TITLE IV

RESEARCH, DEVELOPMENT, TEST AND EVALUATION

Funds appropriated under this title provide the resources required to conduct a program of research, development, test and evaluation, including research in basic science, applied research, advanced technology development, demonstration and validation, engineering and manufacturing development, and operational systems development.

The President's fiscal year 2010 budget requests a total of $78,634,289,000 for research, development, test and evaluation appropriations.

SUMMARY OF COMMITTEE ACTION

The Committee recommends research, development, test and evaluation appropriations totaling $78,450,388,000 for fiscal year 2010. This is $183,901,000 below the budget estimate.

Committee recommended research, development, test and evaluation appropriations for fiscal year 2010 are summarized below:

SUMMARY OF RESEARCH, DEVELOPMENT, TEST AND EVALUATION APPROPRIATIONS

[In thousands of dollars]

Account	2010 budget estimate	Committee recommendation	Change from budget estimate
Research, Development, Test and Evaluation:			
Research, Development, Test and Evaluation, Army	10,438,218	10,653,126	+214,908
Research, Development, Test and Evaluation, Navy	19,270,932	19,148,509	−122,423
Research, Development, Test and Evaluation, Air Force	27,992,827	28,049,015	+56,188
Research, Development, Test and Evaluation, Defense-Wide	20,741,542	20,408,968	−332,574
Operational Test and Evaluation, Defense	190,770	190,770	.....
Total	78,634,289	78,450,388	−183,901

COMMITTEE RECOMMENDATIONS

The Committee has displayed recommended adjustments in tables presented under each appropriation account.

These adjustments reflect the following Committee actions: elimination of funds requested for programs which are lower priority, duplicative, or not supported by firm requirements in out-year development or procurement appropriations; deletion of excess funds based on program delays or slow execution; addition of funds to reflect congressional priorities and to rectify shortfalls in the budget estimate; and implementation of recommendations in S. 1390, the National Defense Authorization Act for Fiscal Year 2010 as passed by the Senate.

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

RESEARCH, DEVELOPMENT, TEST AND EVALUATION OVERVIEW

Corrosion Prevention and Control.—The effects of corrosion on weapon systems and infrastructure has been estimated to cost the Department of Defense more than $22,000,000,000 annually. Corrosion reduces mission readiness by limiting asset availability and also impacts safety. The Committee believes the Department needs to invest more in corrosion prevention and mitigation projects in order to better control future year maintenance costs of weapon systems and infrastructure. Corrosion prevention projects include development of new coating and materials, studies, and training. The Department of Defense Corrosion Prevention and Control Program has shown a return on investment in excess of 55:1 for projects funded in prior years. The Committee believes the demonstrated success of these efforts warrant full funding of the program's stated requirement of $27,700,000 for fiscal year 2010, which is more than twice the budget request of $13,100,000. The Government Accountability Office estimates that fully funding the corrosion prevention program could potentially result in a cost avoidance of almost $1,000,000,000. Therefore, the Committee recommends $14,600,000 above the budget request to fully fund the fiscal year 2010 Corrosion Prevention and Control program stated requirement and urges the Department to fully fund the requirement in future budget requests.

The Committee is also concerned that the stated requirement for the Corrosion Prevention and Control Program is artificially constrained by the Department primarily because of budgetary concerns and does not reflect the total number of ready to implement corrosion control projects identified by the Services. In 2004, the Government Accountability Office reported that an internal Department of Defense estimate identified almost $1,900,000,000 in corrosion prevention projects that could be executed between 2004 and 2009. The wide disparity between the Department's stated requirement of $27,700,000 in fiscal year 2010 and an average of over $300,000,000 annualized requirements identified in the 2004 estimate raises questions about the Department's methodology for developing the Corrosion Prevention and Control Program requirement. Therefore, the Committee directs the Government Accountability Office to provide—within 60 days after submission of the Department of Defense budget for fiscal year 2011—information on differences between the Department and Service-reported requirements for corrosion control and prevention projects for fiscal year 2011 and later submit a report on selected corrosion control projects identified by the Department and the Military Services. This review should identify projects at field level, headquarters level and Department-Wide activities that can be executed in the coming fiscal years and would contribute to lowering the overall annual cost of corrosion. The review should also identify the Services' methodology and process for forwarding candidate projects for funding consideration and determine why the Services' entire esti-

mated requirements are not reflected in the overall Department of Defense requirement.

Unmanned Aerial Vehicle [UAV]-based Signals Intelligence [SIGINT] Payloads.—The Committee is aware that the Army and Air Force have parallel development programs underway to fulfill similar requirements for signals intelligence payloads capable of flying on small unmanned aerial vehicles, but have thus far proceeded with separate acquisition strategies. In order to ensure the Department of Defense is fulfilling operational requirements for this capability and that continued development provides the best value for the warfighter and the taxpayer, the Committee directs the Under Secretary of Defense for Acquisition, Technology and Logistics to submit a report to the congressional defense committees no later than March 15, 2010, that details the preferred acquisition strategy for UAV-based signals intelligence capabilities across the military services.

Engineer Surfaces for Weapons Systems Life Extension—Transfer of U.S. Government Property to the University of North Dakota.—The Committee understands that the program was initiated in 2005 with the intent that the equipment located at and in use by the University of North Dakota under this program would be conveyed to the university upon completion of the contract. Therefore, the Committee encourages that upon completion and termination of the contracts identified below, the appropriate Department of Defense official transfer without consideration to the University of North Dakota, Grand Forks, North Dakota, all rights, title, and interests of the United States in the property consisting of all U.S. Government property procured for the United States Army Engineered Surfaces for Weapons System Life Extension Program under the following contracts: FA4600–06–D–0003, SPO7000–97–D–4001, and AMPTIAC–05–0001.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY

Appropriations, 2009	$12,060,111,000
Budget estimate, 2010	10,438,218,000
House allowance	11,151,884,000
Committee recommendation	10,653,126,000

The Committee recommends an appropriation of $10,653,126,000. This is $214,908,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

	Item	2010 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
	RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY					
	BASIC RESEARCH					
1	IN-HOUSE LABORATORY INDEPENDENT RESEARCH	19,671	19,671	19,671	.....	.....
2	DEFENSE RESEARCH SCIENCES	173,024	196,074	183,324	+10,300	−12,750
3	UNIVERSITY RESEARCH INITIATIVES	88,421	110,421	87,921	−500	−22,500
4	UNIVERSITY AND INDUSTRY RESEARCH CENTERS	96,144	114,844	103,144	+7,000	−11,700
	TOTAL, BASIC RESEARCH	377,260	441,010	394,060	+16,800	−46,950
	APPLIED RESEARCH					
5	MATERIALS TECHNOLOGY	27,206	68,256	81,806	+54,600	+13,550
6	SENSORS AND ELECTRONIC SURVIVABILITY	50,641	67,641	58,641	+8,000	−9,000
7	TRACTOR HIP	14,324	14,324	14,324	.....	.....
8	AVIATION TECHNOLOGY	41,332	50,832	44,332	+3,000	−6,500
9	ELECTRONIC WARFARE TECHNOLOGY	16,119	24,119	16,119	.....	−8,000
10	MISSILE TECHNOLOGY	50,716	64,816	65,716	+15,000	+900
11	ADVANCED WEAPONS TECHNOLOGY	19,678	22,678	19,678	.....	−3,000
12	ADVANCED CONCEPTS AND SIMULATION	17,473	26,973	23,473	+6,000	−3,500
13	COMBAT VEHICLE AND AUTOMOTIVE TECHNOLOGY	55,937	74,437	66,437	+10,500	−8,000
14	BALLISTICS TECHNOLOGY	61,843	79,843	64,843	+3,000	−15,000
15	CHEMICAL, SMOKE AND EQUIPMENT DEFEATING TECHNOLOGY	5,293	13,293	7,293	+2,000	−6,000
16	JOINT SERVICE SMALL ARMS PROGRAM	7,674	7,674	7,674	.....	.....
17	WEAPONS AND MUNITIONS TECHNOLOGY	41,085	124,585	88,985	+47,900	−35,600
18	ELECTRONICS AND ELECTRONIC DEVICES	61,404	115,454	107,204	+45,800	−8,250
19	NIGHT VISION TECHNOLOGY	26,893	48,893	35,893	+9,000	−13,000
20	COUNTERMINE SYSTEMS	18,945	20,945	22,945	+4,000	+2,000
21	HUMAN FACTORS ENGINEERING TECHNOLOGY	18,605	33,605	18,605	.....	−15,000
22	ENVIRONMENTAL QUALITY TECHNOLOGY	15,902	19,402	23,402	+7,500	+4,000
23	COMMAND, CONTROL, COMMUNICATIONS TECHNOLOGY	24,833	31,533	24,833	.....	−6,700
24	COMPUTER AND SOFTWARE TECHNOLOGY	5,639	5,639	5,639	.....	.....
25	MILITARY ENGINEERING TECHNOLOGY	54,818	61,918	57,818	+3,000	−4,100
26	MANPOWER/PERSONNEL/TRAINING TECHNOLOGY	18,701	18,701	16,701	−2,000	−2,000
27	WARFIGHTER TECHNOLOGY	27,109	31,909	38,109	+11,000	+6,200
28	MEDICAL TECHNOLOGY	99,027	195,942	165,387	+66,360	−30,555

[In thousands of dollars]

	Item	2010 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
	TOTAL, APPLIED RESEARCH	781,197	1,223,412	1,075,857	+294,660	−147,555
	ADVANCED TECHNOLOGY DEVELOPMENT					
29	WARFIGHTER ADVANCED TECHNOLOGY	37,574	54,524	41,874	+4,300	−12,650
30	MEDICAL ADVANCED TECHNOLOGY	72,940	301,866	196,040	+123,100	−105,826
31	AVIATION ADVANCED TECHNOLOGY	60,097	87,097	104,697	+44,600	+17,600
32	WEAPONS AND MUNITIONS ADVANCED TECHNOLOGY	66,410	89,910	71,210	+4,800	−18,700
33	COMBAT VEHICLE AND AUTOMOTIVE ADVANCED TECHNOLOGY	89,586	162,186	182,886	+93,300	+20,700
34	COMMAND CONTROL COMMUNICATIONS ADVANCED TECHNOLOGY	8,667	13,667	8,667	.....	−5,000
35	MANPOWER, PERSONNEL AND TRAINING ADVANCED TECHNOLOGY	7,410	7,410	7,410	.....	.....
36	ELECTRONIC WARFARE ADVANCED TECHNOLOGY	50,458	57,258	58,458	+8,000	+1,200
37	TRACTOR HIKE	11,328	11,328	11,328	.....	.....
38	NEXT GENERATION TRAINING & SIMULATION SYSTEMS	19,415	23,915	22,415	+3,000	−1,500
39	TRACTOR ROSE	14,569	14,569	14,569	.....	.....
40	EXPLOSIVES DEMILITARIZATION TECHNOLOGY	.....	3,500	12,200	+12,200	+8,700
41	MILITARY HIV RESEARCH	6,657	29,657	6,657	.....	−23,000
42	COMBATING TERRORISM, TECHNOLOGY DEVELOPMENT	11,989	11,989	36,989	+25,000	+25,000
43	ELECTRONIC WARFARE TECHNOLOGY	19,192	22,692	19,192	.....	−3,500
44	MISSILE AND ROCKET ADVANCED TECHNOLOGY	63,951	75,751	79,451	+15,500	+3,700
45	TRACTOR CAGE	12,154	12,154	12,154	.....	.....
46	LANDMINE WARFARE AND BARRIER ADVANCED TECHNOLOGY	30,317	30,317	36,217	+5,900	+5,900
47	JOINT SERVICE SMALL ARMS PROGRAM	8,996	8,996	8,996	.....	.....
48	NIGHT VISION ADVANCED TECHNOLOGY	40,329	64,829	57,329	+17,000	−7,500
49	ENVIRONMENTAL QUALITY TECHNOLOGY DEMONSTRATIONS	15,706	15,706	16,206	+500	+500
50	MILITARY ENGINEERING ADVANCED TECHNOLOGY	5,911	45,461	17,511	+11,600	−27,950
51	ADVANCED TACTICAL COMPUTER SCIENCE & SENSOR TECHNOLOGY	41,561	60,061	47,061	+5,500	−13,000
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT	695,217	1,204,843	1,069,517	+374,300	−135,326
	DEMONSTRATION & VALIDATION					
52	UNIQUE ITEM IDENTIFICATION (UID)	.....	2,500	.....	.....	−2,500
53	ARMY MISSILE DEFENSE SYSTEMS INTEGRATION	14,683	31,683	74,783	+60,100	+43,100
54	ARMY MISSILE DEFENSE SYSTEMS INTEGRATION (SPACE)	117,471	120,471	118,671	+1,200	−1,800
55	AIR AND MISSILE DEFENSE SYSTEMS ENGINEERING	209,531	110,531	211,531	+2,000	+101,000
57	LANDMINE WARFARE AND BARRIER—ADV DEV	17,536	17,536	17,536	.....	.....
58	SMOKE, OBSCURANT AND TARGET DEFEATING SYS–ADV DEV	4,920	4,920	4,920	.....	.....

59	TANK AND MEDIUM CALIBER AMMUNITION	33,934	33,934	33,934	.....	.....
60	ADVANCED TANK ARMAMENT SYSTEM (ATAS)	90,299	90,299	90,299	.....	.....
61	SOLDIER SUPPORT AND SURVIVABILITY	31,752	31,752	33,752	+2,000	+2,000
62	TACTICAL ELECTRONIC SURVEILLANCE SYSTEM—AD	18,228	18,228	12,228	−6,000	−6,000
64	ENVIRONMENTAL QUALITY TECHNOLOGY	4,770	19,770	6,770	+2,000	−13,000
65	WARFIGHTER INFORMATION NETWORK–TACTICAL	180,673	165,673	180,673	.....	+15,000
66	NATO RESEARCH AND DEVELOPMENT	5,048	5,048	5,048	.....	.....
67	AVIATION—ADV DEV	8,537	8,537	8,537	.....	.....
68	LOGISTICS AND ENGINEER EQUIPMENT—ADV DEV	56,373	57,373	49,873	−6,500	−7,500
69	COMBAT SERVICE SUPPORT CONTROL SYSTEM EVALUATION	9,868	9,868	9,868	.....	.....
70	MEDICAL SYSTEMS—ADV DEV	31,275	37,275	33,275	+2,000	−4,000
71	SOLDIER SYSTEMS—ADVANCED DEVELOPMENT	71,832	71,007	71,832	.....	+825
72	INTEGRATED BROADCAST SERVICE	1,476	1,476	1,476	.....	.....
	TOTAL, DEMONSTRATION & VALIDATION	908,206	837,881	965,006	+56,800	+127,125
	ENGINEERING & MANUFACTURING DEVELOPMENT					
73	AIRCRAFT AVIONICS	92,977	88,977	92,977	.....	+4,000
74	ARMED, DEPLOYABLE OH–58D	65,515	70,515	61,236	−4,279	−9,279
75	ELECTRONIC WARFARE DEVELOPMENT	248,463	248,463	197,463	−51,000	−51,000
76	ALL SOURCE ANALYSIS SYSTEM	13,107	13,107	13,107	.....	.....
77	TRACTOR CAGE	16,286	16,286	16,286	.....	.....
78	INFANTRY SUPPORT WEAPONS	74,814	76,814	82,814	+8,000	+6,000
79	MEDIUM TACTICAL VEHICLES	5,683	5,683	5,683	.....	.....
80	SMOKE, OBSCURANT AND TARGET DEFEATING SYS—SDD	978	978	978	.....	.....
81	FAMILY OF HEAVY TACTICAL VEHICLES	7,477	10,477	7,477	.....	−3,000
82	AIR TRAFFIC CONTROL	7,578	7,578	7,578	.....	.....
83	NON-LIGHT OF SIGHT LAUNCH SYSTEM	88,660	88,660	92,460	+3,800	+3,800
84	NON-LINE OF SIGHT CANNON	58,216	31,216	58,216	.....	+27,000
85	FCS MANNED GRD VEHICLES & COMMON GRD VEHICLE	368,557	184,557	368,557	.....	+184,000
86	FCS SYSTEMS OF SYSTEMS ENGR & PROGRAM MGMT	1,067,191	1,067,191	868,191	−199,000	−199,000
87	FCS RECONNAISSANCE (UAV) PLATFORMS	68,701	68,701	78,001	+9,300	+9,300
88	FCS UNMANNED GROUND VEHICLES	125,616	125,616	125,616	.....	.....
89	FCS UNATTENDED GROUND SENSORS	26,919	26,919	26,919	.....	.....
90	FCS SUSTAINMENT & TRAINING R&D	749,182	749,182	567,182	−182,000	−182,000
92	NIGHT VISION SYSTEMS—SDD	55,410	57,910	55,410	.....	−2,500
93	COMBAT FEEDING, CLOTHING, AND EQUIPMENT	2,092	2,092	2,092	.....	.....
94	NON-SYSTEM TRAINING DEVICES—SDD	30,209	30,209	30,209	.....	.....
95	AIR DEFENSE COMMAND, CONTROL AND INTELLIGENCE—SDD	28,936	28,936	28,936	.....	.....
96	CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT	33,213	33,213	33,213	.....	.....
97	AUTOMATIC TEST EQUIPMENT DEVELOPMENT	15,320	15,320	15,320	.....	.....

[In thousands of dollars]

	Item	2010 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
98	DISTRIBUTIVE INTERACTIVE SIMULATIONS (DIS)—SDD	15,727	15,727	15,727	.....	.....
99	POSITIONING SYSTEMS DEVELOPMENT (SPACE)	9,446	9,446	9,446	.....	.....
100	COMBINED ARMS TACTICAL TRAINER (CATT) CORE	26,243	26,243	26,243	.....	.....
102	WEAPONS AND MUNITIONS—SDD	34,878	44,378	69,878	+35,000	+25,500
103	LOGISTICS AND ENGINEER EQUIPMENT—SDD	36,018	37,518	36,018	.....	−1,500
104	COMMAND, CONTROL, COMMUNICATIONS SYSTEMS—SDD	88,995	88,995	43,995	−45,000	−45,000
105	MEDICAL MATERIEL/MEDICAL BIOLOGICAL DEFENSE EQUIPMENT	33,893	40,293	37,393	+3,500	−2,900
106	LANDMINE WARFARE/BARRIER—SDD	82,260	60,960	82,260	.....	+21,300
107	ARTILLERY MUNITIONS	42,452	42,452	42,452	.....	.....
108	COMBAT IDENTIFICATION	20,070	20,070	10,070	−10,000	−10,000
109	ARMY TACTICAL COMMAND & CONTROL HARDWARE & SOFTWARE	90,864	85,364	78,072	−12,792	−7,292
111	GENERAL FUND ENTERPRISE BUSINESS SYSTEM (GFEBS)	6,002	6,002	6,002	.....	.....
112	FIREFINDER	20,333	20,333	20,333	.....	.....
113	SOLDIER SYSTEMS—WARRIOR DEM/VAL	19,786	19,786	19,786	.....	.....
114	ARTILLERY SYSTEMS	23,318	34,318	114,818	+91,500	+80,500
115	PATRIOT/MEADS COMBINED AGGREGATE PROGRAM (CAP)	569,182	569,182	569,182	.....	.....
116	NUCLEAR ARMS CONTROL MONITORING SENSOR NETWORK	7,140	7,140	7,140	.....	.....
117	INFORMATION TECHNOLOGY DEVELOPMENT	35,309	35,309	67,109	+31,800	+31,800
118	JOINT AIR-TO-GROUND MISSILE (JAGM)	127,439	127,439	127,439	.....	.....
119	MANNED GROUND VEHICLE	100,000	50,000	100,000	.....	+50,000
	TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT	4,640,455	4,389,555	4,319,284	−321,171	−70,271
	RDT&E MANAGEMENT SUPPORT					
120	THREAT SIMULATOR DEVELOPMENT	22,222	30,222	22,222	.....	−8,000
121	TARGET SYSTEMS DEVELOPMENT	13,615	13,615	13,615	.....	.....
122	MAJOR T&E INVESTMENT	51,846	51,846	51,846	.....	.....
123	RAND ARROYO CENTER	16,305	16,305	18,305	+2,000	+2,000
124	ARMY KWAJALEIN ATOLL	163,514	163,514	163,514	.....	.....
125	CONCEPTS EXPERIMENTATION PROGRAM	23,445	23,445	26,945	+3,500	+3,500
127	ARMY TEST RANGES AND FACILITIES	354,693	354,693	354,693	.....	.....
128	ARMY TECHNICAL TEST INSTRUMENTATION AND TARGETS	72,911	75,111	86,611	+13,700	+11,500
129	SURVIVABILITY/LETHALITY ANALYSIS	45,016	45,016	45,016	.....	.....
130	DOD HIGH ENERGY LASER TEST FACILITY	2,891	2,891	8,891	+6,000	+6,000
131	AIRCRAFT CERTIFICATION	3,766	3,766	3,766	.....	.....

132	METEOROLOGICAL SUPPORT TO RDT&E ACTIVITIES	8,391	8,391	8,391	.....	.....
133	MATERIEL SYSTEMS ANALYSIS	19,969	19,969	19,969	.....	.....
134	EXPLOITATION OF FOREIGN ITEMS	5,432	5,432	5,432	.....	.....
135	SUPPORT OF OPERATIONAL TESTING	77,877	77,877	77,877	.....	.....
136	ARMY EVALUATION CENTER	66,309	68,309	66,309	.....	−2,000
137	SIMULATION & MODELING FOR ACQ, RQTS, & TNG (SMART)	5,357	5,357	5,357	.....	.....
138	PROGRAMWIDE ACTIVITIES	77,823	77,823	77,823	.....	.....
139	TECHNICAL INFORMATION ACTIVITIES	51,620	51,620	51,620	.....	.....
140	MUNITIONS STANDARDIZATION, EFFECTIVENESS AND SAFETY	45,053	70,653	56,153	+11,100	−14,500
141	ENVIRONMENTAL QUALITY TECHNOLOGY MGMT SUPPORT	5,191	5,191	5,191	.....	.....
142	MANAGEMENT HEADQUARTERS (RESEARCH AND DEVELOPMENT)	15,866	15,866	15,866	.....	.....
	TOTAL, RDT&E MANAGEMENT SUPPORT	1,149,112	1,186,912	1,185,412	+36,300	−1,500
	OPERATIONAL SYSTEMS DEVELOPMENT					
144	MLRS PRODUCT IMPROVEMENT PROGRAM	27,693	27,693	27,693	.....	.....
146	AEROSTAT JOINT PROJECT OFFICE	360,076	288,076	360,076	.....	+72,000
147	ADV FIELD ARTILLERY TACTICAL DATA SYSTEM	23,727	30,727	23,727	.....	−7,000
148	COMBAT VEHICLE IMPROVEMENT PROGRAMS	190,301	192,301	197,201	+6,900	+4,900
149	MANEUVER CONTROL SYSTEM	21,394	21,394	21,394	.....	.....
150	AIRCRAFT MODIFICATIONS/PRODUCT IMPROVEMENT PROGRAMS	209,401	209,401	214,817	+5,416	+5,416
151	AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM	792	792	792	.....	.....
152	DIGITIZATION	10,692	10,692	10,692	.....	.....
154	MISSILE/AIR DEFENSE PRODUCT IMPROVEMENT PROGRAM	39,273	39,273	39,273	.....	.....
155	OTHER MISSILE PRODUCT IMPROVEMENT PROGRAMS	.....	5,000	.....	.....	−5,000
156	TRACTOR CARD	20,035	20,035	20,035	.....	.....
158	JOINT TACTICAL GROUND SYSTEM	13,258	13,258	13,258	.....	.....
159	JOINT HIGH SPEED VESSEL (JHSV)	3,082	3,082	3,082	.....	.....
161	SECURITY AND INTELLIGENCE ACTIVITIES	2,144	2,144	2,144	.....	.....
162	INFORMATION SYSTEMS SECURITY PROGRAM	74,355	74,355	61,455	−12,900	−12,900
163	GLOBAL COMBAT SUPPORT SYSTEM	144,733	144,733	144,733	.....	.....
164	SATCOM GROUND ENVIRONMENT (SPACE)	40,097	40,097	40,097	.....	.....
165	WWMCCS/GLOBAL COMMAND AND CONTROL SYSTEM	12,034	12,034	12,034	.....	.....
166	JOINT COMMAND AND CONTROL PROGRAM (JC2)	20,365	20,365	.....	−20,365	−20,365
167	TACTICAL UNMANNED AERIAL VEHICLES	202,521	172,521	172,124	−30,397	−397
168	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	188,414	188,414	189,714	+1,300	+1,300
170	AERIAL COMMON SENSOR (ACS)	210,035	210,035	.....	−210,035	−210,035
172	END ITEM INDUSTRIAL PREPAREDNESS ACTIVITIES	68,466	94,466	85,766	+17,300	−8,700
	TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT	1,882,888	1,820,888	1,640,107	−242,781	−180,781

[In thousands of dollars]

	Item	2010 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
999	CLASSIFIED PROGRAMS	3,883	47,383	3,883	.....	−43,500
	TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY	10,438,218	11,151,884	10,651,126	+212,908	−500,758

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2010 budget estimate	Committee recommendation	Change from budget estimate
2	Defense Research Sciences	173,024	183,324	+10,300
	Bioactive Polymers and Coating Systems for Protection Against Bio-Threats			+4,500
	High Frequency Devices and Circuits for Nanotubes and Nanowires			+1,800
	Integrated Flexible Electronics			+2,000
	Vision Integrating Strategies in Ophthalmology and Neurochemistry (VISION)			+2,000
3	University Research Initiatives	88,421	87,921	−500
	V72			−7,500
	Burn and Shock Trauma Institute			+2,000
	Construct Program			+2,000
	Hi-Tech Eyes for the Battlefield			+2,000
	Open Source Intelligence for Force Protection and Intelligence Analysis			+1,000
4	University and Industry Research Centers	96,144	103,144	+7,000
	H50/J22 Network Science—fiscal year 2009 execution delays and excessive growth			−6,000
	ARL–ONAMI Center for Nanoarchitectures for Enhanced Performance			+1,000
	Army Material Degradation			+800
	MEMS Antenna for Wireless Communications Supporting UAVs in the Battlefield			+3,000
	Nanoscale Bio-Sensors			+3,000
	Nanotubes Optimized for Lightweight Exceptional Strength (NOLES)			+4,000
	Visualization for Training and Simulation in Urban Terrains at Fort Knox			+1,200
5	Materials Technology	27,206	81,806	+54,600
	Affordable Light-Weight Metal Matrix Composite (MMC) Armor			+2,500
	Ballistic Armor Research			+4,000
	Composite Applied Research and Technology for Tactical Vehicle Survivability			+4,000
	Development, Optimization, and Transfer of a Reliable Testing Technology for Materials Designed to Protect War-fighters Against Toxic Chemical Warfare Agents			+600
	Distributed, Networked Unmanned Ground Systems for Enhanced Reconnaissance, Surveillance and Target Acquisition/Surveillance and Reconnaissance			+4,000
	Lattice Block Structures for AM2 Matting Replacement			+2,000
	Materials Technology for LED Lighting Applications			+3,000
	Moldable Fabric Armor			+2,000
	Modeling and Testing of Next Generation Body Armor			+2,500
	Multi-Utility Materials for Army Future Combat Systems			+9,000
	Nanoelectronic Memory, Sensor, and Energy Devices			+7,000
	Nanomanufacturing of Multifunctional Sensors			+4,000
	Next Generation High-Strength Glass Fibers for Ballistic Armor Applications			+2,000
	Next Generation Lightweight Drive System for Army Weapons Systems			+2,000
	Renewable Jet Fuel from Lignocellulosic Feedstocks			+3,000
	Smart Integrated Systems: Materials, Manufacturing Methods, and Structures			+1,000

[In thousands of dollars]

Line	Item	2010 budget estimate	Committee recommendation	Change from budget estimate
	Ultrasonic Impact Technology			+2,000
6	Sensors and Electronic Survivability	50,641	58,641	+8,000
	Advanced UV Light Diode Development			+1,000
	Diamond Lens Elements for High-Powered Laser			+1,000
	Electronic Keel			+2,000
	Force Protection Radar for Forward Operating Bases			+2,000
	Nanophotonic Devices			+2,000
8	Aviation Technology	41,332	44,332	+3,000
	Composite Small Main Rotor Blades			+3,000
10	Missile Technology	50,716	65,716	+15,000
	MARIAH Hypersonic Wind Tunnel Development Program			+9,500
	Novel Enothermic Armor Material for Insensitive Munitions Protection of Tactical Missiles and Tubes			+2,500
	Swarms Defense System			+3,000
12	Advanced Concepts and Simulation	17,473	23,473	+6,000
	Combat Optical Biothreat Rapid Analyzer			+6,000
13	Combat Vehicle and Automotive Technology	55,937	66,437	+10,500
	Nanofluid Coolants			+500
	Vehicle Systems Engineering and Integration Activities			+10,000
14	Ballistics Technology	61,843	64,843	+3,000
	EMG—lack of authorization			−2,000
	5.56mm Aluminum Cartridge Case			+2,000
	Enabling Optimization of Reactive Armor			+3,000
15	Chemical, Smoke and Equipment Defeating Technology	5,293	7,293	+2,000
	Missouri Multi-Threat Detection Initiative (M2TDI)			+2,000
17	Weapons and Munitions Technology	41,085	88,985	+47,900
	Accelerated Materials Development for Army Cannon Systems			+3,000
	Acoustic Gun Detection System for Tracked Combat Vehicles			+2,000
	Advanced Materials & Process for Armament Structures (AMPAS)			+4,000
	Army Center of Excellence in Acoustics			+4,100
	Building a Unified Information Framework			+2,000
	Center for Borane Technology			+2,000
	Exploding Foil Initiators (EFI) with Nanomaterial-Based Circuits			+3,000
	Kinetic Energy Enhanced Lethality and Protection Materials			+2,000
	Laser-Guided Energy (LGE) Demonstrator			+2,800
	Multifunctional Nanomaterials for Homeland Defense, Counter-Terrorism and Dual-Use Applications			+2,500
	Nanotechnology Enterprise Consortium (NTEC)			+5,000
	Perimeter Security Systems			+5,000
	Projectile Unmanned Aerial Systems			+2,000
	Ripsaw Unmanned Ground Vehicle (UGV) Weaponization			+2,500
	Titanium Extraction, Mining and Process Engineering Research			+6,000
18	Electronics and Electronic Devices	61,404	107,204	+45,800
	2.0kW Stirling Tactical Cogeneration System (STaCS)			+3,000
	Advanced Hybrid Chemistry for Portable Power			+3,200
	Advanced Soldier-Portable Power Systems Technologies			+3,100
	Advanced Wearable Power System Manufacturing			+2,000
	Army Asset Visibility Enhancement			+1,000
	Ceramic Membrane—10(X) Times More Energy for Battery Systems			+3,000

[In thousands of dollars]

Line	Item	2010 budget estimate	Committee recommendation	Change from budget estimate
	Cogeneration for Enhanced Cooling and Heating of Advanced Tactical Vehicles			+4,000
	Eye Safe Laser Range Finder			+3,000
	High-Frequency, High-Power Electronic and Optoelectronic Devices on Aluminum Nitride (AIN)			+4,000
	Large Format Lithium Ion Battery			+6,200
	Light Weight Nanophosphate Battery with Improved Energy Density			+3,000
	Maryland Proof of Concept Alliance for Defense Technologies			+2,000
	ONAMI Miniaturized Tactical Energy Systems Development			+3,000
	Self Powered, Lightweight, Flexible Display Unit on a Plastic Substrate			+3,800
	Stabilized Enzyme Biofuel Cell (SEBC) for Unmanned Ground Sensors			+1,500
19	Night Vision Technology	26,893	35,893	+9,000
	Materials for Infrared Night Vision Equipment			+9,000
20	Countermine Systems	18,945	22,945	+4,000
	Standoff Sensors, Detection of Explosives and Explosive Devices (IEDs)			+4,000
22	Environmental Quality Technology	15,902	23,402	+7,500
	Chemical Materials and Environmental Modeling Project			+2,000
	Cluster Bomb Unit & Combined Effects Munitions Demilitarization			+1,000
	MLRS Disposal System			+2,500
	Navy Gun Ammo Demilitarization & Recycling			+2,000
25	Military Engineering Technology	54,818	57,818	+3,000
	Geosciences/Atmospheric Research			+3,000
26	Manpower/Personnel/Training Technology	18,701	16,701	−2,000
	Premature growth			−2,000
27	Warfighter Technology	27,109	38,109	+11,000
	Biosecurity Research for Soldier Food Safety			+2,000
	Carbon Nanotube Production			+2,000
	Improved Thermal Resistant Nylon for Enhanced Durability & Thermal Protection in Combat Uniforms			+4,000
	Nano-enabled Ultra High Storage Density Non-volatile Memory for Commander's Digital Assistant			+3,000
28	Medical Technology	99,027	165,387	+66,360
	Advanced Bioengineering for Enhanced Soldier Survivability			+2,500
	Advanced Functional Nanomaterials for Biological Processes			+2,400
	Biometric Signature and Passive Physiological Monitoring			+5,000
	Center for Engineered Biomedical Device			+360
	Center for Injury Biomechanics			+4,000
	Center for Respiratory Biodefense			+3,000
	Cleveland Clinic Rehabilitation Research			+1,000
	Complimentary and Alternative Medicine Research for Military Operations and Healthcare (MIL–CAM)			+6,500
	Development of Drugs for Malaria and Leishmaniasis			+3,400
	Expansion and Development of Bionic Limbs for U.S. Military Personnel			+2,500
	Identification of New Drug Targets in Multi-Drug Resistant Bacterial Infections			+2,500
	Improving soldier recovery from catastrophic bone injuries			+3,000
	Lightweight Medical Devices			+2,000

[In thousands of dollars]

Line	Item	2010 budget estimate	Committee recommendation	Change from budget estimate
	Long-term Pain and Infection Management for Combat Casualty Care			+2,900
	Military Family Empowerment Initiative			+1,000
	Minimizing Shock in Battlefield Injuries			+1,900
	New Vaccines to Fight Respiratory Disease and Central Nervous Disorders			+6,000
	Online Health Services Optimization			+3,900
	Optical Neural Techniques for Combat and Post-Trauma HealthCare			+4,000
	Regenerative Medicine for Battlefield Injuries			+1,000
	Self-Powered Prosthetic Limb Technology			+1,000
	Stabilized Hemoglobin Wound Healing Development			+1,500
	SupportNet for Frontline Providers			+3,000
	The Center for Neuroposthetics and BioMEMS			+2,000
29	Warfighter Advanced Technology	37,574	41,874	+4,300
	High Pressure Pasteurization & Pressure Assisted Thermal Sterilization Project			+4,300
30	Medical Advanced Technology	72,940	196,040	+123,100
	101st Airborne/Air Assault Injury Prevention & Performance Enhancement Initiative			+3,000
	Advance Restoration Therapies in Spinal Cord Injury			+2,000
	Advanced Lower Limb Prostheses for Battlefield Amputees			+4,000
	Advanced Regenerative Medicine Therapies for Combat Injuries			+4,000
	Bioelectrics Research for Casualty Care Management			+1,000
	Bio-printing of skin for battlefield burn injuries			+2,000
	Bio-Surveillance in a Highly Mobile Population			+2,000
	Blood, Medical & Food Safety via Eco-Friendly Wireless Sensing (Phase II)			+2,000
	Center for Integration of Medicine and Innovative Technology			+10,000
	Clinical Development of a Norovirus Gastroenteritis Vaccine			+4,500
	Cooperative International Neuromuscular Research Group (CINRG)			+4,100
	Countermeasures to Hemorrhaging [Liquid Bandage & Tissue Regeneration]			+7,200
	Enhancing Wound Healing, Tissue Regeneration, and Biomarker Discovery			+2,000
	Fibrin Adhesive Stat (FAST) Dressing			+3,000
	Health Sciences Regenerative Medicine Center—Autologous Tissues Research			+4,000
	Highly Functional Neurally Controlled Skeletally Attached and Intelligent Prosthetic Devises			+3,800
	Identification of Pain Mechanisms and Therapeutic Targets			+1,000
	In-Field Body Temperature Conditioner			+3,000
	Malaria Vaccine Development			+5,000
	Military Burn Trauma Research Program			+6,000
	Military Medical Decontamination System			+4,500
	Military Nutrition Research: Four Tasks to Address Personnel Readiness			+1,000
	Mobile Aerosol Monitoring System for the Department of Defense			+1,500
	Multi-Dose Closed Loop pH Monitoring System for Platelets			+2,000
	National Biodefense Training			+5,000
	Neural Control of External Devices			+2,000
	Neuroscience Center of Excellence-Neuropsychiatric and Neurotrauma in U.S. War-fighters			+5,000
	Operation Re-Entry NC			+2,000

[In thousands of dollars]

Line	Item	2010 budget estimate	Committee recommendation	Change from budget estimate
	Rapid Burn Wound Therapies			+2,000
	Regenerative Medicine for Acute Deafness			+3,000
	Rugged Electronic Textile Vital Signs Monitoring			+3,000
	Silicon Nanomaterial for Battlefield Medical Devices			+3,500
	Staph Vaccine			+8,000
	Strattice Dermal Matrix Research			+2,000
	Trauma Care, Research and Training			+3,000
	US Army Vascular Graft Research Project			+2,000
31	Aviation Advanced Technology	60,097	104,697	+44,600
	Advanced Affordable Turbine Engine Program			+5,000
	Autonomous Cargo Acquisition for Rotorcraft Unmanned Aerial Vehicles			+1,600
	Enhanced-Rapid Tactical Integration for Fielding of Systems Initiative			+3,900
	Parts-on-Demand from CONUS Operations			+5,000
	Robust Composite Structural Core for Army Helicopters			+2,000
	Transitioning Stretch Broken Carbon Fiber to Production Programs			+4,000
	UAS Ground Based Sense and Avoid Capability Development for Integration into the National Air Space			+3,600
	UH–60 Transmission/Gearbox Galvanic Corrosion Reduction			+1,500
	Universal Control—FADEC			+9,000
	Unmanned Aerial Vehicle Resupply (UAVR)—BURRO			+4,000
	Vectored Thrust Ducted Compound Helicopter			+5,000
32	Weapons and Munitions Advanced Technology	66,410	71,210	+4,800
	EMG—lack of authorization			−11,500
	Biosensor, Communicator and Controller System			+3,500
	Advanced Prototyping with Non Traditional Suppliers			+1,500
	Advanced Robot and Sensor Technology for Surveillance and Energy Efficiency Applications			+1,500
	Lightweight Reliable Materials for Military Systems			+3,500
	Technology Development at the Quad Cities Manufacturing Laboratory			+6,300
33	Combat Vehicle and Automotive Advanced Technology	89,586	182,886	+93,300
	30-kW Auxiliary Power Unit for Armored Combat Vehicles			+2,000
	Advanced Battery Development Program			+10,000
	Advanced Corrosion Protection for Military Vehicles and Equipment			+3,000
	Advanced Lithium Iron Phosphate Battery System			+3,000
	Advanced Suspension System For Heavy Vehicles			+2,700
	All Composite Lightweight Military Vehicle			+2,000
	Antiballistic Windshield Armor			+3,000
	Compact 10 Kilowatt Generator Set for Army and Marine Combat Vehicles			+2,000
	Defense Advanced Transportation Technology Program Hybrid Truck Users Forum			+6,000
	Enhanced Military Vehicle Maintenance System Demonstration Project			+2,800
	Field Deployable Fleet Hydrogen Fueling			+3,000
	Future Tactical Truck Carbon Composite Shelter & Retrofit of Current Vehicle Shelters			+2,000
	Ground-forces Readiness Enabler for Advanced Tactical Vehicles (GREAT–V)			+1,000
	Hybrid Engine Development Program			+4,000
	Hydraulic Hybrid Vehicles for the Tactical Wheeled Fleet			+3,500
	JAMMA Family of Vehicles			+1,000

[In thousands of dollars]

Line	Item	2010 budget estimate	Committee recommendation	Change from budget estimate
	Military Installation Electric Vehicle Demonstration Project			+2,000
	On-Board Vehicle Power Systems Development			+3,100
	Plug-in Hybrid Electric Vehicle			+4,000
	Pre-discharge Threat Cues			+2,000
	Simulation Based Reliability and Safety (SimBRS) Program			+4,900
	Smart Plug-In Hybrid Electric Vehicle Program			+3,000
	Unmanned Ground Vehicle Initiative			+12,000
	VePro—Vehicle Health Usage Monitoring and Prognostics			+3,100
	VSIL: Armored Vehicle Components and Systems Simulated In Cost-Effective Virtual Design and Test Environment			+4,000
	Zouline Armor			+4,200
36	Electronic Warfare Advanced Technology	50,458	58,458	+8,000
	Applied Communication and Information Networking (ACIN) Program			+3,000
	Cybersecurity in Tactical Environments			+1,000
	Portable Mobile Broadband System			+4,000
38	Next Generation Training & Simulation Systems	19,415	22,415	+3,000
	Combat Medic Training			+2,000
	HapMed Combat Medic Trainer			+1,000
40	Explosives Demilitarization Technology		12,200	+12,200
	Cryofracture/Plasma Arc Demilitarization Program			+8,000
	Ultra Wideband Active RF Detection of IEDs			+2,200
	Unserviceable Ammunition Demilitarization via Chemical Dissolution at Tooele Army Depot			+2,000
42	Combating Terrorism, Technology Development	11,989	36,989	+25,000
	Alternative Energy Advanced Technology Development/Demonstration			+25,000
44	Missile and Rocket Advanced Technology	63,951	79,451	+15,500
	Advanced Commercial Technology Insertion			+3,100
	Army Responsive Tactical Space System Exerciser			+3,000
	Long Range Hypersonic Interceptor			+2,000
	Rapid Response Hostile Fire Detection and Active Protection of Ground and Air Vehicles Sensor Demonstration			+3,200
	Scenario Generation for Integrated Air & Missile Defense Evaluation			+4,200
46	Landmine Warfare and Barrier Advanced Technology	30,317	36,217	+5,900
	Advanced Demining Technology			+5,900
48	Night Vision Advanced Technology	40,329	57,329	+17,000
	Bradley Third Generation FLIR			+5,000
	Microterrain Persistent Surveillance			+2,000
	Smart Sensor Supercomputing Center			+10,000
49	Environmental Quality Technology Demonstrations	15,706	16,206	+500
	Permafrost Tunnel			+500
50	Military Engineering Advanced Technology	5,911	17,511	+11,600
	Advanced Tactical Fuels for the U.S. Military			+4,000
	Amorphous Si Flexible Photovoltaics for Grid Parity			+2,000
	Integrated Alternative Power Systems			+2,600
	Natural Gas Firetube Boiler Demonstration			+1,000
	Ruggedized Military Laptop Fuel Cell Power Supply III			+2,000
51	Advanced Tactical Computer Science and Sensor Technology	41,561	47,061	+5,500
	Compact Airborne Multi-mission Payload (CAMP)			+2,000
	Mobile Localization (M–LOC)			+1,500
	Shared Vision			+2,000
53	Army Missile Defense Systems Integration (Non Space)	14,683	74,783	+60,100
	Adaptive Lightweight Materials Technology for Missile Defense			+4,000

[In thousands of dollars]

Line	Item	2010 budget estimate	Committee recommendation	Change from budget estimate
	Adaptive Robotics Technology for Space, Air and Missiles (ART–SAM)			+4,200
	Advanced Cavitation Power Technology			+4,800
	Advanced Electronics Rosebud Integration			+3,000
	Advanced Fuel Cell Research Program			+2,000
	Alternate Power Technology for Missile Defense			+4,000
	Biological Air Filtering System Technologies			+3,000
	Compact Pulsed Power for Defense Applications			+3,000
	Continuous Threat Alert Sensing System (CTASS)			+1,700
	High Speed Digital Imaging			+3,000
	High Temp Polymers for Missile System Applications			+4,900
	On-Board Hybrid Power Unit (OBHPU)			+1,300
	Orion High Altitude Long Endurance UAV Risk Reduction Effort			+9,700
	Standoff Hazardous Agent Detection and Evaluation System			+9,000
	Discriminatory Imaging and Network Advancement for Missiles, Aviation and Space			+2,500
54	Army Missile Defense Systems Integration (Space)	117,471	118,671	+1,200
	Space Control—excessive program delays			−10,500
	HiSentinel Stratospheric Airship			+3,000
	Low Cost Interceptor			+2,100
	Missile Attack Early Warning System			+2,600
	Nanocomposite Enhanced Radar and Aerospace Materials (NERAM)			+1,000
	Positron Capture and Storage			+3,000
55	Air and Missile Defense Systems Engineering	209,531	211,531	+2,000
	Advanced Environmental Control System			+2,000
61	Soldier Support and Survivability	31,752	33,752	+2,000
	Squad Mission Support System (SMSS)			+2,000
62	Tactical Electronic Surveillance System—Adv Dev	18,228	12,228	−6,000
	Unsustained growth			−6,000
64	Environmental Quality Technology	4,770	6,770	+2,000
	Environmental Management Information System (EMIS)—Army requested transfer from OMA, line 131			+2,000
68	Logistics and Engineer Equipment—Adv Dev	56,373	49,873	−6,500
	JLTV unjustified growth			−10,000
	Expeditionary Water Reclamation Process using Supercritical Water Oxidation			+3,500
70	Medical Systems—Adv Dev	31,275	33,275	+2,000
	Wireless Medical Monitoring System (WiMed)			+2,000
74	Armed, Deployable Helos	65,515	61,236	−4,279
	KW Replacement funds requested ahead of AoA completion			−4,279
75	Electronic Warfare Development	248,463	197,463	−51,000
	L12 unjustified growth			−18,000
	Excessive CIRCM management services			−35,000
	Hostile Fire Indicator			+2,000
78	Infantry Support Weapons	74,814	82,814	+8,000
	Composite Bottles for Survival Egress Air			+4,000
	Lightweight Caliber .50 Machine Gun			+4,000
81	Family of Heavy Tactical Vehicles	7,477	7,477	
83	Non-Line of Sight Launch System	88,660	92,460	+3,800
	NLOS–LS Anti-Tamper Initiative			+3,800
86	FCS Systems of Systems Engr & Program Mgmt	1,067,191	868,191	−199,000
	Contractor fee reduction due to contract restructure			−199,000
87	FCS Reconnaissance (UAV) Platforms	68,701	78,001	+9,300
	MQ–8B Fire Scout Army			+9,300
90	FCS Sustainment & Training R&D	749,182	567,182	−182,000
	Program adjustment			−182,000
102	Weapons and Munitions—SDD	34,878	69,878	+35,000

[In thousands of dollars]

Line	Item	2010 budget estimate	Committee recommendation	Change from budget estimate
	Transfer from Missile Procurement, Army for SLAMRAAM per Army request			+35,000
104	Command, Control, Communications Systems—SDD	88,995	43,995	−45,000
	JBC–P lack of justification			−45,000
105	Medical Materiel/Medical Biological Defense Equipment—SDD	33,893	37,393	+3,500
	Military Applications for Medical Grade Chitosan			+3,500
108	Combat Identification	20,070	10,070	−10,000
	JCTI–G lack of acquisition strategy			−10,000
109	Army Tactical Command & Control Hardware & Software	90,864	78,072	−12,792
	Fiscal year 2011 OT funds requested ahead of need			−12,792
114	Artillery Systems	23,318	114,818	+91,500
	Transfer from WTCV, line 11 for Paladin Integrated Management per Army request			+91,500
117	Information Technology Development	35,309	67,109	+31,800
	Transfer from RDDW, line 117, for DIMHRS execution per Department of Defense request			+30,800
	Electronic Commodity Project			+1,000
123	Rand Arroyo Center	16,305	18,305	+2,000
	Rand Arroyo Center			+2,000
125	Concepts Experimentation Program	23,445	26,945	+3,500
	Automated Communications Support Systems for WARFIGHTERS, Intelligence Community, Linguists, and Analysts			+1,500
	Technology for Rapid Foreign Language Acquisition for Specialized Military and Intelligence Purposes			+2,000
128	Army Technical Test Instrumentation and Targets	72,911	86,611	+13,700
	Define Renewable Energy Systems			+2,000
	Dugway Field Test Improvements			+4,500
	Multiple Source Data Fusion for Dugway Proving Ground			+2,500
	Phase II, Regional Partnership—Ft. Bliss, WSMR, Holloman			+4,700
130	DOD High Energy Laser Test Facility	2,891	8,891	+6,000
	High Energy Laser System Test Facility—HELSTF/HELTD			+6,000
140	Munitions Standardization, Effectiveness and Safety	45,053	56,153	+11,100
	3D Woven Preform Technology for Army Munitions Applications			+2,000
	Army Range Technology Program (ARTP)			+6,100
	Medium Caliber Metal Parts Upgrade			+3,000
148	Combat Vehicle Improvement Programs	190,301	197,201	+6,900
	Combat Vehicle Electrical Power—21st Century (CVEP–21)			+3,900
	Vibration Management Enhancement Program			+3,000
150	Aircraft Modifications/Product Improvement Programs	209,401	214,817	+5,416
	D18–JCA PQT and LFT&E non-Army requirements			−984
	UH–60 Aviation Software Performance Assessment Test Bed			+6,400
162	Information Systems Security Program	74,355	61,455	−12,900
	BEC EMD contract funds requested ahead of need			−10,100
	JPIv2 EMD contract funds requested ahead of need			−6,800
	Biometrics DNA Applications			+4,000
166	Joint Command and Control Program (JC2)	20,365		−20,365
	NECC program adjustment			−20,365
167	Tactical Unmanned Aerial Vehicles	202,521	172,124	−30,397
	UGCS lack of synchronization with Department-wide enterprise			−15,000
	D09 IOT&E funds requested ahead of need			−22,897
	4th Generation Wireless Exploitation			+3,000
	Shadow TUAS Flight in the National Air Space			+2,500

[In thousands of dollars]

Line	Item	2010 budget estimate	Committee recommendation	Change from budget estimate
	Tactical UAV, Heavy Fuel Engine			+2,000
168	Distributed Common Ground/Surface Systems	188,414	189,714	+1,300
	Heuristic Internet Protocol Packet Inspection Engine (HIPPIE)			+1,300
170	Aerial Common Sensor (ACS)	210,035		−210,035
	Lack of requirement			−210,035
172	End Item Industrial Preparedness Activities	68,466	85,766	+17,300
	Aging and Battle Damaged Weapon Systems Repair			+1,500
	De-Weighting Military Vehicles through Advanced Composites Manufacturing Technology			+3,700
	Improved Manufacturing Processes Demonstration Program for Army Tactical Vehicles			+2,000
	Large Structure Titanium Machining Initiative			+1,000
	Legacy Aerospace Gear Drive Re-Engineering Initiative			+2,000
	Precision Strike Munitions Advancement with Integrated Millimeter Wave Power Sources to Satisfy Army Strategic Goals			+4,100
	Spinel Transparent Armor Production Technology			+1,000
	Superior Weapons Systems through Castings			+2,000

Alternative Energy Advanced Technology Development/Demonstration.—The Committee includes $25,000,000 in program element 0603125A in support of deployable force protection initiatives, to include efforts to develop and deploy capabilities that would prevent forward operating bases from being cut off from reliable power sources.

Long Endurance Multi-INT Vehicle [LEMV].—The fiscal year 2010 budget request includes $80,000,000 to initiate the development of a Long Endurance Multi-INT Vehicle [LEMV]. This vehicle is intended to be a hybrid airship capable of remaining on station for 3 weeks at a time and carrying a payload of 2,500 pounds. The Committee understands that the full remaining requirement of $55,000,000 to complete integration, testing and fielding of one airship will be included in the fiscal year 2011 base budget request. The LEMV is being pursued in response to continued theater demands for persistent intelligence, surveillance and reconnaissance [ISR] capabilities. However, the Committee notes that there is no validated requirement specifically for the LEMV and its key performance parameters, nor has an Analysis of Alternatives been conducted to determine whether this proposed technology solution is best suited to address operational needs. Additionally, many of the technologies required for this advanced capability have not been tested in a relevant environment. Finally, the Army's acquisition strategy of awarding a single development contract to one contractor eschews the principle of competitive prototyping which is a key component for reining in the Department's pervasive cost, schedule and performance challenges on many high profile acquisition programs. Given the criticality of ISR capabilities in theater, the Committee fully funds the budget request, but notes that the Army's strategy is high-risk and encourages the Army to review its technical approach and acquisition strategy.

Future Combat System.—Following the Department of Defense April 6, 2009 announcement to terminate the Future Combat Sys-

tem [FCS] Manned Ground Vehicle program, the Department of Defense on June 23, 2009 canceled FCS and directed in its place the establishment of an Army modernization program consisting of four major defense acquisition programs [MDAPs]. This restructure, to include an impact analysis of complementary programs such as the Joint Tactical Radio System [JTRS]; Warfighter Information Network—Tactical [WIN–T]; and Mid-Range Munitions [MRM], as well as of the necessary adjustments to the existing contract, will not be complete until the end of this fiscal year, at the earliest. As such, the Army has been unable to articulate to the Committee how the fiscal year 2010 budget request for FCS would be executed in support of the new MDAPs. Based on the anticipated contract restructure and inevitable programmatic and schedule adjustments, the Committee recommends adjustments to the fiscal year 2010 request.

Universal Ground Control Station.—The fiscal year 2010 budget request includes $28,500,000 for the development of a Universal Ground Control Station [GCS] that will control Army unmanned aerial systems only. The Committee notes that the Army's strategy is inconsistent with Department-wide guidance to seek truly joint capabilities and to adopt common and open GCS architectures. Therefore, the Committee reduces the request to allow for the synchronization of Army efforts with the development and implementation of an enterprise-wide investment plan for GCS. Funds for the development of GCS open architectures are provided elsewhere in this bill, as requested by the Department of Defense.

Aerial Common Sensor [ACS].—The fiscal year 2010 budget request includes $210,035,000 for the development of the aerial common sensor [ACS]. The Committee notes that despite several program delays, a significant adjustment to the originally proposed hardware solution and a modification to the initial acquisition strategy, an ACS requirement has not been validated. The Committee further notes that the fiscal year 2010 budget request includes funds to integrate multiple intelligence capabilities onto medium altitude aircraft which will provide the Army with an enhanced medium altitude reconnaissance and surveillance capability. Therefore, the Committee provides no funds for ACS.

Stryker Product Improvement Program [S–PIP].—The Committee notes that the Stryker Product Improvement Program [S–PIP] continues to be delayed. To ensure appropriate oversight, the Committee directs the Army to establish two distinct projects under program element 0603653A for Stryker PIP and Mobile Gun System.

Armed Scout Helicopter.—The Committee is aware that the Department of the Army is analyzing the requirements and future program options for an armed scout helicopter [ASH]. Given the age of the Vietnam-era OH–58 Kiowa Warrior that a new ASH is being designed to replace, the Committee supports moving forward with a replacement program. The Committee notes, however, that the last two Army efforts to replace the Kiowa Warrior fleet, the RAH–66 Comanche and the ARH–70A Armed Reconnaissance Helicopter programs, resulted in program terminations due to requirements growth, cost overruns and schedule delays after significant taxpayer investment. Therefore, the Committee is concerned that

the Army will attempt yet another new costly development program and encourages the Department of Defense to consider modifying an existing and in-service aircraft to meet ASH mission requirements. In order to mitigate future program risk, the Committee also encourages the Army to consider risk reduction efforts on existing and in-service rotorcraft during fiscal year 2010 to prepare for a future ASH competition.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, NAVY

Appropriations, 2009	$19,764,276,000
Budget estimate, 2010	19,270,932,000
House allowance	20,197,300,000
Committee recommendation	19,148,509,000

The Committee recommends an appropriation of $19,148,509,000. This is $122,423,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

	Item	2010 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
	RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY					
	BASIC RESEARCH					
1	UNIVERSITY RESEARCH INITIATIVES	99,472	103,472	102,472	+3,000	−1,000
2	IN-HOUSE LABORATORY INDEPENDENT RESEARCH	18,076	18,076	18,076	.....	.....
3	DEFENSE RESEARCH SCIENCES	413,743	426,143	423,643	+9,900	−2,500
	TOTAL, BASIC RESEARCH	531,291	547,691	544,191	+12,900	−3,500
	APPLIED RESEARCH					
4	POWER PROJECTION APPLIED RESEARCH	59,787	68,787	72,287	+12,500	+3,500
5	FORCE PROTECTION APPLIED RESEARCH	91,400	124,900	135,900	+44,500	+11,000
6	MARINE CORPS LANDING FORCE TECHNOLOGY	39,308	39,308	46,808	+7,500	+7,500
7	MATERIALS, ELECTRONICS AND COMPUTER TECHNOLOGY	.....	3,500	.....	.....	−3,500
8	COMMON PICTURE APPLIED RESEARCH	83,163	85,963	89,663	+6,500	+3,700
9	WARFIGHTER SUSTAINMENT APPLIED RESEARCH	104,169	104,169	122,569	+18,400	+18,400
10	RF SYSTEMS APPLIED RESEARCH	64,816	68,316	66,816	+2,000	−1,500
11	OCEAN WARFIGHTING ENVIRONMENT APPLIED RESEARCH	48,750	53,750	51,750	+3,000	−2,000
12	JOINT NON-LETHAL WEAPONS APPLIED RESEARCH	6,008	6,008	6,008	.....	.....
13	UNDERSEA WARFARE APPLIED RESEARCH	55,694	60,194	63,194	+7,500	+3,000
14	MINE AND EXPEDITIONARY WARFARE APPLIED RESEARCH	40,880	40,880	44,380	+3,500	+3,500
	TOTAL, APPLIED RESEARCH	593,975	655,775	699,375	+105,400	+43,600
	ADVANCED TECHNOLOGY DEVELOPMENT					
15	POWER PROJECTION ADVANCED TECHNOLOGY	107,969	125,869	106,869	−1,100	−19,000
16	FORCE PROTECTION ADVANCED TECHNOLOGY	66,035	91,935	75,235	+9,200	−16,700
17	COMMON PICTURE ADVANCED TECHNOLOGY	108,394	49,284	110,394	+2,000	+61,110
18	WARFIGHTER SUSTAINMENT ADVANCED TECHNOLOGY	86,239	95,039	86,239	.....	−8,800
19	ELECTROMAGNETIC SYSTEMS ADVANCED TECHNOLOGY	65,827	65,827	76,327	+10,500	+10,500
20	MARINE CORPS ADVANCED TECHNOLOGY DEMONSTRATION (ATD)	107,363	114,863	115,363	+8,000	+500
21	JOINT NON-LETHAL WEAPONS TECHNOLOGY DEVELOPMENT	10,998	11,998	10,998	.....	−1,000
22	WARFIGHTER PROTECTION ADVANCED TECHNOLOGY	18,609	52,609	20,609	+2,000	−32,000
23	UNDERSEA WARFARE ADVANCED TECHNOLOGY	68,037	76,037	68,037	.....	−8,000
24	NAVY WARFIGHTING EXPERIMENTS AND DEMONSTRATIONS	52,643	52,643	52,643	.....	.....

25	MINE AND EXPEDITIONARY WARFARE ADVANCED TECHNOLOGY	28,782	30,782	28,782	.....	−2,000
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT	720,896	766,886	751,496	+30,600	−15,390
	DEMONSTRATION & VALIDATION					
26	AIR/OCEAN TACTICAL APPLICATIONS	116,082	117,982	117,482	+1,400	−500
27	AVIATION SURVIVABILITY	6,505	19,505	18,005	+11,500	−1,500
28	DEPLOYABLE JOINT COMMAND AND CONTROL	6,032	9,832	6,032	.....	−3,800
29	ASW SYSTEMS DEVELOPMENT	16,585	26,455	19,585	+3,000	−6,870
30	TACTICAL AIRBORNE RECONNAISSANCE	7,713	10,213	7,713	.....	−2,500
31	ADVANCED COMBAT SYSTEMS TECHNOLOGY	1,677	4,177	1,677	.....	−2,500
32	SURFACE AND SHALLOW WATER MINE COUNTERMEASURES	76,739	86,739	84,739	+8,000	−2,000
33	SURFACE SHIP TORPEDO DEFENSE	57,538	70,038	57,538	.....	−12,500
34	CARRIER SYSTEMS DEVELOPMENT	173,594	173,594	176,794	+3,200	+3,200
35	SHIPBOARD SYSTEM COMPONENT DEVELOPMENT	1,691	13,791	21,491	+19,800	+7,700
36	PILOT FISH	79,194	79,194	79,194	.....	.....
37	RETRACT LARCH	99,757	99,757	99,757	.....	.....
38	RETRACT JUNIPER	120,752	120,752	114,752	−6,000	−6,000
39	RADIOLOGICAL CONTROL	1,372	1,372	1,372	.....	.....
40	SURFACE ASW	21,995	23,995	21,995	.....	−2,000
41	ADVANCED SUBMARINE SYSTEM DEVELOPMENT	551,836	554,836	550,836	−1,000	−4,000
42	SUBMARINE TACTICAL WARFARE SYSTEMS	10,172	11,172	12,172	+2,000	+1,000
43	SHIP CONCEPT ADVANCED DESIGN	22,541	22,541	22,541	.....	.....
44	SHIP PRELIMINARY DESIGN & FEASIBILITY STUDIES	28,135	40,935	28,135	.....	−12,800
45	ADVANCED NUCLEAR POWER SYSTEMS	259,887	259,887	259,887	.....	.....
46	ADVANCED SURFACE MACHINERY SYSTEMS	5,599	13,199	19,399	+13,800	+6,200
47	CHALK EAGLE	443,555	443,555	443,555	.....	.....
48	LITTORAL COMBAT SHIP (LCS)	360,518	366,918	360,518	.....	−6,400
49	COMBAT SYSTEM INTEGRATION	22,558	22,558	22,558	.....	.....
50	CONVENTIONAL MUNITIONS	3,458	4,458	3,458	.....	−1,000
51	MARINE CORPS ASSAULT VEHICLES	293,466	243,466	293,466	.....	+50,000
53	MARINE CORPS GROUND COMBAT/SUPPORT SYSTEM	73,798	73,798	59,798	−14,000	−14,000
54	JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT	21,054	21,054	21,054	.....	.....
55	COOPERATIVE ENGAGEMENT	56,586	61,586	56,586	.....	−5,000
56	OCEAN ENGINEERING TECHNOLOGY DEVELOPMENT	17,328	17,328	17,328	.....	.....
57	ENVIRONMENTAL PROTECTION	20,661	20,661	21,661	+1,000	+1,000
58	NAVY ENERGY PROGRAM	8,476	13,476	17,876	+9,400	+4,400
59	FACILITIES IMPROVEMENT	4,002	9,202	7,402	+3,400	−1,800
60	CHALK CORAL	70,772	70,772	70,772	.....	.....
61	NAVY LOGISTIC PRODUCTIVITY	4,301	7,101	16,001	+11,700	+8,900
62	RETRACT MAPLE	210,237	210,237	210,237	.....	.....

[In thousands of dollars]

	Item	2010 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
63	LINK PLUMERIA	69,313	69,313	63,313	−6,000	−6,000
64	RETRACT ELM	152,151	152,151	152,151		
65	SHIP SELF DEFENSE	6,960	6,960	6,960		
66	LINK EVERGREEN	123,660	123,660	123,660		
67	SPECIAL PROCESSES	54,115	54,115	54,115		
68	NATO RESEARCH AND DEVELOPMENT	10,194	10,194	10,194		
69	LAND ATTACK TECHNOLOGY	1,238	8,238	1,238		−7,000
70	NONLETHAL WEAPONS	46,971	49,871	46,971		−2,900
71	JOINT PRECISION APPROACH AND LANDING SYSTEMS	150,304	150,304	150,304		
72	SINGLE INTEGRATED AIR PICTURE (SIAP) SYSTEM ENGINEER	52,716	52,716	52,716		
74	DIRECTED ENERGY AND ELECTRIC WEAPON SYSTEMS	5,003	22,003	8,003	+3,000	−14,000
75	TACTICAL AIR DIRECTIONAL INFRARED COUNTERMEASURES	63,702	63,702	50,702	−13,000	−13,000
77	JOINT COUNTER RADIO-CONTROLLED IED ELECTRONIC WARFARE	67,843	67,843	32,843	−35,000	−35,000
78	PRECISION STRIKE WEAPONS DEVELOPMENT PROGRAM	40,926	40,926	40,926		
79	SPACE & ELECTRONIC WARFARE (SEW) ARCHITECTURE/ENGINE	42,533	42,533	40,533	−2,000	−2,000
	TOTAL, DEMONSTRATION & VALIDATION	4,163,795	4,260,665	4,177,995	+14,200	−82,670
	ENGINEERING & MANUFACTURING DEVELOPMENT					
80	OTHER HELO DEVELOPMENT	54,092	54,092	54,092		
81	AV–8B AIRCRAFT—ENG DEV	20,886	20,886	20,886		
82	STANDARDS DEVELOPMENT	53,540	59,340	53,540		−5,800
83	MULTI-MISSION HELICOPTER UPGRADE DEVELOPMENT	81,953	81,953	76,553	−5,400	−5,400
84	AIR/OCEAN EQUIPMENT ENGINEERING	7,485	7,485	7,485		
85	P–3 MODERNIZATION PROGRAM	3,659	3,659	3,659		
86	WARFARE SUPPORT SYSTEM	6,307	6,307	6,307		
87	TACTICAL COMMAND SYSTEM	86,462	95,462	86,462		−9,000
88	ADVANCED HAWKEYE	364,557	362,557	364,557		+2,000
89	H–1 UPGRADES	32,830	25,830	32,830		+7,000
90	ACOUSTIC SEARCH SENSORS	56,369	56,369	56,369		
91	V–22A	89,512	89,512	64,512	−25,000	−25,000
92	AIR CREW SYSTEMS DEVELOPMENT	14,265	12,565	14,265		+1,700
93	EA–18	55,446	57,446	55,446		−2,000
94	ELECTRONIC WARFARE DEVELOPMENT	97,635	101,635	102,635	+5,000	+1,000
95	VHXX EXECUTIVE HELO DEVELOPMENT	85,240	485,240	30,000	−55,240	−455,240

96	NEXT GENERATION JAMMER (NGJ)	127,970	117,970	127,970	.....	+10,000
97	JOINT TACTICAL RADIO SYSTEM—NAVY (JTRS—NAVY)	876,374	880,874	876,374	.....	−4,500
98	SC–21 TOTAL SHIP SYSTEM ENGINEERING	.....	5,000	5,000	+5,000	.....
99	SURFACE COMBATANT COMBAT SYSTEM ENGINEERING	178,459	185,459	178,459	.....	−7,000
100	LPD–17 CLASS SYSTEMS INTEGRATION	5,304	5,304	5,304	.....	.....
101	SMALL DIAMETER BOMB (SDB)	43,902	43,902	43,902	.....	.....
102	STANDARD MISSILE IMPROVEMENTS	182,197	168,197	182,197	.....	+14,000
103	AIRBORNE MCM	48,712	51,712	48,712	.....	−3,000
104	NAVAL INTEGRATED FIRE CONTROL—COUNTER AIR SYSTEMS ENG	11,727	11,727	11,727	.....	.....
105	ADVANCED ABOVE WATER SENSORS	236,078	259,078	236,078	.....	−23,000
106	SSN–688 AND TRIDENT MODERNIZATION	122,733	122,733	121,733	−1,000	−1,000
107	AIR CONTROL	6,533	6,533	6,533	.....	.....
108	SHIPBOARD AVIATION SYSTEMS	80,623	82,123	77,623	−3,000	−4,500
109	COMBAT INFORMATION CENTER CONVERSION	13,305	13,305	13,305	.....	.....
110	NEW DESIGN SSN	154,756	195,256	162,756	+8,000	−32,500
112	SUBMARINE TACTICAL WARFARE SYSTEM	59,703	62,203	66,703	+7,000	+4,500
113	SHIP CONTRACT DESIGN/LIVE FIRE T&E	89,988	92,488	91,988	+2,000	−500
114	NAVY TACTICAL COMPUTER RESOURCES	4,620	4,620	4,620	.....	.....
115	MINE DEVELOPMENT	2,249	2,249	2,249	.....	.....
116	LIGHTWEIGHT TORPEDO DEVELOPMENT	21,105	21,105	24,105	+3,000	+3,000
117	JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT	10,327	10,327	10,327	.....	.....
118	PERSONNEL, TRAINING, SIMULATION, AND HUMAN FACTORS	5,898	6,898	5,898	.....	−1,000
119	JOINT STANDOFF WEAPON SYSTEMS	10,022	10,022	10,022	.....	.....
120	SHIP SELF DEFENSE (DETECT & CONTROL)	35,459	37,459	46,459	+11,000	+9,000
121	SHIP SELF DEFENSE (ENGAGE: HARD KILL)	34,236	35,736	46,236	+12,000	+10,500
122	SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)	88,895	88,895	88,895	.....	.....
123	INTELLIGENCE ENGINEERING	14,438	14,438	14,438	.....	.....
124	MEDICAL DEVELOPMENT	9,888	33,788	22,288	+12,400	−11,500
125	NAVIGATION/ID SYSTEM	63,184	63,184	63,184	.....	.....
127	JOINT STRIKE FIGHTER (JSF)	1,741,296	1,956,296	1,663,296	−78,000	−293,000
128	INFORMATION TECHNOLOGY DEVELOPMENT	9,868	9,868	9,868	.....	.....
129	INFORMATION TECHNOLOGY DEVELOPMENT	69,026	75,826	90,126	+21,100	+14,300
130	CH–53K	554,827	524,443	554,827	.....	+30,384
131	C/KC–130 AVIONICS MODERNIZATION PROGRAM (AMP)	.....	.....	.....	.....	.....
132	JOINT AIR-TO-GROUND MISSILE (JAGM)	81,434	77,734	81,434	.....	+3,700
133	MULTI-MISSION MARITIME AIRCRAFT (MMA)	1,162,417	1,182,417	1,162,417	.....	−20,000
134	CG(X)	150,022	110,022	86,022	−64,000	−24,000
135	DDG–1000	539,053	539,053	526,453	−12,600	−12,600
136	TACTICAL CRYPTOLOGIC SYSTEMS	19,016	20,516	19,016	.....	−1,500

[In thousands of dollars]

	Item	2010 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
	TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT	7,975,882	8,649,098	7,818,142	−157,740	−830,956
	RDT&E MANAGEMENT SUPPORT					
137	THREAT SIMULATOR DEVELOPMENT	25,534	27,534	25,534	.....	−2,000
138	TARGET SYSTEMS DEVELOPMENT	79,603	79,603	79,603	.....	.....
139	MAJOR T&E INVESTMENT	44,844	51,544	49,844	+5,000	−1,700
140	STUDIES AND ANALYSIS SUPPORT—NAVY	11,422	12,422	11,422	.....	−1,000
141	CENTER FOR NAVAL ANALYSES	49,821	49,821	49,821	.....	.....
142	SMALL BUSINESS INNOVATIVE RESEARCH	.....	.....	2,000	+2,000	+2,000
143	TECHNICAL INFORMATION SERVICES	735	4,735	19,735	+19,000	+15,000
144	MANAGEMENT, TECHNICAL, AND INTERNATIONAL SUPPORT	60,590	60,590	60,590	.....	.....
145	STRATEGIC TECHNICAL SUPPORT	3,633	3,633	3,633	.....	.....
146	RDT&E SCIENCE AND TECHNOLOGY MANAGEMENT	70,942	70,942	70,942	.....	.....
148	RDT&E SHIP AND AIRCRAFT SUPPORT	193,353	193,353	183,353	−10,000	−10,000
149	TEST AND EVALUATION SUPPORT	380,733	380,733	380,733	.....	.....
150	OPERATIONAL TEST AND EVALUATION CAPABILITY	12,010	12,010	12,010	.....	.....
151	NAVY SPACE AND ELECTRONIC WARFARE (SEW) SUPPORT	2,703	2,703	2,703	.....	.....
152	SEW SURVEILLANCE/RECONNAISSANCE SUPPORT	20,921	20,921	20,921	.....	.....
153	MARINE CORPS PROGRAM WIDE SUPPORT	19,004	20,004	19,004	.....	−1,000
154	TACTICAL CRYPTOLOGIC ACTIVITIES	2,464	2,464	2,464	.....	.....
155	SERVICE SUPPORT TO JFCOM, JNTC	4,197	4,197	4,197	.....	.....
	TOTAL, RDT&E MANAGEMENT SUPPORT	982,509	997,209	998,509	+16,000	+1,300
	OPERATIONAL SYSTEMS DEVELOPMENT					
159	UNMANNED COMBAT AIR VEHICLE (UCAV) ADVANCED COMPONENT.	311,204	306,204	311,204	.....	+5,000
160	STRATEGIC SUB & WEAPONS SYSTEM SUPPORT	74,939	76,139	69,439	−5,500	−6,700
161	SSBN SECURITY TECHNOLOGY PROGRAM	34,479	34,479	34,479	.....	.....
162	SUBMARINE ACOUSTIC WARFARE DEVELOPMENT	7,211	7,211	7,211	.....	.....
163	NAVY STRATEGIC COMMUNICATIONS	43,982	23,982	46,982	+3,000	+23,000
164	RAPID TECHNOLOGY TRANSITION (RTT)	39,125	39,125	39,125	.....	.....
165	F/A–18 SQUADRONS	127,733	127,733	122,333	−5,400	−5,400
166	E–2 SQUADRONS	63,058	63,058	63,058	.....	.....
167	FLEET TELECOMMUNICATIONS (TACTICAL)	37,431	37,431	37,431	.....	.....
168	TOMAHAWK AND TOMAHAWK MISSION PLANNING CENTER (TMPC)	13,238	14,038	17,338	+4,100	+3,300
169	INTEGRATED SURVEILLANCE SYSTEM	24,835	26,835	24,835	.....	−2,000

170	AMPHIBIOUS TACTICAL SUPPORT UNITS	2,324	2,324	2,324	.....	.....
171	CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT	49,293	52,293	39,293	−10,000	−13,000
172	CRYPTOLOGIC DIRECT SUPPORT	1,609	1,609	1,609	.....	.....
173	ELECTRONIC WARFARE (EW) READINESS SUPPORT	37,524	37,524	37,524	.....	.....
174	HARM IMPROVEMENT	30,045	30,045	30,045	.....	.....
175	TACTICAL DATA LINKS	25,003	25,003	15,003	−10,000	−10,000
176	SURFACE ASW COMBAT SYSTEM INTEGRATION	41,803	41,803	41,803	.....	.....
177	MK–48 ADCAP	28,438	38,438	28,438	.....	−10,000
178	AVIATION IMPROVEMENTS	135,840	127,349	134,149	−1,691	+6,800
179	NAVY SCIENCE ASSISTANCE PROGRAM	3,716	3,716	3,716	.....	.....
180	OPERATIONAL NUCLEAR POWER SYSTEMS	72,031	72,031	72,031	.....	.....
181	MARINE CORPS COMMUNICATIONS SYSTEMS	287,348	291,848	277,348	−10,000	−14,500
182	MARINE CORPS GROUND COMBAT/SUPPORTING ARMS SYSTEMS	120,379	124,179	106,479	−13,900	−17,700
183	MARINE CORPS COMBAT SERVICES SUPPORT	17,057	17,057	21,457	+4,400	+4,400
184	USMC INTELLIGENCE/ELECTRONIC WARFARE SYSTEMS (MIP)	30,167	29,900	30,167	.....	+267
185	TACTICAL AIM MISSILES	2,298	2,298	2,298	.....	.....
186	ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM)	3,604	3,604	3,604	.....	.....
187	JOINT HIGH-SPEED VESSEL (JHSV)	8,431	8,431	8,431	.....	.....
190	TECHNICAL RECONNAISSANCE AND SURVEILLANCE	.....	.....	.....	.....	.....
192	SATELLITE COMMUNICATIONS (SPACE)	474,009	474,009	474,009	.....	.....
193	CONSOLIDATED AFLOAT NETWORK ENTERPRISE SERVICES	45,513	45,513	45,513	.....	.....
194	INFORMATION SYSTEMS SECURITY PROGRAM	24,226	24,226	29,226	+5,000	+5,000
195	JOINT COMMAND AND CONTROL PROGRAM (JC2)	2,453	2,453	.....	−2,453	−2,453
196	JOINT COMMAND AND CONTROL PROGRAM (JC2)	4,139	4,139	.....	−4,139	−4,139
197	COBRA JUDY	62,061	62,061	62,061	.....	.....
198	NAVY METEOROLOGICAL AND OCEAN SENSORS—SPACE (METOC)	28,094	29,094	28,094	.....	−1,000
199	JOINT MILITARY INTELLIGENCE PROGRAMS	4,600	7,000	4,600	.....	−2,400
200	TACTICAL UNMANNED AERIAL VEHICLES	8,971	8,971	8,871	−100	−100
201	ENDURANCE UNMANNED AERIAL VEHICLES	.....	.....	.....	.....	.....
202	AIRBORNE RECONNAISSANCE SYSTEMS	46,208	52,458	50,558	+4,350	−1,900
203	MANNED RECONNAISSANCE SYSTEMS	22,599	19,899	22,599	.....	+2,700
204	DISTRIBUTED COMMON GROUND SYSTEMS	18,079	12,379	18,079	.....	+5,700
205	RQ–4 UAV	465,839	380,839	465,839	.....	+85,000
206	MQ–8 UAV	25,639	25,639	25,639	.....	.....
207	RQ–11 UAV	553	553	553	.....	.....
208	RQ–7 UAV	986	986	986	.....	.....
209	SMALL (LEVEL 0) TACTICAL UAS (STUASL0)	18,763	18,763	18,763	.....	.....
210	SMALL (LEVEL 0) TACTICAL UAS (STUASL0)	23,594	23,594	23,594	.....	.....
212	EP–3E REPLACEMENT (EPX)	11,976	11,976	11,976	.....	.....
213	MODELING AND SIMULATION SUPPORT	8,028	8,028	8,028	.....	.....

[In thousands of dollars]

	Item	2010 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
214	DEPOT MAINTENANCE (NON–IF)	14,675	14,675	14,675	.....	.....
215	AVIONICS COMPONENT IMPROVEMENT PROGRAM	2,725	3,725	2,725	.....	−1,000
216	INDUSTRIAL PREPAREDNESS	56,691	69,191	66,941	+10,250	−2,250
	MARITIME TECHNOLOGY (MARITECH)	.....	1,000	4,000	+4,000	+3,000
	TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT	3,044,566	2,966,858	3,016,483	−28,083	+49,625
999	CLASSIFIED PROGRAMS	1,258,018	1,353,118	1,142,318	−115,700	−210,800
	TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY	19,270,932	20,197,300	19,148,509	−122,423	−1,048,791

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2010 budget estimate	Committee recommendation	Change from budget estimate
1	University Research Initiatives	99,472	102,472	+3,000
	Molecular Electronics for Flash Memory Production			+3,000
3	Defense Research Sciences	413,743	423,643	+9,900
	ONAMI Nanoelectronics, Nanometrology, and Nanobiotechnology Initative			+4,800
	Waves, Wind and Scavengers: Next Generation Renewable Energy Systems for Naval Applications			+2,000
	Texas Microfactory			+2,000
	Human Neural Cell-Based Biosensor			+1,100
4	Power Projection Applied Research	59,787	72,287	+12,500
	Advanced Helicopter Landing Aid			+800
	Combustion Light Gas Gun Projectile			+5,000
	Enhanced EO/IR Sensors			+3,000
	Naval Advanced Electric Launcher System			+2,000
	Millimeter Wave Imaging			+1,700
5	Force Protection Applied Research	91,400	135,900	+44,500
	Alternative Energy Research			+25,000
	Carbon Composite Thin Films for Power Generation and Energy Storage			+2,000
	Magnetic Refrigeration Technology for Naval Applications			+5,000
	Integration of Electro-kinetic Weapons into Next Generation of Navy Ships			+4,000
	Fuel Efficient, High Specific Power Free Piston Engine for USSVs			+2,000
	Supercapacitors for Integrated Power Storage			+2,500
	Harbor Shield—Homeland Defense Port Security Initiative			+2,000
	Proton Exchange Membrane Fuel Cell for Underwater Vehicles			+2,000
6	Marine Corps Landing Force Technology	39,308	46,808	+7,500
	Warfighter Rapid Awareness Processing Technologies			+5,000
	High Power Ultra Lightweight Zinc-Air Battery			+2,500
8	Common Picture Applied Research	83,163	89,663	+6,500
	Intelligent Decision Exploration			+4,500
	Head Attitude Tracking System			+2,000
9	Warfighter Sustainment Applied Research	104,169	122,569	+18,400
	Composite Materials Enhancements through Polymer Science R&D			+5,900
	Productization of Anti-fouling and Fouling Release Coating Systems			+3,500
	Nanotechnology for Anti-Reverse Engineering			+3,000
	Biosensors for Defense Applications			+1,000
	Managing and Extending DoD Asset Lifecycles			+2,000
	Advanced Composite Maritime Manufacturing			+2,000
	Assistive Technologies for Injured Service Members			+1,000
10	RF Systems Applied Research	64,816	66,816	+2,000
	National Initiatives for Applications of Multifunctional Materials			+2,000
11	Ocean Warfighting Environment Applied Research	48,750	51,750	+3,000
	Underwater Imaging and Communications Using Lasers			+2,000
	Unmanned Undersea Vehicle Submerged Long Range Positioning			+1,000
13	Undersea Warfare Applied Research	55,694	63,194	+7,500
	Advanced High Energy Density Surveillance Power Module			+4,000
	Galfenol Energy Harvesting			+3,500
14	Mine and Expeditionary Warfare Applied Research	40,880	44,380	+3,500

[In thousands of dollars]

Line	Item	2010 budget estimate	Committee recommendation	Change from budget estimate
	Electromagnetic Signatures Assessment System Using Multiple Autonomous Undersea Vehicles, Phase III			+2,000
	Virtual Onboard Analyst for Multi-Sensor Mine Detection			+1,500
15	Power Projection Advanced Technology	107,969	106,869	−1,100
	Reduction to growth			−10,000
	Smart Instrument MRO			+5,000
	Detection, Tracking, and Identification for ISRTE of Mobile and Asymmetric Targets			+2,500
	Countermine LIDAR UAV-Based System			+1,400
16	Force Protection Advanced Technology	66,035	75,235	+9,200
	Single Generator Operations Lithium Ion Battery			+5,000
	Land/Sea-Based Air Systems Maintenance and Air Worthiness			+2,000
	Captive Air Amphibious Transporter (CAAT)			+2,200
17	Common Picture Advanced Technology	108,394	110,394	+2,000
	4–D Data Fusion Visualization			+2,000
19	RF Systems Advanced Technology	65,827	76,327	+10,500
	Reduction to new starts			−7,000
	Pacific Airborne Surveillance and Testing			+17,500
20	USMC Advanced Technology Demonstration (ATD)	107,363	115,363	+8,000
	Ground Warfare Acoustical Combat Systems of Netted Sensors			+5,000
	Marine Air-Ground Task Force Situational Awareness			+3,000
22	Warfighter Protection Advanced Technology	18,609	20,609	+2,000
	Naval Special Warfare Performance and Injury Prevention Program for SBT 22 at Stennis Space Center			+2,000
26	Air/Ocean Tactical Applications	116,082	117,482	+1,400
	Semi-Submersible UUV for Sensor Enhancements			+1,400
27	Aviation Survivability	6,505	18,005	+11,500
	Integrated Manifold and Tube Ceramic Oxygen Generator			+6,000
	Conformal Ceramics for Enhanced Aviation Armor Systems			+2,500
	Unmanned Vehicle Sensor Optimization Technologies Program			+3,000
29	ASW Systems Development	16,585	19,585	+3,000
	Sonobuoy Wave-Energy Module			+1,000
	Marine Mammal Detection System to Support Navy Training			+2,000
32	Surface and Shallow Water Mine Countermeasures	76,739	84,739	+8,000
	RMS transfer from OPN line 29			+8,000
34	Carrier Systems Development	173,594	176,794	+3,200
	Composite Mast for CVNs			+3,200
35	Shipboard System Component Development	1,691	21,491	+19,800
	DDG–51 Hybrid Drive System			+8,100
	Advanced Steam Turbine			+4,000
	Propulsion Manufacturing Technology Development			+4,700
	Advanced Fluid Controls for Shipboard Application			+3,000
38	RETRACT JUNIPER	120,752	114,752	−6,000
	Program adjustment			−6,000
41	Advanced Submarine System Development	551,836	550,836	−1,000
	Organic Submarine ISRT Demonstration (IRST OSAID)			+3,000
	Undersea Superiority program support			−4,000
42	Submarine Tactical Warfare Systems	10,172	12,172	+2,000
	High Torque, Low Speed, Direct Drive Electric Motor Technology			+2,000
46	Advanced Surface Machinery Systems	5,599	19,399	+13,800
	Next Generation Shipboard Integrated Power: Fuel Efficiency and Advanced Capability Enhancer			+8,000
	Microdrive for Future HVAC Systems			+2,400
	Fan Coil of the Future			+3,400
53	Marine Corps Ground Combat/Support System	73,798	59,798	−14,000
	Expeditionary Capabilities Laboratory			+3,000

[In thousands of dollars]

Line	Item	2010 budget estimate	Committee recommendation	Change from budget estimate
	Marine Expeditionary Rifle Squad Reconfigurable Vehicle Simulator			+3,000
	JLTV—program delays			−20,000
57	Environmental Protection	20,661	21,661	+1,000
	Compliance Tools Development for Metals in Antifouling Paints			+1,000
58	Navy Energy Program	8,476	17,876	+9,400
	Solar Heat Reflective Film for Energy & Fuel Efficiency in Buildings and Vehicles			+4,900
	Molten Carbonate Fuel Cell Demonstrator			+4,500
59	Facilities Improvement	4,002	7,402	+3,400
	Permanent Magnet Generator—Wave Energy Buoy			+2,400
	Regenerative Fuel Cell Back-up Power			+1,000
61	Navy Logistic Productivity	4,301	16,001	+11,700
	Advanced Naval Logistics			+3,000
	Hawaii National Guard Integrated Information Command System			+1,600
	Photonic Integration Foundry			+3,000
	Thin Film Materials for Advanced Applications, Advanced IED and Anti-Personnel Sensors			+1,600
	Radio Frequency Identification (RFID) Technologies			+1,000
	Real-time Tactical Intelligence Collection System			+1,500
63	LINK PLUMERIA	69,313	63,313	−6,000
	Program adjustment			−6,000
74	Directed Energy and Electric Weapon Systems	5,003	8,003	+3,000
	Global Law Enforcement Support for Counter-Narcotics			+1,500
	Maritime Directed Energy Test and Evaluation Center			+1,500
75	Tactical Air Directional Infrared Countermeasures (TADIRCM)	63,702	50,702	−13,000
	TADIRCM program delay			−13,000
77	Joint Counter Radio Controlled IED Electronic Warfare (JCREW)	67,843	32,843	−35,000
	JCREW 3.3 contract delay			−35,000
79	Space and Electronic Warfare (SEW) Architecture/Engineering Support	42,533	40,533	−2,000
	Funding carryover due to fleet schedules			−2,000
83	Multi-Mission Helicopter Upgrade Development	81,953	76,553	−5,400
	M230 30mm Chain Gun Automatic Cannon			+4,700
	Defer IFF Mode 5			−10,100
91	V–22A	89,512	64,512	−25,000
	Reduction to growth			−25,000
94	Electronic Warfare Development	97,635	102,635	+5,000
	Small Survivable Jammer			+1,000
	F/A–18 Countermeasures Improvement			+4,000
95	VH–71A Executive Helo Development	85,240	30,000	−55,240
	Termination costs funded ahead of estimate			−55,240
98	SC–21 Total Ship System Engineering		5,000	+5,000
	Guidance, Navigation, Control, and Targeting			+5,000
106	SSN–688 and Trident Modernization	122,733	121,733	−1,000
	Improved Submarine Towed Array Systems			+2,000
	OE–538/OE–592 funding carryover			−3,000
108	Shipboard Aviation Systems	80,623	77,623	−3,000
	ADMACS Block 3 program delay			−3,000
110	New Design SSN	154,756	162,756	+8,000
	Common Command and Control System Module			+6,000
	Mold in Place Coating Development for the Submarine Fleet			+2,000
112	Submarine Tactical Warfare System	59,703	66,703	+7,000
	Artificial Intelligence-Based Combat System Kernel			+4,000
	Submarine Environment for Evaluation and Development			+3,000
113	Ship Contract Design/ Live Fire T&E	89,988	91,988	+2,000
	Automated Fiber Optic Manufacturing Initiative			+2,000
116	Lightweight Torpedo Development	21,105	24,105	+3,000
	Weapon Acquisition and Firing System			+3,000

[In thousands of dollars]

Line	Item	2010 budget estimate	Committee recommendation	Change from budget estimate
120	Ship Self Defense (Detect & Control)	35,459	46,459	+11,000
	Autonomous Unmanned Surface Vehicle			+3,000
	Expeditionary Swimmer Defense System			+4,000
	Persistent Surveillance Wave PowerBuoy System			+4,000
121	Ship Self Defense (Engage: Hard Kill)	34,236	46,236	+12,000
	Next Generation Phalanx with Laser Demo			+12,000
124	Medical Development	9,888	22,288	+12,400
	Simplified Orthopedic Surgery			+5,300
	Composite Tissue Transplantation for Combat Wounded Repair			+2,000
	Biocidal Wound Dressings			+1,500
	Mobile Oxygen, Ventilation, and External Suction (MOVES) system			+2,000
	Multivalent Dengue Vaccine Program			+1,600
127	Joint Strike Fighter (JSF)	1,741,296	1,663,296	−78,000
	Excess to need			−78,000
129	Information Technology Development	69,026	90,126	+21,100
	Condition-Based Maintenance Enabling Technologies Program			+3,000
	Digitization, Integration, and Analyst Access of Investigative Files, NCIS			+1,500
	Integration of Logistics Information of Knowledge Projection & Readiness Assessment Program			+2,000
	METOC Integrated Network-Centric Technology Systems			+2,600
	Supply Chain Logistics Capability at the ABL NIROP			+8,000
	SPAWAR Systems Center/ITC New Orleans			+4,000
134	CG(X)	150,022	86,022	−64,000
	Propulsion development ahead of material solution decision			−24,000
	Unjustified request			−40,000
135	DDG–1000	539,053	526,453	−12,600
	FSST alternative initiative			−12,600
139	Major T&E Investment	44,844	49,844	+5,000
	NAE Interoperability for Aircraft Carrier and Expeditionary Ships			+5,000
142	Small Business Innovative Research		2,000	+2,000
	Wave Energy Harvesting for Buoy Applications			+2,000
143	Technical Information Services	735	19,735	+19,000
	Hawaii Technology Development Venture			+10,500
	Integrated Manufacturing Enterprise			+5,000
	NSWC Indian Head Technology Transfer Office			+1,500
	Virtual Business Accelerator for the Silicon Prairie			+2,000
148	RDT&E Ship and Aircraft Support	193,353	183,353	−10,000
	MRTFB additional aircraft support early to need			−10,000
160	Strategic Sub & Weapons System Support	74,939	69,439	−5,500
	Adelos Program: Nuclear Security Sensor System			+3,500
	Joint Warhead Fuze Sustainment growth			−9,000
163	Navy Strategic Communications	43,982	46,982	+3,000
	E–6B Strategic Communications Upgrade—VLF–TX			+3,000
165	F/A–18 Squadrons	127,733	122,333	−5,400
	Fighter Jet Noise Reduction Under Carrier Deck Operational Environment			+3,600
	IRST contract delay			−9,000
167	Fleet Telecommunications (Tactical)	37,431	37,431	
	Shipboard Automated Radio Room System			+2,000
	NC3–LTS late Milestone B			−2,000
168	Tomahawk and Tomahawk Mission Planning Center (TMPC)	13,238	17,338	+4,100
	Tomahawk Cost Reduction Initiative			+4,100
171	Consolidated Training Systems Development	49,293	39,293	−10,000
	Reduction to growth			−10,000
175	Tactical Data Links	25,003	15,003	−10,000
	Increment 3 program uncertainty			−10,000
178	Aviation Improvements	135,840	134,149	−1,691
	Highly Conductive Lightweight Aircraft Sealant			+1,200

[In thousands of dollars]

Line	Item	2010 budget estimate	Committee recommendation	Change from budget estimate
	Laser Peening for P–3 Life Extension			+1,600
	Vet-Biz Initiative for National Sustainment			+5,000
	Wireless Sensors for Navy Aircraft			+3,000
	F–135 component improvement			−12,491
181	Marine Corps Communications Systems	287,348	277,348	−10,000
	Mobile Modular Command Center (M2C2)			+3,000
	DCGS-MC tech development excessive growth			−5,000
	C2 Warfare Systems reduce growth			−8,000
182	Marine Corps Ground Combat/Supporting Arms Systems	120,379	106,479	−13,900
	Expandable Rigid Wall Composite Shelter			+1,000
	LAV Indirect Fire Modernization			−12,200
	Battlefield Target Identification Device program uncertainty			−2,700
183	Marine Corps Combat Services Support	17,057	21,457	+4,400
	High Performance Capabilities for Military Vehicles Project			+1,400
	Marine Personnel Carrier Support System			+3,000
194	Information Systems Security Program	24,226	29,226	+5,000
	Trusted Discovery/Universal Description Discovery and Integration UDDI			+5,000
195	Joint Command and Control Program (JC2)	2,453		−2,453
	Program delay			−2,453
196	Joint Command and Control Program (JC2)	4,139		−4,139
	Program delay			−4,139
200	Tactical Unmanned Aerial Vehicles	8,971	8,871	−100
	New start UAS			−100
202	Airborne Reconnaissance Systems	46,208	50,558	+4,350
	FEATHAR—Fusion, Exploitation, Algorithm, Targeting High-Altitude Reconnaissance			+4,350
216	Industrial Preparedness	56,691	66,941	+10,250
	Low Acoustic and Thermal Signature Battlefield Power Source			+4,000
	Out of Autoclave Composite Processing			+2,000
	Life Extension of Weapon Systems Through Advanced Materials Processing			+2,500
	Flight/Hangar Deck Cleaner			+1,750
217	Maritime Technology (MARITECH)		4,000	+4,000
	National Shipbuilding Research Program Advanced Shipbuilding Enterprise			+4,000
	CLASSIFIED	1,258,018	1,142,318	−115,700
	Classified adjustments			−115,700

Advanced Tactical Data Links.—The budget request includes $18,700,000 for development of Advanced Tactical Data Links, including Joint Tactical Information Distribution System Increment III. Increment III is intended to address mandates by the National Security Agency, the Joint Chiefs of Staff, and the Federal Aviation Administration to implement cryptographic modernization and frequency remapping. The Committee is concerned that the requested program does not address the question of whether Increment III will include enhanced throughput capability upgrades. Adding an enhanced throughput requirement after the program is initiated in fiscal year 2010 would significantly increase the cost and complexity of the program, which is required to meet critical NSA, JCS, and FAA directives. The Committee is reluctant to initiate the Increment III upgrade program without a clear understanding of the program's requirements and acquisition strategy, and therefore recommends a reduction of $10,000,000.

Sea-based Strategic Deterrent [SBSD].—The budget request includes $387,517,000 to initiate technology demonstration and design efforts for the SBSD, a successor to the Ohio class ballistic missile submarines which will begin to retire in 2027. The program is being initiated to coincide with the United Kingdom's program to replace its Vanguard-class submarines, creating efficiencies and cost savings in the design of a common missile compartment.

Both the forthcoming Nuclear Posture Review and an analysis of alternatives are expected to inform key decisions about the specifications and performance of the Ohio class replacement. Although this submarine will remain in service for several decades, overly ambitious requirements will drive increased costs, further compounding challenges in future shipbuilding budgets. The Committee urges the Navy to continue to make cost a critical factor in design of the Ohio class replacement, and to continue to seek efficiencies by leveraging existing technology, cooperative international programs, and best practices of the U.S. industrial base.

High-integrity Global Positioning System [iGPS].—The Committee strongly supports the iGPS program since it continues to demonstrate better than anticipated performance in jammed environments. In July 2009, the Department of Defense validated in a field experiment that iGPS operates effectively in a severely jammed GPS environment by demonstrating acquisition and positioning from a cold start under more than 30 decibel jamming conditions. This capability is urgently requested by U.S. Special Operations Command [USSOCOM], and the funds in the fiscal year 2010 request will provide hand-held prototypes for use by USSOCOM forces. Upon successful demonstration of the prototype, the warfighters will have a capability to operate in a strongly jammed environment at least 10 years earlier than currently planned.

Mobile User Objective System [MUOS].—The Navy established a National Review Team [NRT] to assess the technical, schedule, and cost status of the MUOS satellites. The NRT reported its recommendations in August and found that MUOS is a sound technical program with an inadequate schedule and budget. The program will be rebaselined this fall, which will require additional funding in the out years to complete.

The first MUOS satellite is at least 1 year late, which increases the risk that the Navy will have a gap in Ultra High Frequency [UHF] service. Within 90 days of enactment of this act, the Committee directs the Navy to provide the defense oversight committees a mitigation strategy that would alleviate a break in UHF service. This strategy should look at all options, including maintaining the legacy systems longer, using commercially hosted payloads, and putting a UHF payload on Tactical Satellite-4 [TACSAT–4]. In addition, the Committee directs that $150,000,000 of the funding in Weapons Procurement, Navy for the second MUOS satellite launch vehicle be fenced until the defense oversight committees receive the rebaselined acquisition strategy and the mitigation plan. If additional funding is required to support the mitigation plan, the Committee will look favorably on a reprogramming to support the strategy.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, AIR FORCE

Appropriations, 2009	$27,084,340,000
Budget estimate, 2010	27,992,827,000
House allowance	27,976,278,000
Committee recommendation	28,049,015,000

The Committee recommends an appropriation of $28,049,015,000. This is $56,188,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

	Item	2010 budget estimate	House allowance	Committee recommendation	Change from—	
					budget estimate	House allowance
	RESEARCH, DEVELOPMENT, TEST & EVAL, AIR FORCE					
	BASIC RESEARCH					
1	DEFENSE RESEARCH SCIENCES	321,028	323,528	331,028	+10,000	+7,500
2	UNIVERSITY RESEARCH INITIATIVES	132,249	140,449	136,949	+4,700	−3,500
3	HIGH ENERGY LASER RESEARCH INITIATIVES	12,834	12,834	12,834	.....	.....
	TOTAL, BASIC RESEARCH	466,111	476,811	480,811	+14,700	+4,000
	APPLIED RESEARCH					
7	MEDICAL DEVELOPMENT	.....	.....	.....	.....	.....
7	MATERIALS	127,957	155,707	168,957	+41,000	+13,250
8	AEROSPACE VEHICLE TECHNOLOGIES	127,129	129,129	138,529	+11,400	+9,400
9	HUMAN EFFECTIVENESS APPLIED RESEARCH	85,122	85,122	96,122	+11,000	+11,000
10	AEROSPACE PROPULSION	196,529	226,669	199,529	+3,000	−27,140
11	AEROSPACE SENSORS	121,768	129,768	135,668	+13,900	+5,900
12	SPACE TECHNOLOGY	104,148	116,248	110,148	+6,000	−6,100
13	CONVENTIONAL MUNITIONS	58,289	58,289	58,289	.....	.....
14	DIRECTED ENERGY TECHNOLOGY	105,677	106,677	99,927	−5,750	−6,750
15	COMMAND CONTROL AND COMMUNICATIONS	.....	2,500	.....	.....	−2,500
16	DOMINANT INFORMATION SCIENCES AND METHODS	115,278	115,278	115,278	.....	.....
17	HIGH ENERGY LASER RESEARCH	52,754	61,254	46,654	−6,100	−14,600
	TOTAL, APPLIED RESEARCH	1,094,651	1,186,641	1,169,101	+74,450	−17,540
	ADVANCED TECHNOLOGY DEVELOPMENT					
18	ADVANCED MATERIALS FOR WEAPON SYSTEMS	37,901	56,301	64,501	+26,600	+8,200
19	SUSTAINMENT SCIENCE AND TECHNOLOGY (S&T)	2,955	2,955	2,955	.....	.....
20	ADVANCED AEROSPACE SENSORS	51,482	53,482	51,482	.....	−2,000
21	AEROSPACE TECHNOLOGY DEV/DEMO	76,844	91,844	76,844	.....	−15,000
22	AEROSPACE PROPULSION AND POWER TECHNOLOGY	175,676	191,176	178,676	+3,000	−12,500
23	CREW SYSTEMS AND PERSONNEL PROTECTION TECHNOLOGY	.....	.....	3,000	+3,000	+3,000
24	ELECTRONIC COMBAT TECHNOLOGY	31,021	32,521	31,021	.....	−1,500
25	ADVANCED SPACECRAFT TECHNOLOGY	83,909	98,609	90,409	+6,500	−8,200
26	MAUI SPACE SURVEILLANCE SYSTEM (MSSS)	5,813	5,813	37,813	+32,000	+32,000
27	HUMAN EFFECTIVENESS ADVANCED TECHNOLOGY DEVELOPMENT	24,565	24,565	24,565	.....	.....

28	CONVENTIONAL WEAPONS TECHNOLOGY	14,356	16,556	14,356	.....	−2,200
29	ADVANCED WEAPONS TECHNOLOGY	30,056	30,056	44,556	+14,500	+14,500
30	MANUFACTURING TECHNOLOGY PROGRAM	39,913	41,913	44,913	+5,000	+3,000
31	BATTLESPACE KNOWLEDGE DEVELOPMENT & DEMONSTRATION	39,708	39,708	39,708	.....	.....
32	C3I ADVANCED DEVELOPMENT	.....	4,000	2,900	+2,900	−1,100
33	HIGH ENERGY LASER ADVANCED TECHNOLOGY PROGRAM	3,831	3,831	3,831	.....	.....
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT	618,030	693,330	711,530	+93,500	+18,200
	DEMONSTRATION & VALIDATION					
34	INTELLIGENCE ADVANCED DEVELOPMENT	5,009	6,009	5,009	.....	−1,000
35	PHYSICAL SECURITY EQUIPMENT	3,623	3,623	3,623	.....	.....
37	GPS III—OPERATIONAL CONTROL SEGMENT	.....	.....	.....	.....	.....
38	ADVANCED EHF MILSATCOM (SPACE)	464,335	464,335	464,335	.....	.....
39	POLAR MILSATCOM (SPACE)	253,150	253,150	253,150	.....	.....
40	SPACE CONTROL TECHNOLOGY	97,701	97,701	102,701	+5,000	+5,000
41	COMBAT IDENTIFICATION TECHNOLOGY	27,252	27,252	29,252	+2,000	+2,000
42	NATO RESEARCH AND DEVELOPMENT	4,351	4,351	4,351	.....	.....
43	INTERNATIONAL SPACE COOPERATIVE R&D	632	632	632	.....	.....
45	INTEGRATED BROADCAST SERVICE	20,739	20,739	20,739	.....	.....
46	INTERCONTINENTAL BALLISTIC MISSILE	66,079	69,079	66,079	.....	−3,000
47	WIDEBAND GAPFILLER SYSTEM RDT&E (SPACE)	70,956	70,956	70,956	.....	.....
48	POLLUTION PREVENTION (DEM/VAL)	2,896	12,896	2,896	.....	−10,000
49	JOINT PRECISION APPROACH AND LANDING SYSTEMS	23,174	23,174	23,174	.....	.....
51	BATTLE MGMT COM & CTRL SENSOR DEVELOPMENT	22,612	.....	72,612	+50,000	+72,612
52	HARD AND DEEPLY BURIED TARGET DEFEAT SYSTEM	20,891	20,891	20,891	.....	.....
53	JOINT DUAL ROLE AIR DOMINANCE MISSILE	6,882	6,882	6,882	.....	.....
54	REQUIREMENTS ANALYSIS AND MATURATION	35,533	35,533	35,533	.....	.....
55	GROUND ATTACK WEAPONS FUZE DEVELOPMENT	18,778	18,778	18,778	.....	.....
56	ALTERNATIVE FUELS	89,020	94,020	69,020	−20,000	−25,000
57	AUTOMATED AIR-TO-AIR REFUELING	43,158	43,158	43,158	.....	.....
59	OPERATIONALLY RESPONSIVE SPACE	112,861	114,361	125,861	+13,000	+11,500
60	TECH TRANSITION PROGRAM	9,611	9,611	9,611	.....	.....
61	NATIONAL POLAR-ORBITING OPERATIONAL ENVIRONMENTAL SAT	396,641	396,641	396,641	.....	.....
61A	NEXT GENERATION MILSATCOM TECHNOLOGY DEVELOPMENT	.....	.....	50,000	+50,000	+50,000
	TOTAL, DEMONSTRATION & VALIDATION	1,795,884	1,793,772	1,895,884	+100,000	+102,112
	ENGINEERING & MANUFACTURING DEVELOPMENT					
62	GLOBAL BROADCAST SERVICE (GBS)	31,124	31,124	31,124	.....	.....
63	NUCLEAR WEAPONS SUPPORT	37,860	42,860	37,860	.....	−5,000

[In thousands of dollars]

	Item	2010 budget estimate	House allowance	Committee recommendation	Change from—	
					budget estimate	House allowance
65	SPECIALIZED UNDERGRADUATE FLIGHT TRAINING	6,227	10,862	7,862	+1,635	−3,000
68	ELECTRONIC WARFARE DEVELOPMENT	97,275	97,275	80,275	−17,000	−17,000
69	Tactical Data Networks Enterprise	88,444	88,444	82,944	−5,500	−5,500
70	PHYSICAL SECURITY EQUIPMENT	50	50	50	.....	.....
71	SMALL DIAMETER BOMB (SDB)	153,815	155,815	153,815	.....	−2,000
72	COUNTERSPACE SYSTEMS	64,248	64,248	64,248	.....	.....
73	SPACE SITUATION AWARENESS SYSTEMS	308,134	207,834	269,534	−38,600	+61,700
74	AIRBORNE ELECTRONIC ATTACK	11,107	11,107	11,107	.....	.....
75	SPACE-BASED INFRARED SYSTEM (SBIRS) HIGH EMD	512,642	526,442	512,642	.....	−13,800
76	THIRD GENERATION INFRARED SURVEILLANCE (3GIRS)	143,169	39,169	143,169	.....	+104,000
77	ARMAMENT/ORDNANCE DEVELOPMENT	18,671	18,671	18,671	.....	.....
78	SUBMUNITIONS	1,784	1,784	1,784	.....	.....
79	AGILE COMBAT SUPPORT	11,261	11,261	11,261	.....	.....
80	LIFE SUPPORT SYSTEMS	10,711	11,911	14,111	+3,400	+2,200
81	COMBAT TRAINING RANGES	29,718	29,718	14,718	−15,000	−15,000
82	INTEGRATED COMMAND & CONTROL APPLICATIONS (IC2A)	10	9,010	10	.....	−9,000
83	INTELLIGENCE EQUIPMENT	1,495	1,495	1,495	.....	.....
84	JOINT STRIKE FIGHTER (JSF)	1,858,055	2,073,055	1,780,055	−78,000	−293,000
85	INTERCONTINENTAL BALLISTIC MISSILE	60,010	60,010	60,010	.....	.....
86	EVOLVED EXPENDABLE LAUNCH VEHICLE PROGRAM (SPACE)	26,545	51,545	26,545	.....	−25,000
88	NEXT GENERATION AERIAL REFUELING AIRCRAFT	439,615	.....	409,615	−30,000	+409,615
89	CSAR–X RDT&E	89,975	9,975	.....	−89,975	−9,975
89a	HH–60 RDT&E	.....	.....	14,975	+14,975	+14,975
90	HC/MC–130 RECAP RDT&E	20,582	20,582	20,582	.....	.....
91	Joint SIAP Executive Program Office	34,877	34,877	14,877	−20,000	−20,000
92	LINK–16 SUPPORT AND SUSTAINMENT	.....	.....	79,300	+79,300	+79,300
94	SINGLE INTEGRATED AIR PICTURE (SIAP)	13,466	13,466	13,466	.....	.....
95	FULL COMBAT MISSION TRAINING	99,807	99,807	79,807	−20,000	−20,000
97	JOINT CARGO AIRCRAFT (JCA)	9,353	9,353	9,353	.....	.....
98	CV–22	19,640	19,640	19,640	.....	.....
99	AIRBORNE SENIOR LEADER C3 (SLC3S)	20,056	20,056	20,056	.....	.....
	TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT	4,219,726	3,771,446	4,004,961	−214,765	+233,515

	RDT&E MANAGEMENT SUPPORT					
100	THREAT SIMULATOR DEVELOPMENT	27,789	27,789	27,789	.....	.....
101	MAJOR T&E INVESTMENT	60,824	63,324	67,824	+7,000	+4,500
102	RAND PROJECT AIR FORCE	27,501	27,501	29,501	+2,000	+2,000
104	INITIAL OPERATIONAL TEST & EVALUATION	25,833	25,833	25,833	.....	.....
105	TEST AND EVALUATION SUPPORT	736,488	736,488	755,788	+19,300	+19,300
106	ROCKET SYSTEMS LAUNCH PROGRAM (SPACE)	14,637	14,637	14,637	.....	.....
107	SPACE TEST PROGRAM (STP)	47,215	47,215	47,215	.....	.....
108	FACILITIES RESTORATION & MODERNIZATION—TEST & EVAL	52,409	60,409	52,409	.....	−8,000
109	FACILITIES SUSTAINMENT—TEST AND EVALUATION SUPPORT	29,683	29,683	34,683	+5,000	+5,000
110	ACQUISITION AND MANAGEMENT SUPPORT	18,947	18,947	18,947	.....	.....
111	GENERAL SKILL TRAINING	1,450	1,450	1,450	.....	.....
113	INTERNATIONAL ACTIVITIES	3,748	3,748	3,748	.....	.....
	TOTAL, RDT&E MANAGEMENT SUPPORT	1,046,524	1,057,024	1,079,824	+33,300	+22,800
	OPERATIONAL SYSTEMS DEVELOPMENT					
114	COMMON VERTICAL LIFT SUPPORT PLATFORM	9,513	2,000	5,513	−4,000	+3,513
115	ANTI–TAMPER TECHNOLOGY EXECUTIVE AGENCY	47,276	47,276	47,276	.....	.....
117	B–52 SQUADRONS	93,930	102,930	99,930	+6,000	−3,000
118	AIR-LAUNCHED CRUISE MISSILE (ALCM)	3,652	3,652	3,652	.....	.....
119	B–1B SQUADRONS	148,025	178,025	179,025	+31,000	+1,000
120	B–2 SQUADRONS	415,414	436,714	397,414	−18,000	−39,300
121	STRAT WAR PLANNING SYSTEM—USSTRATCOM	33,836	33,836	33,836	.....	.....
122	NIGHT FIST—USSTRATCOM	5,328	5,328	5,328	.....	.....
124	ATMOSPHERIC EARLY WARNING SYSTEM	9,832	9,832	9,832	.....	.....
125	REGION/SECTOR OPERATION CONTROL CENTER MODERNIZATION	25,734	25,734	25,734	.....	.....
126	STRATEGIC AEROSPACE INTELLIGENCE SYSTEM ACTIVITIES	18	18	18	.....	.....
127	WARFIGHTER RAPID ACQUISITION PROCESS (WRAP) RAPID TRAN	11,996	11,996	11,996	.....	.....
128	MQ–9 UAV	39,245	109,245	39,245	.....	−70,000
129	Multi-Platform Electronic Warfare Equipment	14,747	14,747	14,747	.....	.....
130	A–10 SQUADRONS	9,697	9,697	12,197	+2,500	+2,500
131	F–16 SQUADRONS	141,020	141,020	143,020	+2,000	+2,000
132	F–15E SQUADRONS	311,167	320,167	323,167	+12,000	+3,000
133	MANNED DESTRUCTIVE SUPPRESSION	10,748	10,748	8,748	−2,000	−2,000
134	F–22 SQUADRONS	569,345	569,345	569,345	.....	.....
135	TACTICAL AIM MISSILES	5,915	5,915	5,915	.....	.....
136	ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM)	49,971	49,971	49,971	.....	.....
137	JOINT HELMET MOUNTED CUEING SYSTEM (JHMCS)	2,529	2,529	2,529	.....	.....
138	COMBAT RESCUE—PARARESCUE	2,950	2,950	2,950	.....	.....
139	AF TENCAP	11,643	11,643	11,643	.....	.....

[In thousands of dollars]

	Item	2010 budget estimate	House allowance	Committee recommendation	Change from—	
					budget estimate	House allowance
140	PRECISION ATTACK SYSTEMS PROCUREMENT	2,950	2,950	2,950	.....	.....
141	COMPASS CALL	13,019	13,019	13,019	.....	.....
142	AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM	166,563	157,563	154,563	−12,000	−3,000
143	CSAF INNOVATION PROGRAM	4,621	4,621	12,921	+8,300	+8,300
144	JOINT AIR-TO-SURFACE STANDOFF MISSILE (JASSM)	29,494	29,494	29,494	.....	.....
145	AIR AND SPACE OPERATIONS CENTER (AOC)	99,405	101,405	103,405	+4,000	+2,000
146	CONTROL AND REPORTING CENTER (CRC)	52,508	52,508	52,508	.....	.....
147	AIRBORNE WARNING AND CONTROL SYSTEM (AWACS)	176,040	176,040	176,040	.....	.....
149	ADVANCED COMMUNICATIONS SYSTEMS	63,782	63,782	63,782	.....	.....
151	COMBAT AIR INTELLIGENCE SYSTEM ACTIVITIES	1,475	1,475	1,475	.....	.....
152	THEATER BATTLE MANAGEMENT (TBM) C4I	19,067	19,067	19,067	.....	.....
153	FIGHTER TACTICAL DATA LINK	72,106	72,106	62,106	−10,000	−10,000
155	C2ISR TACTICAL DATA LINK	1,667	1,667	1,667	.....	.....
156	COMMAND AND CONTROL (C2) CONSTELLATION	26,792	31,792	26,792	.....	−5,000
157	JOINT SURVEILLANCE AND TARGET ATTACK RADAR SYSTEM	140,670	140,670	175,670	+35,000	+35,000
158	SEEK EAGLE	22,071	22,071	22,071	.....	.....
159	USAF MODELING AND SIMULATION	27,245	27,245	27,245	.....	.....
160	WARGAMING AND SIMULATION CENTERS	7,018	7,018	7,018	.....	.....
161	DISTRIBUTED TRAINING AND EXERCISES	6,740	6,740	6,740	.....	.....
162	MISSION PLANNING SYSTEMS	91,995	91,995	41,995	−50,000	−50,000
163	INFORMATION WARFARE SUPPORT	12,271	14,271	12,271	.....	−2,000
170	E–4B NATIONAL AIRBORNE OPERATIONS CENTER (NAOC)	26,107	26,107	26,107	.....	.....
172	MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK	72,694	72,694	72,694	.....	.....
173	INFORMATION SYSTEMS SECURITY PROGRAM	196,621	196,621	136,621	−60,000	−60,000
174	GLOBAL COMBAT SUPPORT SYSTEM	3,375	3,375	3,375	.....	.....
175	GLOBAL COMMAND AND CONTROL SYSTEM	3,149	7,149	3,149	.....	−4,000
176	JOINT COMMAND AND CONTROL PROGRAM (JC2)	3,087	3,087	.....	−3,087	−3,087
177	MILSATCOM TERMINALS	257,693	257,693	257,693	.....	.....
179	AIRBORNE SIGINT ENTERPRISE	176,989	176,989	166,989	−10,000	−10,000
181	ADVANCED GEOSPATIAL INTELLIGENCE	.....	.....	6,500	+6,500	+6,500
182	GLOBAL AIR TRAFFIC MANAGEMENT (GATM)	6,028	6,028	6,028	.....	.....
183	CYBER SECURITY INITIATIVE	2,065	2,065	7,065	+5,000	+5,000
184	SATELLITE CONTROL NETWORK (SPACE)	20,991	20,991	20,991	.....	.....
185	WEATHER SERVICE	33,531	33,531	33,531	.....	.....
186	AIR TRAFFIC CONTROL, APPROACH, & LANDING SYSTEM (ATC)	9,006	9,006	12,006	+3,000	+3,000

187	AERIAL TARGETS	54,807	54,807	54,807	.....	.....
190	SECURITY AND INVESTIGATIVE ACTIVITIES	742	742	742	.....	.....
192	DEFENSE JOINT COUNTERINTELLIGENCE ACTIVITIES	39	39	39	.....	.....
194	NAVSTAR GLOBAL POSITIONING SYSTEM (USER EQUIPMENT)	137,692	137,692	137,692	.....	.....
195	NAVSTAR GLOBAL POSITIONING SYSTEM (SPACE AND CONTROL)	52,039	52,039	52,039	.....	.....
197	SPACE AND MISSILE TEST AND EVALUATION CENTER	3,599	3,599	3,599	.....	.....
198	SPACE WARFARE CENTER	3,009	3,009	3,009	.....	.....
199	SPACELIFT RANGE SYSTEM (SPACE)	9,957	9,957	9,957	.....	.....
200	INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS	1,240	2,240	1,240	.....	−1,000
202	ENDURANCE UNMANNED AERIAL VEHICLES	73,736	73,736	38,736	−35,000	−35,000
203	AIRBORNE RECONNAISSANCE SYSTEMS	143,892	145,892	143,892	.....	−2,000
204	MANNED RECONNAISSANCE SYSTEMS	12,846	15,346	12,846	.....	−2,500
205	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	82,765	82,765	82,765	.....	.....
206	PREDATOR UAV (JMIP)	18,101	24,301	22,101	+4,000	−2,200
207	RQ–4 UAV	317,316	317,316	317,316	.....	.....
208	NETWORK–CENTRIC COLLABORATIVE TARGET (TIARA)	8,160	8,160	8,160	.....	.....
209	GPS III SPACE SEGMENT	815,095	717,695	425,695	−389,400	−292,000
209A	GPS CONTROL SEGMENT (OCX)	.....	.....	292,000	+292,000	+292,000
210	JSPOC MISSION SYSTEM	131,271	131,271	137,271	+6,000	+6,000
211	INTELLIGENCE SUPPORT TO INFORMATION WARFARE	5,267	5,267	5,267	.....	.....
213	NUDET DETECTION SYSTEM (SPACE)	84,021	84,021	84,021	.....	.....
214	NATIONAL SECURITY SPACE OFFICE	10,634	.....	10,634	.....	+10,634
215	SPACE SITUATION AWARENESS OPERATIONS	54,648	54,648	54,648	.....	.....
216	NASS, IO TECHNOLOGY INTEGRATION & TOOL DEVELOPMENT	30,076	30,076	30,076	.....	.....
217	SHARED EARLY WARNING (SEW)	3,082	3,082	3,082	.....	.....
218	C–130 AIRLIFT SQUADRON	201,250	201,250	182,250	−19,000	−19,000
219	C–5 AIRLIFT SQUADRONS	95,266	95,266	85,266	−10,000	−10,000
220	C–17 AIRCRAFT	161,855	161,855	161,855	.....	.....
221	C–130J PROGRAM	30,019	30,019	30,019	.....	.....
222	LARGE AIRCRAFT IR COUNTERMEASURES (LAIRCM)	31,784	31,784	26,784	−5,000	−5,000
223	KC–135S	10,297	10,297	10,297	.....	.....
224	KC–10S	35,586	35,586	35,586	.....	.....
226	OPERATIONAL SUPPORT AIRLIFT	4,916	4,916	4,916	.....	.....
227	AIR MOBILITY TACTICAL DATA LINK	.....	.....	.....	.....	.....
228	SPECIAL TACTICS/COMBAT CONTROL	8,222	10,222	10,222	+2,000	.....
229	DEPOT MAINTENANCE (NON–IF)	1,508	1,508	1,508	.....	.....
217	ACQUISITION AND MANAGEMENT SUPPORT	.....	.....	.....	.....	.....
231	INDUSTRIAL PREPAREDNESS	.....	4,000	1,000	+1,000	−3,000
232	LOGISTICS INFORMATION TECHNOLOGY (LOGIT)	246,483	246,483	246,483	.....	.....
233	SUPPORT SYSTEMS DEVELOPMENT	6,288	12,788	38,188	+31,900	+25,400

[In thousands of dollars]

	Item	2010 budget estimate	House allowance	Committee recommendation	Change from—	
					budget estimate	House allowance
234	OTHER FLIGHT TRAINING	805	805	805	.....	.....
235	JOINT NATIONAL TRAINING CENTER	3,220	3,220	3,220	.....	.....
236	TRAINING DEVELOPMENTS	1,769	1,769	1,769	.....	.....
237	OTHER PERSONNEL ACTIVITIES	116	116	116	.....	.....
238	JOINT PERSONNEL RECOVERY AGENCY	6,376	6,376	6,376	.....	.....
240	CIVILIAN COMPENSATION PROGRAM	8,174	8,174	8,174	.....	.....
241	PERSONNEL ADMINISTRATION	10,492	10,492	30,982	+20,490	+20,490
242	FINANCIAL MANAGEMENT INFORMATION SYSTEMS DEVELOPMENT	55,991	55,991	55,991	.....	.....
	TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT	6,796,817	6,848,770	6,642,020	−154,797	−206,750
999	CLASSIFIED PROGRAMS	11,955,084	12,148,484	12,064,884	+109,800	−83,600
	TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, AIR FORCE	27,992,827	27,976,278	28,049,015	+56,188	+72,737

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Program element title	Fiscal year 2010 base	Committee recommendation	Change from budget estimate
1	Defense Research Sciences	321,028	331,028	+10,000
	Coal Transformation Laboratory			+1,000
	Development and Validation of Advanced Design Technologies for Hypersonic Research			+2,000
	Development of Deployable Biosensors			+2,000
	Safeguarding End-User Military Software			+5,000
2	University Research Initiatives	132,249	136,949	+4,700
	Cyber Innovation Center (CIC) Research and Development Seed Fund			+1,000
	Cybersecurity of Security Control Networks			+1,700
	High Temperature Hydrogen Energy Production Facility			+1,000
	Cyber Security Laboratory (CSL)			+1,000
7	Materials	127,957	168,957	+41,000
	Advanced Aerospace Carbon Foam Heat Exchangers			+4,000
	Air Force Minority Leaders Program			+6,000
	Aircraft Fatigue Modeling and Simulation			+3,000
	Conducting Polymer Stress and Polymer Damage Sensors for Composites			+3,600
	Consortium for Nanomaterials for Aerospace Commerce and Technology (CONTACT)			+4,000
	Development of Mobile Wind Turbine Systems to Power Forward Bases			+1,500
	Energy Efficiency, Recovery and Generation (ENERGy)			+1,000
	Fire- and Blast-Resistant Materials for Force Protection			+4,000
	Hybrid Materials Integration (HMI)			+2,500
	LGX High Temperature Acoustic Wave Sensors			+2,000
	Lightning Protection of Composites			+3,000
	Mid-IR Laser Materials			+1,000
	ONAMI Safer Nanomaterials and Nanomanufacturing			+4,400
	Temperature Resistant Landing Pad Jet Blast Protection			+1,000
8	Aerospace Vehicle Technologies	127,129	138,529	+11,400
	Materials Integrity Management Research for the Air Force			+3,000
	UAV Sensor and Maintenance Development Center			+4,900
	Unmanned Aerial System Exploitation			+3,500
9	Human Effectiveness Applied Research	85,122	96,122	+11,000
	Advanced Night Vision System—Cockpit Integration			+1,000
	Imaging Tools for Human Performance Enhancement and Diagnostics			+2,000
	Center for UAS Research, Education & Training			+8,000
10	Aerospace Propulsion	196,529	199,529	+3,000
	Energy Superior Lithium Battery Technology For Defense Applications			+2,000
	HEETE—funded in Public Law 111–5			−5,000
	Next Generation Solar Electric In-Space Propulsion			+1,000
	Split Discharge Variable Delivery Pump for Military Aircraft			+2,000
	Thermal and Energy Management for Aerospace II (THEMA II)			+3,000
11	Aerospace Sensors	121,768	135,668	+13,900
	Advanced Integrated Microsystems for Military Electronic Systems			+3,100

[In thousands of dollars]

Line	Program element title	Fiscal year 2010 base	Committee recommendation	Change from budget estimate
	Edwards Rocket Test Stand 2–A Improvements			+4,000
	Information Quality Tools for Persistent Surveillance Data Sets			+1,800
	On-Chip Integrated Photonic Polymer Transceiver			+5,000
12	Space Technology	104,148	110,148	+6,000
	AFRL Seismic Research Program			+5,000
	Reconfigurable Electronics and Non-Volatile Memory Research			+1,000
14	Directed Energy Technology	105,677	99,927	−5,750
	Chemical laser technology—authorization adjustment			−5,750
17	High Energy Laser Research	52,754	46,654	−6,100
	Chemical laser technology—authorization adjustment			−6,100
18	Advanced Materials for Weapon Systems	37,901	64,501	+26,600
	Aircraft Evaluation Readiness Initiative			+3,000
	Automated Processing of Advanced Low Observables (RAPALO)			+1,500
	Metals Affordability Initiative			+5,000
	Military Waste-to-Energy Project using the Hydro-Thermal Energy Conversion (Hy-TEC) Process			+2,000
	Sewage-Derived Biofuels Project			+4,800
	SiC-RF Power for Airborne Avionics Systems			+2,000
	Silicon Carbide Electronics Material Producibility Initiative			+6,300
	Strategic Biofuels Supply System			+2,000
22	Aerospace Propulsion and Power Technology	175,676	178,676	+3,000
	ADVENT—funded in Public Law 111–5			−6,000
	Algal Biofuels for Aviation			+3,000
	Methanol Fuel Cell Development for USAF Battlefield Renewable Integrated Tactical Energy System (BRITES)			+3,000
	Silicon Carbide Power Modules for the F–35 Joint Strike Fighter			+3,000
23	Crew Systems and Personnel Protection Technology		3,000	+3,000
	Water for Injection and Air Purification with Carbon Nanotube Nanostructured Material			+3,000
25	Advanced Spacecraft Technology	83,909	90,409	+6,500
	P-Net Ballistic Missile Technology			+2,500
	Domestic Manufacturing of 45nm Electronics			+4,000
26	Maui Space Surveillance System (MSSS)	5,813	37,813	+32,000
	FLASH Hyper-Dimensional Imaging for Near Space Surveillance and Ballistic Missile Defense			+2,000
	Maui Space Surveillance System Operations and Research			+20,000
	PanSTARRS			+10,000
29	Advanced Weapons Technology	30,056	44,556	+14,500
	Advanced Fiber Lasers Systems and Components			+4,000
	Applications of LIDAR to Vehicles with Analysis			+6,500
	Real-time Optical Surveillance Applications			+4,000
30	Manufacturing Technology Program	39,913	44,913	+5,000
	Next Generation Casting Initiative			+5,000
32	C3I Advanced Development		2,900	+2,900
	MPOI for Battlespace Information Exchange			+2,900
40	Space Control Technology	97,701	102,701	+5,000
	Space situational awareness			+5,000
41	Combat Identification Technology	27,252	29,252	+2,000
	Advanced Fast Steering Mirror Applications for 3–D LADAR in LITENING Pod			+2,000
51	Battle Mgmt Com & Ctrl Sensor Development	22,612	72,612	+50,000
	RTIP development for large aircraft platform			+50,000
56	Alternative Fuels	89,020	69,020	−20,000
	Excess to need			−20,000
59	Operationally Responsive Space	112,861	125,861	+13,000

[In thousands of dollars]

Line	Program element title	Fiscal year 2010 base	Committee recommendation	Change from budget estimate
	Low-Earth Orbit Nanosatellite Integrated Defense Autonomous Systems (LEONIDAS)			+5,000
	Rapid Small Satellite Development Test Facilities			+2,000
	Space Sensor Data Link Technology			+6,000
61a	Next Generation MILSATCOM Technology Development		50,000	+50,000
	Next Generation MILSATCOM Technology Development—transfer from MPAF, Line 16			+50,000
65	Specialized Undergraduate Flight Training	6,227	7,862	+1,635
	AT–6B Capability Demonstration for ANG			+4,000
	T–38 Improved Brake System Program—program cancelled in fiscal year 2009			−2,365
68	Electronic Warfare Development	97,275	80,275	−17,000
	MALD–J excess to Air Force requirement			−17,000
69	Tactical Data Networks Enterprise	88,444	82,944	−5,500
	Excess to need			−10,000
	Global UAS Networking and Interoperability System (GUNIS)			+4,500
73	Space Situation Awareness Systems	308,134	269,534	−38,600
	High Accuracy Network Determination System-Intelligent Optical Network for Space Situational Awareness			+5,000
	Space Surveillance Telescope (SST)			−6,900
	SBSS follow-on—program delay			−36,700
80	Life Support Systems	10,711	14,111	+3,400
	ACES 5 Ejection Seat			+2,400
	Backpack Medical Oxygen System (BMOS)			+1,000
81	Combat Training Ranges	29,718	14,718	−15,000
	ACTS Range Threat Systems—program delay			−15,000
84	Joint Strike Fighter (JSF)	1,858,055	1,780,055	−78,000
	Excess to need			−78,000
88	Next Generation Aerial Refueling Aircraft	439,615	409,615	−30,000
	Contract award delay			−30,000
89	CSAR–X RDT&E	89,975		−89,975
	Air Force requested transfer to RDAF, Line 89A and APAF, Line 14			−89,975
89A	HH–60 RDT&E		14,975	+14,975
	HH–60 Replacements—Air Force requested transfer from RDAF, Line 89			+14,975
91	Joint SIAP Executive Program Office	34,877	14,877	−20,000
	Unjustified request			−20,000
92	Link-16 Support and Sustainment		79,300	+79,300
	DOD requested transfer from Title VI Rapid Acquisition Fund for BACN			+79,300
95	Full Combat Mission Training	99,807	79,807	−20,000
	Contract award delay			−20,000
101	Major T&E Investment	60,824	67,824	+7,000
	Holloman High Speed Test Track			+7,000
102	RAND Project Air Force	27,501	29,501	+2,000
	RAND Project Air Force			+2,000
105	Test and Evaluation Support	736,488	755,788	+19,300
	Authorization increase—Test Resources Management Center			+19,300
109	Facilities Sustainment—Test and Evaluation Support	29,683	34,683	+5,000
	Sustainable Energy Vermont National Guard			+5,000
114	Common Vertical Lift Support Platform	9,513	5,513	−4,000
	Excess to need			−4,000
117	B–52 Squadrons	93,930	99,930	+6,000
	B–52 Tactical Data Link Capability			+6,000
119	B–1B Squadrons	148,025	179,025	+31,000
	AF requested transfer from APAF, Line 28			+29,000
	B–1 Bomber AESA Radar Operational Utility Evaluation			+2,000
120	B–2 Squadrons	415,414	397,414	−18,000
	B–2 Advanced Tactical Data Link			+12,000

[In thousands of dollars]

Line	Program element title	Fiscal year 2010 base	Committee recommendation	Change from budget estimate
	EHF SATCOM Increment 2—premature request			−30,000
130	A–10 Squadrons	9,697	12,197	+2,500
	CAD/CAM Aircraft Structural Overhaul Work Center			+2,500
131	F–16 Squadrons	141,020	143,020	+2,000
	Thunder Radar Pod			+2,000
132	F–15E Squadrons	311,167	323,167	+12,000
	F–15C AESA Classified Demo			+12,000
133	Manned Destructive Suppression	10,748	8,748	−2,000
	Funding ahead of need			−2,000
142	Aircraft Engine Component Improvement Program	166,563	154,563	−12,000
	F–135 component improvement funding ahead of need			−12,000
143	CSAF Innovation Program	4,621	12,921	+8,300
	Eagle Vision III Upgrades			+6,000
	Multiband Realtime Hyperspectral Targeting Sensor			+2,300
145	Air & Space Operations Center (AOC)	99,405	103,405	+4,000
	COTS Technology for Space Command and Control			+4,000
153	Fighter Tactical Data Link	72,106	62,106	−10,000
	Excess to need			−10,000
157	Joint Surveillance/Target Attack Radar System (JSTARS)	140,670	175,670	+35,000
	Re-engining program—transfer from APAF, Line 59			+35,000
162	Mission Planning Systems	91,995	41,995	−50,000
	Increment IV re-plan and TASM development delay			−50,000
173	Information Systems Security Program	196,621	136,621	−60,000
	Restructure of Cryptographic Modernization program			−35,000
	Premature request			−25,000
176	Joint Command and Control Program (JC2)	3,087		−3,087
	Program termination			−3,087
179	Airborne SIGINT Enterprise	176,989	166,989	−10,000
	ASIP RQ–4 program delay			−10,000
181	Advanced Geospatial Intelligence (AGI)		6,500	+6,500
	Advanced Technical Intelligence Center (ATIC)			+6,500
183	Cyber Security Initiative	2,065	7,065	+5,000
	Cyber Attack and Security Environment (CASE)			+5,000
186	Air Traffic Control, Approach, and Landing System (ATCALS)	9,006	12,006	+3,000
	Transportable Transponder Landing System			+3,000
202	Endurance Unmanned Aerial Vehicles	73,736	38,736	−35,000
	ISIS—authorization adjustment			−35,000
206	MQ–1 Predator A UAV	18,101	22,101	+4,000
	Multi Sensor Detect, Sense and Aoid (MSDSA)			+4,000
209	GPS III Space Segment	815,095	425,695	−389,400
	GPS Control Segment (OCX)—transfer to Line 209A			−389,400
209A	GPS Control Segment (OCX)		292,000	+292,000
	GPS Control Segment (OCX)—transfer from Line 209 (reduction due to contract award delay)			+292,000
210	JSpOC Mission System	131,271	137,271	+6,000
	Project Karnac—authorization adjustment			+6,000
218	C–130 Airlift Squadron	201,250	182,250	−19,000
	Funded in prior year reprogramming			−19,000
219	C–5 Airlift Squadrons (IF)	95,266	85,266	−10,000
	C–5 RERP—program underexecution			−10,000
222	Large Aircraft IR Countermeasures (LAIRCM)	31,784	26,784	−5,000
	Program underexecution			−5,000
228	Special Tactics/Combat Control	8,222	10,222	+2,000
	Next Generation Simulation Training for Pararescue Forces			+2,000
231	Industrial Preparedness		1,000	+1,000
	Mobile Laser Systems for Aircraft Structures (MLSAS)			+1,000
233	Support Systems Development	6,288	38,188	+31,900

[In thousands of dollars]

Line	Program element title	Fiscal year 2010 base	Committee recommendation	Change from budget estimate
	Alternative energy research and integration			+25,000
	Assessment of Alternative Energy for Aircraft Ground Equipment (AGE)			+2,000
	Freedom Fuels/Coal Fuel Alliance			+4,900
241	Personnel Administration	10,492	30,982	+20,490
	DIMHRS—OSD requested transfer from RDDW, Line 117			+20,490
999	Other Programs	11,955,084	12,064,884	+109,800
	Classified adjustments			−30,200
	Classified program			+140,000

Maui Space Surveillance System [MSSS].—The Committee recommends an increase of $20,000,000 over the President's budget request for sustainment, investment in new technologies and initiatives, and research and development activities at MSSS. The Committee is concerned that the Air Force will apply taxes to MSSS programs at excessive rates for lab overhead, and directs the Air Force to base its overhead charges only on the amount requested. None of the increases provided in this program element or other program elements that conduct research activities at the site shall be subject to Air Force taxes or withholds. Furthermore, research funds should be allocated by Air Force officials on-site to local programs that offer the greatest potential return and merit.

High Accuracy Network Determination System-Intelligent Optical Network [HANDS–ION] Joint Capability Technology Demonstration [JCTD].—The Committee recommends an increase of $5,500,000 for the HANDS–ION program. This project addresses current shortfalls in space situational awareness and has been reviewed and recommended by the Department of Defense as a JCTD program.

Missile Warning.—The Committee remains concerned over the development challenges that the Space-based Infra-Red System [SBIRS] Geosynchronous Earth Orbit [GEO] satellites continue to encounter. The program is more than 8 years behind schedule and at least $7,500,000,000 over its original cost estimate. In June, the Committee was informed that the program is facing another potential schedule delay and cost increase associated with a number of parts quality issues. The Air Force has not yet determined the impact to cost and schedule of these most recent findings. Due to chronic problems and the importance of missile warning for national security, the Committee supports the Third Generation Infra-Red Surveillance program in order to ensure that development funding is being invested in missile warning capabilities.

RAND Project Air Force.—The Committee recognizes the value of the research and analysis produced by RAND's Project Air Force for the senior leadership of the Air Force. The core program of Project Air Force must be effectively and efficiently prioritized and managed. The Committee is concerned that funding for the program is insufficient and encourages the Air Force in its fiscal year 2011 budget request to provide a stable level of effort at not less than 80 percent of the Project Air Force ceiling.

F–22.—The Committee includes a general provision that would allow the Department of Defense to develop an export version of

the F–22 aircraft. The Committee urges the Air Force to start this effort within the funds appropriated in Research, Development, Test and Evaluation, Air Force for the F–22 aircraft.

Joint Air-to-Surface Standoff Missile [JASSM].—The Committee is concerned over the chronic cost growth and poor test performance in the JASSM program. Its successor program, JASSM-Extended Range [ER], is currently performing better than the baseline program and provides more capability to the warfighter. Therefore, the Committee believes that the Air Force should focus its efforts on the JASSM–ER version of the missile.

The Committee remains concerned, however, over the cost growth of the program and the overall unit cost of the JASSM–ER missile and believes that in order to make the JASSM–ER program affordable, costs need to remain stable. The Committee directs the Government Accountability Office to provide the congressional defense oversight committees with a report on the JASSM and JASSM–ER programs to include reliability, unit cost, and production performance by April 16, 2010.

Joint Surveillance-Target Attack Radar System [JSTARS] Re-engining.—The Committee understands that the Air Force Fleet Viability Board recently assessed the long-term viability of the JSTARS aircraft. The report recommends that if JSTARS is needed to support the large sensor and associated communications for airborne battle management, command, control, intelligence, surveillance, and reconnaissance for at least 25 more years, the Air Force must modernize the fleet. The modernization effort that they recommend includes upgraded avionics and cockpit displays, re-engining, and defensive suites to enhance survivability. The cost is high, exceeding $5,500,000,000 for the 17 aircraft in the fleet. The Committee is concerned about the significant cost of this modernization effort and whether the Air Force is committed to the program.

Since the Air Force has not determined how to proceed with the program, the Air Force informed the Committee that no funding was required in Aircraft Procurement, Air Force [APAF] for the re-engining program in fiscal year 2010. The Committee has provided an additional $35,000,000 for the JSTARS re-engining system design and development [SDD] program in order to ensure that funding is available if the Department of Defense decides it will proceed with re-engining the aircraft. In addition, the budget request contains $16,000,000 and the Air Force will carry over $13,000,000 in fiscal year 2009 funds making a total of $64,000,000 available in fiscal year 2010 for the SDD work. The Committee directs, however, that none of these funds be obligated or expended until the congressional defense oversight committees are provided a report from the Under Secretary of Defense for Acquisition, Technology and Logistics that provides an affordable and executable plan for re-engining the JSTARS fleet.

Joint Precision Approach and Landing System [JPALS] Increment 2-Land Based.—The Committee recognizes the importance of JPALS in providing seamless civil-military interoperability when operating from land-based sites. The Secretary of Defense is urged to establish requirements for JPALS Increment 2 that reflect to the maximum extent possible the importance of interoperability by en-

suring equivalent levels of flight safety and performance in precision landings by military versions of civil transport aircraft and by the Civil Reserve Air Fleet at both military and civilian airfields.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, DEFENSE-WIDE

Appropriations, 2009	$21,423,338,000
Budget estimate, 2010	20,741,542,000
House allowance	20,721,723,000
Committee recommendation	20,408,968,000

The Committee recommends an appropriation of $20,408,968,000. This is $332,574,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

	Item	2010 budget estimate	House allowance	Committee recommendation	Change from—	
					budget estimate	House allowance
	RESEARCH, DEVELOPMENT, TEST & EVAL, DEFENSE-WIDE					
	BASIC RESEARCH					
1	DTRA UNIVERSITY STRATEGIC PARTNERSHIP BASIC RESEARCH	48,544	48,544	33,544	−15,000	−15,000
2	DEFENSE RESEARCH SCIENCES	226,125	242,825	194,218	−31,907	−48,607
3	GOVT/INDUSTRY COSPONSORSHIP OF UNIVERSITY RESEARCH	.....	5,000	.....	.....	−5,000
5	NATIONAL DEFENSE EDUCATION PROGRAM	89,980	89,980	69,980	−20,000	−20,000
6	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	58,974	79,474	67,874	+8,900	−11,600
	TOTAL, BASIC RESEARCH	423,623	465,823	365,616	−58,007	−100,207
	APPLIED RESEARCH					
7	INSENSITIVE MUNITIONS—EXPLORATORY DEVELOPMENT	22,669	18,961	15,112	−7,557	−3,849
9	HISTORICALLY BLACK COLLEGES & UNIV (HBCU) SCIENCE	15,164	65,521	18,464	+3,300	−47,057
10	LINCOLN LABORATORY RESEARCH PROGRAM	34,034	34,034	34,034	.....	.....
11	INFORMATION AND COMMUNICATIONS TECHNOLOGY	282,749	285,749	255,931	−26,818	−29,818
12	COGNITIVE COMPUTING SYSTEMS	142,840	144,840	142,840	.....	−2,000
13	BIOLOGICAL WARFARE DEFENSE	40,587	40,587	40,587	.....	.....
14	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	209,072	226,572	215,972	+6,900	−10,600
15	JOINT DATA MANAGEMENT ADVANCED DEVELOPMENT	4,940	4,940	.....	−4,940	−4,940
16	HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) APP	9,446	9,446	7,946	−1,500	−1,500
17	TACTICAL TECHNOLOGY	276,075	278,075	241,125	−34,950	−36,950
18	MATERIALS AND BIOLOGICAL TECHNOLOGY	268,859	268,959	272,359	+3,500	+3,400
19	ELECTRONICS TECHNOLOGY	223,841	225,841	170,154	−53,687	−55,687
20	WEAPONS OF MASS DESTRUCTION DEFEAT TECHNOLOGIES	219,130	220,630	221,530	+2,400	+900
21	SPECIAL OPERATIONS TECHNOLOGY DEVELOPMENT	27,384	33,884	24,884	−2,500	−9,000
22	SOF MEDICAL TECHNOLOGY DEVELOPMENT	.....	3,000	.....	.....	−3,000
	TOTAL, APPLIED RESEARCH	1,776,790	1,861,039	1,660,938	−115,852	−200,101
	ADVANCED TECHNOLOGY DEVELOPMENT					
23	JOINT MUNITIONS ADVANCED TECH INSENSITIVE MUNITIONS AD	23,538	16,754	10,428	−13,110	−6,326
24	SO/LIC ADVANCED DEVELOPMENT	43,808	43,808	43,808	.....	.....
25	COMBATING TERRORISM TECHNOLOGY SUPPORT	81,868	102,368	106,268	+24,400	+3,900
26	COUNTERPROLIFERATION INITIATIVES—PROLIF PREV & DEFEAT	233,203	241,203	233,203	.....	−8,000
27	BALLISTIC MISSILE DEFENSE TECHNOLOGY	109,760	109,760	104,760	−5,000	−5,000

28	JOINT ADVANCED CONCEPTS	7,817	3,909	7,817	.....	+3,908
29	JOINT DOD–DOE MUNITIONS TECHNOLOGY DEVELOPMENT	23,276	23,276	23,276	.....	.....
30	ADVANCED AEROSPACE SYSTEMS	338,360	338,360	249,360	−89,000	−89,000
31	SPACE PROGRAMS AND TECHNOLOGY	200,612	202,612	189,312	−11,300	−13,300
32	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM—ADVANCED DEVELOPMENT	282,235	297,735	296,235	+14,000	−1,500
33	JOINT ELECTRONIC ADVANCED TECHNOLOGY	10,838	10,838	10,838	.....	.....
34	JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS	198,352	202,352	143,467	−54,885	−58,885
35	NETWORKED COMMUNICATIONS CAPABILITIES	28,212	28,212	28,212	.....	.....
36	JOINT DATA MANAGEMENT RESEARCH	4,935	4,935	4,935	.....	.....
37	BIOMETRICS SCIENCE AND TECHNOLOGY	10,993	10,993	10,993	.....	.....
38	HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) ADV	11,480	11,480	9,980	−1,500	−1,500
39	DEFENSE-WIDE MANUFACTURING SCIENCE AND TECHNOLOGY PROGRAM	14,638	16,638	24,638	+10,000	+8,000
40	JOINT ROBOTICS PROGRAM/AUTONOMOUS SYSTEMS	9,110	11,610	9,110	.....	−2,500
41	GENERIC LOGISTICS R&D TECHNOLOGY DEMONSTRATIONS	19,043	34,043	42,643	+23,600	+8,600
42	DEPLOYMENT AND DISTRIBUTION ENTERPRISE TECHNOLOGY	29,356	29,356	29,356	.....	.....
43	STRATEGIC ENVIRONMENTAL RESEARCH PROGRAM	69,175	69,175	67,675	−1,500	−1,500
44	MICROELECTRONIC TECHNOLOGY DEVELOPMENT AND SUPPORT	26,310	51,810	55,210	+28,900	+3,400
45	JOINT WARFIGHTING PROGRAM	11,135	11,135	11,135	.....	.....
46	ADVANCED ELECTRONICS TECHNOLOGIES	205,912	207,912	179,907	−26,005	−28,005
47	SYNTHETIC APERTURE RADAR (SAR) COHERENT CHANGE DETECT	4,864	4,864	4,864	.....	.....
49	HIGH PERFORMANCE COMPUTING MODERNIZATION PROGRAM	221,286	221,286	245,186	+23,900	+23,900
50	COMMAND, CONTROL, AND COMMUNICATIONS SYSTEMS	293,476	293,476	270,326	−23,150	−23,150
52	CLASSIFIED DARPA PROGRAMS	186,526	186,526	178,326	−8,200	−8,200
53	NETWORK-CENTRIC WARFARE TECHNOLOGY	135,941	135,941	135,941	.....	.....
54	SENSOR TECHNOLOGY	243,056	243,056	223,800	−19,256	−19,256
55	GUIDANCE TECHNOLOGY	37,040	37,040	37,040	.....	.....
56	DISTRIBUTED LEARNING ADVANCED TECHNOLOGY DEVELOPMENT	13,822	13,822	13,822	.....	.....
57	SOFTWARE ENGINEERING INSTITUTE	31,298	31,298	31,298	.....	.....
59	QUICK REACTION SPECIAL PROJECTS	107,984	92,984	69,484	−38,500	−23,500
60	JOINT EXPERIMENTATION	124,480	107,380	109,480	−15,000	+2,100
61	JOINT WARGAMING SIMULATION MANAGEMENT OFFICE	38,505	38,505	34,505	−4,000	−4,000
62	TEST & EVALUATION SCIENCE & TECHNOLOGY	95,734	95,734	95,734	.....	.....
63	TECHNOLOGY TRANSFER	2,219	12,219	8,319	+6,100	−3,900
65	SPECIAL OPERATIONS ADVANCED TECHNOLOGY DEVELOPMENT	31,675	57,175	36,975	+5,300	−20,200
66	SPECIAL OPERATIONS ADVANCED TECHNOLOGY DEVELOPMENT	3,544	3,544	3,544	.....	.....
67	SOF INFORMATION & BROADCAST SYSTEMS ADVANCED TECHNOLOG	4,988	4,988	4,988	.....	.....
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT	3,570,404	3,660,112	3,396,198	−174,206	−263,914
	DEMONSTRATION & VALIDATION					
68	NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT	36,019	39,019	46,219	+10,200	+7,200

[In thousands of dollars]

	Item	2010 budget estimate	House allowance	Committee recommendation	Change from—	
					budget estimate	House allowance
70	RETRACT LARCH	21,718	21,718	37,218	+15,500	+15,500
71	JOINT ROBOTICS PROGRAM	11,803	15,803	11,803	.....	−4,000
72	ADVANCE SENSOR APPLICATIONS PROGRAM	17,771	17,771	17,771	.....	.....
73	ENVIRONMENTAL SECURITY TECHNICAL CERTIFICATION PROGRAM	31,613	36,613	37,013	+5,400	+400
74	BALLISTIC MISSILE DEFENSE TERMINAL DEFENSE SEGMENT	719,465	719,465	719,465	.....	.....
75	BALLISTIC MISSILE DEFENSE MIDCOURSE DEFENSE SEGMENT	982,922	982,922	1,032,922	+50,000	+50,000
73a	TWO-STAGE INTERCEPTOR SEGMENT	.....	.....	.....	.....	.....
73b	EUROPEAN MIDCOURSE RADAR	.....	.....	.....	.....	.....
73c	EUROPEAN GLOBAL ENGAGEMENT MANGER/U.S. COMMUNICATIONS	.....	.....	.....	.....	.....
76	BALLISTIC MISSILE DEFENSE BOOST DEFENSE SEGMENT	186,697	186,697	186,697	.....	.....
77	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	205,952	210,952	205,952	.....	−5,000
78	BALLISTIC MISSILE DEFENSE SENSORS	636,856	636,856	626,856	−10,000	−10,000
79	BALLISTIC MISSILE DEFENSE SYSTEM INTERCEPTOR	.....	80,000	.....	.....	−80,000
80	BALLISTIC MISSILE DEFENSE TEST & TARGETS	966,752	940,752	778,652	−188,100	−162,100
81	BALLISTIC MISSILE DEFENSE SYSTEMS CORE	369,145	358,645	358,145	−11,000	−500
82	SPECIAL PROGRAMS—MDA	301,566	286,566	251,566	−50,000	−35,000
83	AEGIS BMD	1,690,758	1,670,758	1,468,358	−222,400	−202,400
183A	AEGIS SM–3 BLOCK IIA CO–DEVELOPMENT	.....	.....	257,400	+257,400	+257,400
84	SPACE SURVEILLANCE & TRACKING SYSTEM	180,000	160,000	173,200	−6,800	+13,200
85	MULTIPLE KILL VEHICLES	.....	.....	.....	.....	.....
86	BALLISTIC MISSILE DEFENSE SYSTEM SPACE PROGRAMS	12,549	12,549	12,549	.....	.....
87	BALLISTIC MISSILE DEFENSE C2BMC	340,014	340,014	340,014	.....	.....
88	BALLISTIC MISSILE DEFENSE HERCULES	48,186	48,186	48,186	.....	.....
89	BALLISTIC MISSILE DEFENSE JOINT WARFIGHTER SUPPORT	60,921	61,421	60,921	.....	−500
90	BALLISTIC MISSILE DEFENSE JOINT NATIONAL INTERGRATION	86,949	86,949	86,949	.....	.....
91	REGARDING TRENCH	6,164	6,164	6,164	.....	.....
92	SEA BASED X–BAND RADAR (SBX)	174,576	161,576	174,576	.....	+13,000
95	BMD EUROPEAN CAPABILITY	50,504	50,504	50,504	.....	.....
97	ISRAELI COOPERATIVE PROGRAMS	119,634	202,434	202,434	+82,800	.....
98	HUMANITARIAN DEMINING	14,687	14,687	14,687	.....	.....
99	COALITION WARFARE	13,885	13,885	13,885	.....	.....
100	DEPARTMENT OF DEFENSE CORROSION PROGRAM	4,887	6,387	21,487	+16,600	+15,100
101	DOD UNMANNED AIRCRAFT SYSTEM (UAS) COMMON DEVELOPMENT	55,289	65,289	55,289	.....	−10,000
102	JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS	18,577	3,577	18,577	.....	+15,000
103	HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) RES	7,006	7,006	7,006	.....	.....

104	JOINT SYSTEMS INTEGRATION COMMAND (JSIC)	19,744	19,744	19,744	.....	.....
105	JOINT FIRES INTEGRATION & INTEROPERABILITY TEAM	16,972	16,972	16,972	.....	.....
106	REDUCTION OF TOTAL OWNERSHIP COST	24,647	24,647	24,647	.....	.....
107	JOINT ELECTROMAGNETIC TECHNOLOGY (JET) PROGRAM	3,949	6,949	3,949	.....	−3,000
108	DEFENSE ACQUISITION CHALLENGE PROGRAM (DACP)	28,862	28,862	28,862	.....	.....
109	NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT	7,628	7,628	7,628	.....	.....
110	PROMPT GLOBAL STRIKE CAPABILITY DEVELOPMENT	166,913	166,913	166,913	.....	.....
	TOTAL, DEMONSTRATION & VALIDATION	7,641,580	7,716,880	7,591,180	−50,400	−125,700
	ENGINEERING & MANUFACTURING DEVELOPMENT					
111	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	332,895	339,895	296,595	−36,300	−43,300
112	JOINT ROBOTICS PROGRAM	5,127	5,127	5,127	.....	.....
113	ADVANCED IT SERVICES JOINT PROGRAM OFFICE (AITS–JPO)	39,911	39,911	15,157	−24,754	−24,754
114	JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM (JTIDS)	20,633	20,633	20,633	.....	.....
115	WEAPONS OF MASS DESTRUCTION DEFEAT CAPABILITIES	8,735	8,735	9,735	+1,000	+1,000
116	INFORMATION TECHNOLOGY DEVELOPMENT	11,705	15,205	11,705	.....	−3,500
117	DEFENSE INTEGRATED MILITARY HUMAN RESOURCES SYSTEM	70,000	70,000	18,710	−51,290	−51,290
118	BUSINESS TRANSFORMATION AGENCY R&D ACTIVITIES	197,008	197,008	192,508	−4,500	−4,500
119	HOMELAND PERSONNEL SECURITY INITIATIVE	395	395	395	.....	.....
120	OUSD(C) IT DEVELOPMENT INITIATIVES	5,000	5,000	5,000	.....	.....
121	TRUSTED FOUNDRY	41,223	41,223	51,223	+10,000	+10,000
122	DEFENSE ACQUISITION EXECUTIVE (DAE) PILOT PROGRAM	4,267	4,267	4,267	.....	.....
123	GLOBAL COMBAT SUPPORT SYSTEM	18,431	18,431	18,431	.....	.....
124	JOINT COMMAND AND CONTROL PROGRAM (JC2)	49,047	49,047	.....	−49,047	−49,047
125	WOUNDED ILL AND INJURED SENIOR OVERSIGHT COMMITTEE OFF	1,609	1,609	1,609	.....	.....
	TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT	805,986	816,486	651,095	−154,891	−165,391
	RDT&E MANAGEMENT SUPPORT					
126	GENERIC LOGISTICS TECHNOLOGY DEMONSTRATIONS	.....	2,000	.....	.....	−2,000
127	DEFENSE READINESS REPORTING SYSTEM (DRRS)	13,121	16,121	13,121	.....	−3,000
128	JOINT SYSTEMS ARCHITECTURE DEVELOPMENT	15,247	15,247	7,430	−7,817	−7,817
129	CENTRAL TEST AND EVALUATION INVESTMENT DEVELOPMENT	145,052	152,552	157,452	+12,400	+4,900
130	THERMAL VICAR	9,045	12,045	9,045	.....	−3,000
131	JOINT MISSION ENVIRONMENT TEST CAPABILITY (JMETC)	9,455	9,455	9,455	.....	.....
132	TECHNICAL STUDIES, SUPPORT, AND ANALYSIS	44,760	44,760	44,760	.....	.....
133	USD(A&T)—CRITICAL TECHNOLOGY SUPPORT	4,914	4,914	4,914	.....	.....
134	FOREIGN MATERIAL ACQUISITION AND EXPLOITATION	94,921	94,921	94,921	.....	.....
135	JOINT THEATER AIR AND MISSILE DEFENSE ORGANIZATION	96,909	96,909	96,909	.....	.....
136	CLASSIFIED PROGRAM USD(P)	.....	95,637	95,637	+95,637	.....

[In thousands of dollars]

	Item	2010 budget estimate	House allowance	Committee recommendation	Change from—	
					budget estimate	House allowance
137	FOREIGN COMPARATIVE TESTING	35,054	35,054	35,054	.....	.....
138	NUCLEAR MATTERS—PHYSICAL SECURITY	6,474	6,474	6,474	.....	.....
139	SUPPORT TO NETWORKS AND INFORMATION INTEGRATION	14,916	14,916	14,916	.....	.....
140	GENERAL SUPPORT TO USD (INTELLIGENCE)	5,888	5,888	5,888	.....	.....
141	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	106,477	106,477	106,477	.....	.....
147	SMALL BUSINESS INNOVATION RESEARCH/CHALLENGE ADMINISTRATION	2,163	3,163	4,063	+1,900	+900
148	DEFENSE TECHNOLOGY ANALYSIS	11,005	11,805	11,005	.....	−800
150	FORCE TRANSFORMATION DIRECTORATE	19,981	24,981	19,981	.....	−5,000
151	DEFENSE TECHNICAL INFORMATION CENTER (DTIC)	54,411	49,411	54,411	.....	+5,000
152	R&D IN SUPPORT OF DOD ENLISTMENT, TESTING & EVALUATION	19,554	19,554	19,554	.....	.....
153	DEVELOPMENT TEST AND EVALUATION	23,512	23,512	23,512	.....	.....
154	DARPA AGENCY RELOCATION	45,000	45,000	15,000	−30,000	−30,000
155	MANAGEMENT HEADQUARTERS (RESEARCH & DEVELOPMENT)	51,055	51,055	51,055	.....	.....
156	BUDGET AND PROGRAM ASSESSMENTS	5,929	5,929	5,929	.....	.....
157	AVIATION SAFETY TECHNOLOGIES	8,000	8,000	8,000	.....	.....
158	JOINT STAFF ANALYTICAL SUPPORT	1,250	1,250	1,250	.....	.....
161	SUPPORT TO INFORMATION OPERATIONS (IO) CAPABILITIES	30,604	25,904	36,504	+5,900	+10,600
162	INFORMATION TECHNOLOGY RAPID ACQUISITION	4,667	4,667	4,667	.....	.....
163	CYBER SECURITY INITIATIVE	50,000	50,000	50,000	.....	.....
164	INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS (IO)	20,648	22,648	20,648	.....	−2,000
165	INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS (IO) (NSA)	.....	.....	.....	.....	.....
166	WARFIGHTING AND INTELLIGENCE-RELATED SUPPORT	829	829	829	.....	.....
167	COCOM EXERCISE ENGAGEMENT AND TRAINING TRANSFORMATION	34,306	34,306	41,806	+7,500	+7,500
168	PENTAGON RESERVATION	19,709	.....	19,709	.....	+19,709
169	MANAGEMENT HEADQUARTERS—MDA	57,403	52,403	57,403	.....	+5,000
170	IT SOFTWARE DEV INITIATIVES	980	980	980	.....	.....
	TOTAL, RDT&E MANAGEMENT SUPPORT	1,063,239	1,148,767	1,148,759	+85,520	−8
	OPERATIONAL SYSTEMS DEVELOPMENT					
171	DEFENSE INFORMATION SYSTEM FOR SECURITY (DISS)	1,384	1,384	1,384	.....	.....
172	REGIONAL INTERNATIONAL OUTREACH & PARTNERSHIP FOR PEACE	2,001	2,001	2,001	.....	.....
173	OVERSEAS HUMANITARIAN ASSISTANCE SHARED INFORMATION SYSTEMS	292	292	292	.....	.....
174	CHEMICAL AND BIOLOGICAL DEFENSE (OPERATIONAL SYSTEMS D	6,198	6,198	6,198	.....	.....
175	JOINT INTEGRATION AND INTEROPERABILITY	46,214	46,214	46,214	.....	.....

177	CLASSIFIED PROGRAMS	2,179	2,179	2,179	.....	.....
178	C4I INTEROPERABILITY	74,786	74,786	74,786	.....	.....
180	JOINT/ALLIED COALITION INFORMATION SHARING	10,767	10,767	10,767	.....	.....
187	NATIONAL MILITARY COMMAND SYSTEM-WIDE SUPPORT	548	548	548	.....	.....
188	DEFENSE INFO INFRASTRUCTURE ENGINEERING AND INTEGRATION	17,655	17,655	17,655	.....	.....
189	LONG-HAUL COMMUNICATIONS (DCS)	9,406	9,406	9,406	.....	.....
190	MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK	9,830	9,830	9,830	.....	.....
191	PUBLIC KEY INFRASTRUCTURE (PKI)	8,116	8,116	8,116	.....	.....
192	KEY MANAGEMENT INFRASTRUCTURE (KMI)	41,002	41,002	41,002	.....	.....
193	INFORMATION SYSTEMS SECURITY PROGRAM	13,477	13,477	15,477	+2,000	+2,000
194	INFORMATION SYSTEMS SECURITY PROGRAM	408,316	408,316	408,316	.....	.....
196	DISA MISSION SUPPORT OPERATIONS	1,205	1,205	1,205	.....	.....
197	C4I FOR THE WARRIOR	4,098	4,098	4,098	.....	.....
198	GLOBAL COMMAND AND CONTROL SYSTEM	23,761	23,761	34,761	+11,000	+11,000
199	JOINT SPECTRUM CENTER	18,944	18,944	18,944	.....	.....
200	NET-CENTRIC ENTERPRISE SERVICES (NCES)	1,782	1,782	1,782	.....	.....
201	JOINT MILITARY DECEPTION INITIATIVE	942	942	942	.....	.....
202	TELEPORT PROGRAM	5,239	5,239	5,239	.....	.....
203	SPECIAL APPLICATIONS FOR CONTINGENCIES	16,381	30,381	16,381	.....	−14,000
204	DEFENSE GEOSPATIAL INTELLIGENCE	.....	.....	.....	.....	.....
206	CYBER SECURITY INITIATIVE	993	993	993	.....	.....
208	CYBER SECURITY INITIATIVE	10,080	10,080	10,080	.....	.....
209	CRITICAL INFRASTRUCTURE PROTECTION (CIP)	12,725	12,725	17,725	+5,000	+5,000
201	DEFENSE JOINT COUNTERINTELLIGENCE ACTIVITIES	.....	.....	.....	.....	.....
215	POLICY R&D PROGRAMS	6,948	6,948	6,948	.....	.....
217	NET CENTRICITY	1,479	1,479	1,479	.....	.....
221	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	1,407	9,407	1,407	.....	−8,000
224	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	3,158	3,158	3,158	.....	.....
226	MQ–1 PREDATOR A UAV	2,067	2,067	2,067	.....	.....
228	HOMELAND DEFENSE TECHNOLOGY TRANSFER PROGRAM	2,963	2,963	2,963	.....	.....
229	INTERNATIONAL INTELLIGENCE TECHNOLOGY ASSESSMENT, ADVANCEMENT	1,389	1,389	1,389	.....	.....
218	COMBATANT COMMAND INTELLIGENCE OPERATIONS	.....	.....	.....	.....	.....
238	INDUSTRIAL PREPAREDNESS	20,514	28,014	50,514	+30,000	+22,500
239	LOGISTICS SUPPORT ACTIVITIES	2,798	2,798	2,798	.....	.....
240	MANAGEMENT HEADQUARTERS (JCS)	8,303	8,303	8,303	.....	.....
241	NATO AGS	74,485	74,485	66,485	−8,000	−8,000
242	MQ–9 UAV	4,380	4,380	4,380	.....	.....
245	SPECIAL OPERATIONS TECHNOLOGY DEVELOPMENT	82,621	74,121	67,592	−15,029	−6,529
246	SPECIAL OPERATIONS TACTICAL SYSTEMS DEVELOPMENT	6,182	2,594	7,494	+1,312	+4,900
247	SPECIAL OPERATIONS INTELLIGENCE SYSTEMS DEVELOPMENT	21,273	21,780	36,173	+14,900	+14,393

[In thousands of dollars]

	Item	2010 budget estimate	House allowance	Committee recommendation	Change from—	
					budget estimate	House allowance
248	SOF OPERATIONAL ENHANCEMENTS	60,310	64,310	60,310	.....	−4,000
249	SPECIAL OPERATIONS CV–22 DEVELOPMENT	12,687	12,687	12,687	.....	.....
250	JOINT MULTI-MISSION SUBMERSIBLE	43,412	23,412	43,412	.....	+20,000
252	OPS ADVANCED SEAL DELIVERY SYSTEM (ASDS) DEVELOPMENT	1,321	3,500	1,600	+279	−1,900
253	MISSION TRAINING AND PREPARATION SYSTEMS (MTPS)	3,192	3,192	3,192	.....	.....
254	UNMANNED VEHICLES (UV)	.....	1,000	.....	.....	−1,000
255	MC130J SOF TANKER RECAPITALIZATION	5,957	5,957	5,957	.....	.....
256	SOF COMMUNICATIONS EQUIPMENT AND ELECTRONICS SYSTEMS	733	733	733	.....	.....
257	SOF TACTICAL RADIO SYSTEMS	2,368	2,368	2,368	.....	.....
258	SOF WEAPONS SYSTEMS	1,081	1,081	1,081	.....	.....
259	SOF SOLDIER PROTECTION AND SURVIVAL SYSTEMS	597	597	597	.....	.....
260	SOF VISUAL AUGMENTATION, LASERS & SENSOR SYSTEMS	3,369	6,869	6,369	+3,000	−500
261	SOF TACTICAL VEHICLES	1,973	1,973	1,973	.....	.....
262	SOF ROTARY WING AVIATION	18,863	18,863	18,863	.....	.....
263	SOF UNDERWATER SYSTEMS	3,452	13,000	12,452	+9,000	−548
264	SOF SURFACE CRAFT	12,250	10,000	12,250	.....	+2,250
265	SOF PSYOP	9,887	9,887	9,887	.....	.....
266	SOF GLOBAL VIDEO SURVEILLANCE ACTIVITIES	4,944	4,944	4,944	.....	.....
267	SOF OPERATIONAL ENHANCEMENTS INTELLIGENCE	11,547	11,547	11,547	.....	.....
	TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT	1,186,231	1,202,127	1,239,693	+53,462	+37,566
999	CLASSIFIED PROGRAMS	4,273,689	4,050,489	4,355,489	+81,800	+305,000
	DARPA UNDISTRIBUTED REDUCTION	.....	−200,000	.....	.....	+200,000
	TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, DEF-WIDE	20,741,542	20,721,723	20,408,968	−332,574	−312,755

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2010 budget estimate	Committee recommendation	Change from budget estimate
1	DTRA Basic Research Initiative	48,544	33,544	−15,000
	Excessive growth ahead of program assessment			−15,000
2	Defense Research Sciences	226,125	194,214	−31,907
	Fiscal year 2009 new start execution delays			−16,750
	Reduction to requested fiscal year 2010 new starts			−20,057
	Advanced Materials Research Institute (AMRI)			+1,000
	Security Protection using Ballistic CORE Technology			+3,900
5	National Defense Education Program	89,980	69,980	−20,000
	Premature funding increase			−20,000
6	Chemical and Biological Defense Program	58,974	67,874	+8,900
	High Speed, High Volume Laboratory Network for Infectious Disease			+2,000
	InVitro Models for Biodefense Vaccines			+1,900
	Portable Rapid Bacterial Warfare Detection Unit			+5,000
7	Joint Munitions Technology	22,669	15,112	−7,557
	P204—new start			−7,557
9	Historically Black Colleges and Universities (HBCU) Science	15,164	18,464	+3,300
	Instrumentation Program for Tribal Colleges			+3,300
11	Information & Communications Technology	282,749	255,931	−26,818
	Fiscal year 2009 new start execution delays			−8,196
	Reduction to requested fiscal year 2010 new starts			−18,622
14	Chemical and Biological Defense Program	209,072	215,972	+6,900
	Chemical Biological Infrared Detection System			+1,900
	Contaminated Human Remains Pouch			+2,000
	HyperAcute Vaccine Development			+1,000
	PaintShield for Protecting People from Microbial Threats			+2,000
15	Joint Data Management Advanced Development	4,940		−4,940
	Redundancy with other DoD programs			−4,940
16	Human, Social and Culture Behavior Modeling (HSCB) Applied Research	9,446	7,946	−1,500
	Unexecutable growth			−1,500
17	Tactical Technology	276,075	241,125	−34,950
	Fiscal year 2009 new start execution delays			−31,950
	Reduction to requested fiscal year 2010 new starts			−24,000
	Fiscal year 2010 new starts			+12,000
	Center of Excellence for Research in Ocean Sciences (CEROS)			+9,000
18	Materials and Biological Technology	268,859	272,359	+3,500
	Fiscal year 2009 new start execution delays			−2,000
	Strategic Materials			+5,500
19	Electronics Technology	223,841	170,154	−53,687
	Fiscal year 2009 new start execution delays			−39,500
	Reduction to requested fiscal year 2010 new starts			−26,187
	Fiscal year 2010 new starts			+12,000
20	Weapons of Mass Destruction Defeat Technologies	219,130	221,530	+2,400
	University Strategic Partnership			+2,400
21	Special Operations Technology Development	27,384	24,884	−2,500
	REITS unjustified new starts			−4,500
	Flashlight soldier-to-soldier combat identification system			+2,000
23	Joint Munitions Advanced Technology	23,538	10,428	−13,110
	P002—excessive growth			−10,000
	P301—new start			−3,110
25	Combating Terrorism Technology Support	81,868	106,268	+24,400
	BOPPER/COPPER—Bioterrorism Operations Policy for Public Emergency/Chemoterrorism Operations Policy for Public Emergency			+1,000
	Covert Sensing and Tagging System			+1,500
	Dynamic Data Flow Management System			+2,000

[In thousands of dollars]

Line	Item	2010 budget estimate	Committee recommendation	Change from budget estimate
	Emergency Egress System			+2,000
	Expeditionary Surveillance and Reconnaissance Program			+5,000
	IdentClarity-Identity Resolution			+1,800
	Integrated Rugged Checkpoint Container (IRCC)			+1,600
	MARCENT Thermal Imaging Suite			+3,000
	Omni Directional Relay and Conformal Antenna			+2,500
	Reconnaissance and Data Exploitation (REX) System			+4,000
27	Ballistic Missile Defense Technology	109,760	104,760	−5,000
	Multiple-Target-Tracking Optical Sensor-Array Technology (MOST)			+5,000
	Reduce program growth to support near-term missile defense programs			−10,000
30	Advanced Aerospace Systems	338,360	249,360	−89,000
	Vulture contract award delay			−17,000
	Reductions for high-speed engines			−40,000
	Rapid Eye excessive growth without acquisition strategy			−25,000
	Reduction to requested fiscal year 2010 new starts			−7,000
31	Space Programs and Technology	200,612	189,312	−11,300
	Fiscal year 2009 new start execution delays			−4,500
	Reduction to requested fiscal year 2010 new starts			−6,800
32	Chemical and Biological Defense Program—Advanced Development	282,235	296,235	+14,000
	Advanced Development of Mobile Rapid Response Prototypes			+3,000
	Army Plant Vaccine Development Program			+2,000
	Center for Advanced Emergency Response			+5,000
	NIDS Handheld Common Identifier for Biological Agents			+3,000
	Water Purification System for Natural Disasters			+1,000
34	Joint Capability Technology Demonstrations	198,352	143,467	−54,885
	Fiscal year 2010 JCTD New Starts			−54,885
38	Human, Social and Culture Behavior Modeling (HSCB) Advanced Development	11,480	9,980	−1,500
	Unexecutable growth			−1,500
39	Defense-Wide Manufacturing Science and Technology Program	14,638	24,638	+10,000
	High Performance Manufacturing Technology Initiative			+10,000
41	Generic Logistics R&D Technology Demonstrations	19,043	42,643	+23,600
	Biofuels Program			+2,000
	Commodity Management Systems Consolidation Program			+2,000
	Continuous Acquisition and Life-Cycle Support (CALS) Integrated Data Environment and Defense Logistics Enterprise Services Program (DLES)			+4,000
	Fuel Cell Hybrid Battery Manufacturing for Defense Operations			+1,000
	Fuelcell Locomotive			+3,000
	Next Generation Manufacturing Technologies Initiative			+2,000
	Vehicle Fuel Cell and Hydrogen Logistics Program			+8,000
	Woody Biomass Conversion to JP–8 Fuel			+1,600
43	Strategic Environmental Research Program	69,175	67,675	−1,500
	Execution adjustment			−1,500
44	Microelectronics Technology Development and Support	26,310	55,210	+28,900
	Electronics & Materials for Flexible Sensors and Transponders (EMFST)			+6,000
	High Performance Tunable Materials—Combinatorial Development of Advanced Dielectrics			+4,500
	Shipping Container Security System Field Evaluation			+4,500
	Smart Bomb Targeting Radar System			+2,900
	Tunable MicroRadio for Military Systems			+7,000
	Vehicle and Dismount Exploitation Radar (VADER)			+4,000
46	Advanced Electronics Technologies	205,912	179,907	−26,005
	Fiscal year 2009 new start execution delays			−11,000
	Reduction to requested fiscal year 2010 new starts			−22,005
	Institute of Advanced Flexible Manufacturing Systems			+7,000

[In thousands of dollars]

Line	Item	2010 budget estimate	Committee recommendation	Change from budget estimate
49	High Performance Computing Modernization Program	221,286	245,186	+23,900
	Program adjustment			+20,000
	High Performance Computational Design of Novel Materials			+3,900
50	Command, Control, and Communications Systems	293,476	270,326	−23,150
	Fiscal year 2009 new start execution delays			−2,000
	CCC–CLS execution delays			−18,150
	Reduction to requested fiscal year 2010 new starts			−3,000
52	Classified DARPA Programs	186,526	178,326	−8,200
	Program terminated by DARPA			−8,200
53	Network-Centric Warfare Technology	135,941	135,941	
	Fiscal year 2009 new start execution delays			−9,500
	Reduction to requested fiscal year 2010 new starts			−2,500
	Fiscal year 2010 new starts			+12,000
54	Sensor Technology	243,056	223,800	−19,256
	Fiscal year 2009 new start execution delays			−4,256
	SEN–CLS execution delays			−10,000
	Reduction to requested fiscal year 2010 new starts			−5,000
59	Quick Reaction Special Projects	107,984	69,484	−38,500
	QRF fiscal year 2010 new starts			−15,000
	RRF fiscal year 2010 new starts			−25,000
	Small Craft Threat Identification Program			+1,500
60	Joint Experimentation	124,480	109,480	−15,000
	National Center for Small Unit Excellence			−5,000
	Unexecutable program growth			−10,000
61	DoD Modeling and Simulation Management Office	38,505	34,505	−4,000
	Unexecutable growth			−4,000
63	Technology Transfer	2,219	8,319	+6,100
	Center for Innovation at Arlington			+2,700
	MilTech Expansion Program			+2,000
	National Radio Frequency (RF) R&D and Technology Transfer Consortium			+1,400
65	Special Operations Advanced Technology Development	31,675	36,975	+5,300
	REITS unjustified new starts			−4,500
	Advanced Distributed Aperture System (ADAS)/Hostile Fire Indicating System (HFIS)			+1,300
	Antennas and other CNT devices for Intelligence/Special Military			+3,000
	Partnership for Defense Innovation Wi-Fi Laboratory Testing and Assessment Center			+3,500
	Tiger Moth Air-Launched Off Board Sensing Small Unmanned Aerial System			+2,000
68	Nuclear and Conventional Physical Security Equipment RDT&E ADC&P	36,019	46,219	+10,200
	Advance Detection of Special Nuclear Materials			+2,000
	Auto Scan Under Vehicle Inspection (UVIS)			+1,500
	Pacific Data Conversion and Technology Program			+2,000
	Wyoming Army National Guard Joint Training and Experimentation Center (JTEC)			+4,700
70	RETRACT LARCH	21,718	37,218	+15,500
	Program adjustment			+15,500
73	Environmental Security Technical Certification Program	31,613	37,013	+5,400
	Alternative Energy Study			+1,400
	Inland Empire Perchlorate Remediation			+4,000
75	Ballistic Missile Defense Midcourse Defense Segment	982,922	1,032,922	+50,000
	GBI vendor base sustainment			+50,000
78	Ballistic Missile Defense Sensors	636,856	626,856	−10,000
	Replacement Patriot Launcher Pad for Japan—MDA requested adjustment			[2,500]
	System Engineering and Unifying Missile Defense Functions—reduce program growth to support near-term missile defense programs			−10,000
80	Ballistic Missile Defense Test & Targets	966,752	778,652	−188,100
	Premature request			−151,100

[In thousands of dollars]

Line	Item	2010 budget estimate	Committee recommendation	Change from budget estimate
	STSS targets—FTS–01 and FTS–02			−37,000
81	BMD Enabling Programs	369,145	358,145	−11,000
	Advanced Composite Radome			+4,000
	General reduction to support near-term missile defense programs			−15,000
82	Special Programs—MDA	301,566	251,566	−50,000
	Reduce program growth to support near-term missile defense programs			−50,000
83	AEGIS BMD	1,690,758	1,468,358	−222,400
	Transfer to Line 83A, AEGIS SM–3 Block IIA Co-development			−257,400
	SM–3 development			+35,000
83A	AEGIS SM–3 Block IIA co-development		257,400	+257,400
	Transfer from AEGIS BMD, Line 83			+257,400
84	Space Tracking & Surveillance System	180,000	173,200	−6,800
	Support for FTS–01 and FTS–02 tests			−6,800
97	Israeli Cooperative Programs	119,634	202,434	+82,800
	Short-range ballistic missile defense			+34,300
	Arrow-3			+12,500
	Arrow-2 co-development			+26,000
	Arrow-2 co-production			+10,000
100	Department of Defense Corrosion Program	4,887	21,487	+16,600
	Center for Education and Research on Corrosion and Materials Performance			+2,000
	Department of Defense Corrosion Prevention and Control Program			+14,600
111	Chemical and Biological Defense Program	332,895	296,595	−36,300
	Lack of justification for core program growth			−47,400
	Joint Services Aircrew Mask (JSAM) Don/Doff In-flight Upgrade			+3,000
	Laser Studied and Enhanced Reactive Materials: Self-Decontaminating Polymers for Chemical-Biological Defense			+2,000
	Man Portable Sensors for Dismounted Reconnaissance			+2,500
	Real Time Test Monitoring of Chemical Agents, Chemical Agent Stimulants and Toxic Industrial Chemicals			+1,600
	Self-Contained Automated Vehicle Washing Systems with Microwave Decontamination			+2,000
113	Advanced IT Services Joint Program Office (AITS–JPO)	39,911	15,157	−24,754
	Rapid Technology Insertion Fund			−24,754
115	Weapons of Mass Destruction Defeat Capabilities	8,735	9,735	+1,000
	Electric Grid Reliability/Assurance			+1,000
117	Defense Integrated Military Human Resources System (DIMHRS)	70,000	18,710	−51,290
	Transfer to RDA, line 117 for DIMHRS execution per Department of Defense request			−30,800
	Transfer to RDAF, line 241 for DIMHRS execution per Department of Defense request			−20,490
118	Business Transformation Agency R&D Activities	197,008	192,508	−4,500
	DAI—Defer one major fielding			−4,500
121	Trusted Foundry	41,223	51,223	+10,000
	Trusted Foundry			+10,000
124	Joint Command and Control Program (JC2)	49,047		−49,047
	Program adjustment			−38,047
	Transfer to line 198			−11,000
128	Joint Systems Architecture Development	15,247	7,430	−7,817
	Duplicate funding			−7,817
129	Central Test and Evaluation Investment Development (CTEIP)	145,052	157,452	+12,400
	Advanced SAM Hardware Simulator Development			+4,000
	Border Security and Defense Systems Research			+2,000
	Pacific Region Interoperability Test and Evaluation Capability			+3,500
	UAV Systems and Operations Validation Program			+2,900
136	Classified Program USD(P)		95,637	+95,637

[In thousands of dollars]

Line	Item	2010 budget estimate	Committee recommendation	Change from budget estimate
	Classified program adjustment			+95,637
147	Small Business Innovation Research/Challenge Administration	2,163	4,063	+1,900
	Random Obfuscating Compiler Anti-Tamper Software			+1,900
154	DARPA Agency Relocation	45,000	15,000	−30,000
	Delay to project initiation			−30,000
161	Support to Information Operations (IO) Capabilities	30,604	36,504	+5,900
	Enhanced Simulation for Information Operations Capabilities			+5,900
167	COCOM Exercise Engagement and Training Transformation (CE2T2)	34,306	41,806	+7,500
	Agile Software Capability Intervention (ASCI)			+1,500
	Integrated Analysis Environment			+2,000
	Playas Training and Research Center			+4,000
193	Information Systems Security Program	13,477	15,477	+2,000
	IASTAR Federal Information Security Management Act Compliance			+2,000
198	Global Command and Control System	23,761	34,761	+11,000
	Transfer from line 124 for program enhancements			+11,000
209	Critical Infrastructure Protection (CIP)	12,725	17,725	+5,000
	Disaster Response: Communications and Other Infrastructure Restoration			+5,000
238	Industrial Preparedness	20,514	50,514	+30,000
	Industrial Base Innovation Fund			+30,000
241	NATO AGS	74,485	66,485	−8,000
	Excess to requirement			−8,000
245	Special Operations Aviation Systems Advanced Development	82,621	67,592	−15,029
	AMP lack of acquisition strategy			−20,029
	EC–130J Multi-Mission Upgrades			+5,000
246	Special Operations Tactical Systems Development	6,182	7,494	+1,312
	SOF Resource Business Information System program delays			−4,588
	Covert Waveform for Software Defined Radios			+2,800
	SOC–R Armor Development for Small Arms Armor Piercing Ammo			+3,100
247	Special Operations Intelligence Systems Development	21,273	36,173	+14,900
	Advanced, Long Endurance Unattended Ground Sensor Technologies			+4,900
	Biometrical Optical Surveillance System			+6,000
	Picoceptor and Processor for Man-portable Threat Warning			+4,000
252	Operations Advanced Seal Delivery System (ASDS) Development	1,321	1,600	+279
	ASDS			−1,321
	Lithium-ion Battery Safety Detection and Control of Impending Failures			+1,600
260	SOF Visual Augmentation, Lasers and Sensor Systems	3,369	6,369	+3,000
	ASIC Miniaturization for Lasers and Sensors Development			+3,000
263	SOF Underwater Systems	3,452	12,452	+9,000
	Alternative SOF Submersible Concept Design Study			+1,000
	Future Dry Deck Shelter			+5,500
	Undersea Special Warfare Engineering Support Office			+2,500
999	Other Programs	4,273,689	4,355,489	+81,800
	Classified Adjustments			+52,900
	Armed Forces Health and Food Supply Research			+5,000
	Center for Intelligence and Security Studies			+2,400
	Hawaii Advanced Laboratory for Information Integration			+2,500
	Initiative to Advance Adaptive Petascale Supercomputing			+10,000
	Intelligent Explosives Detection			+4,000
	Technology applications for Security Enhancement			+3,000
	The Biological and Chemical Warfare Online Repository of Technical Holdings 2 System			+2,000

Implementation of Weapon Systems Acquisition System Reform.—On May 22, 2009, the Weapon Systems Acquisition Reform Act of 2009 [WSARA] became Public Law 111–23. The Committee understands that certain Department of Defense workload requirements, such as systems engineering and developmental test and evaluation, may increase as a result of this act. As the Department develops a strategy to implement the WSARA, the Committee encourages the Department to grow and retain the necessary expertise in-house, instead of outsourcing these functions.

Defense Advanced Research Projects Agency [DARPA].—The fiscal year 2010 budget request for DARPA is $3,248,000,000. The Committee notes that from fiscal year 2006 to 2008, DARPA executed an average program of roughly $2,666,000,000. Therefore, the Committee believes that such a significant funding increase to DARPA's program is fiscally imprudent and has recommended adjustments as detailed in the accompanying table.

DARPA New Start Programs.—DARPA's fiscal year 2010 budget request includes $135,170,000 for new start programs. The Committee understands that the new Director, DARPA did not have an opportunity to adjust DARPA's fiscal year 2010 budget submission to reflect the new administration's priorities. Therefore, the Committee denies all funding for the requested new start programs. Instead, the Committee has provided funds in program elements 0602702E, 0602716E, and 0603766E for new starts to be selected by the Director, DARPA in fiscal year 2010. The Committee directs that none of these funds may be obligated until the Director, DARPA provides to the congressional defense committees details on the programs to be initiated, to include descriptions, program objectives, the expected duration of the DARPA effort and associated outyear funding requirements and Service transition partners. The Committee expects DARPA to use established budgeting procedures for new starts in its fiscal year 2011 budget submission.

Transition of DARPA Projects.—The Committee remains concerned by the lack of clear and executable plans for many DARPA projects, to include the lack of defined transition capabilities and a resourced transition strategy. In fiscal year 2009, the congressional defense committees were presented with several reprogramming requests because the necessary transition funding had not been budgeted. The Committee encourages DARPA to improve mechanisms to transition its technologies.

Notification of Project Adjustments in the Year of Execution.—DARPA's budget is allocated among several program elements, many of which are in excess of $200,000,000 and contain dozens of small projects. Established reprogramming procedures provide DARPA with significant flexibility to adjust funding within lines in the year of execution. The Committee directs DARPA to provide, with the fiscal year 2011 budget submission, a detailed listing by program element and project of funding adjustments in the year of execution.

DARPA Justification Materials.—The Committee notes the improvement in the budget materials supporting DARPA's unclassified programs. However, the budget information provided in support of classified programs is inadequate. The Committee looks forward to working with the Director, DARPA to ensure the appro-

priate and necessary budgetary information is provided in support of DARPA's fiscal year 2011 budget submission.

National Defense Education Program [NDEP].—The budget request includes $89,900,000 for the National Defense Education Program, which is intended to increase the Department's outreach to practitioners in the fields of science, technology, engineering, and mathematics [STEM]. The Committee notes that the fiscal year 2010 request is an increase of over 100 percent from fiscal year 2008 and that the fiscal year 2009 program faced execution challenges. Additionally, the Department is currently undertaking a strategic review of its various STEM programs to ensure maximum coordination. The Committee believes that increasing the funds prior to completing the strategic review is premature and recommends the same funding as in fiscal year 2009.

Execution Year New Starts.—The fiscal year 2010 budget request includes $77,300,000 under the Joint Capability Technology Demonstration [JCTD] program, and an additional $93,600,000 under the Quick Reaction Special Projects [QRSP] program for new start programs that will be selected in the execution year. These programs are designed to address technology gaps that are not being funded by the Services and rapidly field technologies to the warfighter. However, the Committee notes the poor transition success of many initiatives funded with these funds, in part due to the absence of Service participation in these programs. The Committee further notes that established reprogramming procedures have allowed for reprogramming requests for unfunded warfighter requirements in excess of $1,500,000,000 in fiscal year 2009. While concern over the lack of institutional support for the warfighter remains, the Committee believes that established reprogramming authorities are the appropriate manner to fund urgent, unforeseen national security requirements.

Alternative Energy Study.—The Committee includes $1,400,000 for a pilot study on the use of Department of Defense land for renewable energy production. The study to analyze the potential impacts of a program to develop large-scale renewable electricity generation projects shall be completed not later than one year after enactment of this act.

Chemical and Biological Defense Program.—The fiscal year 2010 budget request includes $1,201,803,000 in research and development funding for the Chemical and Biological Defense Program [CBDP]. This is an increase of $137,000,000 over the amount programmed for fiscal year 2010 in last year's budget. The Committee understands that roughly half of that growth, $61,000,000, is attributed to the Non Traditional Agents [NTA] Initiative, and fully supports that increase. However, the Committee notes that the remaining growth is unjustified or for follow-on efforts to existing projects whose outyear funding requirements are unknown. The Committee denies this unjustified growth and directs that none of the reductions may be levied against the NTA Initiative.

Defense Integrated Military Human Resources System [DIMHRS].—DIMHRS is designed to provide an integrated, multi-component personnel and pay system to the Services. In August 2009, the Department asked the Committee to transfer fiscal year 2010 funds requested for DIMHRS under the Business Trans-

formation Agency to the Services for execution in accordance with a recently completed program restructure that transitions this capability to the Services. The Committee has accommodated this request as detailed in the tables accompanying this report.

Net-Enabled Command Capability [NECC]/Global Command and Control System [GCCS].—The Net-Enabled Command Capability [NECC] is the Department's next generation command and control system. However, the program has suffered from significant program delays and lack of coordination with the Services. The Committee understands that the Department is currently re-evaluating its investment in NECC. As such, the Committee denies funds for further development of NECC and instead redirects funding towards the GCCS to enhance the Department's existing command control capability.

Missile Defense Agency.—The Committee has recommended several changes in the fiscal year 2010 request for the Missile Defense Agency [MDA] in order to ensure that MDA remains focused on the near-term missile defense programs, in particular, Aegis Ballistic Missile Defense [BMD], Theater High Area Altitude Defense [THAAD] and the accompanying TPY–2 radars, and the Ground-based Midcourse Defense [GMD] programs. The Committee believes that these near-term programs should not be reduced to fund higher risk development projects. While the Committee supports the new technology development focus on early intercept, land-based SM–3, and the follow-on STSS satellite system, it is concerned that these new programs are technically challenging and could consume a significant portion of the missile defense budget in future years.

In order to ensure that MDA is fully funded to support Aegis BMD, THAAD and the accompanying TPY–2 radars, and GMD, the Committee has made several adjustments that are highlighted in the paragraphs below.

Aegis Ballistic Missile Defense.—Despite pronouncements from Administration officials when the fiscal year 2010 budget was submitted that the Aegis program was increasing production of Standard Missile-3 [SM–3] in order to get more capability to the warfighter sooner, the budget request actually decreased SM–3 production from fiscal year 2009 to fiscal year 2010. The Committee has added $57,600,000 in Procurement, Defense-Wide to procure an additional six SM–3 Block 1A missiles in order to help boost the production line and get much needed capability to the warfighter sooner than the current program profile.

In addition, the Committee has added $35,000,000 in Research, Development, Test and Evaluation, Defense-Wide for additional development of SM–3. Each year funding requested for the SM–3 variants is reduced to support other shortfalls in the program or in the Agency. The funding recommened should help alleviate that burden and ensure that the development programs are not delayed.

TPY–2 Radars.—The fiscal year 2010 budget request contains no procurement funding for the TPY–2 radars that accompany the THAAD batteries. The Committee has provided an additional $41,000,000 in Procurement, Defense-Wide to begin long-lead procurement of the next TPY–2 radar to ensure that the radars are available when the THAAD batteries become available to the

warfighters. The Committee was informed that funding for TPY–2 radars would resume in fiscal year 2011, and the Committee fully expects MDA to honor this commitment.

Ground-based Missile Defense.—The Committee supports the administration's proposal to reduce the number of emplaced ground-based interceptors [GBIs] to a total of 30. However, several changes have occurred since the submission of the fiscal year 2010 budget request for GMD specifically due to the late approval of the Integrated Master Test Plan [IMTP]. In order to execute the IMTP, the Agency will require seven additional GBIs above those that are in the planned program. In order to ensure that the GBI production line and its sub-vendors do not shut down next year, the Committee has provided an additional $50,000,000 to maintain production capacity for these additional missiles. Furthermore, the Committee is concerned that in order to sustain the GBI's out to 2030, MDA has underestimated the amount of funding required for development and parts obsolescence to maintain the viability of the interceptors. The Committee encourages MDA to remedy this problem in future year budget requests.

Ballistic Missile Defense Test and Targets.—The Committee has reduced $151,000,000 from the request for tests that are not required in fiscal year 2010. In addition, the Committee has reduced $37,000,000 from the request to support the development of two targets that are being built solely to support the two Space Tracking and Surveillance System [STSS] demonstration satellites. The STSS demonstration satellites were built with payloads that would demonstrate capabilities required under the former Space-based Infrared-Low [SBIRS-Low] program. The new constellation that MDA is considering for space-based detection and tracking is very different from the original SBIRS-Low concept and the STSS demonstration satellites. The Committee believes that while these tests could provide useful data to MDA, the investment could be better spent on other near-term programs. There is sufficient funding in the request to demonstrate the STSS capability for which they were built and provide valuable data to MDA by using the multiple targets of opportunity presented by MDA and other Department of Defense missile launches, such as Air Force Glory Trips. The Committee recognizes, however, that a substantial portion of these targets have already been built and encourages MDA to use them in other missile defense tests.

Pacific Region Ballistic Missile Threat.—Recent threats by the North Koreans to launch a missile at the United States, namely the Hawaiian islands, demonstrates that there is an escalating ballistic missile threat in the Pacific region that should be addressed with a more enduring missile defense presence and capability. While MDA has robust testing capacity in the Pacific, operational assets are limited and not well integrated. Therefore, the Committee encourages MDA, in coordination with the U.S. Pacific Command, to explore options for a more integrated missile defense capability at the Pacific Missile Range Facility to defend the State of Hawaii against a ballistic missile attack.

Airborne Laser.—The Committee understands that the Missile Defense Agency [MDA] realigned funding for the Airborne Laser [ABL] program in the fiscal year 2010 President's budget request.

The Committee is also aware that MDA has an upcoming test that could demonstrate the potential lethal capabilities of the system. In the event of a successful demonstration of the Airborne Laser during this test, the Committee believes that MDA should explore future funding for the program.

OPERATIONAL TEST AND EVALUATION, DEFENSE

Appropriations, 2009	$188,772,000
Budget estimate, 2010	190,770,000
House allowance	190,770,000
Committee recommendation	190,770,000

The Committee recommends an appropriation of $190,770,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

	Item	2010 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
	OPERATIONAL TEST & EVAL, DEFENSE					
	RDT&E MANAGEMENT SUPPORT					
1	OPERATIONAL TEST AND EVALUATION	58,647	58,647	58,647		
2	LIVE FIRE TESTING	12,285	12,285	12,285		
3	OPERATIONAL TEST ACTIVITIES AND ANALYSES	119,838	119,838	119,838		
	TOTAL, RDT&E MANAGEMENT SUPPORT	190,770	190,770	190,770		
	TOTAL, OPERATIONAL TEST & EVAL, DEFENSE	190,770	190,770	190,770		