVELOPMENT.....	24,267	24,267	---
96 EA-18.....	272,699	274,699	+2,000

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
97 ELECTRONIC WARFARE DEVELOPMENT.....	41,064	44,564	+3,500
98 VHXX EXECUTIVE HELO DEVELOPMENT.....	270,971	230,971	-40,000
99 JOINT TACTICAL RADIO SYSTEM - NAVY (JTRS-NAVY).....	853,676	853,676	---
100 SC-21 TOTAL SHIP SYSTEM ENGINEERING.....	621,544	629,544	+8,000
101 SURFACE COMBATANT COMBAT SYSTEM ENGINEERING.....	142,810	146,810	+4,000
102 LPD-17 CLASS SYSTEMS INTEGRATION.....	4,300	4,300	---
103 SMALL DIAMETER BOMB (SDB).....	9,832	9,832	---
104 STANDARD MISSILE IMPROVEMENTS.....	231,791	231,791	---
105 AIRBORNE MCM.....	54,761	57,761	+3,000
106 NAVAL INTEGRATED FIRE CONTROL-COUNTER AIR SYSTEMS ENG.	11,497	15,497	+4,000
107 ADVANCED ABOVE WATER SENSORS.....	121,494	121,494	---
108 SSN-688 AND TRIDENT MODERNIZATION.....	114,789	115,789	+1,000
109 AIR CONTROL.....	4,166	4,166	---
111 SHIPBOARD AVIATION SYSTEMS.....	28,100	28,100	---
112 COMBAT INFORMATION CENTER CONVERSION.....	17,139	17,139	---
113 NEW DESIGN SSN.....	223,958	249,958	+26,000
114 SSN-21 DEVELOPMENTS.....	2,457	2,457	---
115 SUBMARINE TACTICAL WARFARE SYSTEM.....	53,703	55,703	+2,000
116 SHIP CONTRACT DESIGN/ LIVE FIRE T&E.....	62,404	63,404	+1,000
118 MINE DEVELOPMENT.....	2,092	2,092	---
120 LIGHTWEIGHT TORPEDO DEVELOPMENT.....	27,056	27,056	---
122 JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT.....	10,382	10,382	---
123 PERSONNEL, TRAINING, SIMULATION, AND HUMAN FACTORS....	8,830	8,830	---
125 JOINT STANDOFF WEAPON SYSTEMS.....	24,851	30,851	+6,000
126 SHIP SELF DEFENSE (DETECT & CONTROL).....	33,064	35,064	+2,000
127 SHIP SELF DEFENSE (ENGAGE: HARD KILL).....	67,366	70,366	+3,000
128 SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW).....	34,323	37,323	+3,000
129 INTELLIGENCE ENGINEERING.....	1,959	1,959	---
130 MEDICAL DEVELOPMENT.....	7,973	37,573	+29,600
131 NAVIGATION/ID SYSTEM.....	42,121	42,121	---
133 JOINT STRIKE FIGHTER (JSF).....	1,707,372	2,038,872	+331,500
135 INFORMATION TECHNOLOGY DEVELOPMENT.....	22,181	26,181	+4,000
136 INFORMATION TECHNOLOGY DEVELOPMENT.....	54,098	62,098	+8,000
138 CH-53X.....	417,161	407,161	-10,000
139 MULTI-MISSION MARITIME AIRCRAFT (MMA).....	880,106	881,106	+1,000

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
140 TACTICAL CRYPTOLOGIC SYSTEMS.....	39,053	41,053	+2,000
TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT.....	7,848,516	8,244,616	+396,100
RDT&E MANAGEMENT SUPPORT			
141 THREAT SIMULATOR DEVELOPMENT.....	23,924	23,924	---
142 TARGET SYSTEMS DEVELOPMENT.....	32,376	32,376	---
143 MAJOR T&E INVESTMENT.....	37,614	41,714	+4,100
144 STUDIES AND ANALYSIS SUPPORT - NAVY.....	7,516	7,516	---
145 CENTER FOR NAVAL ANALYSES.....	49,360	49,360	---
148 TECHNICAL INFORMATION SERVICES.....	694	5,694	+5,000
149 MANAGEMENT, TECHNICAL & INTERNATIONAL SUPPORT.....	49,498	49,498	---
150 STRATEGIC TECHNICAL SUPPORT.....	3,452	3,452	---
151 RDT&E SCIENCE AND TECHNOLOGY MANAGEMENT.....	68,180	68,180	---
152 RDT&E INSTRUMENTATION MODERNIZATION.....	1,423	1,423	---
153 RDT&E SHIP AND AIRCRAFT SUPPORT.....	184,541	184,541	---
154 TEST AND EVALUATION SUPPORT.....	336,130	336,130	---
155 OPERATIONAL TEST AND EVALUATION CAPABILITY.....	12,176	12,176	---
156 NAVY SPACE AND ELECTRONIC WARFARE (SEW) SUPPORT.....	2,439	2,439	---
157 SEW SURVEILLANCE/RECONNAISSANCE SUPPORT.....	29,071	24,071	-5,000
158 MARINE CORPS PROGRAM WIDE SUPPORT.....	20,166	25,166	+5,000
159 TACTICAL CRYPTOLOGIC ACTIVITIES.....	1,508	1,508	---
160 SERVICE SUPPORT TO JFCOM, JNTC.....	5,078	---	-5,078
TOTAL, RDT&E MANAGEMENT SUPPORT.....	865,146	869,168	+4,022

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
OPERATIONAL SYSTEMS DEVELOPMENT			
163 HARPOON MODIFICATIONS.....	43,470	43,470	---
164 UNMANNED COMBAT AIR VEHICLE (UCAV) ADVANCED COMPONENT.	161,665	161,665	---
165 STRATEGIC SUB & WEAPONS SYSTEM SUPPORT.....	81,398	54,398	-27,000
166 SSBN SECURITY TECHNOLOGY PROGRAM.....	33,109	33,109	---
167 SUBMARINE ACOUSTIC WARFARE DEVELOPMENT.....	4,149	4,149	---
168 NAVY STRATEGIC COMMUNICATIONS.....	36,531	36,531	---
169 RAPID TECHNOLOGY TRANSITION (RTT).....	44,756	40,756	-4,000
170 F/A-18 SQUADRONS.....	44,891	50,891	+6,000
171 E-2 SQUADRONS.....	22,691	22,691	---
172 FLEET TELECOMMUNICATIONS (TACTICAL).....	23,108	24,108	+1,000
173 TOMAHAWK AND TOMAHAWK MISSION PLANNING CENTER (TMPC)...	11,405	17,005	+5,600
174 INTEGRATED SURVEILLANCE SYSTEM.....	27,740	29,740	+2,000
175 AMPHIBIOUS TACTICAL SUPPORT UNITS.....	1,845	1,845	---
176 CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT.....	6,987	10,487	+3,500
177 CRYPTOLOGIC DIRECT SUPPORT.....	1,443	1,443	---
178 ELECTRONIC WARFARE (EW) READINESS SUPPORT.....	34,340	34,340	---
179 HARM IMPROVEMENT.....	34,762	38,262	+3,500
180 TACTICAL DATA LINKS.....	5,534	5,534	---
181 SURFACE ASW COMBAT SYSTEM INTEGRATION.....	11,200	18,200	+7,000
182 MK-48 ADCAP.....	17,941	20,941	+3,000
183 AVIATION IMPROVEMENTS.....	100,284	108,284	+8,000
184 NAVY SCIENCE ASSISTANCE PROGRAM.....	3,473	3,473	---
185 OPERATIONAL NUCLEAR POWER SYSTEMS.....	71,720	71,720	---
186 MARINE CORPS COMMUNICATIONS SYSTEMS.....	280,140	285,640	+5,500
187 MARINE CORPS GROUND COMBAT/SUPPORTING ARMS SYSTEMS....	57,177	66,177	+9,000
188 MARINE CORPS COMBAT SERVICES SUPPORT.....	12,946	12,946	---
189 TACTICAL AIM MISSILES.....	4,445	4,445	---
190 ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM).....	4,579	4,579	---
191 JOINT HIGH SPEED VESSEL (JHSV).....	18,934	18,934	---
195 SATELLITE COMMUNICATIONS (SPACE).....	736,572	741,572	+5,000
196 INFORMATION SYSTEMS SECURITY PROGRAM.....	28,393	32,393	+4,000
197 JOINT COMMAND AND CONTROL PROGRAM (JC2).....	1,007	1,007	---
198 JOINT COMMAND AND CONTROL PROGRAM (JC2).....	5,015	5,015	---
199 COBRA JUDY.....	132,679	132,679	---

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
200 NAVY METEOROLOGICAL AND OCEAN SENSORS-SPACE (METOC)...	4,887	4,887	---
202 JOINT MILITARY INTELLIGENCE PROGRAMS.....	5,444	5,444	---
203 TACTICAL UNMANNED AERIAL VEHICLES.....	50,185	59,185	+9,000
204 ENDURANCE UNMANNED AERIAL VEHICLES.....	116,666	116,666	---
205 AIRBORNE RECONNAISSANCE SYSTEMS.....	50,677	56,977	+6,300
206 MANNED RECONNAISSANCE SYSTEMS.....	22,488	22,488	---
207 DISTRIBUTED COMMON GROUND SYSTEMS.....	19,350	21,350	+2,000
208 AERIAL COMMON SENSOR (ACS)	16,606	6,606	-10,000
209 MODELING AND SIMULATION SUPPORT.....	7,832	7,832	---
210 DEPOT MAINTENANCE (NON-IF).....	19,402	19,402	---
211 AVIONICS COMPONENT IMPROVEMENT PROGRAM.....	1,635	1,635	---
212 INDUSTRIAL PREPAREDNESS.....	56,445	58,445	+2,000
213 MARITIME TECHNOLOGY (MARITECH).....	---	1,500	+1,500
TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT.....	2,477,946	2,520,846	+42,900
999 CLASSIFIED PROGRAMS.....	1,219,225	1,161,225	-58,000
TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY.....	17,075,536	17,718,624	+643,088

The adjustments to the budget activities for Research, Development, Test and Evaluation, Navy, are shown below:

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
(in thousands of dollars)

R-1	Budget Request	Committee Recommended	Change from Request
1 UNIVERSITY RESEARCH INITIATIVES	76,637	93,137	16,500
Blast and Impact Resistant Composite Structures for Navy Ships		2,000	
Cell-Based Sensors for Chemical Threats		1,000	
Center for Hetero-Functional Materials		2,500	
Center for Nanoscience and Nanomaterials		1,500	
CSTARS (Center for Southeastern Tropical Advanced Remote Sensing)		2,500	
Microwave Ferrites and Multifunctional Integrated Circuits		1,000	
National Security Training		2,000	
Research Infrastructure for the Applied Physics Laboratory (UW)		4,000	
3 DEFENSE RESEARCH SCIENCES	374,052	380,052	6,000
Energetics Technology Center/Energetics S&T Workforce		3,000	
Mobile Ad Hoc Data Communications for Unmanned Systems		1,000	
ONAMI Nanoelectronics and Nanometrology Initiative		1,000	
Stand-off Biochemical Agent Detection		1,000	
4 POWER PROJECTION APPLIED RESEARCH	83,419	102,019	18,600
Aging Evaluation of Advanced Materials Used for Military Aircraft		1,500	
Clustered Millimeter Wave Imaging Sensors		600	
High Energy Conventional Energetics (Phase One)		6,000	
High Power Free Electron Laser Development for Naval Applications		2,500	
Marine Mammals - Effects of Sound		1,000	
Modular Payload Systems		2,500	
Multifunctional Oxide Materials, Their Application and Devices (MFMA)		2,500	
Strike Weapon Propulsion (SWEAP)		2,000	
5 FORCE PROTECTION APPLIED RESEARCH	155,936	167,436	11,500
Advanced Simulation Tools for Aircraft Structures Made of Composite Materials		2,000	
Critical Composites Technologies for Enabling Special Operations Forces Medium Range Endurance Craft		1,000	
High Temperature Super Conducting Magnetic Energy Storage		500	
High Toughness Aluminum Structures		1,500	
Integration of Electro-Kinetic Weapons into Next Generation of Navy Ships		1,000	
Optical Recognition Protocol for Biologics Detection		1,000	
Planar Solid Oxide Fuel Cell System Demonstration at UTC SimCenter		3,500	
Stabilized Laser Designation Capability		1,000	
6 MARINE CORPS LANDING FORCE TECHNOLOGY	26,785	27,785	1,000
High Power Lightweight Zinc-Air Battery		1,000	

R-1	Budget Request	Committee Recommended	Change from Request
MATERIALS, ELECTRONICS AND COMPUTER			
7 TECHNOLOGY	0	2,500	2,500
Digital Direct Manufacturing Research Center		1,000	
Infrared Materials Laboratories		1,500	
8 COMMON PICTURE APPLIED RESEARCH	93,376	99,376	6,000
Advanced Panoramic Sensor Systems for UAV's		1,000	
All Weather Sense & Avoid for UAV's		2,000	
Radio Sensor Module (RASM)		2,000	
UGV Mobility & Coordination in Joint Urban/Littoral Environments		1,000	
9 WARFIGHTER SUSTAINMENT APPLIED RESEARCH	88,297	102,297	14,000
Advanced Fouling and Corrosion Control Coatings		2,000	
Advanced Reinforced Materials and New Materials Research for Aircraft Tires		1,000	
Atmospheric Water Harvesting		1,000	
Durability of Composite Materials and Structures		2,000	
Mast-mounted In-Port Video Force Protection Surveillance System		2,000	
Mission Deployable Surveillance Biometrics		2,000	
Nanotechnology Engineer & Manufacturing Operation (NEMO)		1,000	
Virtual Clinical Learning Lab and Center of Excellence		3,000	
10 RF SYSTEMS APPLIED RESEARCH	45,451	51,451	6,000
Gallium Nitride RF Power Technology		2,000	
Notre Dame Center for the Engineering of Oxide-Nitride Structures (CEONS)		2,000	
Reparative Core Medicine		1,000	
Ultra Stable Coherent Laser		1,000	
OCEAN WARFIGHTING ENVIRONMENT APPLIED			
11 RESEARCH	49,869	55,369	5,500
Autonomous Undersea Vehicle Applications Center		1,500	
Autonomous Marine Sensors and Networks for Rapid Littoral Assessment		2,000	
Littoral Battlespace Sensing (LBS) & Autonomous Underwater Vehicle System (UAV) Program		1,000	
Underwater Acoustic Imaging for Maritime Domain Awareness		1,000	
13 UNDERSEA WARFARE APPLIED RESEARCH	68,455	70,955	2,500
Autonomous Unmanned Undersea Vehicle (JUV) Delivery & Communications Demonstration		2,500	
MINE AND EXPEDITIONARY WARFARE APPLIED			
14 RESEARCH	59,874	68,374	8,500
Autonomous Underwater Vehicle (AUV) Docking and Recharging Station		3,500	
Center for Detection and Neutralization of Electronically Initiated Improved Explosive Devices		3,000	
Navy Special Warfare (NSW) Unattended Sensor Network		2,000	
15 POWER PROJECTION ADVANCED TECHNOLOGY	49,684	54,684	5,000
Flow Path Analysis Tool (FPAT)		1,000	
High Speed Anti-radiation Demonstration (HSAD)		2,000	
Magdalena Ridge Observatory (MRO)		2,000	

R-1		Budget Request	Committee Recommended	Change from Request
16	FORCE PROTECTION ADVANCED TECHNOLOGY	70,850	106,100	35,250
	Accelerating Fuel Cells Manufacturability and their Application in the Armed Forces		2,750	
	Advanced Logistics Fuel Reformer for Fuel Cells		3,000	
	Advanced Navy Boat Lift (13,000 – 24,000 lbs.) Research and Development		1,000	
	Agile Port and High Speed Ship Technology		3,000	
	Cryogenic Power System for Unmanned Underwater Vehicles		1,000	
	Detecting Improvised Explosive Devices		1,000	
	Direct Motor Driven Waterjet		2,000	
	High Speed Power Node Switching and Control Center		2,000	
	Innovative Methods for Ship-Building Affordability		2,000	
	Integrated Advanced Communications Terminal (IACT)		1,000	
	Multi-Fuel Combustor for Shipboard Fuel Cells		2,000	
	M65 Bismaleimide Carbon Fiber Prepreg		3,000	
	Pure Hydrogen Supply from Logistic Fuels		3,000	
	Secure Infrastructure Technology Laboratory (SINTEL)		3,000	
	Solid-State DC Protection System (SSDCP)		500	
	Tactical Compact Optical Interrogator		2,000	
	Underground Coordination of Managed Mesh-networks		1,000	
	Wide Area Sensor for Force Protection Targeting		2,000	
17	COMMON PICTURE ADVANCED TECHNOLOGY	40,782	43,782	3,000
	Computer Forensics for Enhanced Maritime Domain Awareness		1,000	
	Maritime Identification Surveillance Technology (MIST)		2,000	
	WARFIGHTER SUSTAINMENT ADVANCED TECHNOLOGY			
18	TECHNOLOGY	102,124	113,624	11,500
	Environmentally-Sealed, Ruggedized Avionics Displays		2,000	
	Littoral Combat Ship (LCS) Networked Tactical Training System (NTTS)		1,000	
	NADEP Cherry Point Center for Vertical Lift - Institute for Maintenance, Science and Technology		3,000	
	National Center for Research on Evaluation, Standards, and Student Testing (CRESST) Skill Set Analysis (Note: Including \$2M to support CRESST as a UARC for Educational and Training Technology Assessment)		3,000	
	Validation of Prognostic and Health Management Systems		2,500	
19	RF SYSTEMS ADVANCED TECHNOLOGY	22,676	27,676	5,000
	C-Band Active Array Radar System		5,000	
	MARINE CORPS ADVANCED TECHNOLOGY			
20	DEMONSTRATION (ATD)	70,968	76,468	5,500
	Craft Integrated Electronic Suite (CIES)		3,000	
	Dual-Stage Ultra-Reliable Water Filtration Technology Development		2,500	
	JOINT NON-LETHAL WEAPONS TECHNOLOGY			
21	DEVELOPMENT	10,938	13,438	2,500
	Chameleon Chemical Detection Armband		2,500	

R-1		Budget Request	Committee Recommended	Change from Request
	WARFIGHTER PROTECTION ADVANCED TECHNOLOGY			
23	C. W. Bill Young Bone Marrow Donor Recruitment and Research Program	12,145	43,645	31,500
			31,500	
24	UNDERSEA WARFARE ADVANCED TECHNOLOGY Upward Looking Sonar (ULS)	73,626	74,626	1,000
			1,000	
	MINE AND EXPEDITIONARY WARFARE ADVANCED TECHNOLOGY			
26	Joint Explosive Ordnance Disposal (JEOD) Diver Situational Awareness System	26,840	27,840	1,000
			1,000	
27	AIR/OCEAN TACTICAL APPLICATIONS Gateway System Meteorological and Ocean Sensors (METOC) Data Acquisition Program Growth Naval Observatory Joint Milli-Arcsecond Pathfinder Survey (J-MAPS) Program	47,914	44,914	-3,000
			2,000	
			-10,000	
			5,000	
28	AVIATION SURVIVABILITY Equipment Life Extension Project (ELEP) Intelligent Autonomy Technology Transition Program (IA) Modular Advanced Helmet Vision System Silver Fox UAS Smart Visor Technology Collaboration for Aerospace Engineering Programs Unmanned Force Augmentation System	6,252	20,252	14,000
			1,500	
			2,500	
			2,000	
			1,000	
			2,000	
			2,000	
			3,000	
30	ASW SYSTEMS DEVELOPMENT Marine Mammal Awareness, Alert and Response Systems (MMAARS) Tactical E-Field Buoy Development Program	16,706	21,706	5,000
			3,000	
			2,000	
	SURFACE AND SHALLOW WATER MINE COUNTERMEASURES			
33	Evaluating Extremely Low Frequency (ELF) Signals in Maritime Environments	91,122	92,722	1,600
			1,600	
34	SURFACE SHIP TORPEDO DEFENSE Anti-Torpedo Torpedo (ATT) Anti-Submarine Warfare (ASW) Enhancements	15,967	28,967	13,000
			3,000	
			10,000	
35	CARRIER SYSTEMS DEVELOPMENT Carrier Plant Automation and Manning Reduction Technology Insertion Improved Corrosion Protection for Electromagnetic Aircraft Launch System (EMALS) for CVN-21 Quiet Interlude Processing System (QuiPS) Integration with Undersea Warfare – Decision Support System (USW-DSS)	84,806	89,306	4,500
			1,000	
			2,500	
			1,000	

R-1	Budget Request	Committee Recommended	Change from Request
36 SHIPBOARD SYSTEM COMPONENT DEVELOPMENT	9,450	27,050	17,600
Advanced Combatant Materials Research		2,000	
Advanced Fluid Controls for Shipboard Applications		1,000	
Advanced Repair Technology for the Expeditionary Navy		1,000	
Air Gun Ship Shock Testing of Naval Vessels		2,000	
Circuit Breaker for Navy Shipboard Power Distribution Systems		600	
High Efficiency Quiet Electric Drive		2,000	
High Temperature Superconductor (HTS) Navy Propulsion Motor for DDG-1000		2,500	
Integrated Power System Converter		1,000	
Internet Protocol over Power Line Carrier Technology			
Integration with Integrated Condition Assessment System (ICAS)		2,000	
Naval Flywheel Energy Storage System		1,000	
Smart Valve		1,000	
Shipboard Wireless Maintenance Assistant (SWMA)		1,500	
41 SURFACE ASW	25,560	50,560	25,000
Small Business Technology Insertion		25,000	
43 ADVANCED SUBMARINE SYSTEM DEVELOPMENT	134,882	139,382	4,500
Acoustic Materials for Integral Bow Conformal Array		1,000	
Navy Submarine Hydraulic Oil Recycling and Waste Reduction		1,000	
Twinline Thinline Submarine Towed Array		2,500	
44 SUBMARINE TACTICAL WARFARE SYSTEMS	9,865	10,865	1,000
High Awareness Littoral Observing (HALO) Sensor - 360 Degree Imaging for Submarines		1,000	
45 SHIP CONCEPT ADVANCED DESIGN	30,858	32,858	2,000
Advanced Video Processing Technologies (AVPT)		1,000	
SCOUT MK3		1,000	
50 LITTORAL COMBAT SHIP (LCS)	217,502	229,002	11,500
Anti-Submarine Warfare (ASW) Contact Management			
Mission Planning Improvement		3,500	
LCS Mission Package Enterprise		5,000	
Remote Multi-Mission Vehicle Anti-Submarine Warfare (ASW) Mission Module for LCS		3,000	
51 COMBAT SYSTEM INTEGRATION	53,427	58,427	5,000
Open Architecture/Maintenance Free Operating Period		3,000	
Automated Test and Re-Test		2,000	
55 MARINE CORPS GROUND COMBAT/SUPPORT SYSTEM	80,403	83,903	3,500
Intelligent Machining of Advanced Defense Materials		3,500	
57 COOPERATIVE ENGAGEMENT	33,283	38,283	5,000
Cooperative Engagement Capability		5,000	
59 ENVIRONMENTAL PROTECTION	19,850	21,350	1,500
Puget Sound Anoxia Research		1,500	

R-1		Budget Request	Committee Recommended	Change from Request
60	NAVY ENERGY PROGRAM	5,335	6,335	1,000
	Ocean Thermal Energy Conversion (OTEC)		1,000	
61	FACILITIES IMPROVEMENT	4,131	10,581	6,450
	Advanced Photovoltaic Material Integration Development		950	
	Kinetic Hydropower System (KHPS) Turbine		4,000	
	Swimmer Detection Sonar Network		1,500	
63	NAVY LOGISTIC PRODUCTIVITY	3,547	15,547	12,000
	Defense Integrated Technical Data Center		1,500	
	National Item Identification Number Validation and Correction		2,000	
	Unique Identification of Tangible Items		8,500	
71	LAND ATTACK TECHNOLOGY	31,021	62,021	31,000
	Affordable Weapon System		19,000	
	Modular Advanced Ultra Light Weapons System prototype mount		10,000	
	76mm Super Rapid Medium Caliber Gun System			
	Explosives Safety Review		2,000	
72	NONLETHAL WEAPONS	45,892	48,892	3,000
	Spherical Airship Research and Development		2,000	
	High-Power Microwave System for Vehicle Immobilization		1,000	
76	COUNTER-DRUG RDT&E PROJECTS	0	10,000	10,000
	Global Personal Locator Beacon for Counter-narcoterrorism		2,000	
	Project Athena		8,000	
77	DIRECTED ENERGY AND ELECTRIC WEAPON SYSTEMS	0	2,500	2,500
	Lasers for Navy Applications		2,500	
78	TACTICAL AIR DIRECTIONAL INFRARED COUNTERMEASURES	27,569	34,569	7,000
	Assault Directed Infrared Countermeasures		5,000	
	High Power Fiber Laser (HPFL) - Based Pod		2,000	
79	HARD AND DEEPLY BURIED TARGET DEFEAT SYSTEM (HDBTDS)	126,434	0	-126,434
	Conventional Trident Modification		-126,434	
83	OTHER HELO DEVELOPMENT	46,815	42,815	-4,000
	Wireless Blade Monitoring System (WBMS)		1,000	
	Program execution		-5,000	
85	STANDARDS DEVELOPMENT	106,242	110,242	4,000
	Advanced Measurement Standards Development		4,000	
88	P-3 MODERNIZATION PROGRAM	8,621	4,621	-4,000
	Program execution		-4,000	
89	WARFARE SUPPORT SYSTEM	2,911	4,911	2,000
	Agent-based Expeditionary Security System for Anti-Terrorism Afloat		1,000	
	Wireless Imaging and Sensor Network		1,000	

R-1		Budget Request	Committee Recommended	Change from Request
90	TACTICAL COMMAND SYSTEM Distributed Multi-Platform Sensor Support System	86,921	89,421 2,500	2,500
93	ACOUSTIC SEARCH SENSORS Deep Extended Echo Ranging (DEER)	18,325	19,325 1,000	1,000
96	EA-18 Next Generation Electronic Warfare Simulator (NGEWS)	272,699	274,699 2,000	2,000
97	ELECTRONIC WARFARE DEVELOPMENT EA-6B ALQ-99 Band 5/6 Traveling Wave Tube (TWT) Driver Modification Point Mugu Electronic Warfare Lab Upgrade	41,064	44,564 1,000 2,500	3,500
98	VH-71A EXECUTIVE HELO DEVELOPMENT Program execution	270,971	230,971 -40,000	-40,000
100	SC-21 TOTAL SHIP SYSTEM ENGINEERING Floating Area Network (FAN) Littoral Sensor Grid SmartLink Planar Scanner Antenna Modernization Wireless Maritime Inspection System	621,544	629,544 5,000 2,000 1,000	8,000
101	SURFACE COMBATANT COMBAT SYSTEM ENGINEERING Aegis Combat Information Center (CIC) Virtualization/Common Presentation Layer Integration Smart Integrated Data Environment	142,810	146,810 3,000 1,000	4,000
105	AIRBORNE MCM Airborne Mine Countermeasures (AMCM) "Open Architecture" Technology Insertion	54,761	57,761 3,000	3,000
106	NAVAL INTEGRATED FIRE CONTROL-COUNTER AIR SYSTEMS ENGINEERING Sustainability of AN/SPS - 49 Common Signal Data Processor	11,497	15,497 4,000	4,000
108	SSN-688 AND TRIDENT MODERNIZATION Advanced Intercept & Ranging System	114,789	115,789 1,000	1,000
113	NEW DESIGN SSN Oxygen Generator Small Business Technology Insertion	223,958	249,958 1,000 25,000	26,000
115	SUBMARINE TACTICAL WARFARE SYSTEM Submarine Maintenance Automation and Communication System (SMACS)	53,703	55,703 2,000	2,000
116	SHIP CONTRACT DESIGN/ LIVE FIRE T&E Automated Fiber Optic Manufacturing Initiative	62,404	63,404 1,000	1,000
125	JOINT STANDOFF WEAPON SYSTEMS Joint Stand Off Weapon Research and Development	24,851	30,851 6,000	6,000
126	SHIP SELF DEFENSE (DETECT & CONTROL) Distributed Detection Classification and Localization (DCL)	33,064	35,064 2,000	2,000

R-1	Budget Request	Committee Recommended	Change from Request
127 SHIP SELF DEFENSE (ENGAGE: HARD KILL)	67,366	70,366	3,000
Phalanx Next Generation		3,000	
128 SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)	34,323	37,323	3,000
Advanced Radar Absorbing Tiles for Surface Ships		2,000	
Electronic Warfare Concept Demonstrator for the Littoral Combat Ship		1,000	
130 MEDICAL DEVELOPMENT	7,973	37,573	29,600
Advanced Research and Development of Hemostatic Agents (Note: USMC)		4,000	
Center for Deployment Psychology		1,000	
Granular Chitosan Clotting Agent for Anti-Coagulated Hypothermic Blood (Note: USMC)		1,500	
Implantable Middle Ear Hearing System		1,000	
Military Dental Research		2,000	
Mobile Oxygen, Ventilation and External Suction (MOVES)		2,100	
On-Demand Custom Body Implants and Prosthesis for Injured Personnel		2,000	
Penn State Cancer Institute		7,000	
Somatic Cell Processing Program		2,000	
Strategies to Mitigate Individual Stress Reactivity and Operational Stress Reactions in the Military		2,000	
US Navy Pandemic Influenza Vaccine Program		2,000	
VisualDX Image-Based Real-Time Clinical Decision Support		3,000	
133 JOINT STRIKE FIGHTER (JSF)	1,707,372	2,038,872	331,500
Alternate Engine Development		240,000	
Excess Award Fees		-8,500	
Production Affordability Initiatives and Information Assurance		100,000	
135 INFORMATION TECHNOLOGY DEVELOPMENT	22,181	26,181	4,000
Electronic Portal for Analysis and Surveillance of Medical and Preventative Health Records		3,000	
Oblique imaging and software tool for Marine Installations		1,000	
136 INFORMATION TECHNOLOGY DEVELOPMENT	54,098	62,098	8,000
Navy Condition Based Maintenance for Shipyard Facilities and Equipment		3,000	
National Terrorism Preparedness Institute Counter-Terrorism Technology Development Training		3,000	
SPAWAR System Center Information Technology Center (ITC)		2,000	
138 CH-53K RDTE	417,161	407,161	-10,000
Program execution		-10,000	
139 MULTI-MISSION MARITIME AIRCRAFT (MMA)	880,106	881,106	1,000
Military Aircraft Loss of Control Training Research		1,000	
140 TACTICAL CRYPTOLOGIC SYSTEMS	39,053	41,053	2,000
AN/SSQ-137 (V) Ships Signals Exploitation Equipment Increment E		2,000	

R-1	Budget Request	Committee Recommended	Change from Request
143 MAJOR T&E INVESTMENT	37,614	41,714	4,100
Network Expansion & Integration of Navy/NASA RDT&E Ranges & Facilities		4,100	
148 TECHNICAL INFORMATION SERVICES	694	5,694	5,000
Commercialization of Advanced Technology (CAT)		3,000	
Integrated Manufacturing Enterprise		2,000	
157 SEW SURVEILLANCE/RECONNAISSANCE SUPPORT	29,071	24,071	-5,000
Program growth		-5,000	
158 MARINE CORPS PROGRAM WIDE SUPPORT	20,166	25,166	5,000
Automated Identification and Data Capture (AIDC) Solutions Center		3,500	
USMC Logistics Analysis and Optimization		1,500	
160 SERVICE SUPPORT TO JFCOM, JNTC	5,078	0	-5,078
Transfer to Operation & Maintenance, Defense-wide (CE2T2)		-5,078	
165 STRATEGIC SUB & WEAPONS SYSTEM SUPPORT	81,398	54,398	-27,000
Advanced Linear Accelerator (LINAC) Facility		3,000	
Reliable Replacement Warhead		-30,000	
169 RAPID TECHNOLOGY TRANSITION (RTT)	44,756	40,756	-4,000
US Navy Mobile Condition Assessment System Pilot Program execution		1,000	
		-5,000	
170 F/A-18 SQUADRONS	44,891	50,891	6,000
Airborne Tactical Server		3,000	
F/A-18 Roadmap Procurement Plan Fidelity Upgrade		3,000	
172 FLEET TELECOMMUNICATIONS (TACTICAL)	23,108	24,108	1,000
AN-USQ-155 Card Upgrade for Navy Voice over Internet Protocol Telephony		1,000	
TOMAHAWK AND TOMAHAWK MISSION PLANNING CENTER (TMPC)	11,405	17,005	5,600
Precision Terrain Aided Navigation		4,000	
Tomahawk Weapons Control System		1,600	
174 INTEGRATED SURVEILLANCE SYSTEM	27,740	29,740	2,000
Autonomous Anti-Submarine Vertical Beam Array		1,000	
Low Cost, Expendable, Fiber Optic Sensor Array		1,000	
176 CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT	6,987	10,487	3,500
Anti-Submarine Warfare (ASW) Training Interoperability Enterprise Demonstration Test Bed		1,500	
Total Ship Training System (TSTS) Support System		2,000	
179 HARM IMPROVEMENT	34,762	38,262	3,500
Advanced Anti-Radiation Guided Missile (AARGM)		3,500	
181 SURFACE ASW COMBAT SYSTEM INTEGRATION	11,200	18,200	7,000
Advanced Composite Materials for Acoustic Window Applications		6,000	
Long Range Synthetic Aperature Sonar (SAS) for Anti-Submarine Warfare (ASW)		1,000	

R-1	Budget Request	Committee Recommended	Change from Request
182 MK-48 ADCAP	17,941	20,941	3,000
Digital Data for Weapon System Readiness		1,000	
MK-48 Torpedo Post-Launch Communication System		2,000	
183 AVIATION IMPROVEMENTS	100,284	108,284	8,000
Age Exploration Model Enhancement & Vibration Analysis/Precision Measurement Integration		2,500	
Advanced Avionics Miniaturization Program		1,000	
Lightweight Composite Structure Development for Aerospace Vehicles		1,500	
Aviation Improvements - Low Observable Aircraft Sealants		2,000	
Rotor Blade Protection Against Sand and Water Erosion		1,000	
186 MARINE CORPS COMMUNICATIONS SYSTEMS	280,140	285,640	5,500
Battlefield Sensor Netting		3,000	
STRIKE Research and Development and Integration with Intelligence C2 Systems / Counter Intelligence and Human Intelligence Equipment Program (CIHEP)		2,500	
MARINE CORPS GROUND COMBAT/SUPPORTING			
187 ARMS SYSTEMS	57,177	66,177	9,000
Expeditionary Fire Support System (EFSS) Projectile Technology Enhancements - USMC		5,500	
Tractable Durable Net Complex Shaped Body and Extremity Armor		2,000	
Ultrasonic Consolidation of Embedded Sensors		1,500	
195 SATELLITE COMMUNICATIONS (SPACE)	736,572	741,572	5,000
Field Programmable Processor Array (FPPA) for Space Based "Reconfigurable" Wide Field of View Sensor		2,000	
Joint Integrated Systems for Advanced Digital Networking (JIST-NET)		1,000	
Transformational Satellite Communications (TSAT) upgrade to Navy Multi-Band Terminal (NMT)		2,000	
196 INFORMATION SYSTEMS SECURITY PROGRAM	28,393	32,393	4,000
Tactical Key Loader		4,000	
203 TACTICAL UNMANNED AERIAL VEHICLES	50,185	59,185	9,000
Coastal Airship Surveillance Demonstrator		2,000	
Micro-munitions Interface for Tactical Unmanned Systems		4,000	
Unmanned Air Systems "Open Architecture" Migration		3,000	
205 AIRBORNE RECONNAISSANCE SYSTEMS	50,677	56,977	6,300
EP-3E Environmental Cooling System Upgrade		6,300	
207 DISTRIBUTED COMMON GROUND SYSTEMS	19,350	21,350	2,000
Distributed Common Ground System- Navy/AFATDS Interoperability		1,000	
Maritime Intelligence Integration for Shared Situational Awareness		1,000	
208 AERIAL COMMON SENSOR (ACS)	16,606	6,606	-10,000
Program restructure		-10,000	

R-1	Budget Request	Committee Recommended	Change from Request
212 INDUSTRIAL PREPAREDNESS	56,445	58,445	2,000
Improved Advanced Watertight Door (IAWD) for Navy Surface Ships		1,000	
U.S. Navy Nuclear Power Plant and Ship Propulsion Shaft Manufacturing Improvement Project		1,000	
213 MARITIME TECHNOLOGY (MARITECH)	0	1,500	1,500
Enhanced Tracking and Asset Control (ETAC)		1,500	

BONE MARROW REGISTRY

The Committee provides \$31,500,000, to be administered by the C.W. Bill Young Bone Marrow Donor Recruitment and Research Program, also known and referred to within the Naval Medical Research Center as the Bone Marrow Registry. Funds appropriated for the C.W. Bill Young Bone 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 Bone Marrow Program. This DoD donor center has recruited more than 420,000 DoD volunteers, and provides more marrow donors per week than any other donor center in the Nation. More than 2,575 service members and other DoD volunteers from this donor center have provided marrow to save the lives of patients. The Committee is aware of the continuing success of this national and international life-saving program for military contingencies and civilian patients, which now includes more than 6,600,000 potential volunteer donors. Further, the Committee encourages agencies involved in contingency planning to continue to include the C.W. Bill Young Bone Marrow Donor Recruitment and Research Program in the development and testing of their contingency plans. DD Form 1414 shall show this as a congressional special interest item, and the Committee directs that all of the funds appropriated for this purpose be released to the C.W. Bill Young Bone Marrow Recruitment and Research Program within 60 days of enactment of the Department of Defense Appropriations Act, 2008.

INNOVATIVE METHODS FOR SHIPBUILDING CONSTRUCTION

The Committee supports the Navy's efforts to design, develop, and implement high performance steel sandwich panel construction techniques in order to improve quality and performance and to reduce procurement costs for Navy ships. Therefore, the Committee provides an additional \$2,000,000 to Program Element 0603123N for continuing the development and qualification of advanced steel sandwich panels for ship construction.

SYSTEM OPEN ARCHITECTURE/SMALL BUSINESS TECHNOLOGY
INSERTION

While the Committee recognizes that the Navy has made considerable strides in the recent past towards open architecture combat systems, the overall effort could certainly be accelerated and improved. The Chief of Naval Operations has stated that after witnessing the cost-effective advantages gained through the Acoustic Rapid Commercial off-the-shelf Insertion/Advanced Processor Build Program (ARCI/APB) within the submarine community, the Navy needs to work to rapidly transition this concept to other acquisition programs. The Committee applauds the Navy's attempt to expand the ARCI concept from submarines to other platforms in an effort to obtain the same types of advantages and efficiencies now being seen in the submarine force. Examples include, but are not limited to, modularity, rapid technology insertion, software re-use, improved manufacturing processes, and cost reductions. The Committee believes that a key requirement of tactical systems is the

sharing of information across networks in a standard, consistent method via the use of middleware. Navy Open Architecture doctrine calls for a standard-based, middleware solution to be used for data communication. The Committee strongly recommends the use of virtualization that will allow disparate systems to co-exist on a single computer, thus allowing shipboard computer rooms/processing centers to be smaller in size, consume less power, and provide more processing capability in a more efficient and effective way.

To that end, the Committee believes a valuable resource in this area, the small business community, is oftentimes overlooked in the hectic world that is the Department's acquisition process. The small business community can provide fresh, creative, and innovative solutions to the Navy's requirements. Especially in light of cost growth recently realized in such ship construction programs as the Littoral Combat Ship, the Committee enthusiastically supports efforts to reduce the burgeoning cost of ship acquisition using the aforementioned ARCI concept as a blueprint. In an effort to reduce the cost of ship acquisition, the Committee provides \$25,000,000 in program element 0604558N and \$25,000,000 in program element 0603553N to fund small business efforts for high risk/high reward components of surface ship and submarine combat system development.

UNIQUE IDENTIFICATION OF TANGIBLE ITEMS

In 2003, the Department of Defense mandated that by 2010, the Services must be able to locate, control, and value assets which should lead to lower cost of item management, improved operational readiness, and reduced burden on the workforce through increased productivity and efficiency. To date, no Service or agency has developed a single standard approach to meet this mandate. The Unique Identification of Tangible Items program will satisfy the Department's mandated requirements for item identification and tracking. Therefore, the Committee provides \$8,500,000 to accelerate the development of the Unique Identification of Tangible Items program.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, AIR FORCE

Fiscal year 2007 appropriation	\$24,516,276,000
Fiscal year 2008 budget request	26,711,940,000
Committee recommendation	26,163,917,000
Change from budget request	-548,023,000

This appropriation finances the research, development, test and evaluation activities of the Department of the Air Force.

The Committee recommends an appropriation of \$26,163,917,000 for Research, Development, Test and Evaluation, Air Force, which is \$1,647,641,000 more than the amount provided in fiscal year 2007 and \$548,023,000 less than the request for fiscal year 2008.

PROGRAM RECOMMENDED

The total amount recommended in the bill will provide the following program in fiscal year 2008:

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST	
RESEARCH, DEVELOPMENT, TEST & EVAL. AF				
BASIC RESEARCH				
1	DEFENSE RESEARCH SCIENCES.....	258,259	265,759	+7,500
2	UNIVERSITY RESEARCH INITIATIVES.....	104,304	104,304	---
3	HIGH ENERGY LASER RESEARCH INITIATIVES.....	12,636	12,636	---
	TOTAL, BASIC RESEARCH.....	375,199	382,699	+7,500
APPLIED RESEARCH				
4	MEDICAL DEVELOPMENT.....	---	8,000	+8,000
5	MATERIALS.....	122,794	164,294	+41,500
6	AEROSPACE VEHICLE TECHNOLOGIES.....	131,948	136,948	+5,000
7	HUMAN EFFECTIVENESS APPLIED RESEARCH.....	79,856	84,856	+5,000
8	AEROSPACE PROPULSION.....	179,161	201,461	+22,300
9	AEROSPACE SENSORS.....	108,055	119,055	+11,000
10	MULTI-DISCIPLINARY SPACE TECHNOLOGY.....	---	2,000	+2,000
11	SPACE TECHNOLOGY.....	109,566	114,416	+4,850
12	CONVENTIONAL MUNITIONS.....	57,804	59,304	+1,500
13	DIRECTED ENERGY TECHNOLOGY.....	54,883	57,883	+3,000
14	COMMAND CONTROL AND COMMUNICATIONS.....	116,705	125,105	+8,400
16	HIGH ENERGY LASER RESEARCH.....	50,303	50,303	---
	TOTAL, APPLIED RESEARCH.....	1,011,075	1,123,625	+112,550
ADVANCED TECHNOLOGY DEVELOPMENT				
20	ADVANCED MATERIALS FOR WEAPON SYSTEMS.....	39,730	65,230	+25,500
21	ADVANCED AEROSPACE SENSORS.....	55,549	65,549	+10,000
22	AEROSPACE TECHNOLOGY DEV/DEMO.....	64,922	29,822	-35,100
23	AEROSPACE PROPULSION AND POWER TECHNOLOGY.....	117,990	125,990	+8,000
24	CREW SYSTEMS AND PERSONNEL PROTECTION TECHNOLOGY.....	28,558	37,258	+8,700
25	ELECTRONIC COMBAT TECHNOLOGY.....	23,743	26,743	+3,000
28	ADVANCED SPACECRAFT TECHNOLOGY.....	78,704	98,004	+19,300
29	GLOBAL POSITIONING SYSTEM (GPS) EXTENSION PROGRAM.....	70,758	---	-70,758
30	MAUI SPACE SURVEILLANCE SYSTEM (MSSS).....	5,237	7,237	+2,000
32	CONVENTIONAL WEAPONS TECHNOLOGY.....	16,904	18,904	+2,000
33	ADVANCED WEAPONS TECHNOLOGY.....	43,999	43,999	---

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST	
34	C3I ADVANCED DEVELOPMENT.....	27,357	29,357	+2,000
36	HIGH ENERGY LASER ADVANCED TECHNOLOGY PROGRAM.....	3,815	3,815	---
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT.....	577,266	551,908	-25,358
	DEMONSTRATION & VALIDATION			
40	INTELLIGENCE ADVANCED DEVELOPMENT.....	4,930	5,930	+1,000
41	PHYSICAL SECURITY EQUIPMENT.....	466	2,466	+2,000
42	NAVSTAR GLOBAL POSITIONING SYSTEM III.....	587,226	507,226	-80,000
43	ADVANCED EHF MILSATCOM (SPACE).....	603,179	603,179	---
44	POLAR MILSATCOM (SPACE).....	178,754	178,754	---
45	SPACE CONTROL TECHNOLOGY.....	37,604	62,604	+25,000
46	COMBAT IDENTIFICATION TECHNOLOGY.....	26,054	26,054	---
47	NATO RESEARCH AND DEVELOPMENT.....	4,280	4,280	---
48	INTERNATIONAL SPACE COOPERATIVE R&D.....	619	619	---
49	TRANSFORMATIONAL SATCOM (TSAT).....	963,585	963,585	---
50	INTEGRATED BROADCAST SERVICE.....	21,192	21,192	---
51	INTERCONTINENTAL BALLISTIC MISSILE.....	26,519	32,519	+6,000
52	WIDEBAND GAFILLER SYSTEM RDT&E (SPACE).....	19,213	19,213	---
53	SPACE-BASED RADAR.....	---	186,000	+186,000
54	POLLUTION PREVENTION (DEM/VAL).....	2,838	8,838	+6,000
55	JOINT PRECISION APPROACH AND LANDING SYSTEMS.....	7,544	7,544	---
60	COMMON AERO VEHICLE (CAV).....	32,806	37,806	+5,000
61	OPERATIONALLY RESPONSIVE SPACE.....	87,032	107,032	+20,000
63	NATIONAL POLAR-ORBITING OPERATIONAL ENVIRONMENTAL SAT.....	334,871	334,871	---
	TOTAL, DEMONSTRATION & VALIDATION.....	2,938,712	3,109,712	+171,000
	ENGINEERING & MANUFACTURING DEVELOPMENT			
64	GLOBAL BROADCAST SERVICE (GBS).....	29,407	29,407	---
66	NUCLEAR WEAPONS SUPPORT.....	20,319	20,319	---
67	B-1B.....	159,126	144,126	-15,000
68	SPECIALIZED UNDERGRADUATE FLIGHT TRAINING.....	12,622	12,622	---
70	B-2 ADVANCED TECHNOLOGY BOMBER.....	244,019	289,219	+45,200
71	PERSONNEL RECOVERY SYSTEMS.....	290,059	190,059	-100,000
72	ELECTRONIC WARFARE DEVELOPMENT.....	101,649	103,149	+1,500
74	PHYSICAL SECURITY EQUIPMENT.....	34	34	---
75	SMALL DIAMETER BOMB (SDB).....	145,191	145,191	---
76	COUNTERSPACE SYSTEMS.....	53,412	53,412	---

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
77 SPACE SITUATION AWARENESS SYSTEMS.....	187,804	197,604	+9,800
78 AIRBORNE ELECTRONIC ATTACK.....	20,007	20,007	---
79 SPACE BASED INFRARED SYSTEM (SBIRS) HIGH EMD.....	587,004	614,604	+27,600
80 ALTERNATIVE INFRARED SPACE SYSTEM (AIRSS).....	230,887	75,887	-155,000
82 ARMAMENT/ORDNANCE DEVELOPMENT.....	1,985	3,485	+1,500
83 SUBMUNITIONS.....	1,988	1,988	---
84 AGILE COMBAT SUPPORT.....	10,623	12,623	+2,000
86 LIFE SUPPORT SYSTEMS.....	12,649	13,649	+1,000
87 COMBAT TRAINING RANGES.....	17,657	17,657	---
88 INTEGRATED COMMAND & CONTROL APPLICATIONS (IC2A).....	189	13,189	+13,000
89 INTELLIGENCE EQUIPMENT.....	1,469	1,469	---
91 JOINT STRIKE FIGHTER (JSF).....	1,780,874	2,137,374	+356,500
94 RDT&E FOR AGING AIRCRAFT.....	17,021	19,021	+2,000
96 TEST AND EVALUATION SUPPORT.....	3,044	3,044	---
96 LINK-16 SUPPORT AND SUSTAINMENT.....	199,363	196,363	-3,000
98 E-10 SQUADRONS.....	39,703	39,703	---
99 SINGLE INTEGRATED AIR PICTURE (SIAP).....	4,976	4,976	---
100 FULL COMBAT MISSION TRAINING.....	87,096	72,096	-15,000
102 JOINT CARGO AIRCRAFT (JCA).....	42,368	42,368	---
103 CV-22.....	16,688	16,688	---
TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT.....	4,319,233	4,491,333	+172,100
RDT&E MANAGEMENT SUPPORT			
104 THREAT SIMULATOR DEVELOPMENT.....	39,892	39,892	---
105 MAJOR T&E INVESTMENT.....	59,064	61,064	+2,000
106 RAND PROJECT AIR FORCE.....	30,999	30,999	---
109 INITIAL OPERATIONAL TEST & EVALUATION.....	30,203	30,203	---
110 TEST AND EVALUATION SUPPORT.....	737,558	712,558	-25,000
111 ROCKET SYSTEMS LAUNCH PROGRAM (SPACE).....	15,145	20,145	+5,000
112 SPACE TEST PROGRAM (STP).....	47,430	47,430	---
113 FACILITIES RESTORATION & MODERNIZATION - TEST & EVAL..	59,131	60,131	+1,000
114 FACILITIES SUSTAINMENT - TEST AND EVALUATION SUPPORT..	30,865	34,865	+4,000

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
117 INTERNATIONAL ACTIVITIES.....	4,041	4,041	---
TOTAL, RDT&E MANAGEMENT SUPPORT.....	1,054,328	1,041,328	-13,000
OPERATIONAL SYSTEMS DEVELOPMENT			
118 ANTI-TAMPER TECHNOLOGY EXECUTIVE AGENCY.....	10,930	10,930	---
120 B-52 SQUADRONS.....	41,916	47,416	+5,500
122 AIR-LAUNCHED CRUISE MISSILE (ALCM).....	4,672	4,672	---
123 STRAT WAR PLANNING SYSTEM - USSTRATCOM.....	20,340	20,340	---
124 NIGHT FIST - USSTRATCOM.....	5,296	5,296	---
126 REGION/SECTOR OPERATION CONTROL CENTER MODERNIZATION..	23,495	23,495	---
127 WARFIGHTER RAPID ACQUISITION PROCESS (WRAP) RAPID TRAN	14,245	14,245	---
128 MQ-9 UAV.....	61,069	61,069	---
129 A-10 SQUADRONS.....	1,963	1,963	---
130 F-16 SQUADRONS.....	90,620	90,620	---
131 F-15E SQUADRONS.....	101,251	114,251	+13,000
133 F-22 SQUADRONS.....	743,593	379,563	-364,030
135 TACTICAL AIM MISSILES.....	7,927	7,927	---
136 ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM).....	36,838	36,838	---
139 AF TENCAP.....	11,526	11,526	---
141 COMPASS CALL.....	4,603	4,603	---
142 AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM.....	139,042	139,042	---
144 JOINT AIR-TO-SURFACE STANDOFF MISSILE (JASSM).....	12,152	12,152	---
145 AIR AND SPACE OPERATIONS CENTER (AOC).....	111,557	111,557	---
146 CONTROL AND REPORTING CENTER (CRC).....	16,505	16,505	---
147 AIRBORNE WARNING AND CONTROL SYSTEM (AWACS).....	152,721	152,721	---
148 TACTICAL AIRBORNE CONTROL SYSTEMS.....	3,387	3,387	---
149 ADVANCED COMMUNICATIONS SYSTEMS.....	33,584	33,584	---
150 EVALUATION AND ANALYSIS PROGRAM.....	650,608	652,608	+2,000
152 THEATER BATTLE MANAGEMENT (TBM) C4I.....	9,961	9,961	---
153 FIGHTER TACTICAL DATA LINK.....	39,545	39,545	---
154 BOMBER TACTICAL DATA LINK.....	37,130	37,130	---
155 C2ISR TACTICAL DATA LINK.....	1,809	1,809	---
156 COMMAND AND CONTROL (C2) CONSTELLATION.....	45,049	45,049	---
157 JOINT SURVEILLANCE AND TARGET ATTACK RADAR SYSTEM.....	65,924	82,924	+17,000
158 SEEK EAGLE.....	22,969	22,969	---
160 USAF MODELING AND SIMULATION.....	23,044	25,044	+2,000

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
161 WARGAMING AND SIMULATION CENTERS.....	6,490	6,490	---
162 DISTRIBUTED TRAINING AND EXERCISES.....	7,522	7,522	---
163 MISSION PLANNING SYSTEMS.....	105,371	105,371	---
164 INFORMATION WARFARE SUPPORT.....	12,111	12,111	---
165 SPECIAL EVALUATION SYSTEM.....	760,312	760,312	---
171 E-4B NATIONAL AIRBORNE OPERATIONS CENTER (NAOC).....	19,529	19,529	---
172 AIR FORCE COMMUNICATIONS (AIRCOM).....	2,022	2,022	---
173 MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK ...	103,846	83,846	-20,000
174 INFORMATION SYSTEMS SECURITY PROGRAM.....	229,657	187,610	-42,047
175 GLOBAL COMBAT SUPPORT SYSTEM.....	10,631	12,131	+1,500
176 GLOBAL COMMAND AND CONTROL SYSTEM.....	3,397	14,897	+11,500
177 JOINT COMMAND AND CONTROL PROGRAM (JC2).....	5,841	5,841	---
178 MILSATCOM TERMINALS.....	388,491	388,491	---
180 AIRBORNE SIGINT ENTERPRISE.....	139,627	124,627	-15,000
183 GLOBAL AIR TRAFFIC MANAGEMENT (GATM).....	6,681	6,681	---
184 SATELLITE CONTROL NETWORK (SPACE).....	27,256	27,256	---
185 WEATHER SERVICE.....	39,747	40,747	+1,000
186 AIR TRAFFIC CONTROL, APPROACH, AND LANDING SYSTEM (ATC	4,672	5,392	+720
187 AERIAL TARGETS.....	7,376	7,376	---
190 SECURITY AND INVESTIGATIVE ACTIVITIES.....	829	829	---
194 NAVSTAR GLOBAL POSITIONING SYSTEM (USER EQUIPMENT)....	93,267	156,467	+63,200
195 NAVSTAR GLOBAL POSITIONING SYSTEM (SPACE AND CONTROL).	120,931	120,931	---
197 SPACE AND MISSILE TEST AND EVALUATION CENTER.....	3,089	3,089	---
198 SPACE WARFARE CENTER.....	1,678	1,678	---
199 SPACELIFT RANGE SYSTEM (SPACE).....	27,300	27,300	---
200 INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS.....	1,134	1,134	---
202 AIRBORNE RECONNAISSANCE SYSTEMS.....	64,869	64,869	---
203 MANNED RECONNAISSANCE SYSTEMS.....	12,672	15,672	+3,000
204 DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS.....	107,117	108,117	+1,000
205 PREDATOR UAV (JMIP).....	22,296	25,796	+3,500
206 GLOBAL HAWK UAV.....	298,501	260,501	-38,000
207 NETWORK-CENTRIC COLLABORATIVE TARGET (TIARA).....	8,641	8,641	---
208 INTELLIGENCE SUPPORT TO INFORMATION WARFARE.....	5,362	5,362	---
209 NCMC - TW/AA SYSTEM.....	11,882	11,882	---

350

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
211 NUDET DETECTION SYSTEM (SPACE).....	38,974	38,974	---
213 NATIONAL SECURITY SPACE OFFICE.....	10,821	10,821	---
214 SPACE SITUATION AWARENESS OPERATIONS.....	23,980	23,980	---
215 NASS, IO TECHNOLOGY INTEGRATION & TOOL DEV.....	15,681	15,681	---
216 SHARED EARLY WARNING (SEW).....	3,152	3,152	---
217 C-130 AIRLIFT SQUADRON.....	188,069	192,069	+4,000
218 C-5 AIRLIFT SQUADRONS.....	203,585	185,585	-18,000
219 C-17 AIRCRAFT.....	181,734	181,734	---
220 C-130J PROGRAM.....	74,223	74,223	---
222 LARGE AIRCRAFT IR COUNTERMEASURES (LAIRCM).....	19,324	19,324	---
223 KC-135S.....	8,766	8,766	---
224 KC-10S.....	36,790	13,790	-23,000
225 KC-135 TANKER REPLACEMENT.....	314,454	114,454	-200,000
226 OPERATIONAL SUPPORT AIRLIFT.....	4,868	4,868	---
228 SPECIAL TACTICS / COMBAT CONTROL.....	5,225	5,225	---
229 DEPOT MAINTENANCE (NON-IF).....	1,510	1,510	---
230 ACQUISITION AND MANAGEMENT SUPPORT.....	22,317	22,317	---
231 INDUSTRIAL PREPAREDNESS.....	39,906	48,906	+9,000
233 LOGISTICS INFORMATION TECHNOLOGY (LOGIT).....	114,176	115,676	+1,500
234 SUPPORT SYSTEMS DEVELOPMENT.....	11,076	17,576	+6,500
235 JOINT NATIONAL TRAINING CENTER.....	3,128	---	-3,128
236 OTHER PERSONNEL ACTIVITIES.....	115	115	---
237 JOINT PERSONNEL RECOVERY AGENCY.....	5,377	5,377	---
238 SERVICE-WIDE SUPPORT (NOT OTHERWISE ACCOUNTED FOR)....	6,495	6,495	---
239 CIVILIAN COMPENSATION PROGRAM.....	8,070	8,070	---
240 PERSONNEL ADMINISTRATION.....	16,832	16,832	---
241 FINANCIAL MANAGEMENT INFORMATION SYSTEMS DEVELOPMENT..	47,105	37,105	-10,000
TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT.....	6,611,171	6,023,886	-587,285
999 CLASSIFIED PROGRAMS.....	9,824,956	9,439,426	-385,530
TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, AF.....	26,711,940	26,163,917	-548,023

The adjustments to the budget activities for Research, Development, Test and Evaluation, Air Force, are shown below:

EXPANION OF PROJECT LEVEL ADJUSTMENTS
 [In thousands of dollars]

R-1	Budget Request	Committee Recommended	Change from Request
1 DEFENSE RESEARCH SCIENCES	258,259	265,759	7,500
Chabot Space and Science Center		1,000	
Process Integrated Mechanism for Human-Computer Collaboration and Coordination		1,000	
Fully-Integrated Solar-Powered Interior Lighting Technology		1,000	
Nanotechnology based biosensors and bio-threat detectors		2,500	
Hybrid Materials for Thermal Management in Thin Films and Bulk Composites		2,000	
4 MEDICAL DEVELOPMENT	0	8,000	8,000
Light Emitting Diode (LED) Wound Healing of Oral and Cutaneous Lesions		1,500	
Tricorder Detector		1,500	
National Center for Integrated Civilian-Military Domestic Disaster Medical Response		2,500	
Comprehensive Clinical Phenotyping and Genetic Mapping for the Discovery of Autism Susceptibility Gene		1,500	
Frank R. Seaver Science and Engineering Complex		1,000	
5 MATERIALS	122,794	164,294	41,500
Chrome Free Environmentally Friendly Corrosion Protection for Aircraft		2,000	
Free Electron Laser Capabilities for Aerospace Microfabrication		2,000	
Intelligent Carbon Nanotube Based Computer Devices for Space Applications		6,000	
Aircraft Active Corrosion Protective Compounds		1,000	
Accelerated Insertion of Advanced Materials and Certification for Military Aircraft Structure Material		1,500	
Blast Resistant Concrete Products		2,000	
Large Area, APVT Materials Development for High Power Devices		2,000	
Plasma-Sphere Array for Flexible Electronics		2,000	
Advanced Carbon Fiber Research and Testing Initiative		3,500	
Institute for Science and Engineering Simulation (ISES)		2,500	
Science for Sustainment Initiative to Improve Mission		2,000	
ONAMI Safer Nanomaterials and Nanomanufacturing		2,000	
Pennsylvania Nanomaterials Commercialization Center		2,000	
High Temperature Aerogel Materials for Global Strike Vehicles		2,000	
Polymer Nanocomposites for Energy Storage and Pulsed Power		1,000	
Carbon Nano-Materials for Advanced Aerospace Applications, AQW Rice University		2,000	
University of Houston Consortium for Nanomaterials for Aerospace Commerce and Technology (CONTACT)		3,000	
Gallium Nitride (GaN) RF Power Technology		2,000	
Life Shield Blast Resistant Panels		1,000	
6 AEROSPACE VEHICLE TECHNOLOGIES	131,948	136,948	5,000
Cognitive UAV		1,000	
Advanced Aerospace Heat Exchangers		1,000	

R-1	Budget Request	Committee Recommended	Change from Request
Modeling and Simulation for Rapid Integration and Technology Evaluation		1,000	
Advancement of Intelligent Aerospace Systems (AIAS) for the U.S. Air Force		2,000	
7 HUMAN EFFECTIVENESS APPLIED RESEARCH	79,856	84,856	5,000
Warfighter Pocket XP-Next Gen		2,000	
Imaging Tools for Human Performance Enhancement and Diagnostics		2,000	
Ubiquitous RFID Chem/Bio Detection		1,000	
8 AEROSPACE PROPULSION	179,161	201,461	22,300
Development & Testing of Advanced Paraffin-based Hybrid Rockets for Space Applications		2,000	
Center for Solar Electricity and Hydrogen		3,000	
LOX/Methane Cooled Upper Stage Rocket Engine		1,000	
Modified F-22 Maintenance-Free Nickel Cadmium Aircraft Batteries for the F-16		1,800	
Advanced Vehicle and Propulsion Center		2,000	
Integrated Electrical Starter/Generator		2,500	
Hydrocarbon Boost Technology Demonstrator		1,500	
THEMA - Thermal and Energy Management for Aerospace		3,500	
WASH Oxygen Sensor and Cell Level Battery Controller		1,500	
Active Combustion Control System for Military Aircraft		3,500	
9 AEROSPACE SENSORS	108,055	119,055	11,000
Optical Maximum Entropy Verification (OMEV)		1,000	
Sensor Fusion		2,000	
OPAL (Optically Pumped Atomic Laser for Defense)		4,000	
Center for Advanced Sensor and Communications Antennas		1,000	
Low Voltage, Wideband Electro-Optic Polymer Modulator		3,000	
10 MULTI-DISCIPLINARY SPACE TECHNOLOGY	0	2,000	2,000
Integrated Propulsion Analysis Tool (IPAT)		2,000	
11 SPACE TECHNOLOGY	109,566	114,416	4,850
Advanced Modular Avionics for Operationally Responsive Space Use		2,000	
Multicontinuum Technology for Space Structures		2,000	
Mission Design and Analysis Tool		500	
Shielding Rocket Payloads		350	
12 CONVENTIONAL MUNITIONS	57,804	59,304	1,500
Advanced Nanotube Micro-Munition Weapon Technology Initiative		1,500	
13 DIRECTED ENERGY TECHNOLOGY	54,883	57,883	3,000
Ceramics for Next-Generation Tactical Laser Systems		3,000	

R-1		Budget Request	Committee Recommended	Change from Request
14	COMMAND CONTROL AND COMMUNICATIONS	116,705	125,105	8,400
	Compact Laser Terminal for Airborne Network Centric Warfare		2,500	
	Compact Coherent LIDAR Transceiver System		2,000	
	Adaptive Optics Lasercom		2,000	
	Cyber Attack Mitigation and Exploitation Laboratory II (CAMEL II)		1,900	
20	ADVANCED MATERIALS FOR WEAPON SYSTEMS	39,730	65,230	25,500
	Continuous Integrated Vehicle Health Monitoring System		1,500	
	Encapsulated Ballistic Protection System (EBPS)		1,000	
	Coated Field repair (2K Gun)		1,000	
	National Aerospace Leadership Initiative		20,000	
	EMI Grid Fabrication Technology		2,000	
21	ADVANCED AEROSPACE SENSORS	55,549	65,549	10,000
	TacNode-Tactical Airborne Communications Node		4,000	
	Active Unmanned Air Vehicle (UAV) Phenomenology (AUP) & ART Technology Transition		4,000	
	Moving Target Strike		2,000	
	AEROSPACE TECHNOLOGY			
22	DEVELOPMENT/DEMONSTRATION	64,922	29,822	-35,100
	Advanced Composite Cargo Aircraft Demonstration		-35,000	
	Transfer to O&M, Defense-Wide for CE2T2		-3,100	
	Advance Aerospace Titanium Structures Initiative		2,000	
	Big Antennas Small Structures Efficient Tactical (BASSET) UAV		1,000	
	AEROSPACE PROPULSION AND POWER			
23	TECHNOLOGY	117,990	125,990	8,000
	FRESH (Field Renewable Energy System Hybrids) Li Ion Battery Program		1,000	
	Versatile Affordable Advanced Turbine Engine (VAATE) -- Small Turbofan (STF)		4,500	
	Ceramic Matrix Composite (CMC) Airfoil Capability Enhancements		1,000	
	Texas Research Institute for Environmental Studies		1,500	
	CREW SYSTEMS AND PERSONNEL PROTECTION			
24	TECHNOLOGY	28,558	37,258	8,700
	Variable Transmittance Visor		1,000	
	Virtual Medical Trainer		3,000	
	Battlefield Automatic Life Status Monitor (BALSM)		2,000	
	Low Cost/Improved Performance for Helmet Display and Life Support Technologies		2,700	
25	ELECTRONIC COMBAT TECHNOLOGY	23,743	26,743	3,000
	BLADES (Real-Time Battlefield Laser Detection System)		2,000	
	Innovative Polymeric Materials for Three-Dimensional (3-D) Microdevice Construction		1,000	

R-1		Budget Request	Committee Recommended	Change from Request
28	ADVANCED SPACECRAFT TECHNOLOGY	78,704	98,004	19,300
	Small Low Cost Reconnaissance Spacecraft		2,300	
	Micromachined Switches for Next Generation Modular Satellites		3,000	
	Microsatellite Serial Manufacturing		2,000	
	Satellite Coherent Optical Receiver (SCORE)		2,500	
	Space Situational Awareness		1,500	
	Systematic Approach to Radiation Hardened Electronics (SHARE)		2,000	
	Intelligent Free Space Optical Satellite Communications Node		1,000	
	Radially Segmented Launch Vehicle (RSLV) Risk Reduction Program		2,000	
	Multi-mission Advanced Sensor System (MASS)		3,000	
	GLOBAL POSITIONING SYSTEM (GPS) EXTENSION PROGRAM	70,758	0	-70,758
	Transferred to RDTE, Defense-Wide, Line 232		-70,758	
30	MAUI SPACE SURVEILLANCE SYSTEM (MSSS)	5,237	7,237	2,000
	High Accuracy Network Determination System (HANDS)		2,000	
32	CONVENTIONAL WEAPONS TECHNOLOGY	16,904	18,904	2,000
	Body Armor Improved Ballistic Protection		2,000	
34	C3I ADVANCED DEVELOPMENT	27,357	29,357	2,000
	Interoperability Network to Fuse and Exchange Real-Time Information		1,000	
	Collaboration Gateway		1,000	
40	INTELLIGENCE ADVANCED DEVELOPMENT	4,930	5,930	1,000
	Multilingual Text Mining Platform for Intelligence Analysts		1,000	
41	PHYSICAL SECURITY EQUIPMENT	466	2,466	2,000
	Tactical Automated Security System (TASS), Advanced Communications Module (ACM)		2,000	
42	NAVSTAR GLOBAL POSITIONING SYSTEM III	587,226	507,226	-80,000
	GPS III		-80,000	
45	SPACE CONTROL TECHNOLOGY	37,604	62,604	25,000
	Self Aware - Space Situational Awareness		25,000	
51	INTERCONTINENTAL BALLISTIC MISSILE	26,519	32,519	6,000
	Conventional Strike Missiles Capability Demonstration		6,000	
53	SPACE-BASED RADAR	0	186,000	186,000
	Space Radar		186,000	
54	POLLUTION PREVENTION (DEMONSTRATION/VALIDATION)	2,838	8,838	6,000
	Assessment of Alternative Energy for Aircraft Ground Equipment (AGE)		1,000	
	Transforming Waste Plastics into Alternative Fuels		1,000	
	Transformation and Modernization of Air Force Weapons Systems		3,000	
	Microcomposite Coatings for Chrome Replacement		1,000	

R-1	Budget Request	Committee Recommended	Change from Request
60	COMMON AERO VEHICLE (CAV) Ballistic Missile Technology	32,806 37,806 5,000	5,000
61	OPERATIONALLY RESPONSIVE SPACE Operationally Responsive Space	87,032 107,032 20,000	20,000
67	B-1B Program execution	159,126 144,126 -15,000	-15,000
70	B-2 ADVANCED TECHNOLOGY BOMBER Radar Modernization Program Small Diameter Bomb	244,019 289,219 38,000 7,200	45,200
71	PERSONNEL RECOVERY SYSTEMS Contract award delay	290,059 190,059 -100,000	-100,000
72	ELECTRONIC WARFARE DEVELOPMENT Rapid Replacement of Mission Critical Logistics Electronic Components	101,649 103,149 1,500	1,500
77	SPACE SITUATION AWARENESS SYSTEMS Space Fence	187,804 197,604 9,800	9,800
79	SPACE BASED INFRARED SYSTEM (SBIRS) HIGH EMD MCSB Upgrade	587,004 614,604 27,600	27,600
80	ALTERNATIVE INFRARED SPACE SYSTEM (AIRSS) Program Growth	230,887 75,887 -155,000	-155,000
82	ARMAMENT/ORDNANCE DEVELOPMENT I-1000 Warhead Technology Demonstration	1,985 3,485 1,500	1,500
84	AGILE COMBAT SUPPORT Improvised Ordnance Detonator -Advanced Development	10,623 12,623 2,000	2,000
86	LIFE SUPPORT SYSTEMS ACES II Ejection Seat Improvement	12,649 13,649 1,000	1,000
88	INTEGRATED COMMAND & CONTROL APPLICATIONS (IC2A) Program Engineering Interoperability Framework Enterprise Services for Reach Back Capabilities (ESRBC) MEDSTARS Integration with Global Combat Support System Airborne Web Services (AWS) Spiral 5 Distributed Mission Interoperability Toolkit (DMIT)	189 13,189 2,000 3,000 2,000 1,000 5,000	13,000
91	JOINT STRIKE FIGHTER (JSF) Alternate engine development Production Affordability Initiatives and Information Assurance Small Business Technology Insertion Program Excess Award Fees	1,780,874 2,137,374 240,000 100,000 25,000 -8,500	356,500
94	RDT&E FOR AGING AIRCRAFT Enhanced Smart Triple Ejector Rack	17,021 19,021 2,000	2,000

R-1		Budget Request	Committee Recommended	Change from Request
96	LINK-16 SUPPORT AND SUSTAINMENT Objective Gateway - Core contract award	199,363	196,363 -3,000	-3,000
100	FULL COMBAT MISSION TRAINING F-15/F-16 Simulator integration development	87,096	72,096 -15,000	-15,000
105	MAJOR T&E INVESTMENT FPS-16 Radar Mobilization Upgrade	59,064	61,064 2,000	2,000
110	TEST AND EVALUATION SUPPORT Execution	737,558	712,558 -25,000	-25,000
111	ROCKET SYSTEMS LAUNCH PROGRAM (SPACE) Ballistic Missile Range Safety Technology	15,145	20,145 5,000	5,000
FACILITIES RESTORATION & MODERNIZATION - TEST & EVALUATION				
113	SUPPORT Internal Base Facility Energy Independence - Wind/Turbine	59,131	60,131 1,000	1,000
FACILITIES SUSTAINMENT - TEST AND EVALUATION				
114	SUPPORT Base Facility Energy Independence	30,865	34,865 4,000	4,000
120	B-52 SQUADRONS B-52 CCJ Common Reconfigurable Advanced Thermal Management System	41,916	47,416 5,000 500	5,500
131	F-15E SQUADRONS F-15 AN/ALR-56C RWR Digital Receiver Upgrade AESA Development and Demonstration	101,251	114,251 7,000 6,000	13,000
133	F-22 SQUADRONS Transfer to MilPers, Air Force, BA-5 for PCS Obligation	743,593	379,593 -364,000	-364,000
150	EVALUATION AND ANALYSIS PROGRAM Compound Zoom for Airborne Reconnaissance (CZAR)	650,608	652,608 2,000	2,000
JOINT SURVEILLANCE AND TARGET ATTACK RADAR				
157	SYSTEM SYERS Demonstration Joint STARS Electro-Optical Adjunct	65,924	82,924 16,000 1,000	17,000
160	USAF MODELING AND SIMULATION MAICE	23,044	25,044 2,000	2,000
MINIMUM ESSENTIAL EMERGENCY				
173	COMMUNICATIONS NETWORK Minuteman MEECN	103,846	83,846 -20,000	-20,000
174	INFORMATION SYSTEMS SECURITY PROGRAM Unjustified program growth Cyber Security Defend and Attack Exercise	229,657	187,610 -45,047 3,000	-42,047
175	GLOBAL COMBAT SUPPORT SYSTEM Technical Order Optimization	10,631	12,131 1,500	1,500

R-1	Budget Request	Committee Recommended	Change from Request
176 GLOBAL COMMAND AND CONTROL SYSTEM	3,397	14,897	11,500
Carbon Nanotube Enhanced Power Sources for Space Command & Control Service Level Management (C2SLM) program		1,500 10,000	
180 AIRBORNE SIGINT ENTERPRISE	139,627	124,627	-15,000
Predator SIGINT - Funds provided in the 2007 Supplemental		-15,000	
185 WEATHER SERVICE	39,747	40,747	1,000
TAMDAR System Integration and Performance Evaluation on Unmanned Aerial Systems		1,000	
AIR TRAFFIC CONTROL, APPROACH, AND LANDING SYSTEM	4,672	5,392	720
Terminal Radar Approach Control (TRACON) Quick Connect Panel and Switchgear		720	
NAVSTAR GLOBAL POSITIONING SYSTEM (USER EQUIPMENT)	93,267	156,467	63,200
GPS User Equipment		63,200	
203 MANNED RECONNAISSANCE SYSTEMS	12,672	15,672	3,000
Rivet Joint Network Interface Growth		3,000	
204 DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	107,117	108,117	1,000
Advanced Architecture Designs Supporting U.S. Army Net Centric Warfare (AADSUNW)		1,000	
205 PREDATOR UAV (JMIP)	22,296	25,796	3,500
Integrator Unmanned Aircraft System (UAS) Advanced Concept Development		3,500	
206 GLOBAL HAWK UAV	298,501	260,501	-38,000
Execution		-38,000	
217 C-130 AIRLIFT SQUADRON	188,069	192,069	4,000
Air Force C-130 Propeller De-icing System Safety Upgrade Using Metal Fiber Brushes		1,000	
C-130 AIRCAT CBM+		3,000	
218 C-5 AIRLIFT SQUADRONS	203,585	185,585	-18,000
Test program execution		-20,000	
Inductive Thermography Systems Inspections		2,000	
224 KC-10S	36,790	13,790	-23,000
SDD AMP contract delay		-23,000	
225 KC-135 TANKER REPLACEMENT	314,454	114,454	-200,000
Transfer to Tanker Replacement Transfer Fund		-200,000	

R-1	Budget Request	Committee Recommended	Change from Request
231 INDUSTRIAL PREPAREDNESS	39,906	48,906	9,000
Technology Insertion Demonstration and Evaluation (TIDE)		1,500	
Laser Peening for Friction Stir Welded (FSW) Aerospace Structures		1,000	
Production of Nanocomposites for Aerospace Applications		2,000	
High Temperature, Laser Sintered Polymeric Material		2,500	
Digital Product Definition		2,000	
Prepreg Thickness Variability Reduction Program			
233 LOGISTICS INFORMATION TECHNOLOGY (LOGIT)	114,176	115,676	1,500
Expert Organizational Development System (EXODUS)		1,500	
234 SUPPORT SYSTEMS DEVELOPMENT	11,076	17,576	6,500
Alternative Energy Fuel Cell Power Generation		1,000	
Strategic Airlift Aircraft Availability Improvements		3,500	
Heavy Duty Hybrid Electric Vehicle		2,000	
235 JOINT NATIONAL TRAINING CENTER	3,128	0	-3,128
Transfer to O&M, Defense-Wide for CE2T2		-3,128	
FINANCIAL MANAGEMENT INFORMATION SYSTEMS			
241 DEVELOPMENT	47,105	37,105	-10,000
DEAMS Contract Award		-10,000	

KC-135 TANKER REPLACEMENT

The fiscal year 2008 budget request includes \$314,454,000 for the development of a follow-on tanker to replace the aging KC-135. The Committee notes that \$70,000,000 was provided in fiscal year 2007 for systems development and demonstration and a replacement platform selection and that few funds have been obligated. Therefore, a substantial amount of the fiscal year 2008 request is early to need and would not be executed. Accordingly, the Committee reduces funding provided for the development program by \$200,000,000. The Committee is very supportive of proceeding with the development and procurement of a tanker to replace the KC-135 and as such has transferred these funds into the Tanker Replacement Transfer Fund. The Secretary of the Air Force may transfer these funds from this account only for the purposes of proceeding with a tanker acquisition program.

JOINT STRIKE FIGHTER F-136 ENGINE DEVELOPMENT

The fiscal year 2008 budget request includes no funding for development of the F-136 as an alternate engine within the Joint Strike Fighter program. The Committee recommends \$480,000,000 for this effort. These funds have been added to the Air Force and Navy's respective Joint Strike Fighter development lines.

The statement of the managers accompanying the conference report on the Defense Appropriations Act for fiscal year 2007 directed the Department of Defense to fund the continued development of both the F-135 and F-136 engines in the fiscal year 2008 budget request. The Committee notes that this direction was disregarded by the Office of the Secretary of Defense. In exercising its power of the purse, the Committee made the necessary program adjustments to the fiscal year 2008 budget request to fully fund the requirement for this engine development program. The fiscal year 2009 requirement for the F-136 is estimated to be \$350,000,000. The Committee again directs the Department of Defense to fully fund this development program in the fiscal year 2009 budget submission.

JOINT STRIKE FIGHTER DEVELOPMENT

Elsewhere in this report, the Committee notes the criticality of this period in the Joint Strike Fighter program. The Committee has expressed concerns about delays in systems design and development with regard to production of the test aircraft. The Committee believes that additional funding for development efforts at this time could help get production of these aircraft back on track and prove extremely beneficial to the long-term health of the program. Accordingly, the Committee recommends an additional \$200,000,000 divided between the Air Force and Navy research and development lines to support developmental activities. These funds may be used for unfunded information assurance requirements driven by current Department of Defense policy updates, or in support of investment into new and more efficient manufacturing techniques that can drive down aircraft cost and production schedule.

PERSONNEL RECOVERY SYSTEMS (CSAR-X)

The budget request includes \$290,059,000 for the development of a replacement helicopter for the HH-60 combat search and rescue mission. The Committee notes that the contract award for this program is under a bid protest and as such been delayed significantly. Accordingly, the Committee reduced funding for the request by \$100,000,000.

The Committee is concerned about the selection criteria and process by which this program has proceeded to source selection. The Committee directs the Secretary of the Air Force to submit a report to the congressional defense committees detailing the source selection criteria and how they were established. The report shall include the significant factors of the Request for Proposal (RFP) that determined the source selection, their importance, and how each of the respondents to the RFP was rated against those factors. The report shall be delivered not later than September 15, 2007.

JOINT STARS SYERS DEMONSTRATION

The Committee recommends an additional \$16,000,000 to develop and conduct a demonstration of the Senior Year Electro-optical Reconnaissance System (SYERS) on a Joint STARS aircraft. This funding is provided to address an Air Force requirement for combat identification capability on Joint STARS to reduce the sensor-to-shooter timeline. The Joint STARS Operational Requirements Document dated December 2004 requires a Combat Identification (CID) System/Function that entails the process of attaining an accurate characterization of detected objects in the joint battle space and provides decision quality data to the operator so the timely application of military options and weapons resource can occur. Demonstrating the integration of an electro-optical sensor on the Joint STARS will accelerate the ability to provide a combat identification capability to this platform. The current target identification concept of operations is a slow process measured in hours dependent on coordination of multiple intelligence, surveillance and reconnaissance systems. The Committee believes that just as targeting pods have become huge force multipliers by turning fighter jets into non-traditional intelligence, surveillance and reconnaissance assets, the ability of the Joint STARS to not only locate but also provide combat identification of ground threats will be a similar advancement and reduce the sensor-to-shooter timeline from hours to minutes.

SPACE PROGRAMS

The combination of space systems and modern weaponry provides today's armed forces with unprecedented lethality at a reduced risk to the lives of our nation's soldiers, sailors, airmen and marines. The present national security space acquisition system, however, is replete with cost overruns and schedule delays to the point that some observers have described space acquisition as broken.

In almost every area of national security space, this year's budget requests both space programs that have not yet been fielded, and at the same time requests alternative, or improved, programs

for the same mission area. In missile warning, the first Space Based Infrared System (SBIRS) has not yet launched, and the Air Force is requesting funds for the Alternative Infrared Satellite System (AIRSS) program. In global positioning, the first Global Positioning Satellite (GPS) IIF has not yet launched, and the Air Force is requesting funds for the GPS III program. In communications, the first Advanced Extremely High Frequency (AEHF) and Wideband Gapfiller Satellite (WGS) satellites have not yet launched, and the Air Force is requesting funds for the Transformational Satellite (TSAT) program. The high cost of space acquisition is only increased when the acquisition decision is to cut off a program after spending billions of dollars to procure three, two, or even a single satellite and to spend billions of dollars to start a new acquisition. New programs might look good on paper from a cost and schedule standpoint, but that is only because they have not yet entered the riskiest periods of a satellite's life during integration, testing, launch, and on-orbit initialization. For all national security space programs, a commitment to realistic budgets and schedules that reflects the realities of engineering, manufacturing, launch and the harshness of the space environment is necessary.

The Committee's review of the Department's space program has led to the conclusion that funding for some of these follow-on systems is requested ahead of need. The Committee recommends \$75,877,000 for the Alternative Infrared Satellite System, which is a reduction of \$155,000,000 below the request for fiscal year 2008. The Alternative Infrared Satellite System is investigating sensor improvements over the current Space Based Infrared System, and should continue these research and development efforts.

The Committee recommends \$507,226,000 for the Global Positioning System III, which is a reduction of \$80,000,000 below the request for fiscal year 2008. The Global Positioning System III acquisition plan includes a selection of a single contractor to build eight satellites for block A of the program and a future decision for block B and block C, which could include a decision to purchase satellites from a different contractor. Additionally, there is debate within the Department of Defense regarding the requirements and timing for each of the blocks of the program. The current acquisition strategy should be modified in a way that ensures a healthy competition for the objective program of block C and maximum flexibility for blocks A and B.

SPACE SITUATIONAL AWARENESS AND OPERATIONALLY RESPONSIVE SPACE

The Committee recommends \$197,604,000 for Space Situational Awareness Systems, which is \$9,800,000 more than the request for upgrades to the Space Fence. In addition, the Committee recommends \$62,604,000 for Space Control Technology, which is \$25,000,000 more than the request for fiscal year 2008. These additional funds are for Self Aware-Space Situational Awareness described in the Air Force unfunded priorities list.

The Committee is strongly supportive of the ongoing efforts to improve space situational awareness, especially in light of the recently successful Chinese anti-satellite test. Accordingly, the Committee has provided these additional funds to improve the efforts

to understand both natural and man-made threats to space systems.

The Committee also recommends \$107,032,000 for Operationally Responsive Space, which is an increase of \$20,000,000. Of the \$20,000,000 increase, \$6,100,000 shall be used as described in the classified annex. In light of the recent Chinese anti-satellite test, the Committee provides these additional funds for efforts associated with responsive launch, payload, and bus development.

SPACE RADAR

The Committee recommends \$186,000,000 for the Space Radar program, which is consistent with the fiscal year 2007 level of funding and has transferred the funding back to the same Air Force Space Radar program element as fiscal year 2007. The Committee remains concerned about the cost, value and maturity of planning for the Space Radar program. For example, the Department of Defense and the Intelligence Community have not decided on issues such as responsibilities for transitioning to operations and integration with other space and ground capabilities. The total program cost, estimated by the Congressional Budget Office as \$35 billion to \$50 billion, is not affordable, the program has significant technical challenges, the moving target indicator mission is currently performed by airborne platforms, and the program is a lower priority than other Defense requirements.

BALLISTIC MISSILE RANGE SAFETY TECHNOLOGY

The budget request includes \$15,145,000 in PE 605860F, Rocket Systems Launch Program, but does not include funding for the Ballistic Missile Range Safety Technology (BMRST) program. The Committee has long supported and continues to support BMRST. The Committee recommends \$20,145,000 in PE 605860F, an increase of \$5,000,000 for BMRST.

The Committee believes that BMRST has developed the opportunity for a more flexible national launch complex and is disappointed with the lack of effort shown by the Department of the Air Force to assess the long term value in this project. As a result, the Committee encourages the Department of Defense's Executive Agent (EA) for Space to pursue this opportunity and any other that will provide the Nation with minimal and adaptable launch infrastructure requirements, mobile range options, and launch-on-demand capabilities that fully leverage GPS metric tracking and integrated communications relays. The Committee also encourages the EA for Space, through the newly established Operationally Responsive Space Office, to explore ways that the BMRST program would enable the goals of responsive launch.

Additionally, the Committee directs the Secretary of the Air Force to perform the certification process for the BMRST system on the eastern range with respect to full integration of telemetry and command destruct capabilities. The Committee directs that of the funds available in PE 305182F, Spacelift Range Systems, \$10,000,000 is restricted from obligation or expenditure until 30 days after notification to the congressional defense committees of the results from the BMRST certification process.

MEDSTARS INTEGRATION WITH THE GLOBAL COMBAT SUPPORT SYSTEM

The Committee recommends \$2,000,000 for MEDSTARS Integration with the Global Combat Support System. As the exposure to non-conventional weapons increases, servicemembers need a front-line medical system to enable the rapid relay, monitoring and assessment of the health of the combat force. The MEDSTARS program is the only system that digitally collects information using a state-of-the-art digital data tablet system that can integrate with the Theater Trauma Registry program and the Global Combat Support System (GCCS). The Committee urges the rapid development and deployment of this system to best provide our forces with instant access to health care information and trauma reports.

WIDE AREA SURVEILLANCE RADAR INTEGRATION ON JOINT STARS

The Committee is concerned about the need for future radar capability enhancements for the Joint STARS fleet and understands that the Air Force is considering a plan to transition the wide area surveillance (WAS) radar from the E-10 program to Joint STARS. The Committee believes the Air Force should prepare a formal cost estimate and schedule for a program to integrate the WAS on Joint STARS for consideration by the congressional defense committees.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION,
DEFENSE-WIDE

Fiscal year 2007 appropriation	\$21,291,056,000
Fiscal year 2008 budget request	20,559,850,000
Committee recommendation	20,659,095,000
Change from budget request	+99,245,000

The appropriation provides funds for the research, development, test and evaluation activities of the Department of Defense for defense-wide activities.

The Committee recommends an appropriation of \$20,659,095,000 for Research, Development, Test and Evaluation, Defense-Wide, which is \$631,961,000 less than the amount provided in fiscal year 2007 and \$99,245,000 more than the amount requested for fiscal year 2008.

PROGRAM RECOMMENDED

The total amount recommended in the bill will provide the following program in fiscal year 2008:

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST	
RESEARCH, DEVELOPMENT, TEST & EVAL, DW				
BASIC RESEARCH				
1	DTRA UNIVERSITY STRATEGIC PARTNERSHIP BASIC RESEARCH..	5,000	8,000	+3,000
2	DEFENSE RESEARCH SCIENCES.....	---	10,800	+10,800
2	FORCE HEALTH PROTECTION.....	152,622	152,622	---
3	GOVERNMENT/INDUSTRY COSPONSORSHIP OF UNIVERSITY RESEAR	---	8,000	+8,000
4	DEFENSE EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE	5,878	5,878	---
5	NATIONAL DEFENSE EDUCATION PROGRAM.....	44,372	44,372	---
6	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.....	72,003	101,253	+29,250
	TOTAL, BASIC RESEARCH.....	279,875	330,925	+51,050
APPLIED RESEARCH				
ADVANCED DEVELOPMENT INITIATIVES FUNDS.....				
7	INSENSITIVE MUNITIONS--EXPLORATORY DEVELOPMENT.....	15,542	11,542	-4,000
8	MEDICAL FREE ELECTRON LASER.....	---	2,000	+2,000
9	HISTORICALLY BLACK COLLEGES & UNIV (HBCU) SCIENCE.....	15,150	15,150	---
10	LINCOLN LABORATORY RESEARCH PROGRAM.....	29,524	29,524	---
11	INFORMATION AND COMMUNICATIONS TECHNOLOGY.....	229,739	235,139	+5,400
12	COGNITIVE COMPUTING SYSTEMS.....	179,728	179,728	---
13	BIOLOGICAL WARFARE DEFENSE.....	99,137	85,466	-13,671
14	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.....	305,327	348,777	+43,450
15	HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) APP	7,300	---	-7,300
16	TACTICAL TECHNOLOGY.....	374,717	365,341	-9,376
17	MATERIALS AND BIOLOGICAL TECHNOLOGY.....	306,022	306,022	---
19	ELECTRONICS TECHNOLOGY.....	213,529	203,929	-9,600
21	WEAPONS OF MASS DESTRUCTION DEFEAT TECHNOLOGIES.....	182,416	222,916	+40,500
23	SPECIAL OPERATIONS TECHNOLOGY DEVELOPMENT.....	21,282	31,782	+10,500
24	SOF MEDICAL TECHNOLOGY DEVELOPMENT.....	2,388	2,388	---
25	INSENSITIVE MUNITIONS - ADVANCED DEVELOPMENT.....	6,000	---	-6,000
	TOTAL, APPLIED RESEARCH.....	1,987,801	2,089,704	+101,903
ADVANCED TECHNOLOGY DEVELOPMENT				
27	SO/LIC ADVANCED DEVELOPMENT.....	32,669	41,669	+9,000
28	COMBATING TERRORISM TECHNOLOGY SUPPORT.....	76,276	109,276	+33,000
29	COUNTERPROLIFERATION INITIATIVES--PROLIF PREV & DEFEAT	213,240	220,740	+7,500
30	BALLISTIC MISSILE DEFENSE TECHNOLOGY.....	118,569	101,569	-17,000
31	JOINT DOD-DOE MUNITIONS TECHNOLOGY DEVELOPMENT.....	23,488	23,488	---

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST	
32	ADVANCED AEROSPACE SYSTEMS.....	86,385	70,385	-16,000
33	SPACE PROGRAMS AND TECHNOLOGY.....	224,551	217,803	-6,748
34	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM - ADVANCED DEV	232,302	278,602	+46,300
35	JOINT ELECTRONIC ADVANCED TECHNOLOGY.....	9,219	9,219	---
36	JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS.....	194,352	196,352	+2,000
37	NETWORKED COMMUNICATIONS CAPABILITIES.....	40,000	---	-40,000
38	BIOMETRICS SCIENCE AND TECHNOLOGY.....	8,000	---	-8,000
39	HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) ADV	9,000	---	-9,000
40	DEFENSE-WIDE MANUFACTURING SCIENCE AND TECHNOLOGY PROG	10,000	3,500	-6,500
41	JOINT ROBOTICS PROGRAM/AUTONOMOUS SYSTEMS.....	11,256	16,756	+5,500
42	GENERIC LOGISTICS R&D TECHNOLOGY DEMONSTRATIONS.....	18,736	33,736	+15,000
44	STRATEGIC ENVIRONMENTAL RESEARCH PROGRAM.....	68,874	68,874	---
45	MICROELECTRONIC TECHNOLOGY DEVELOPMENT AND SUPPORT....	---	28,000	+28,000
46	JOINT WARFIGHTING PROGRAM.....	11,060	11,060	---
47	ADVANCED ELECTRONICS TECHNOLOGIES.....	220,548	224,048	+3,500
48	SYNTHETIC APERTURE RADAR (SAR) COHERENT CHANGE DETECTI	6,500	---	-6,500
49	ADVANCED CONCEPT TECHNOLOGY DEMONSTRATIONS.....	---	2,000	+2,000
50	HIGH PERFORMANCE COMPUTING MODERNIZATION PROGRAM.....	187,587	189,587	+2,000
51	COMMAND, CONTROL AND COMMUNICATIONS SYSTEMS.....	256,868	256,868	---
52	LAND WARFARE TECHNOLOGY.....	24,711	19,011	-5,700
53	CLASSIFIED DARPA PROGRAMS.....	188,188	188,188	---
54	NETWORK-CENTRIC WARFARE TECHNOLOGY.....	151,641	144,641	-7,000
55	SENSOR TECHNOLOGY.....	196,462	196,462	---
56	GUIDANCE TECHNOLOGY.....	127,777	127,777	---
57	DISTRIBUTED LEARNING ADVANCED TECHNOLOGY DEVELOPMENT..	13,282	13,282	---
58	SOFTWARE ENGINEERING INSTITUTE.....	29,851	29,851	---
60	QUICK REACTION SPECIAL PROJECTS.....	109,514	112,414	+2,900
61	JOINT EXPERIMENTATION.....	112,017	108,717	-3,300
62	JOINT WARGAMING SIMULATION MANAGEMENT OFFICE.....	37,837	27,837	-10,000
63	TEST & EVALUATION SCIENCE & TECHNOLOGY.....	62,889	62,889	---
64	TECHNOLOGY LINK.....	2,234	4,234	+2,000
65	SPECIAL OPERATIONS ADVANCED TECHNOLOGY DEVELOPMENT....	29,935	42,435	+12,500
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT.....	3,145,818	3,181,270	+35,452
	DEMONSTRATION & VALIDATION			
66	NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT R	38,060	45,060	+7,000

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
68 RETRACT LARCH.....	22,365	22,365	---
69 JOINT ROBOTICS PROGRAM.....	11,860	16,860	+5,000
71 ENVIRONMENTAL SECURITY TECHNICAL CERTIFICATION PROGRAM	33,199	40,699	+7,500
72 BALLISTIC MISSILE DEFENSE TERMINAL DEFENSE SEGMENT....	962,585	1,032,585	+70,000
73 BALLISTIC MISSILE DEFENSE MIDCOURSE DEFENSE SEGMENT...	2,520,064	2,233,864	-286,200
74 BALLISTIC MISSILE DEFENSE BOOST DEFENSE SEGMENT.....	548,759	498,108	-50,651
75 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.....	57,160	62,160	+5,000
76 BALLISTIC MISSILE DEFENSE SENSORS.....	778,163	611,663	-166,500
SPACE SURVEILLANCE & TRACKING SYSTEM.....	331,525	286,167	-45,358
77 BALLISTIC MISSILE DEFENSE SYSTEM INTERCEPTOR.....	227,499	372,853	+145,354
78 BALLISTIC MISSILE DEFENSE TEST & TARGETS.....	586,150	586,150	---
86 BALLISTIC MISSILE DEFENSE C2BMC.....	258,913	460,703	+201,790
87 BALLISTIC MISSILE DEFENSE HERCULES.....	53,658	52,824	-834
88 BALLISTIC MISSILE DEFENSE JOINT WARFIGHTER SUPPORT....	48,787	50,235	+1,448
89 BALLISTIC MISSILE DEFENSE JOINT NATIONAL INTERGRATION.	104,012	79,099	-24,913
80 BALLISTIC MISSILE DEFENSE SYSTEMS CORE.....	482,016	431,788	-50,228
81 SPECIAL PROGRAMS - MDA.....	323,250	198,250	-125,000
82 AEGIS BMD.....	1,059,103	1,116,103	+57,000
84 MULTIPLE KILL VEHICLES.....	271,151	274,251	+3,100
85 BALLISTIC MISSILE DEFENSE SYSTEM SPACE PROGRAMS.....	27,666	17,666	-10,000
92 HUMANITARIAN DEMINING.....	14,013	14,013	---
93 COALITION WARFARE.....	14,047	10,047	-4,000
94 DEPARTMENT OF DEFENSE CORROSION PROGRAM.....	4,983	4,983	---
95 JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS.....	2,960	2,960	---
91 REGARDING TRENCH.....	2,000	2,000	---
96 HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) RES	5,700	---	-5,700
97 JOINT SYSTEMS INTEGRATION COMMAND (JSIC).....	19,375	19,375	---
98 JOINT FIRES INTEGRATION & INTEROPERABILITY TEAM.....	16,596	16,596	---
99 REDUCTION OF TOTAL OWNERSHIP COST.....	25,225	25,225	---
100 JOINT ELECTROMAGNETIC TECHNOLOGY (JET) PROGRAM.....	3,482	4,982	+1,500
PROMPT GLOBAL STRIKE.....	---	100,000	+100,000
TOTAL, DEMONSTRATION & VALIDATION.....	8,854,326	8,689,634	-164,692
ENGINEERING & MANUFACTURING DEVELOPMENT			
101 DEPLOYMENT AND DISTRIBUTION ENTERPRISE TECHNOLOGY.....	25,000	10,000	-15,000

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
102 DEFENSE ACQUISITION CHALLENGE PROGRAM (DACP).....	28,970	28,970	---
103 NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT R	3,281	3,281	---
104 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.....	247,935	249,935	+2,000
106 JOINT ROBOTICS PROGRAM.....	2,911	7,911	+5,000
107 ADVANCED IT SERVICES JOINT PROGRAM OFFICE (AITS-JPO)..	9,832	9,832	---
108 JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM (JTIDS)	16,527	16,527	---
109 WEAPONS OF MASS DESTRUCTION DEFEAT CAPABILITIES.....	15,394	15,394	---
110 INFORMATION TECHNOLOGY DEVELOPMENT.....	11,297	11,297	---
113 DEFENSE INTEGRATED MILITARY HUMAN RESOURCES SYSTEM....	79,300	79,300	---
116 BUSINESS TRANSFORMATION AGENCY R&D ACTIVITIES.....	127,970	128,970	+1,000
117 HOMELAND PERSONNEL SECURITY INITIATIVE.....	1,800	1,800	---
118 TRUSTED FOUNDRY.....	43,604	43,604	---
119 DEFENSE ACQUISITION EXECUTIVE (DAE) PILOT PROGRAM.....	5,838	5,838	---
121 GLOBAL COMBAT SUPPORT SYSTEM.....	18,129	18,129	---
122 JOINT COMMAND AND CONTROL PROGRAM (JC2).....	70,283	70,283	---
TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT.....	708,071	701,071	-7,000
RDT&E MANAGEMENT SUPPORT			
126 GENERIC LOGISTICS R&D TECHNOLOGY DEMONSTRATIONS.....	4,000	4,000	---
127 TRAINING TRANSFORMATION (T2).....	51,752	54,252	+2,500
129 DEFENSE READINESS REPORTING SYSTEM (DRRS).....	11,886	11,886	---
130 JOINT SYSTEMS ARCHITECTURE DEVELOPMENT.....	14,437	14,437	---
131 CENTRAL TEST AND EVALUATION INVESTMENT DEVELOPMENT....	133,772	144,272	+10,500
132 ASSESSMENTS AND EVALUATIONS.....	1,645	1,645	---
133 THERMAL VICAR.....	7,822	7,822	---
134 JOINT MISSION ENVIRONMENT TEST CAPABILITY (JMETC).....	6,925	6,925	---
135 TECHNICAL STUDIES, SUPPORT AND ANALYSIS.....	31,263	35,263	+4,000
136 USD(A&T)--CRITICAL TECHNOLOGY SUPPORT.....	4,021	4,021	---
137 FOREIGN MATERIAL ACQUISITION AND EXPLOITATION.....	52,683	52,683	---
139 JOINT THEATER AIR AND MISSILE DEFENSE ORGANIZATION....	53,653	53,653	---
140 CLASSIFIED PROGRAM USD(P).....	---	98,200	+98,200
141 FOREIGN COMPARATIVE TESTING.....	32,919	32,919	---
142 NUCLEAR MATTERS - PHYSICAL SECURITY.....	4,513	4,513	---
143 SUPPORT TO NETWORKS AND INFORMATION INTEGRATION.....	11,152	11,152	---
144 GENERAL SUPPORT TO USD (INTELLIGENCE).....	4,574	4,574	---
145 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.....	99,053	99,053	---

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
150 SMALL BUSINESS INNOVATION RESEARCH/CHALLENGE ADMINISTR	2,162	3,162	+1,000
151 DEFENSE TECHNOLOGY ANALYSIS.....	11,927	11,927	---
153 FORCE TRANSFORMATION DIRECTORATE.....	20,585	20,585	---
154 DEFENSE TECHNICAL INFORMATION CENTER (DTIC).....	51,800	51,800	---
155 R&D IN SUPPORT OF DOD ENLISTMENT, TESTING & EVALUATION	9,326	9,326	---
156 DEVELOPMENT TEST AND EVALUATION.....	18,712	18,712	---
157 MANAGEMENT HEADQUARTERS (RESEARCH & DEVELOPMENT).....	52,992	52,992	---
158 BUDGET AND PROGRAM ASSESSMENTS.....	5,750	---	-5,750
161 SUPPORT TO INFORMATION OPERATIONS (IO) CAPABILITIES...	28,652	28,652	---
162 INFORMATION TECHNOLOGY RAPID ACQUISITION.....	5,197	5,197	---
163 INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS (IO)...	9,932	9,932	---
165 WARFIGHTING AND INTELLIGENCE-RELATED SUPPORT.....	827	827	---
166 PENTAGON RESERVATION.....	6,058	6,058	---
167 MANAGEMENT HEADQUARTERS - MDA.....	85,906	85,906	---
168 IT SOFTWARE DEV INITIATIVES.....	888	888	---
TOTAL, RDT&E MANAGEMENT SUPPORT.....	836,784	947,234	+110,450
OPERATIONAL SYSTEMS DEVELOPMENT			
170 DEFENSE INFORMATION SYSTEM FOR SECURITY (DISS).....	34,417	34,417	---
171 PARTNERSHIP FOR PEACE (PFP) INFORMATION MANAGEMENT SYS	2,000	2,000	---
172 CHEMICAL AND BIOLOGICAL DEFENSE (OPERATIONAL SYSTEMS D	7,716	7,716	---
173 JOINT INTEGRATION AND INTEROPERABILITY.....	53,892	53,892	---
174 JOINT STAFF ANALYTICAL SUPPORT.....	7,744	7,744	---
175 CLASSIFIED PROGRAMS.....	1,694	1,694	---
176 C4I INTEROPERABILITY.....	76,179	76,179	---
178 JOINT/ALLIED COALITION INFORMATION SHARING.....	26,321	26,321	---
184 NATIONAL MILITARY COMMAND SYSTEM-WIDE SUPPORT.....	713	713	---
185 DEFENSE INFO INFRASTRUCTURE ENGINEERING AND INTEGRATIO	5,548	5,548	---
186 LONG HAUL COMMUNICATIONS (DCS).....	16,487	16,487	---
187 MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK....	9,482	9,482	---
188 PUBLIC KEY INFRASTRUCTURE (PKI).....	9,389	9,389	---
189 KEY MANAGEMENT INFRASTRUCTURE (KMI).....	52,090	52,090	---
190 INFORMATION SYSTEMS SECURITY PROGRAM.....	13,256	16,256	+3,000
191 INFORMATION SYSTEMS SECURITY PROGRAM.....	394,314	394,314	---
192 INFORMATION SYSTEMS SECURITY PROGRAM.....	2,300	2,300	---

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
194 C4I FOR THE WARRIOR.....	3,624	3,624	---
196 GLOBAL COMMAND AND CONTROL SYSTEM.....	47,237	47,237	---
197 JOINT SPECTRUM CENTER.....	18,653	18,653	---
198 NET-CENTRIC ENTERPRISE SERVICES (NCES).....	43,424	43,424	---
199 TELEPORT PROGRAM.....	5,798	5,798	---
200 SPECIAL APPLICATIONS FOR CONTINGENCIES.....	15,687	17,687	+2,000
203 CRITICAL INFRASTRUCTURE PROTECTION (CIP).....	12,667	12,667	---
205 DEFENSE JOINT COUNTERINTELLIGENCE ACTIVITIES.....	2,951	2,951	---
207 POLICY R&D PROGRAMS.....	4,627	5,627	+1,000
209 NET CENTRICITY.....	10,243	10,243	---
215 DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS.....	15,800	17,800	+2,000
217 MQ-1 PREDATOR A UAV.....	13,100	13,100	---
226 INDUSTRIAL PREPAREDNESS.....	20,114	33,114	+13,000
227 LOGISTICS SUPPORT ACTIVITIES.....	2,846	2,846	---
228 MANAGEMENT HEADQUARTERS (JCS).....	3,210	3,210	---
229 NATO JOINT STARS.....	41,466	31,466	-10,000
230 STORM.....	27,107	27,107	---
232 SPECIAL OPERATIONS AVIATION SYSTEMS ADVANCED DEV.....	60,750	81,909	+21,159
233 SPECIAL OPERATIONS TECHNOLOGY DEVELOPMENT.....	42,262	54,262	+12,000
234 SPECIAL OPERATIONS TACTICAL SYSTEMS DEVELOPMENT.....	35,783	46,283	+10,500
235 SOF OPERATIONAL ENHANCEMENTS.....	53,418	58,118	+4,700
236 SPECIAL OPERATIONS CV-22 DEVELOPMENT.....	23,473	23,473	---
237 SPECIAL OPERATIONS AIRCRAFT DEFENSIVE SYSTEMS.....	5,195	5,195	---
238 OPS ADVANCED SEAL DELIVERY SYSTEM (ASDS) DEVELOPMENT..	20,292	20,292	---
239 MISSION TRAINING AND PREPARATION SYSTEMS (MTPS).....	6,405	6,405	---
240 UNMANNED VEHICLES (UV).....	1,500	1,500	---
241 MC130J SOF TANKER RECAPITALIZATION.....	12,701	12,701	---
TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT.....	1,263,875	1,323,234	+59,359
999 CLASSIFIED PROGRAMS.....	3,483,300	3,396,023	-87,277
TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, DW.....	20,559,850	20,659,095	+99,245

The adjustments to the budget activities for Research Development, Test and Evaluation, Defense-Wide, are shown below:

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
 [In thousands of dollars]

R-1	Budget Request	Committee Recommended	Change from Request
DTRA UNIVERSITY STRATEGIC PARTNERSHIP BASIC			
1 RESEARCH	5,000	8,000	3,000
Combat Effective Facial Armor Research and Development		1,500	
Dual Use Technologies for Bio-defense		1,500	
2 DEFENSE RESEARCH SCIENCES	0	10,800	10,800
Nanoscience Nanotechnology Institute		3,000	
High Energy Laser for Detection, Inspection and Non-destructive Testing		2,000	
Illinois Institute of Technology		1,300	
Nanocrystal Source Display		1,500	
Bacterial Ghost Influenza Vaccine Development		2,000	
Advanced Research to Further National Security Goals		1,000	
GOVERNMENT/INDUSTRY COSPONSORSHIP OF UNIVERSITY RESEARCH			
3 UNIVERSITY RESEARCH	0	8,000	8,000
Nanotechnology Initiative at Shaw University		1,000	
New York Structural Biology Center		2,000	
Integrated Cryo-cooled High Power Density Systems		2,000	
Focus Center Government-Industry Consortia for University Research		3,000	
6 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	72,003	101,253	29,250
Chem Bio Defense Initiative		5,000	
Detection of Biological Agents in Water		2,500	
Diamond MEMS Sensors for Real-Time Sensing of Weaponized Pathogens		1,000	
Portable Continuous Monitor for Biodetection		2,000	
Portable Rapid Bacterial Warfare Detection Unit		5,500	
Rapid Response Database Systems Initiative		1,000	
Initiative for Defense Against Bio-Warfare and Bio-Terrorism		2,000	
Zumwalt National Program for Countermeasures to Biological and Chemical Threats		1,000	
Chemical/Biological Preparedness Center – Advanced Development of Mobile Rapid Response Prototype		4,250	
Garden State Cancer Center Vaccine Development Program		1,000	
Novel Viral Biowarfare Agent Identification and Treatment (NOVBAIT)		4,000	
XX ADVANCED DEVELOPMENT INITIATIVES FUND	0	50,000	50,000
INSENSITIVE MUNITIONS--EXPLORATORY DEVELOPMENT			
7 DEVELOPMENT	15,542	11,542	-4,000
Program Growth		-4,000	
8 MEDICAL FREE ELECTRON LASER	0	2,000	2,000
Medical Free Electron Laser		2,000	

R-1		Budget Request	Committee Recommended	Change from Request
11	INFORMATION AND COMMUNICATIONS TECHNOLOGY	229,739	235,139	5,400
	National Repository of Digital Forensic Intelligence/Center for Telecommunications and Network Security		1,400	
	Secure Open Systems Institute		3,000	
	Software Assurance Education and Research Institute		1,000	
13	BIOLOGICAL WARFARE DEFENSE	99,137	85,466	-13,671
	Execution Delays		-4,400	
	Cancellation of Spectral Sensing of Bio-Aerosols (SSBA)		-9,771	
	Biomedical Engineering Initiative		500	
14	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	305,327	348,777	43,450
	Chem Bio Defense Initiative		10,000	
	Asymmetrical Protocols for Biodefense: Rapid Acting Broad Spectrum Protection Against Biological Threat		3,000	
	Chemical Warfare Agent Fate Model Verification and Validation		1,000	
	Point-of-Care Diagnostic System		1,000	
	Biosurety Development and Management Program		800	
	Strategic Bioterrorism Response for Battlefield Survival		1,800	
	Virus Mutation and Virus Transfer from Humans to Animals		3,000	
	Mixed Oxidants for Chemical and Biological Decontamination		5,000	
	Self-Decontaminating Polymer System for Chemical and Biological Warfare Agents		7,000	
	Rapid Forensic Evaluation of Microbes in Biodefense		1,000	
	Continuation of Unmanned Vehicle CBRNE Unitary Sensor Suite Development and Demonstration		2,000	
	Countermeasures to Chemical/Biological Control-Rapid Response		5,000	
	Multifunctional Particles for Defeating CBWA (Chemical and Biological Warfare Agents)		1,000	
	HyperAcute Vaccine Development		1,850	
	HUMAN, SOCIAL AND CULTURE BEHAVIOR			
15	MODELING (HSCB) APPLICATIONS	7,300	0	-7,300
	Program growth		-7,300	
16	TACTICAL TECHNOLOGY	374,717	365,341	-9,376
	Cancellation for Waveforms for Active Sensing		-3,670	
	Cancellation of SUAVE		-6,706	
	Oplinet Sensor System		1,000	
19	ELECTRONICS TECHNOLOGY	213,529	203,929	-9,600
	Execution Delays		-9,600	
	WEAPONS OF MASS DESTRUCTION DEFEAT			
21	TECHNOLOGIES	182,416	222,916	40,500
	Fissile Material Detection Research		26,500	
	University Strategic Partnerships		3,000	
	Simulated Virtual Prototype Environment Development		1,000	
	Comprehensive National Incident Management System		3,000	

R-1	Budget Request	Committee Recommended	Change from Request
Center for Nonproliferation Studies, Monterey Institute for International Affairs		2,000	
Remote Sighting System		1,000	
PROTECTOR-DACS		3,000	
National Center for Blast Mitigation and Protection		1,000	
23 SPECIAL OPERATIONS TECHNOLOGY DEVELOPMENT	21,282	31,782	10,500
Pulsed Energy Projectile (PEP)		1,000	
Special Operations Forces Network-Centric Sharing and Storage		1,000	
Nickel Boron Metal Coating Technology for USSOCOM Vehicle Systems		2,000	
Athena - Threat Signal Locator		1,000	
Advanced Multi-Purpose Microdisplay System		1,000	
Flashlight Soldier-to-Soldier Combat ID System (FSCIS)		2,000	
Improved Sensor Systems		2,500	
INSENSITIVE MUNITIONS - ADVANCED			
25 DEVELOPMENT	6,000	0	-6,000
Reduce program growth		-8,000	
27 SO/LIC ADVANCED DEVELOPMENT	32,669	41,669	9,000
Aerial Canopy Sensor Delivery System (ACSDDS)		1,000	
BIGFOOT Tag Airborne Receiver		5,000	
Extended-Lifetime Radioisotope Batteries		1,000	
Day Night Wide Area Surveillance System		2,000	
28 COMBATING TERRORISM TECHNOLOGY SUPPORT	76,276	109,276	33,000
Automated Language Translation		3,000	
Counter-insurgency Biometrics Tactical Census			
Authentication Enrollment and Identification System		2,500	
CT-QAS Counterterrorism-Quality Assurance Science program		1,500	
DICAST System Enhancement		3,000	
Early Responders Distance Learning Center (ERDLC): Scenario and Incident Based Port Security Training		1,000	
EDIT Advanced Shallow Subsurface Tunnel, Bunker and Cache Detection		1,000	
DIFAR Sensor System		2,000	
Roll-On, Roll-Off Reconnaissance Pallet Improvement		6,000	
Facility Security Using Tactical Surveys		3,000	
Law Enforcement Test Bed for Counter-Insurgency Tactics, Techniques and Practices		2,000	
Port and Hull Security 3D, Real Time Sonar-System			
Echoscope		3,000	
Comprehensive Maritime Domain Awareness		3,000	
Accelerated DT&E of Affordable Robust Mid-Sized UGVs for Defense & Homeland Security Applications		1,000	
Contextual Arabic Blog and Slang Analysis Program		1,000	

R-1	Budget Request	Committee Recommended	Change from Request
COUNTERPROLIFERATION INITIATIVES--			
29 PROLIFERATION PREVENTION & DEFEAT	213,240	220,740	7,500
Low Power Next Generation Portable Radionuclide Detection & ID Systems		2,000	
Stand-off Chemical Detector for SOF Venture		2,000	
AELED IED Detection for Naval UAVs		1,000	
Continuation of Advanced Materials Research for Nuclear Detection, Counter-proliferation and Imaging		2,500	
30 BALLISTIC MISSILE DEFENSE TECHNOLOGY	118,569	101,569	-17,000
Program Reduction		-10,000	
Transferred to Line 86 for execution		-12,000	
Advanced Surface Radar Technologies (ASuRT)		3,000	
Aluminum Nitride for Substrates and Devices		2,000	
32 ADVANCED AEROSPACE SYSTEMS	86,385	70,385	-16,000
Execution Delays		-16,000	
33 SPACE PROGRAMS AND TECHNOLOGY	224,551	217,803	-6,748
Cancellation of Micro Electric Propulsion (MEP)		-6,748	
CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM -			
34 ADVANCED DEVELOPMENT	232,302	278,602	46,300
Chem Bio Defense Initiative		10,000	
Develop & Test Environmentally Safe Biocides for Bio-Defense		500	
Fraunhofer USA Center for Molecular Biology		1,000	
Hand-held Nanotechnology Enabled Bio-warfare Agent Identification System		3,000	
Long Range Stand Off System for Detection of Biological Materials		1,000	
Myeloid Progenitor for Acute Radiation Syndrome		3,000	
Carbon Nanotube Chemical Detector		1,000	
Surface Enhanced infrared Detection of Threats		3,300	
Regenerative Chemical Biological Filtration Systems		2,500	
Small Accelerators and Detection Systems for Homeland Defense and National Security Applications		2,000	
Total Perimeter Surveillance (TPS)		2,000	
Warfighter Personnel Decontamination		1,000	
Acinetobacter Baumannii Research		2,000	
Antioxidant Micronutrient Therapeutic Countermeasures for Chemical Agents		1,000	
Anthrax Monoclonal Antibody Therapeutic and Prophylaxis Program		2,000	
UCLA High Speed and High Volume Laboratory Network for Infectious Diseases		5,000	
Modular Raman Chem/Bio Detection System		1,000	
Photo Catalytic Oxidation (PCO) Demonstration for Water Reuse		2,500	
Environmental Bioterrorism Detection Program		2,500	
36 JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS	194,352	196,352	2,000
Distributed Network Switching Joint Capability Demonstration		2,000	
37 NETWORKED COMMUNICATIONS CAPABILITIES	40,000	0	-40,000
Program growth		-40,000	

R-1		Budget Request	Committee Recommended	Change from Request
38	BIOMETRICS SCIENCE AND TECHNOLOGY	8,000	0	-8,000
	Program growth		-8,000	
	HUMAN, SOCIAL AND CULTURE BEHAVIOR			
39	MODELING (HSCB) ADV	9,000	0	-9,000
	Program growth		-9,000	
	DEFENSE-WIDE MANUFACTURING SCIENCE AND TECHNOLOGY PROGRAM	10,000	3,500	-6,500
	Program growth		-10,000	
	Light Weight Composite Brakes for Armored Wheeled Vehicles		1,000	
	Clafin University Detection and Remediation Response to Biological and Chemical Weapons Project		2,500	
	JOINT ROBOTICS PROGRAM/AUTONOMOUS SYSTEMS	11,256	16,756	5,500
	Joint Robotics Initiative		5,000	
	Autonomous and Semi-autonomous Manipulation for Ground Robots		500	
	GENERIC LOGISTICS R&D TECHNOLOGY DEMONSTRATIONS	18,736	33,736	15,000
	Advanced Mobile Microgrid System		3,000	
	Aging Systems Sustainment and Enabling Technologies (ASSET)		2,500	
	Emerging Critical Interconnection Technology Program (E/CIT)		1,000	
	Parts Backorder Reduction		3,000	
	Advanced Mobile Microgrid System		5,500	
	MICROELECTRONIC TECHNOLOGY DEVELOPMENT AND SUPPORT	0	28,000	28,000
	Agile JTRS Integrated Circuits		2,000	
	Defense Command Integration Center		1,000	
	End to End Semi Fab Alpha Tool		2,000	
	Semi Conductor Photomask Technology Initiative		3,000	
	High Specific Energy Rechargeable Battery		2,000	
	Superlattice Nanotechnology		2,000	
	University Materials Characterization and Metrology Center		1,500	
	Spintronics Memory Storage Technology		3,000	
	3D Electronics		1,000	
	Carbon Nanotube Thin Film Near Infrared Detector		1,000	
	Next Generation Supercomputer IA Prototype for the NRL		5,000	
	Advanced Dynamic Optics Program		1,500	
	Foliage Penetrating Acoustically Cued Imagery Sensor		3,000	
47	ADVANCED ELECTRONICS TECHNOLOGIES	220,548	224,048	3,500
	Computing and Nanoscale Electronic Processing		1,500	
	The Center for Advanced Microelectronics Manufacturing		2,000	
	SYNTHETIC APERTURE RADAR (SAR) COHERENT CHANGE DETECTION	6,500	0	-6,500
	Program growth		-6,500	

R-1		Budget Request	Committee Recommended	Change from Request
	ADVANCED CONCEPT TECHNOLOGY			
49	DEMONSTRATIONS	0	2,000	2,000
	Power Dozer Side-Casting Technology Operational Capability/Integration Evaluation		2,000	
	HIGH PERFORMANCE COMPUTING MODERNIZATION			
50	PROGRAM	187,587	189,587	2,000
	Data-Intensive, High-Performance Computing-Phase 4		2,000	
52	LAND WARFARE TECHNOLOGY	24,711	19,011	-5,700
	Execution Delays		-5,700	
54	NETWORK-CENTRIC WARFARE TECHNOLOGY	151,641	144,641	-7,000
	Cancellation of Confirmatory Hunter-Killer System: Close Combat Lethal Recon (CCLR)		-7,000	
60	QUICK REACTION SPECIAL PROJECTS	109,514	112,414	2,900
	Semi-Autonomous Robotic Manipulation and Sensing		1,500	
	Counter Sniper Protection System (CSPS) Turret		1,400	
61	JOINT EXPERIMENTATION	112,017	108,717	-3,300
	Reduce Program Growth		-10,000	
	Cultural and Societal Modeling & Simulation		3,200	
	Joint Urban Fires Prototype (JUFP)		1,500	
	Joint Experimentation Visualization		2,000	
	JOINT WARGAMING SIMULATION MANAGEMENT			
62	OFFICE	37,837	27,837	-10,000
	Program Reduction		-10,000	
64	TECHNOLOGY LINK	2,234	4,234	2,000
	First Link/Mil Tech First Responder Product Engineering and Test & Evaluation Program		2,000	
	SPECIAL OPERATIONS ADVANCED TECHNOLOGY			
65	DEVELOPMENT	29,935	42,435	12,500
	11m RIB Replacement Craft Design		1,000	
	Field Experimentation Program for Special Operations		2,000	
	Information Networking For Operational Reporting and Monitoring (INFORM)		2,500	
	Waterway Threat Detection Sensor System		3,000	
	Improved Information Transfer for Special Forces		4,000	
	NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY			
66	EQUIPMENT	38,060	45,060	7,000
	Integrated Base Defense Operation Planning Process		1,000	
	Integrated High Activity Response System (INHARS)		5,000	
	Digital Network Centric Remotely Operated Weapons System		1,000	
69	JOINT ROBOTICS PROGRAM	11,860	16,860	5,000
	Joint Robotics Initiative		5,000	
	ENVIRONMENTAL SECURITY TECHNICAL			
71	CERTIFICATION PROGRAM	33,199	40,699	7,500
	Inland Empire Well Treatment of Perchlorate Contaminated Wells		2,500	

R-1	Budget Request	Committee Recommended	Change from Request
BALLISTIC MISSILE DEFENSE JOINT NATIONAL			
89	104,012	79,099	-24,913
		-913	
		-24,000	
BALLISTIC MISSILE DEFENSE SYSTEMS CORE			
80	482,016	431,788	-50,228
		-15,228	
		-35,000	
SPECIAL PROGRAMS - MDA			
81	323,250	198,250	-125,000
		-125,000	
AEGIS BMD			
82	1,059,103	1,116,103	57,000
		22,000	
		20,000	
		15,000	
MULTIPLE KILL VEHICLES			
84	271,151	274,251	3,100
		3,100	
BALLISTIC MISSILE DEFENSE SYSTEM SPACE			
85	27,666	17,666	-10,000
		-10,000	
COALITION WARFARE			
93	14,047	10,047	-4,000
		-4,000	
HUMAN, SOCIAL AND CULTURE BEHAVIOR			
96	5,700	0	-5,700
		-5,700	
JOINT ELECTROMAGNETIC TECHNOLOGY (JET)			
100	3,482	4,982	1,500
		1,500	
PROMPT GLOBAL STRIKE			
XX	0	100,000	100,000
DEPLOYMENT AND DISTRIBUTION ENTERPRISE			
101	25,000	10,000	-15,000
		-15,000	
CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM			
104	247,935	249,935	2,000
		2,000	
JOINT ROBOTICS PROGRAM			
106	2,911	7,911	5,000
		5,000	
BUSINESS TRANSFORMATION AGENCY R&D			
116	127,970	128,970	1,000
		1,000	
TRAINING TRANSFORMATION (T2)			
127	51,752	54,252	2,500
		2,500	

R-1	Budget Request	Committee Recommended	Change from Request
CENTRAL TEST AND EVALUATION INVESTMENT			
131 DEVELOPMENT	133,772	144,272	10,500
Advanced SAM Hardware Simulator Development-ITEAMS		4,500	
Joint Gulf Range Complex Test and Training Interdependency Initiative		1,000	
UAV Systems and Operations Validation Program (USOVP)		2,000	
Range Tactical Data Link (TDL) & Relay Capability		3,000	
135 TECHNICAL STUDIES, SUPPORT AND ANALYSIS	31,263	35,263	4,000
Capabilities Study for Improvised Explosive Devices Detection		1,000	
Countering Missile-related Technology Proliferation Foreign Test Range Analysis – Measurement and Signature Intelligence (MASINT)		2,000	
		1,000	
140 CLASSIFIED PROGRAM USD(P)	0	98,200	98,200
Classified Adjustment		98,200	
SMALL BUSINESS INNOVATION			
150 RESEARCH/CHALLENGE	2,162	3,162	1,000
Directed Energy Systems for UAV Payloads		1,000	
158 BUDGET AND PROGRAM ASSESSMENTS	5,750	0	-5,750
Program Reduction		-5,750	
190 INFORMATION SYSTEMS SECURITY PROGRAM	13,256	16,256	3,000
Security for Critical Communication Networks (SCCN)		3,000	
200 SPECIAL APPLICATIONS FOR CONTINGENCIES	15,687	17,687	2,000
Mobile Optical Wireless Networking for Intelligence, Surveillance, and Reconnaissance		2,000	
207 POLICY R&D PROGRAMS	4,627	5,627	1,000
Improved Collapsible Urethane Fuel Storage Tanks		1,000	
DISTRIBUTED COMMON GROUND/SURFACE			
215 SYSTEMS	15,800	17,800	2,000
Constant Look Operation Support Environment (CLOSE)		2,000	
226 INDUSTRIAL PREPAREDNESS	20,114	33,114	13,000
Castings for Improved Defense Readiness		2,000	
Corrosion Resistant Ultrahigh-Strength Steel for Landing Gear		2,000	
Military High Pressure Packaging Project		2,000	
Northwest Manufacturing Initiative		1,000	
Technology Roadmapping and Strategic Investment Planning		2,000	
Advanced Microcircuit Emulation (AME)		4,000	
229 NATO JOINT STARS	41,466	31,466	-10,000
Execution Delays		-10,000	

MISSILE DEFENSE AGENCY
REPORTING REQUIREMENTS

The Committee is concerned that the information currently provided by the Missile Defense Agency (MDA) does not allow Congress to exercise sufficient oversight over the Ballistic Missile Defense programs. Past Congresses have established a framework of laws that require program and cost reporting to Congress to help exercise this oversight. However, because the Ballistic Missile Defense System (BMDS) has not formally entered DoD's System Development and Demonstration acquisition phase, which triggers the application of a significant portion of these laws, all the information essential for full oversight has not been provided to Congress. Therefore, the Committee directs MDA to develop a system-wide plan to report according to the spirit of existing acquisition laws to improve accountability and transparency of its program. MDA is directed to report for all elements that are effectively in System Development and Demonstration or production corresponding baselines, the results of independent cost estimates performed by the Cost Analysis Improvement Group, unit costs, and unit cost growth. This direction should not be construed as requiring full compliance with DoD Regulation 5000.2. In addition, while developing and fielding the BMDS outside DoD's normal acquisition cycle, MDA should address operational testing by including operational test objectives in developmental tests. The Committee directs that this plan be delivered to the congressional defense committees with the submission of the fiscal year 2009 budget and updated semi-annually.

BLOCK STRUCTURE

The Committee understands that Missile Defense Agency (MDA) is in the process of restructuring its block acquisition approach. While the Committee does not wish to define the block approach that MDA should follow, it does believe that the new structure should include, at a minimum, a longer timeframe in which to complete system-level developmental activities and the manufacture and delivery of all assets that compose the block. In addition, the block structure adopted should include only those assets that will be fielded during the block.

EUROPEAN COMPONENT

The Department of Defense included \$310,000,000 in the fiscal year 2008 request for the Ballistic Missile Defense European Component. This request includes funding for the European Interceptor site in Poland, a Midcourse Radar in the Czech Republic and the fielding of a Forward Based Radar (AN-TPY-2). The cost of the proposed program exceeds \$4,000,000,000 through fiscal year 2013 just for the tactical portion of the proposal. These estimates, though, do not include costs for barracks, family housing or any other costs normally associated with infrastructure of a cantonment area at a military facility. Also, the estimate does not include personnel costs for manning the facilities.

The Committee believes that it is premature to provide full funding for the European Component given the uncertainty surrounding the program as of this writing. Accordingly, the Committee has reduced without prejudice funding of \$139,000,00 for the missile field construction and the associated equipment.

SPACE TRACKING AND SURVEILLANCE SYSTEM (STSS)

The budget request includes \$331,525,000 for STSS, of which \$105,789,000 is for the proposed follow-on space system. The Committee recommends \$30,720,000 for the follow-on effort. This amount, adjusted for inflation, is equal to the amount provided in the fiscal year 2007 appropriation. The Committee notes that two demonstration satellites will be launched in fiscal year 2008 and that exploitation of data from these satellites will allow the Missile Defense Agency to develop sensor requirements and a concept of operations that will drive the follow-on space system. As a result, the Committee believes it is premature to award the follow-on space system contract and directs the Missile Defense Agency to maintain the current level of effort in pursuit of sensor technology development and risk reduction with the remaining follow-on funds.

Additionally, the Committee has provided \$2,000,000 for a Federally Funded Research and Development Corporation to conduct an analysis of alternatives for a satellite-based capability for infrared and visible sensors to provide global tracking of ballistic missiles. Further, this analysis should also examine the applicability of the STSS demonstration system and the proposed follow-on systems' ability to perform against the space situational awareness mission requirement and other space mission applications.

UNDEFINITIZED CONTRACTS

The Committee has become aware of the excessive use of undefinitized contracts by the MDA. Based on information obtained by the Committee, it is apparent that MDA has not provided the proper oversight of contracting activities within various programs. According to the MDA, the amounts of undefinitized contracts may be in excess of \$2,700,000,000. While the Committee understands the need at times for programs to use this type of contracting mechanism, it is apparent that the MDA has grossly abused it with respect to volume, dollar amounts and the numbers of days to definitize. The Committee directs the MDA to definitize the current contracts in an expedient manner and to minimize the use of the mechanism in the future. The Committee further directs the Undersecretary of Defense, Acquisition Technology and Logistics to review contracting procedures at the MDA and provide a report to the congressional defense committees within 90 days of enactment of this Act detailing a strategy to reduce current, and minimize future, undefinitized contracts in the MDA.

KINETIC ENERGY INTERCEPTOR

The Committee has included \$372,853,000 for the Kinetic Energy Interceptor (KEI) program, an increase of \$145,354,000 above the budget request. In the fiscal year 2008 request, the Missile Defense

Agency (MDA) reduced the planned funding by \$178,009,000 to \$227,499,000. Additionally, the MDA drastically descoped the program. Even though the KEI program has met each knowledge point while remaining on schedule and on budget, it has been used as an offset on numerous occasions for other more high risk programs. As originally conceived, the KEI mission is as a boost phase defense weapon with mobile capability on land and sea. In the current request, the KEI has been descoped to a booster program aimed at replacing the Ground-based Midcourse Interceptor. The Committee disagrees with this change and has provided additional funding in an effort to accelerate this much-needed capability.

AIRBORNE LASER (ABL)

The Committee believes that a robust boost intercept capability is vital to a layered missile defense system. Further, the Committee notes the technical progress that the Airborne Laser (ABL) program has made over the last three years with the early accomplishment of the firing and refurbishment of the high energy laser and the continuing flight testing of the associated beam control/fire control (BC/FC) system. These technical challenges were accomplished while the program stayed within the government determined schedule and budget. The Committee looks forward to continued strong support and commensurate funding by the Missile Defense Agency of ABL.

AIRBORNE LASER LESSONS LEARNED

The Committee commends the MDA on its continued efforts on the Airborne Laser program. While the program has seen many technology successes, the Committee is concerned about the transition of these successes to other service programs. The Committee directs the Missile Defense Agency to develop a lessons learned program for the Airborne Laser program for future use by the Department of Defense.

COMMAND AND CONTROL, BATTLE MANAGEMENT AND COMMUNICATIONS (C2BMC) PROGRAM

The Committee recommends \$460,703,000 for the Command and Control, Battle Management and Communications program. In fiscal year 2006, funding for the C2BMC program was reduced by \$30,000,000. However, during the year of execution the MDA increased funding for C2BMC by over \$50,000,000 by using funds in other program elements to back-fill the congressional reduction. The Committee in fiscal year 2007 reinstated the fiscal year 2006 congressional reduction and directed the MDA to fully comply with congressional intent by funding C2BMC within program element 0603889C. In fiscal year 2008, the MDA has chosen to ignore congressional intent by funding C2BMC in the C2BMC program element and has also included \$208,000,000 in various other program elements. This disregard of congressional intent obfuscates total funding allocated to the program. This method of funding also creates impediments to Congress' fiduciary responsibility to taxpayers in providing oversight of the programs. As in previous years, the Committee again directs the Missile Defense Agency to fully fund

C2BMC in the C2BMC program element. If the MDA continues to fund C2BMC in multiple different program elements, the Committee will consider all funding outside of the C2BMC program element to be excess to need. If, due to emergent requirements, the program needs additional funding during the year of execution, the Missile Defense Agency is directed to comply with the reprogramming guidance specified in this report and in the report accompanying the House version of the fiscal year 2007 Department of Defense Appropriations bill as it pertains to guidelines allowing agencies to reprogram funds from one program element or appropriation to another.

AEGIS BALLISTIC MISSILE DEFENSE SYSTEM

The Committee commends the MDA for showing progress and promise in continued success in its Aegis Ballistic Missile Defense System. In this bill, the Committee has included additional funding for the continuation of the Open Architecture and Ballistic Missile Signal Processor. Additionally, the Committee has included funding to upgrade two additional Aegis Destroyers to a Long Range Track and Surveillance (LRT&S) and Engage capability specifically for the Atlantic Fleet by the end of 2009. The Committee strongly urges that MDA refrain from transferring funds out of the Aegis program to other missile defense programs; MDA shall fully fund and execute the Aegis program as Congress intends.

MULTIPLE KILL VEHICLE

The Committee has provided \$272,151,000 only for the Multiple Kill Vehicle (MKV) program. The Committee encourages the Missile Defense Agency to accelerate development and delivery of the MKV capability. The Committee designates the MKV program as congressional special interest items subject to prior approval reprogramming procedures.

ASYMMETRIC MISSILE DEFENSE

The Committee has previously noted its concern about and responded to the possibility of an asymmetric missile threat against the United States homeland, defined by a terrorist or other non-state actor launching a cruise or short-range ballistic missile from air or sea-based platforms to the United States' territory. In fiscal years 2006 and 2007, the Committee provided additional funding targeted specifically at this potential threat.

The Committee believes that while the MDA has made valuable contributions in conducting studies and analyses and providing recommendations for potential means to address the threats, much additional work remains to be done within the U.S. government. As a result, the Committee recommends an additional \$15,000,000 to continue the Missile Defense Agency's efforts to conduct experiments, develop prototypes, test concepts of operations, and recommend deployment options for an integrated asymmetric missile defense capability that would protect population centers. In addition to the current efforts, the Committee directs the MDA to conduct an operationally realistic test using sea-based assets. The MDA shall develop a recommended architecture and concept of op-

erations for homeland asymmetric missile defense to include progressions for spiral technology upgrades that would enhance cruise and ballistic missile defense capabilities over time. The Director, MDA, in consultation with Commanders, U.S. Northern Command and U.S. Strategic Command, shall provide a report to the congressional defense committees not later than March 1, 2008 on results of the efforts to date along with a recommended program plan for further development, to include recommended knowledge points to guide further investment in the critical capability.

FISSILE MATERIAL DETECTION RESEARCH

The Committee recommends an increase of \$26,500,000 for the Defense Threat Reduction Agency (DTRA) to accelerate improvements in the detection of improvised fissile material devices. While the Department has funded small efforts in the fiscal year 2008 request, the Committee is concerned that the Department is not fully addressing this threat by providing the appropriate level of funding. Accordingly, the Committee is providing this funding specifically targeted to increasing the capability of detection of fissile material and allowing for the acceleration of these efforts by several years.

SPECIAL OPERATIONS COMMAND

The Committee recommendation includes \$444,637,000 for the Special Operations Command. This amount is \$109,422,000 below the fiscal year 2007 enacted amount and \$73,359,000 above the request. Of this amount, an increase of \$25,000,000 is included for the GPS Extension Program, transferred from the Air Force, RDT&E. The funds will enable the Special Operations Command to prove the ability to develop and manufacture GPS Extension user equipment in a portable device prior to funding future developmental efforts which compete with GPS III anti-jam capabilities. The request is to augment the GPS signal using the Iridium constellation of communications satellites for the benefit of SOCOM users. The task would be to modify GPS receivers to receive both GPS and Iridium signals on a handheld device.

CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM

The Committee recommends \$25,000,000 for the Chemical and Biological Defense Program. The Committee commends the Department on the continued execution of the "Chem-Bio Defense Initiatives Fund" and recommends continuing the program within the Department's Chemical and Biological Defense Program. The Committee's recommendation provides an increase of \$25,000,000 for this fund. The Secretary of Defense is directed to allocate these funds among the programs that yield the greatest gain in our chem-bio defensive posture. The Committee further directs that funds cannot be obligated for the Chem-Bio Initiative Fund until 15 days after a report, including a description of projects to be funded, is provided to the congressional defense committees.

DEFENSE ADVANCED RESEARCH PROJECTS AGENCY

The Committee has included \$3,035,222,000 for the Defense Advanced Research Projects Agency (DARPA), which is a decrease of \$50,395,000 from the fiscal year 2008 request and a decrease of \$80,088,000 from the amount appropriated in fiscal year 2007. Based on historic under-execution in several program elements, the Committee has reduced funding in the Biological Warfare, Electronics Technology, Advanced Aerospace Systems and Land Warfare Technology program elements. Additionally, the Committee has reduced funding for various programs as identified by DARPA that have been cancelled subsequent to the submission of the fiscal year 2008 budget.

In the statement of the managers accompanying the Conference Report on the Department of Defense Appropriation Act, 2007, the conferees expressed concern over the development of the DARPA budget submission material and encouraged DARPA to include additional programmatic detail in the fiscal year 2008 budget request. DARPA chose not to address these concerns. Therefore, the Committee directs DARPA to provide in future budget justification material more individual programmatic detail, to include budget information, programmatic achievements and goal by fiscal year, as well as transition plans.

ADVANCE DEVELOPMENT INITIATIVE

The Committee includes \$50,000,000 for an Advanced Development Initiative Fund. This fund, under the direction of the Director, Defense Research and Engineering (D,DR&E), shall be used to resource projects that will enhance the Department's long-range research and development strategy, as determined by the D,DR&E. The Committee has denied funding for various new starts in the fiscal year 2008 request due to concern over an apparent lack of relations to and integration into that long-range strategy. A more coordinated approach that targets funds to key development programs should result in a more successful research and development effort over time.

FIRSTLINK—IEE (TECHNOLOGY TRANSITION LINE)

The Committee continues its support for the FirstLink program and strongly encourages the Department of Defense to include the funding for this program in its fiscal year 2009 budget submission. FirstLink has been highly successful at helping the Department transfer its technologies as well as generating new revenue through the return on investment this activity provides to the Department of Defense Laboratories while at the same time making these technologies available for both the military and first responder applications. The Department is urged to make the FirstLink program a permanent part of its technology, transition, and acquisition activities.

WMD MEDICAL COUNTERMEASURES

The Committee recognizes that there remains a significant threat from biological and chemical weapons. It is paramount that better medical defensive strategies are developed. It is unlikely that the

agent of a deployed weapon of mass destruction can be readily identified. Consequently, the DoD is encouraged to develop a multi-threat treatment countermeasure that can be used for exposures to chemical, biological and radiation exposures. DoD is encouraged to seek technologies that would facilities pre-symptomatic real-time diagnoses to avoid catastrophic health consequences.

OPERATIONAL TEST AND EVALUATION, DEFENSE

Fiscal year 2007 appropriation	\$185,420,000
Fiscal year 2008 budget request	180,264,000
Committee recommendation	180,264,000
Change from budget request	---

This appropriation funds the Operational Test and Evaluation activities of the Department of Defense.

The Committee recommends an appropriation of \$180,264,000 for Operational Test and Evaluation, Defense. The following table provides a summary of the Committee's recommendation.

PROGRAM RECOMMENDED

The total program recommended in the bill will provide the following in fiscal year 2008:

