

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 2008 budget requests a total of \$75,117,194,000 for research, development, test and evaluation appropriations.

SUMMARY OF COMMITTEE ACTION

The Committee recommends research, development, test and evaluation appropriations totaling \$75,382,046,000 for fiscal year 2008. This is \$264,852,000 above the budget estimate.

Committee recommended research, development, test and evaluation appropriations for fiscal year 2008 are summarized below:

SUMMARY OF RESEARCH, DEVELOPMENT, TEST AND EVALUATION APPROPRIATIONS

[In thousands of dollars]

Account	2008 budget estimate	Committee recommendation	Change from budget estimate
Research, Development, Test and Evaluation:			
Army	10,589,604	11,355,005	+ 765,401
Navy	17,075,536	17,472,210	+ 396,674
Air Force	26,711,940	26,070,841	- 641,099
Defense-Wide	20,559,850	20,303,726	- 256,124
Operational Test and Evaluation, Defense	180,264	180,264	.....
Total	75,117,194	75,382,046	+ 264,852

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. 1547, the National Defense Authorization Act for Fiscal Year 2008.

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

Research, Development, Test and Evaluation Program Element Codes and Budget Justification Documents.—At the request of Congress, the Government Accountability Office [GAO] recently completed a review of the Defense Department's research, development, test and evaluation [RDT&E] program element code structure and of the RDT&E budget justification documents that are provided annually to Congress in support of the President's budget request. The Committee relies heavily on program element codes and budget justification documents during its budget review and believes that improvements could be made to enhance visibility over the Department's efforts and to provide stronger justification for requested funding. The Committee will work with the Department of Defense to achieve this goal in time for preparation of the fiscal year 2010 budget submission. Areas in need of improvement include, but are not limited to, the correlation of program element codes with the activities funded under the program element; the provision of specific information about activities conducted and accomplishments achieved with prior year funding; information on planned activities and their costs for the budget year at the project level; the improvement of cross references among projects; provision of schedules that identify key events; updates to narratives that reflect prior years' events; and the implementation of a more informative display of programmatic, schedule and budgetary changes.

F-35 Joint Strike Fighter.—The Committee is disappointed that the Department of Defense did not continue funding to support the development of an alternative engine for the F-35 Joint Strike Fighter in the fiscal year 2008 budget request. Although the Committee recognizes that the Department of Defense faces difficult budget challenges, the Committee also believes it is premature to cancel the second engine source. Experience with the F-16 Fighter program demonstrated that engine competition led to a more reliable, better performing and lower cost engine. The Committee believes that competition for the F-35 engine is critical to procuring the best value engine at the lowest price and that competition will likely lead to an overall savings across the life cycle of the fighter program. Therefore, the Committee recommends an additional \$240,000,000 in both the Navy and Air Force Research, Development, Test and Evaluation accounts. The Committee also directs the Department of Defense to fund the continued development of both engines in future budget submissions.

Conventional TRIDENT Missile.—The budget request includes \$175,400,000 to develop a prompt global strike capability using existing TRIDENT II (D-5) missiles with conventional payloads. The Committee recommends no funding for that program. Basic issues with the use of the conventional TRIDENT missile remain; these issues include the possibility of misinterpretation as a nuclear missile launch, the effect of diverting strategic system assets for conventional uses and the exposure of strategic submarine locations. As such, the Committee instead recommends funds to consider other options, including land and air-based alternatives. To encourage a different perspective in addressing the problem, the Com-

mittee is providing \$125,000,000 in the Research, Development, Test and Evaluation, Defense-Wide appropriation for prompt global strike. The funds shall be used for engineering and development of alternatives to the conventional TRIDENT missile program. Specific areas of interest include research on re-entry systems (including FALCON CAV, formerly funded through the Defense Advanced Research Projects Agency), strategic policy compliance, advanced guidance, navigation and control technologies, weapon system command and control, intermediate range missile concepts, advanced nonnuclear warheads and other mission enabling capabilities that address emerging requirements.

Science and Technology.—The Committee notes that the changing warfighting environment requires continued investment in new, forward-looking capabilities. The Committee directs the Secretary of Defense to provide a report to the congressional defense committees that details the Department’s mid- and long-term science and technology strategic plans to address the changing threat environment and to ensure that our warfighters continue to maintain the technological edge over our adversaries. The report is due with the fiscal year 2009 budget submission.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY

Appropriations, 2007	\$11,054,958,000
Budget estimate, 2008	10,589,604,000
House allowance	11,509,540,000
Committee recommendation	11,355,005,000

The Committee recommends an appropriation of \$11,355,005,000. This is \$765,401,000 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]

Line	Item	2008 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	19,266	19,266	22,266	+ 3,000	+ 3,000
2	DEFENSE RESEARCH SCIENCES	137,676	161,176	147,176	+ 9,500	- 14,000
3	UNIVERSITY RESEARCH INITIATIVES	64,843	74,743	80,843	+ 16,000	+ 6,100
4	UNIVERSITY AND INDUSTRY RESEARCH CENTERS	84,034	96,784	104,834	+ 20,800	+ 8,050
	TOTAL, BASIC RESEARCH	305,819	351,969	355,119	+ 49,300	+ 3,150
APPLIED RESEARCH						
5	MATERIALS TECHNOLOGY	18,614	47,989	52,264	+ 33,650	+ 4,275
6	SENSORS AND ELECTRONIC SURVIVABILITY	39,826	62,826	44,026	+ 4,200	- 18,800
7	TRACTOR HIP	4,367	4,367	4,367	.....	.....
8	AVIATION TECHNOLOGY	42,567	46,567	41,567	- 1,000	- 5,000
9	ELECTRONIC WARFARE TECHNOLOGY	16,411	25,411	26,411	+ 10,000	+ 1,000
10	MISSILE TECHNOLOGY	53,038	60,538	59,038	+ 6,000	- 1,500
11	ADVANCED WEAPONS TECHNOLOGY	19,342	21,342	32,342	+ 13,000	+ 11,000
12	ADVANCED CONCEPTS AND SIMULATION	16,654	19,654	20,654	+ 4,000	+ 1,000
13	COMBAT VEHICLE AND AUTOMOTIVE TECHNOLOGY	53,342	93,842	66,342	+ 13,000	- 27,500
14	BALLISTICS TECHNOLOGY	55,014	64,014	59,814	+ 4,800	- 4,200
15	CHEMICAL, SMOKE AND EQUIPMENT DEFEATING TECHNOLOGY	2,235	7,735	5,235	+ 3,000	- 2,500
16	JOINT SERVICE SMALL ARMS PROGRAM	7,008	7,008	7,008	.....	.....
17	WEAPONS AND MUNITIONS TECHNOLOGY	40,469	87,669	75,169	+ 34,700	- 12,500
18	ELECTRONICS AND ELECTRONIC DEVICES	43,391	88,791	78,491	+ 35,100	- 10,300
19	NIGHT VISION TECHNOLOGY	24,391	40,391	26,391	+ 2,000	- 14,000
20	COUNTERMINE SYSTEMS	21,795	21,795	25,795	+ 4,000	+ 4,000
21	HUMAN FACTORS ENGINEERING TECHNOLOGY	17,426	44,426	17,426	.....	- 27,000
22	ENVIRONMENTAL QUALITY TECHNOLOGY	15,809	25,309	17,009	+ 1,200	- 8,300
23	COMMAND, CONTROL, COMMUNICATIONS TECHNOLOGY	22,215	38,465	23,715	+ 1,500	- 14,750
24	COMPUTER AND SOFTWARE TECHNOLOGY	5,368	11,368	5,368	.....	- 6,000
25	MILITARY ENGINEERING TECHNOLOGY	51,120	54,620	56,720	+ 5,600	+ 2,100
26	MANPOWER/PERSONNEL/TRAINING TECHNOLOGY	16,208	16,208	16,208	.....	.....
27	WARFIGHTER TECHNOLOGY	23,083	33,583	33,583	+ 10,500	.....
28	MEDICAL TECHNOLOGY	76,544	183,334	106,544	+ 30,000	- 76,790

[In thousands of dollars]

Line	Item	2008 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
	TOTAL, APPLIED RESEARCH	686,237	1,107,252	901,487	+ 215,250	− 205,750
	ADVANCED TECHNOLOGY DEVELOPMENT					
29	WARFIGHTER ADVANCED TECHNOLOGY	47,065	57,495	75,765	+ 28,700	+ 18,270
30	MEDICAL ADVANCED TECHNOLOGY	53,274	287,474	134,924	+ 81,650	− 152,550
31	AVIATION ADVANCED TECHNOLOGY	53,890	77,390	93,190	+ 15,800	+ 39,300
32	WEAPONS AND MUNITIONS ADVANCED TECHNOLOGY	59,389	85,889	62,189	+ 2,800	− 23,700
33	COMBAT VEHICLE AND AUTOMOTIVE ADVANCED TECHNOLOGY	131,436	197,386	193,321	+ 61,885	− 4,065
34	COMMAND, CONTROL, COMMUNICATIONS ADVANCED TECHNOLOGY	12,255	14,255	12,255	.....	− 2,000
35	MANPOWER, PERSONNEL AND TRAINING ADVANCED TECHNOLOGY	6,783	6,783	6,783	.....	.....
36	ELECTRONIC WARFARE ADVANCED TECHNOLOGY	49,199	58,449	49,199	.....	− 9,250
37	TRACTOR HIKE	12,633	12,633	12,633	.....	.....
38	NEXT GENERATION TRAINING & SIMULATION SYSTEMS	18,723	22,223	21,723	+ 3,000	− 500
39	TRACTOR ROSE	6,526	6,526	6,526	.....	.....
40	IED DEFEAT TECHNOLOGY DEVELOPMENT (0603100A) .....	.....	3,000	.....	.....	− 3,000
41	EXPLOSIVES DEMILITARIZATION TECHNOLOGY	10,349	13,349	19,849	+ 9,500	+ 6,500
42	MILITARY HIV RESEARCH	6,998	16,998	6,998	.....	− 10,000
43	COMBATING TERRORISM, TECHNOLOGY DEVELOPMENT	13,061	13,061	13,061	.....	.....
45	ELECTRONIC WARFARE TECHNOLOGY	17,419	44,919	23,419	+ 6,000	− 21,500
46	MISSILE AND ROCKET ADVANCED TECHNOLOGY	60,353	72,353	69,353	+ 9,000	− 3,000
47	TRACTOR CAGE	18,448	18,448	18,448	.....	.....
48	LANDMINE WARFARE AND BARRIER ADVANCED TECHNOLOGY	25,315	27,315	29,315	+ 4,000	+ 2,000
49	JOINT SERVICE SMALL ARMS PROGRAM	8,097	9,347	8,097	.....	− 1,250
50	NIGHT VISION ADVANCED TECHNOLOGY	35,892	44,892	47,892	+ 12,000	+ 3,000
51	ENVIRONMENTAL QUALITY TECHNOLOGY DEMONSTRATIONS	14,982	14,982	14,982	.....	.....
52	MILITARY ENGINEERING ADVANCED TECHNOLOGY	6,837	22,037	15,037	+ 8,200	− 7,000
53	ADVANCED TACTICAL COMPUTER SCIENCE & SENSOR TECHNOLOGY	67,011	78,511	67,631	+ 620	− 10,880
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT	735,935	1,205,715	1,002,590	+ 266,655	− 203,125
	DEMONSTRATION & VALIDATION					
54	UNIQUE ITEM IDENTIFICATION (UID)	668	668	668	.....	.....
55	ARMY MISSILE DEFENSE SYSTEMS INTEGRATION	14,389	59,389	112,389	+ 98,000	+ 53,000
56	ARMY MISSILE DEFENSE SYSTEMS INTEGRATION (SPACE)	17,421	29,321	39,621	+ 22,200	+ 10,300
57	AIR AND MISSILE DEFENSE SYSTEMS ENGINEERING	176,142	178,142	170,142	− 6,000	− 8,000
58	JOINT AIR-TO-GROUND MISSILE (JAGM)	53,500	53,500	53,500	.....	.....

59	LANDMINE WARFARE AND BARRIER—ADV DEV	24,737	24,737	24,737	.....	.....
60	SMOKE, OBSCURANT AND TARGET DEFEATING SYS—ADV DEV	19,449	19,449	6,449	- 13,000	- 13,000
61	TANK AND MEDIUM CALIBER AMMUNITION	44,578	44,578	48,578	+ 4,000	+ 4,000
62	ADVANCED TANK ARMAMENT SYSTEM (ATAS)	142,486	144,986	142,486	.....	- 2,500
63	SOLDIER SUPPORT AND SURVIVABILITY	4,787	4,787	5,787	+ 1,000	+ 1,000
65	NIGHT VISION SYSTEMS ADVANCED DEVELOPMENT	3,454	3,454	3,454	.....	.....
66	ENVIRONMENTAL QUALITY TECHNOLOGY	6,149	20,799	20,149	+ 14,000	- 650
67	WARFIGHTER INFORMATION NETWORK—TACTICAL	222,296	356,296	222,296	.....	- 134,000
68	NATO RESEARCH AND DEVELOPMENT	4,959	4,959	4,959	.....	.....
69	AVIATION—ADV DEV	6,481	6,481	6,481	.....	.....
70	LOGISTICS AND ENGINEER EQUIPMENT—ADV DEV	27,499	27,499	27,499	.....	.....
71	COMBAT SERVICE SUPPORT CONTROL SYSTEM EVALUATION	19,054	19,054	13,554	- 5,500	- 5,500
72	MEDICAL SYSTEMS—ADV DEV	12,479	23,479	22,979	+ 10,500	- 500
73	SOLDIER SYSTEMS—ADVANCED DEVELOPMENT	18,178	22,478	16,778	- 1,400	- 5,700
	TOTAL, DEMONSTRATION & VALIDATION	818,706	1,044,056	942,506	+ 123,800	- 101,550
	ENGINEERING & MANUFACTURING DEVELOPMENT					
76	AIRCRAFT AVIONICS	57,786	57,786	57,786	.....	.....
77	ARMED, DEPLOYABLE OH—58D	82,310	129,310	182,310	+ 100,000	+ 53,000
78	ELECTRONIC WARFARE DEVELOPMENT	55,716	55,716	58,016	+ 2,300	+ 2,300
81	TRACTOR CAGE	17,821	17,821	17,821	.....	.....
83	INFANTRY SUPPORT WEAPONS	45,229	53,229	57,229	+ 12,000	+ 4,000
84	MEDIUM TACTICAL VEHICLES	1,994	4,794	4,494	+ 2,500	- 300
85	SMOKE, OBSCURANT AND TARGET DEFEATING SYS—SDD	1,347	1,347	1,347	.....	.....
86	FAMILY OF HEAVY TACTICAL VEHICLES	1,947	2,947	11,947	+ 10,000	+ 9,000
87	AIR TRAFFIC CONTROL	8,956	8,956	8,956	.....	.....
88	LIGHT TACTICAL WHEELED VEHICLES	82,300	55,300	38,800	- 43,500	- 16,500
90	NON-LIGHT OF SIGHT LAUNCH SYSTEM	253,410	253,410	255,010	+ 1,600	+ 1,600
91	NON-LINE OF SIGHT CANNON	137,802	137,802	137,802	.....	.....
92	FCS MANNED GRD VEHICLES & COMMON GRD VEHICLE	696,333	506,033	696,333	.....	+ 190,300
93	FCS SYSTEMS OF SYSTEMS ENGR & PROGRAM MGMT	1,589,466	1,422,466	1,589,466	.....	+ 167,000
94	FCS RECONNAISSANCE (UAV) PLATFORMS	41,164	42,264	41,164	.....	- 1,100
95	FCS UNMANNED GROUND VEHICLES	90,667	87,567	90,667	.....	+ 3,100
96	FCS UNATTENDED GROUND SENSORS	10,999	10,999	10,999	.....	.....
97	FCS SUSTAINMENT & TRAINING R&D	678,781	631,781	678,781	.....	+ 47,000
98	MODULAR BRIGADE ENHANCEMENT	64,796	64,796	64,796	.....	.....
99	NIGHT VISION SYSTEMS—SDD	44,619	44,619	47,619	+ 3,000	+ 3,000
100	COMBAT FEEDING, CLOTHING, AND EQUIPMENT	2,501	2,501	2,501	.....	.....
101	NON-SYSTEM TRAINING DEVICES—SDD	35,992	35,992	35,992	.....	.....
102	AIR DEFENSE COMMAND, CONTROL AND INTELLIGENCE—SDD	21,513	21,513	21,513	.....	.....

[In thousands of dollars]

Line	Item	2008 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
103	CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT	31,962	31,962	31,962	.....	.....
104	AUTOMATIC TEST EQUIPMENT DEVELOPMENT	18,025	18,025	8,025	- 10,000	- 10,000
105	DISTRIBUTIVE INTERACTIVE SIMULATIONS (DIS)—SDD	16,594	18,744	16,594	.....	- 2,150
106	COMBINED ARMS TACTICAL TRAINER (CATT) CORE	37,035	37,035	37,035	.....	.....
107	JOINT NETWORK MANAGEMENT SYSTEM	2,786	2,786	2,786	.....	.....
108	WEAPONS AND MUNITIONS—SDD	55,368	68,368	57,368	+ 2,000	- 11,000
109	LOGISTICS AND ENGINEER EQUIPMENT—SDD	45,009	48,009	45,009	.....	- 3,000
110	COMMAND, CONTROL, COMMUNICATIONS SYSTEMS—SDD	10,047	10,047	10,047	.....	.....
111	MEDICAL MATERIEL/MEDICAL BIOLOGICAL DEFENSE EQUIPMENT	15,823	22,323	22,323	+ 6,500	.....
112	LANDMINE WARFARE/BARRIER—SDD	142,315	146,315	157,958	+ 15,643	+ 11,643
114	ARTILLERY MUNITIONS	63,039	65,039	7,089	- 55,950	- 57,950
115	COMBAT IDENTIFICATION	11,362	11,362	11,362	.....	.....
116	ARMY TACTICAL COMMAND & CONTROL HARDWARE & SOFTWARE	99,202	99,202	101,302	+ 2,100	+ 2,100
117	RADAR DEVELOPMENT	7,067	7,067	7,067	.....	.....
118	GENERAL FUND ENTERPRISE BUSINESS SYSTEM (GFEBs)	53,559	112,600	112,600	+ 59,041	.....
119	FIREFINDER	77,279	77,279	77,279	.....	.....
120	SOLDIER SYSTEMS—WARRIOR DEM/VAL .....	.....	2,000	.....	.....	- 2,000
121	ARTILLERY SYSTEMS	24,221	24,221	24,221	.....	.....
122	PATRIOT/MEADS COMBINED AGGREGATE PROGRAM (CAP)	372,146	372,146	372,146	.....	.....
123	NUCLEAR ARMS CONTROL MONITORING SENSOR NETWORK	7,300	7,300	7,300	.....	.....
124	INFORMATION TECHNOLOGY DEVELOPMENT	103,485	106,485	104,485	+ 1,000	- 2,000
	TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT	5,217,073	4,937,264	5,325,307	+ 108,234	+ 388,043
	RDT&E MANAGEMENT SUPPORT .....	.....	.....	.....	.....	.....
126	THREAT SIMULATOR DEVELOPMENT	21,887	23,887	21,887	.....	- 2,000
127	TARGET SYSTEMS DEVELOPMENT	13,499	15,999	18,499	+ 5,000	+ 2,500
128	MAJOR T&E INVESTMENT	66,921	66,921	66,921	.....	.....
130	RAND ARROYO CENTER	16,342	18,342	20,342	+ 4,000	+ 2,000
131	ARMY KWAJALEIN ATOLL	182,136	182,136	182,136	.....	.....
132	CONCEPTS EXPERIMENTATION PROGRAM	34,004	38,004	29,466	- 4,538	- 8,538
133	SMALL BUSINESS INNOVATIVE RESEARCH (0605502A) .....	.....	3,000	.....	.....	- 3,000
134	ARMY TEST RANGES AND FACILITIES	357,964	357,964	357,964	.....	.....
135	ARMY TECHNICAL TEST INSTRUMENTATION AND TARGETS	74,391	76,391	86,991	+ 12,600	+ 10,600
136	SURVIVABILITY/LETHALITY ANALYSIS	40,343	41,843	42,343	+ 2,000	+ 500
137	DOD HIGH ENERGY LASER TEST FACILITY	2,801	2,801	2,801	.....	.....

138	AIRCRAFT CERTIFICATION	4,688	4,688	4,688		
139	METEOROLOGICAL SUPPORT TO RDT&E ACTIVITIES	8,346	8,346	8,346		
141	MATERIEL SYSTEMS ANALYSIS	16,526	16,526	16,526		
142	SUPPORT OF OPERATIONAL TESTING	75,293	77,293	78,293	+ 3,000	+ 1,000
143	ARMY EVALUATION CENTER	61,694	61,694	61,694		
144	SIMULATION & MODELING FOR ACQ, RQTS, & TNG (SMART)	5,342	6,342	5,342		- 1,000
145	PROGRAMWIDE ACTIVITIES	73,718	73,718	73,718		
146	TECHNICAL INFORMATION ACTIVITIES	41,607	41,607	40,607	- 1,000	- 1,000
147	MUNITIONS STANDARDIZATION, EFFECTIVENESS AND SAFETY	19,606	29,606	38,406	+ 18,800	+ 8,800
148	ENVIRONMENTAL QUALITY TECHNOLOGY MGMT SUPPORT	4,958	4,958	4,958		
149	MANAGEMENT HEADQUARTERS (RESEARCH AND DEVELOPMENT)	14,889	14,889	14,889		
	TOTAL, RDT&E MANAGEMENT SUPPORT	1,136,955	1,166,955	1,176,817	+ 39,862	+ 9,862
	OPERATIONAL SYSTEMS DEVELOPMENT					
151	MLRS PRODUCT IMPROVEMENT PROGRAM	54,055	54,055	54,055		
152	WEAPONS CAPABILITY MODIFICATIONS UAV	3,900	3,900	3,900		
153	AEROSTAT JOINT PROJECT OFFICE	481,251	481,251	481,251		
154	ADV FIELD ARTILLERY TACTICAL DATA SYSTEM	16,837	16,837	16,837		
155	COMBAT VEHICLE IMPROVEMENT PROGRAMS	27,615	35,115	36,415	+ 8,800	+ 1,300
156	MANEUVER CONTROL SYSTEM	43,961	45,961	43,961		- 2,000
157	AIRCRAFT MODIFICATIONS/PRODUCT IMPROVEMENT PROGRAMS	325,643	330,143	324,143	- 1,500	- 6,000
158	AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM	476	1,476	476		- 1,000
159	DIGITIZATION	9,737	9,737	9,737		
160	FORCE XXI BATTLE COMMAND, BRIGADE AND BELOW (FBCB2)	32,446	32,446	32,446		
162	MISSILE/AIR DEFENSE PRODUCT IMPROVEMENT PROGRAM	30,219	30,219	30,219		
163	OTHER MISSILE PRODUCT IMPROVEMENT PROGRAMS	1,897	1,897	1,897		
164	TRACTOR CARD	16,573	16,573	16,573		
165	JOINT TACTICAL COMMUNICATIONS PROGRAM (TRI—TAC)	1,536	1,536	1,536		
166	JOINT TACTICAL GROUND SYSTEM	23,462	23,462	23,462		
167	JOINT HIGH SPEED VESSEL (JHSV)	5,148	5,148	5,148		
169	SECURITY AND INTELLIGENCE ACTIVITIES		5,500			- 5,500
170	INFORMATION SYSTEMS SECURITY PROGRAM	28,332	32,282	28,332		- 3,950
171	GLOBAL COMBAT SUPPORT SYSTEM	129,689	94,689	59,689	- 70,000	- 35,000
172	SATCOM GROUND ENVIRONMENT (SPACE)	107,849	107,849	107,849		
173	WWMCCS/GLOBAL COMMAND AND CONTROL SYSTEM	24,836	24,836	24,836		
174	JOINT COMMAND AND CONTROL PROGRAM (JC2)	10,415	10,415	10,415		
175	TACTICAL UNMANNED AERIAL VEHICLES	97,947	97,947	97,947		
177	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS		6,000	7,000	+ 7,000	+ 1,000
178	AVIONICS COMPONENT IMPROVEMENT PROGRAM	1,024	1,024	1,024		

[In thousands of dollars]

Line	Item	2008 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
179	END ITEM INDUSTRIAL PREPAREDNESS ACTIVITIES	66,869	78,869	84,869	+ 18,000	+ 6,000
	TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT	1,541,717	1,549,167	1,504,017	— 37,700	— 45,150
999	CLASSIFIED PROGRAMS	147,162	147,162	147,162	.....	.....
	TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY	10,589,604	11,509,540	11,355,005	+ 765,401	— 154,535

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2008 budget estimate	Committee recommendation	Change from budget estimate	Requested by
1	In-House Laboratory Independent Research	19,266	22,266	+ 3,000	
	Silicon Carbide Armor Manufacturing Initiative			+ 3,000	Bunning
2	Defense Research Sciences	137,676	147,176	+ 9,500	
	Activated Nanostructures for De-icing			+ 1,500	Lincoln, Pryor
	Document Exploitation for Handwriting Recognition			+ 1,000	Warner
	Flexible Electronics Research Initiative			+ 1,000	Specter
	Global Military Operating Environments			+ 2,000	Ensign, Reid
	Integrated nanosensors for NBC threat detection			+ 2,000	Graham
	Organic Semiconductor Modeling and Simulation Research			+ 1,000	Cornyn
	Semiconductor-based Nanotechnology Applications			+ 1,000	Craig, Crapo
3	University Research Initiatives	64,843	80,843	+ 16,000	
	Burn and Shock Trauma Institute			+ 2,000	Durbin
	Hi-tech Eyes for the Battlefield			+ 1,000	Hutchison
	Low Temperature Vehicle Performance Research			+ 1,000	Levin
	Nanomaterial Technologies Research			+ 2,000	Obama
	University Research Initiatives			+ 10,000	Bayh, Clinton, Collins, Johnson, Kennedy, Kerry, Levin, Lieberman, Pryor, Stabenow
4	University and Industry Research Centers	84,034	104,834	+ 20,800	
	H54 program adjustment			- 1,400	
	Center for Information Assurance			+ 1,000	Warner, Webb
	Detecting and Eradicating Corrosion in Army vehicles			+ 1,500	Conrad, Dorgan
	Electron Microprobe Research			+ 1,500	Burr
	Infotonics Research			+ 3,000	Clinton, Schumer
	Integrated Systems in Sensing, Imaging and Communications			+ 1,000	Levin, Stabenow
	MEMS Antenna for wireless comms/UAVs			+ 3,000	Conrad, Dorgan
	Modeling and Analysis of the Response of Structures			+ 1,000	Cochran, Lott
	Nanoscale Biosensor Research			+ 2,500	Lincoln, Pryor
	Nanotubes optimized for lightweight exceptional strength			+ 2,000	Martinez, Bill Nelson
	National Network Security test bed			+ 2,000	McConnell
	Transparent nanocomposite armor			+ 300	Johnson, Thune
	University-based Automotive Research			+ 2,000	Levin, Stabenow
	Visualization for Training and Simulation in urban terrains			+ 1,400	McConnell
5	Materials Technology	18,614	52,264	+ 33,650	

	3D Woven Ballistic Materials for Future Combat Systems			+ 2,000	Reed, Whitehouse
	Advanced Ceramic Surface Engineering for helicopter compressor blades			+ 3,000	Baucus, Tester
	Complex-shaped armor for soldier torso and extremity protection			+ 2,000	Chambliss, Isakson
	Control system for laser powder deposition			+ 400	Johnson
	Future Affordable Multi-utility Materials for Army Future Combat Systems			+ 8,000	Grassley, Harkin, Johnson
	Improvised Explosive Device simulation in different soils			+ 400	Johnson, Thune
	Multi-scale modeling of impact resistant materials for body armor			+ 1,500	Durbin, Obama
	Nanomanufacturing of multifunctional sensors			+ 2,000	Kennedy, Kerry
	Nanotechnologies Initiative			+ 5,000	Committee Initiative
	Next Generation lightweight electric drive systems for Army weapons			+ 2,000	Johnson, Thune
	Protection against Improvised Explosive Devices			+ 4,000	Hagel, Ben Nelson
	Titanium Fabrication for Military/Industrial equipment			+ 1,350	Durbin
	Ultra lightweight metallic armor			+ 2,000	Durbin
6	Sensors and Electronic Survivability	39,826	44,026	+ 4,200	
	H16 unjustified growth			- 1,800	
	SA2 program adjustment			- 1,000	
	Center for Advanced Microelectronics Manufacturing (CAMM)			+ 2,000	Clinton, Schumer
	Integrated Multi-Target Remote-Sensing Technology and Its Applications			+ 2,000	Bill Nelson
	Nanophotonic devices			+ 2,000	Hutchison
	S31 Technology			+ 1,000	Bingaman
8	Aviation Technology	42,567	41,567	- 1,000	
	Program adjustment			- 3,000	
	Composite small main rotor blades			+ 2,000	Brownback, Dodd
9	Electronic Warfare Technology	16,411	26,411	+ 10,000	
	Dominant Military operations on urbanized Terrain Viewer			+ 3,000	Kyl
	Knowledge Integration and Management			+ 3,000	Cardin, Mikulski
	Silver Fox and Manta Unmanned Aerial Systems			+ 4,000	Kyl
10	Missile Technology	53,038	59,038	+ 6,000	
	Mariah Hypersonic Wind Tunnel development program			+ 5,000	Baucus, Tester
	Novel Lightweight Armor Material for Insensitive Munitions Protection of Tactical Missiles			+ 1,000	Reid
11	Advanced Weapons Technology	19,342	32,342	+ 13,000	
	Army Missile and Space Technology Initiative			+ 5,000	Shelby
	Missile Aero-propulsion Computer System (MACS) Modernization			+ 6,000	Sessions, Shelby
	Unmanned Systems Technology Development			+ 2,000	Sessions, Shelby
12	Advanced Concepts and Simulation	16,654	20,654	+ 4,000	
	Boston University Photonic Center			+ 4,000	Kennedy
13	Combat Vehicle and Automotive Technology	53,342	66,342	+ 13,000	
	Advanced Manufacture of Lightweight Materials and Components			+ 2,000	Kohl
	Automotive Research Equipment Purchase			+ 2,000	Stevens

[In thousands of dollars]

Line	Item	2008 budget estimate	Committee recommendation	Change from budget estimate	Requested by
	Center for Advanced Vehicle Design and Simulation			+ 1,000	Stabenow
	Hydrogen PEM Fuel Cell Medium/Heavy-duty Vehicle Demonstration Program			+ 3,000	Dodd, Lieberman
	Military Fuels Research Program			+ 2,000	Bunning, McConnell
	Nano-Engineered Multi-Functional Transparent Armor			+ 1,000	Levin
	SkyPure—Water from Air			+ 2,000	Domenici
14	Ballistics Technology	55,014	59,814	+ 4,800	
	Program adjustment			- 2,000	
	Flexible Solar Cell for Man-Portable Power Generator			+ 2,300	Durbin, Obama
	Laser-based Explosives and Chem/bio Standoff and Point Detector			+ 4,000	Cardin
	Small UAVs and Sensors			+ 500	Johnson
15	Chemical, Smoke and Equipment Defeating Technology	2,235	5,235	+ 3,000	
	Enhanced Vapor Aeration Capabilities (EVAC)			+ 3,000	Voinovich
17	Weapons and Munitions Technology	40,469	75,169	+ 34,700	
	MEFP termination			- 5,000	
	Army Center of Excellence in Acoustics			+ 4,100	Cochran
	Center for Borane Technology			+ 2,000	Bond
	Development and Demonstration of Multi-use/Urban Operations Joint Training System at Fort Dix			+ 3,000	Lautenberg, Menendez
	Electroconversion of Energetic Materials			+ 6,000	Enzi
	Electrolytic Super-Capacitor			+ 3,000	Bond
	Engineered Surfaces for Weapons Life Extension			+ 3,000	Conrad, Dorgan
	Exploding Foils Initiators with Nanomaterial-based Circuits			+ 3,000	Johnson
	Fatigue Odometer for Vehicle Components and Gun Barrels Project Cannon Systems			+ 3,300	Johnson
	Green Armament and RangeSafe Technology			+ 3,000	Lautenberg, Menendez
	Lightweight Munitions and Surveillance for Unmanned Air and Ground Vehicles			+ 5,000	Lautenberg, Menendez
	Research for Army Cannon Systems			+ 2,300	Johnson
	Ripsaw Unmanned Ground Vehicle Weaponization			+ 2,000	Collins, Snowe
18	Electronics and Electronic Devices	43,391	78,491	+ 35,100	
	Advanced, Integrated Portable Power Generation and Charging System			+ 3,100	Cochran, Lott
	Cogeneration for Enhanced Cooling and Heating of Advanced Tactical Vehicles			+ 3,000	Kohl
	Enzyme Biofuel Cell (SEBC)			+ 1,000	Bond
	High-Frequency, High-Power Electronic and Optoelectronic Devices on Aluminum Nitride (AlN)			+ 3,000	Burr, Dole
	Improved Energy Density Battery			+ 1,000	Kerry
	Large Format Li-Ion Battery			+ 1,000	Kohl, Specter
	Mega-Capacity Hybrid Chemistry Lithium Primary Portable Batteries			+ 2,000	Burr, Dole
	ONAMI Miniature Tactical Energy Systems Development			+ 2,500	Smith, Wyden
	PEM Fuel Cell Tactical Generators			+ 5,000	Cardin, Mikulski

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	Portable Hydrogen Generator and Hybrid Power Source			+ 2,000	Kohl
	Renewable Energy for Military Applications			+ 1,500	Bayh, Lugar
	Self-powered, lightweight, flexible display unit on a plastic substrate			+ 2,000	Grassley, Harkin
	Soldier Portable Solid Fuel Hydrogen Generator Cartridge			+ 5,000	Dodd, McConnell, Lieberman
	Thin Lithium-Iron Disulfide Primary Batteries			+ 3,000	Brown, Dole, Leahy
19	Night Vision Technology	24,391	26,391	+ 2,000	
	Small Business Infrared Materials Manufacturing—Silicon Alternatives			+ 2,000	Durbin
20	Countermine Systems	21,795	25,795	+ 4,000	
	Standoff Improvised Explosive Device Protection Program			+ 4,000	Akaka, Lincoln, Bill Nelson, Pryor
22	Environmental Quality Technology	15,809	17,009	+ 1,200	
	Propelling Agent for Slurry Gel			+ 1,200	Reid
23	Command, Control, Communications Technology	22,215	23,715	+ 1,500	
	Portable Flexible Communication Display Devices			+ 1,500	Lautenberg, Menendez
25	Military Engineering Technology	51,120	56,720	+ 5,600	
	Airborne Threats			+ 1,600	Stevens
	Biologically Inspired Security Infrastructure for Tactical Environments			+ 2,000	Martinez, Bill Nelson
	Geosciences/Atmospheric Research			+ 2,000	Allard, Salazar
27	Warfighter Technology	23,083	33,583	+ 10,500	
	Biosecurity Research for Soldier Food Safety			+ 2,500	Roberts
	Carbon Nanotube Armor Protection System			+ 2,000	Sununu
	Modular Ballistic System for Force Protection			+ 5,000	Collins, Salazar, Snowe
	Protective Textile Fabric			+ 1,000	Levin, Stabenow
28	Medical Technology	76,544	106,544	+ 30,000	
	Advanced Bio-engineering for Enhancement of Soldier Survivability			+ 1,500	Chambliss, Isakson
	BioFoam Protein Hydrogel for Battlefield Trauma			+ 2,000	Chambliss, Isakson
	Biomechanics Research			+ 2,000	Warner, Webb
	Carbon Nanotube Production			+ 1,000	Hutchison
	Complementary and Alternative Medicine Research (MIL-CAM)			+ 5,000	Harkin
	Fibrin Adhesive Stat (FAST) Dressing			+ 2,000	Cardin, Clinton, Dole, Mikulski, Schumer
	MRI-DTI Technology to Improve Diagnosis and Treatment of TBI			+ 2,500	Durbin
	New Vaccines to Fight Respiratory Infection			+ 4,000	Hagel, Ben Nelson
	Orthopedic Extremity Trauma Research Program			+ 6,000	Harkin, Hutchison
	Respiratory Biodefense Initiative			+ 2,000	Allard, Salazar
	Staph Vaccine			+ 2,000	Conrad, Dorgan
29	Warfighter Advanced Technology	47,065	75,765	+ 28,700	
	J50 program adjustment			- 4,300	
	Alternative Energy Research			+ 20,000	Committee Initiative

[In thousands of dollars]

Line	Item	2008 budget estimate	Committee recommendation	Change from budget estimate	Requested by
30	BioSensor Communicator and Controller System			+ 3,000	Reid
	ChemBio Integrated Material for Tent Structures			+ 2,000	Gregg, Sununu
	Deployment of Affordable Guided Airdrop System			+ 2,000	Dodd, Lieberman
	High-Pressure/Microwave MRE Processing			+ 2,000	Cantwell, Murray
	Joint Precision Airdrop System (JPADS) Program for Payloads up to 30K lbs			+ 4,000	Lott
	Medical Advanced Technology	53,274	134,924	+ 81,650	
	Advanced Lower Limb Prosthesis for Battlefield Amputees			+ 3,000	Kennedy, Kerry
	Advanced Medical Training Platform: Madigan Army Medical Center			+ 500	Cantwell
	Advanced Regenerative Medicine (ARM) Skin Cell Therapies Burn, Limb and Digit Treatment			+ 1,500	Casey, Specter
	Advanced Surface Technologies for Prosthetic Development			+ 2,000	Baucus, Tester
	Battlefield Tracheal Intubation for Wounded Soldiers			+ 2,000	Hagel, Ben Nelson
	BEAR (Battlefield Extraction-Assist Robot)			+ 2,000	Mikulski
	Brain, Biology, and Machine Applied Research			+ 2,000	Smith, Wyden
	Burns Outcomes Infrastructure Project—only for dual military/civilian application			+ 3,000	Boxer
	Center for Integration of Medicine and Innovative Technology (CIMIT)			+ 5,000	Kennedy
	Control of Inflammation and Tissue Repair (CITR)			+ 2,000	Cantwell, Murray
	Gulf War Illness Peer Reviewed Research			+ 15,000	Akaka, Bayh, Bingaman, Boxer, Byrd, Clinton, Kennedy, Kerry, Obama, Sanders, Tester
	Hibernation Genomics			+ 2,000	Stevens
	Institute for Regenerative Medicine			+ 3,000	Burr, Dole
	Integrated Patient Quality Program			+ 2,000	Craig
	Limb Tissue Regeneration after Battlefield Injuries using Bone Marrow Stem Cells			+ 4,000	Smith, Wyden
	Medical Modeling and Simulation Through Synthetic Digital Genes			+ 2,000	Craig
	National Biodefense Training			+ 1,750	Hutchison
	National Functional Genomics Study			+ 3,000	Dole, Martinez, Bill Nelson
	Neuroimaging, Neurotrauma and Neuroscience in U.S. Warfighters			+ 3,000	Boxer
	Post-IED Craniofacial Injury Reconstruction			+ 2,000	Mikulski
	Robotic Telesurgery in Combat Environments			+ 3,500	Hagel, Ben Nelson
	Rugged Electronic Textile Vital Signs Monitoring			+ 2,000	Reed, Whitehouse
	Surgical Wound Disinfection and Biological Agents			+ 2,000	Lincoln, Ben Nelson, Pryor
	Trauma Care, Research and Training			+ 2,000	Hutchison

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	U.S. Approved Drugs for Malaria and Leishmaniasis in U.S. Military and Civilian Personnel			+ 3,400	Cochran, Lott
	Walter Reed Preventive Medicine Pilot Program			+ 6,000	Stevens
	Wireless Electronic Patient Records, WPIC—Personal Information Carrier			+ 2,000	Feinstein
31	Aviation Advanced Technology	53,890	93,190	+ 39,300	
	Alternate Payload Bomb Live Unit Munition			+ 2,800	Kennedy, Reed, Whitehouse
	Enhanced Rapid Tactical Integration and Fielding of Systems			+ 2,000	Sessions, Shelby
	Excalibur			+ 3,000	Warner, Webb
	Fuel Cells for Mobile Robotic Systems Project			+ 3,000	Durbin, Obama
	Full Authority Digital Engine Controls (FADEC)			+ 3,000	Dodd, Lieberman
	Helmet Mounted Display/Visor Projection for Army Helicopters			+ 2,000	Feinstein
	Improved VAROC/UAV compression system development			+ 3,000	Leahy
	Joint Technical Data Integration—Wide Intelligraf Content Enhancements			+ 4,000	Cantwell
	Parts-on-Demand for CONUS Operations			+ 4,500	Conrad, Dorgan
	Quick-MEDS Automated Release Pod			+ 2,000	Sessions, Shelby
	Technologies for Military Equipment Replenishment			+ 4,000	Kohl
	Unmanned Aerial Vehicle Resupply (BURRO)			+ 2,000	Dodd, Lieberman
32	Weapons and Munitions Advanced Technology	59,389	62,189	+ 4,000	Casey, Specter
	L96 program adjustment			+ 2,800	
	Development of Truck-deployed Explosive Containment Vessel			- 5,000	
	Integrated Aircraft Test Bed			+ 1,800	Reid
	Knowledge Driven Manufacturing System (KDMS)			+ 2,000	Shelby
	Lightweight Cannon Recoil Reduction			+ 1,000	Coleman, Klobuchar
	Raman Chemical Identification System			+ 1,000	Ensign, Reid
33	Combat Vehicle and Automotive Advanced Technology	131,436	193,321	+ 2,000	Kennedy
	FED			+ 61,885	
	53G unjustified program			- 10,000	
	Active Protection Systems Initiative for the Joint Light Tactical Vehicle			- 14,215	
	Advanced Battery Technology (3D ABT)			+ 3,800	Levin
	Advanced Digital Hydraulic Hybrid Drive System			+ 2,000	Durbin
	Advanced Lightweight Composite Armor			+ 1,000	Coleman, Levin, Stabenow
	Advanced Thermal and Oil Management Controls			+ 2,000	Biden, Carper, Cant- well, Murray
	Antiballistic Windshield Armor			+ 2,000	Levin
	Armor Ready Composite Cab Transition			+ 4,000	Bayh, Lugar
	Army Fuel Cell Non-Tactical Vehicle Propulsion			+ 3,000	Biden, Carper, Reed
	Center for Military Vehicle Technologies			+ 2,000	Levin
	Crosshairs Hostile Fire Indicating System			+ 5,100	Cochran, Lott
				+ 3,000	Cornyn

[In thousands of dollars]

Line	Item	2008 budget estimate	Committee recommendation	Change from budget estimate	Requested by
	Diminishing Manufacturing Sources and Material Shortages (DMSMS) Case Resolution Program			+ 2,000	Stabenow
	Enhanced Directed Armor RPG Vehicle Protection System			+ 1,000	Cantwell, Murray, Smith, Wyden
	Field Deployable Fleet Hydrogen Fueling			+ 3,000	Leahy, Sanders
	Fuel Cell Cost Reduction and Durability Improvements			+ 2,000	Levin, Stabenow
	Ground Forces Readiness Enabler for Advanced Tactical Vehicles (GREAT-V)			+ 2,000	Hutchison
	Ground Vehicle Fastening and Joining Research			+ 1,000	Levin, Stabenow
	High Speed Diesel Combustion			+ 4,000	Durbin
	Hybrid Engine Development Program for the Tactical Wheeled Vehicle Fleet			+ 8,000	Levin
	Lightweight Structural Composite Armor for Blast and Ballistic Protection			+ 2,000	Biden, Burr, Carper
	Next Generation Manufacturing Technologies for Defense Supply Chain			+ 4,000	Durbin
	Next Generation Non-Tactical Vehicle Propulsion			+ 2,000	Clinton, Schumer, Stabenow
	Novel Onboard Hydrogen Storage System Development			+ 3,000	Levin
	Rotary Multi-Fuel Auxiliary Power Unit for M1A1 Abrams Tank			+ 2,000	Biden, Cardin, Carper
	Tactical Wheeled Vehicle Structures for Improved Survivability and Performance			+ 5,000	Bayh, Casey, Grassley, Harkin, Lugar, Spec- ter
	Unmanned Ground Vehicle Initiative (UGVI)			+ 12,000	Levin
	Vehicle Design Optimization Tools			+ 1,000	Levin
	Vehicle Information Manager Display for Drivers (VMID)			+ 1,000	Cantwell
	Vehicle Maintenance and Prognostics System			+ 3,200	Cochran, Lott
38	Next Generation Training & Simulation Systems	18,723	21,723	+ 3,000	
	Experiential Technologies for Urban Warfare and Disaster Response			+ 1,000	Burr
	Joint Fires and Effects Training System (JFETS)			+ 2,000	Inhofe
41	Explosives Demilitarization Technology	10,349	19,849	+ 9,500	
	Cryofracture/Plasma Arc Demilitarization Program			+ 3,000	Baucus, Tester
	Missile Recycling Capability—Letterkenney Munitions Center			+ 6,500	Specter
45	Electronic Warfare Technology	17,419	23,419	+ 6,000	
	DAIRCM/CMWS for Army helicopters			+ 6,000	Gregg, Sununu
46	Missile and Rocket Advanced Technology	60,353	69,353	+ 9,000	
	Army Virtual Emergency Research Testbed (AVERT)			+ 3,000	Shelby
	Perimeter & Maritime Sensor Network			+ 3,000	Mikulski
	Software Engineering Enhancements			+ 3,000	Shelby
48	Landmine Warfare and Barrier Advanced Technology	25,315	29,315	+ 4,000	
	Advanced Demining Technology			+ 4,000	Leahy

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50	Night Vision Advanced Technology	35,892	47,892	+ 12,000	
	Enhanced Digital Electronic Night Vision (EDEN)			+ 4,000	Hutchison
	FCS Short Range Electro Optic (SREO) Sensor for Stryker			+ 4,000	Bill Nelson
	UCXR System			+ 4,000	Martinez
52	Military Engineering Advanced Technology	6,837	15,037	+ 8,200	
	Advanced Tactical Fuels for the Military			+ 2,000	Conrad, Dorgan
	Development and Research of Zero Energy Homes at Ft. Campbell			+ 1,200	Alexander
	Direct Methanol Fuel Cell Development			+ 2,000	Martinez
	Regenerative Fuel Cell System for Silent Camp Operations			+ 3,000	Dodd, Lieberman
53	Advanced Tactical Computer Science and Sensor Technology	67,011	67,631	+ 620	
	FOPEN descoper			- 16,380	
	Enhanced Multi-Mission Radar			+ 3,000	Clinton, Schumer
	HYPERSAR Radar			+ 4,000	Bond
	Megawatt Molten Carbonate Fuel Cell Demonstrator			+ 4,000	Dodd, Lieberman
	Shared Vision			+ 4,000	Grassley, Harkin
	X-Band interferometric Radar (XBIR)			+ 2,000	Reed, Whitehouse
55	Army Missile Defense Systems Integration (Non Space)	14,389	112,389	+ 98,000	
	Adaptive Lightweight Materials for Missile Defense			+ 2,000	Baucus, Tester
	Advanced Cavitation Power Technology			+ 5,900	Cochran
	Advanced Electronics Rosebud Integration			+ 4,000	Johnson, Thune
	Advanced Environmental Control System			+ 4,000	Reid
	Advanced Fuel Cell Research			+ 2,000	Cornyn, Hutchison
	Advanced Hypersonic Weapon Technology Demonstration			+ 41,700	Cochran, Sessions
	Advanced Strap-down Seeker			+ 2,500	Gregg, Sununu
	AHW BMC2 HWIL Technology Demonstration			+ 3,000	Lott, Shelby
	Alternative Power Technology (APT) for Missile Defense			+ 4,000	Johnson, Thune
	Compact Pulsed Power for Defense Applications			+ 2,000	Hutchison
	Future TOC Hardware/Software Integration			+ 2,000	Sessions, Shelby
	Heat Dissipation for Electronic Systems & Enclosures			+ 3,000	Reid
	Model-Based Enterprise			+ 1,000	Bunning, McConnell
	Neutralization of IEDs			+ 3,000	Bond
	Low-Earth Orbit Nanosatellite Integrated Defense Autonomous Systems			+ 5,000	Inouye
	Radiation Hardening Technology			+ 2,000	Sessions, Shelby
	Standoff Hazardous Agent Detection & Evaluations System (SHADES)			+ 2,000	Lincoln, Pryor
	Transfer Missile Power System (OBVP)			+ 3,000	Lott
	Vertical Integration for Missile Defense Surveillance Data			+ 5,900	Cochran, Lott
56	Army Missile Defense Systems Integration (Space)	17,421	39,621	+ 22,200	
	Applied Counterspace Technology (ACT) Testbed			+ 6,400	Cochran
	HiSentinel			+ 5,800	Johnson, Thune
	Integrated Nanosat Delivery System			+ 3,000	Sessions, Shelby

[In thousands of dollars]

Line	Item	2008 budget estimate	Committee recommendation	Change from budget estimate	Requested by
	Low Cost Interceptor (LCI)			+ 5,000	Shelby
	Tactical Overwatch High Altitude System (TOHAS)			+ 2,000	Shelby
57	Air and Missile Defense Systems Engineering	176,142	170,142	- 6,000	
	S32 unjustified growth			- 10,000	
	Advanced Extended Range Attack Missile			+ 1,000	Brownback, Roberts
	Border Security and Defense Systems Research			+ 3,000	Hutchison
60	Smoke, Obscurant and Target Defeating Sys—Adv Dev	19,449	6,449	- 13,000	
	Excessive program delays			- 13,000	
61	Tank and Medium Caliber Ammunition	44,578	48,578	+ 4,000	
	High Explosive Air Burst (HEAB) 25mm Ammunition			+ 4,000	Durbin
63	Soldier Support and Survivability	4,787	5,787	+ 1,000	
	Responsive Textiles			+ 1,000	Kerry
66	Environmental Quality Technology	6,149	20,149	+ 14,000	
	Battlefield Asset Recovery Decontamination System (BARDS)			+ 3,000	Casey
	Hawaii Undersea Chemical Weapons Assessment Program			+ 5,500	Akaka
	Modifications to mVHP for use against TICs/TIMs			+ 2,500	Brown, Voinovich
	Web-Based Environmental Compliance Management System			+ 3,000	Boxer
71	Combat Service Support Control System Evaluation and Analysis	19,054	13,554	- 5,500	
	Program growth without acquisition strategy			- 5,500	
72	Medical Systems—Adv Dev	12,479	22,979	+ 10,500	
	Future Medical Shelter System—44/48 Bed Combat Support Hospital			+ 7,500	Lincoln, Pryor
	Wireless Medical Monitoring System (WiMed)			+ 3,000	Grassley, Harkin
73	Soldier Systems—Advanced Development	18,178	16,778	- 1,400	
	S54 40mm Reconnaissance Cartridge			- 1,400	
77	Armed, Deployable OH-58D	82,310	182,310	+ 100,000	
	ARH restructure—Transfer from Aircraft Procurement, Army, line 3			+ 100,000	
78	Electronic Warfare Development	55,716	58,016	+ 2,300	
	Bi-Directional English-Iraqi Instant Language Translation System			+ 2,300	Coleman, Klobuchar
83	Infantry Support Weapons	45,229	57,229	+ 12,000	
	Enhanced Self-Sintered Silicon Carbide Body Armor			+ 2,000	Casey, Specter
	XM312			+ 10,000	Collins, Leahy, Snowe
84	Medium Tactical Vehicles	1,994	4,494	+ 2,500	
	Fuel Saving Continuously Variable Transmission for FMTV and JLTV			+ 2,500	Bayh, Lugar
86	Family of Heavy Tactical Vehicles	1,947	11,947	+ 10,000	
	Heavy Expanded Mobile Tactical Truck A3			+ 10,000	Kohl
88	Light Tactical Wheeled Vehicles	82,300	38,800	- 43,500	

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	Joint Light Tactical Vehicle contract delay			-45,000	
	Second Source Tires for JLTV			+1,500	Brownback
90	Non-Line of Sight Launch System	253,410	255,010	+1,600	
	Enforc-IT Anti Tamper System			+1,600	Bayh, Lugar
99	Night Vision Systems—SDD	44,619	47,619	+3,000	
	Lightweight Multi-purpose Laser			+3,000	Cantwell, Murray
104	Automatic Test Equipment Development	18,025	8,025	-10,000	
	L59 funding ahead of need			-10,000	
108	Weapons and Munitions—SDD	55,368	57,368	+2,000	
	Mortar Anti-Personnel Anti-Material Technology			+2,000	Coleman, Klobuchar, Lautenberg, Menen- dez
111	Medical Materiel/Medical Biological Defense Equipment—SDD	15,823	22,323	+6,500	
	Plasma Sterilizer			+3,000	Coleman, Klobuchar
	Military Applications of Medical Grade Chitosan			+3,500	Inouye
112	Landmine Warfare/Barrier—SDD	142,315	157,958	+15,643	
	IMS FCS integration			-4,045	
	Spider follow-on stand-off capability transfer from Other Procurement, Army, line 40			+19,688	
114	Artillery Munitions	63,039	7,089	-55,950	
	Pending acquisition strategy			-55,950	
116	Army Tactical Command & Control Hardware & Software	99,202	101,302	+2,100	
	C3T CDSOS (Cross Domain Strategic and Operational Solution)			+2,100	Cochran, Lott
118	General Fund Enterprise Business System (GFEBs)	53,559	112,600	+59,041	
	Transfer from Operation and Maintenance, Army, line 432			+29,822	
	Transfer from Other Procurement, Army, line 107			+29,219	
124	Information Technology Development	103,485	104,485	+1,000	
	Electronic Commodity Program			+1,000	Byrd
127	Target Systems Development	13,499	18,499	+5,000	
	Mobile Objects for Net-Centric Operations			+3,000	Cantwell
	Next Generation Ice Protection Technologies			+2,000	Roberts
130	Rand Arroyo Center	16,342	20,342	+4,000	
	Arroyo Center program adjustment			+4,000	Feinstein
132	Concepts Experimentation Program	34,004	29,466	-4,538	
	Program adjustment			-12,538	
	2D-3D Face Recognition System			+3,000	Gregg, Sununu
	Arabic Language Training Program			+1,000	Brownback
	Automated Communication Support System			+2,000	Chambliss, Isakson
	Multispectral Fingerprint Device			+2,000	Bingaman, Domenici
135	Army Technical Test Instrumentation and Targets	74,391	86,991	+12,600	
	Dugway Testing and Infrastructure Upgrade			+3,500	Bennett, Hatch

[In thousands of dollars]

Line	Item	2008 budget estimate	Committee recommendation	Change from budget estimate	Requested by
	Joint Directed Energy Test Site—IED Defeat			+ 6,000	Bingaman, Domenici
	Joint Tactical Network Test Environment			+ 2,500	Bingaman, Domenici
	Robotic Manipulators for Explosive Ordnance Disposal			+ 600	Enzi
136	Survivability/Lethality Analysis	40,343	42,343	+ 2,000	
	Rotorcraft Survivability Assessment Facility			+ 2,000	Cardin, Mikulski
142	Support of Operational Testing	75,293	78,293	+ 3,000	
	Denied GPS			+ 3,000	Casey, Hatch, Specter
146	Technical Information Activities	41,607	40,607	- 1,000	
	Unjustified growth			- 4,000	
	Knowledge, Tech Sharing Program			+ 3,000	Bond
147	Munitions Standardization, Effectiveness and Safety	19,606	38,406	+ 18,800	
	Advanced Cluster Energetics			+ 5,000	Lautenberg, Menendez
	Depleted Uranium Sensing and Treatment for Removal			+ 4,900	Cochran
	Gun Propellant Demilitarization			+ 3,000	Coleman, Klobuchar
	Medium Caliber Metal Parts Upgrade			+ 3,000	Casey, Specter
	Thermal Battery qualification			+ 2,900	Brownback, Roberts
155	Combat Vehicle Improvement Programs	27,615	36,415	+ 8,800	
	Combat Vehicle Transmission Improvement			+ 4,800	Bayh, Lugar
	Vehicle Health Management Systems Development			+ 4,000	Sessions, Shelby
157	Aircraft Modifications/Product Improvement Programs	325,643	324,143	- 1,500	
	ACS lack of acquisition strategy			- 19,500	
	Aircraft Component Remediation			+ 3,000	Sessions
	CH-47 Integrated Vehicle Health Management System (IVHMS)			+ 10,000	Leahy
	Helicopter Autonomous Landing System			+ 5,000	Reid
171	Global Combat Support System	129,689	59,689	- 70,000	
	Program delays			- 70,000	
177	Distributed Common Ground/Surface Systems		7,000	+ 7,000	
	Advanced Architecture Designs Supporting U.S. Army Net Centric Warfare			+ 2,000	Lautenberg, Menendez
	Heuristic Internet Protocol Engine			+ 2,000	Bond
	Asymmetric Threat Response and Analysis Project (ATRAP)			+ 2,000	Kyl
	Effect Based Approach to Operations			+ 1,000	Bennett
179	End Item Industrial Preparedness Activities	66,869	84,869	+ 18,000	
	Aging Weapons Systems Structural Repair			+ 2,000	Johnson, Thune
	Electrodeposited Coatings Systems			+ 2,000	Kohl
	High Temperature Ceramic Manufacturing Technology			+ 2,000	Dodd, Lieberman
	Improved Manufacturing Process for SAPI			+ 4,000	Allard

Laser Engineered Net Shaping (LENS) Qualification for Aging Weapons Systems .....	.....	.....	+ 2,000	Johnson
Legacy Aerospace Gear Drive Re-Engineering Initiative .....	.....	.....	+ 1,000	Dodd
Next Generation Combat Helmet .....	.....	.....	+ 3,000	Gregg, Sununu
Three Dimensional Printing of DOD Titanium Weapon System Components .....	.....	.....	+ 2,000	Crapo

Warfighter Information Network—Tactical [WIN-T].—The fiscal year 2008 budget request includes \$737,900,000 for WIN-T/JNN in Research, Development, Test and Evaluation, Army and in Other Procurement, Army. Subsequent to the budget submission and following a Nunn-McCurdy breach, the Under Secretary of Defense for Acquisition, Technology, and Logistics certified a restructured WIN-T program consisting of four distinct increments that provide progressively increasing capability. The Committee notes that the Nunn-McCurdy breach was primarily caused by program immaturity, schedule growth, errors in cost estimating assumptions and changes to the acquisition strategy. Yet under the restructured program, WIN-T's two most sophisticated elements—Increment 3, which will provide full networking on the move capability, and Increment 4, which will provide protected networking on the move capability—still lack finalized requirements, technological maturity assessments, and cost estimates. As a result, the Committee is highly concerned that the WIN-T program remains surrounded by programmatic uncertainty, technological challenges, and is at risk for additional cost and schedule growth. Therefore, the Committee finds it premature to triple research, development, test and evaluation funding in fiscal year 2008, as the Army has proposed. The Committee recommendation provides an increase of more than \$100,000,000 over amounts provided in fiscal year 2007 and fully funds Increment 2 in support of fielding in fiscal year 2009.

The Committee believes that the program's history and remaining issues of concern, coupled with its importance to the Army's current and future force merit an independent review and assessment. Therefore, the Committee directs the Comptroller General to evaluate, assess and report on the WIN-T program and to present its findings to the congressional defense committees no later than June 30, 2008. This report shall include an assessment of the restructured program's ability to address its past problems; its integration and synchronization with the requirements of the Future Combat Systems program; a technology readiness level assessment; an identification of key remaining risks in the program, its acquisition strategy and management structure; accuracy of cost estimates; and other issues the Comptroller General determines are relevant to the future direction of the WIN-T program.

MQ-8B Fire Scout Vertical Takeoff Unmanned Aerial Vehicle [VTUAV].—The Army is purchasing Fire Scout VTUAV's to satisfy the requirement for Class IV UAV's under its Future Combat Systems program. The platform is based on the Navy's RQ-8A Fire Scout VTUAV that has completed more than 200 flight tests. The Committee understands that production of at least six Army Fire Scout VTUAV's has been completed, but final flight testing has been delayed until 2010 due to the development of the Future Combat Systems network and delays in the Joint Tactical Radio System program. The Committee is concerned about this program delay when the United States Central Command [CENTCOM] has an urgent requirement for persistent command, control, communications, computers, intelligence, surveillance and reconnaissance [C4ISR] systems in support of ongoing operations. The Committee, therefore, urges the Secretary of Army to take appropriate actions to field previously produced Army Fire Scout Class IV VTUAV's, with

appropriate sensors and communications capabilities and requisite ground control stations, for deployment to the CENTCOM area of operations. Further, the Secretary of the Army is directed to submit a report to the congressional defense committees along with the fiscal year 2009 budget submission that describes progress made toward fielding this capability.

XM 982 Excalibur 155mm Precision Guided Extended Range Artillery Projectile.—The fiscal year 2008 request includes \$55,950,000 for a third planned increment, Block Ib, to the XM 982 Excalibur projectile. The Committee understands that the fiscal year 2008 acquisition strategy for Excalibur remains to be determined. Therefore, the Committee denies the requested funding for Block Ib at this time without prejudice. The Committee will revisit funding for Excalibur subsequent to the Army's decision on the program's fiscal year 2008 acquisition strategy.

General Fund Enterprise Business System [GFEBs].—GFEBs is a commercial-off-the-shelf, web-based enterprise resource planning system designed to enable the Army to share resource management data across the Army. The fiscal year 2008 budget request includes \$53,559,000 in Research, Development, Test and Evaluation, Army, \$39,353,000 in Other Procurement, Army, and \$29,822,000 in Operation and Maintenance, Army for a total request of \$122,724,000, an increase of \$62,273,000 over amounts provided in fiscal year 2007. Subsequent to the budget submission, the Army requested that all funding in Operation and Maintenance, Army, and \$29,219,000 of funding in Other Procurement, Army be transferred to the Research, Development, Test and Evaluation, Army account due to an exponential growth in requirements. The Committee notes that this program adjustment differs substantially not only from the fiscal year 2008 budget submission, but also from a program adjustment that was briefed to the Committee earlier this year in support of a reprogramming action. The Committee notes further that subsequent to the fiscal year 2007 budget submission, the Army had also requested a realignment of funds included in the budget request. The Committee is deeply concerned with the lack of stable program requirements and the Army's schedule-driven program management. This is particularly troubling in light of the fact that earlier this year, the Army nominated, and the Deputy Secretary of Defense approved, the GFEBs program as a pilot for the Capital Account Pilot Program, which is designed around the concept of program stability. The Committee sees no such stability in the GFEBs program. However, at this point, recognizing the critical importance of improving the Army's resource management system and faced with a lack of alternatives, the Committee supports the requested realignment of fiscal year 2008 funding. The Committee advises the Army that it expects to receive program updates, to include the program's requirements, schedule, status of deliverables, contractor performance and execution of resources not less than every 60 days.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, NAVY

Appropriations, 2007	\$18,673,894,000
Budget estimate, 2008	17,075,536,000
House allowance	17,718,624,000
Committee recommendation	17,472,210,000

The Committee recommends an appropriation of \$17,472,210,000. This is \$396,674,000 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]

Line	Item	2008 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
	RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY					
	BASIC RESEARCH					
1	UNIVERSITY RESEARCH INITIATIVES	76,637	93,137	90,637	+ 14,000	– 2,500
2	IN-HOUSE LABORATORY INDEPENDENT RESEARCH	16,556	16,556	17,556	+ 1,000	+ 1,000
3	DEFENSE RESEARCH SCIENCES	374,052	380,052	385,752	+ 11,700	+ 5,700
	TOTAL, BASIC RESEARCH	467,245	489,745	493,945	+ 26,700	+ 4,200
	APPLIED RESEARCH					
4	POWER PROJECTION APPLIED RESEARCH	83,419	102,019	99,419	+ 16,000	– 2,600
5	FORCE PROTECTION APPLIED RESEARCH	155,936	167,436	196,436	+ 40,500	+ 29,000
6	MARINE CORPS LANDING FORCE TECHNOLOGY	26,785	27,785	31,285	+ 4,500	+ 3,500
7	MATERIALS, ELECTRONICS AND COMPUTER TECHNOLOGY	2,500	2,500	2,000	+ 2,000	– 500
8	COMMON PICTURE APPLIED RESEARCH	93,376	99,376	104,376	+ 11,000	+ 5,000
9	WARFIGHTER SUSTAINMENT APPLIED RESEARCH	88,297	102,297	101,397	+ 13,100	– 900
10	RF SYSTEMS APPLIED RESEARCH	45,451	51,451	51,451	+ 6,000	.....
11	OCEAN WARFIGHTING ENVIRONMENT APPLIED RESEARCH	49,869	55,369	49,869	.....	– 5,500
12	JOINT NON-LETHAL WEAPONS APPLIED RESEARCH	6,081	6,081	6,081	.....	.....
13	UNDERSEA WARFARE APPLIED RESEARCH	68,455	70,955	71,455	+ 3,000	+ 500
14	MINE AND EXPEDITIONARY WARFARE APPLIED RESEARCH	59,874	68,374	64,374	+ 4,500	– 4,000
	TOTAL, APPLIED RESEARCH	677,543	753,643	778,143	+ 100,600	+ 24,500
	ADVANCED TECHNOLOGY DEVELOPMENT					
15	POWER PROJECTION ADVANCED TECHNOLOGY	49,684	54,684	89,184	+ 39,500	+ 34,500
16	FORCE PROTECTION ADVANCED TECHNOLOGY	70,850	106,100	99,850	+ 29,000	– 6,250
17	COMMON PICTURE ADVANCED TECHNOLOGY	40,782	43,782	111,540	+ 70,758	+ 67,758
18	WARFIGHTER SUSTAINMENT ADVANCED TECHNOLOGY	102,124	113,624	95,124	– 7,000	– 18,500
19	RF SYSTEMS ADVANCED TECHNOLOGY	22,676	27,676	38,676	+ 16,000	+ 11,000
20	MARINE CORPS ADVANCED TECHNOLOGY DEMONSTRATION (ATD)	70,968	76,468	74,968	+ 4,000	– 1,500
21	JOINT NON-LETHAL WEAPONS TECHNOLOGY DEVELOPMENT	10,938	13,438	10,938	.....	– 2,500
23	WARFIGHTER PROTECTION ADVANCED TECHNOLOGY	12,145	43,645	19,145	+ 7,000	– 24,500
24	UNDERSEA WARFARE ADVANCED TECHNOLOGY	73,626	74,626	76,826	+ 3,200	+ 2,200
25	NAVY WARFIGHTING EXPERIMENTS AND DEMONSTRATIONS	41,196	41,196	41,196	.....	.....
26	MINE AND EXPEDITIONARY WARFARE ADVANCED TECHNOLOGY	26,840	27,840	26,840	.....	– 1,000

[In thousands of dollars]

Line	Item	2008 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT	521,829	623,079	684,287	+ 162,458	+ 61,208
	DEMONSTRATION & VALIDATION					
27	AIR/OCEAN TACTICAL APPLICATIONS	47,914	44,914	48,914	+ 1,000	+ 4,000
28	AVIATION SURVIVABILITY	6,252	20,252	11,752	+ 5,500	- 8,500
29	DEPLOYABLE JOINT COMMAND AND CONTROL	9,475	9,475	9,475		
30	ASW SYSTEMS DEVELOPMENT	16,706	21,706	16,706		- 5,000
31	TACTICAL AIRBORNE RECONNAISSANCE	4,063	4,063	4,063		
32	ADVANCED COMBAT SYSTEMS TECHNOLOGY	9,331	9,331	9,331		
33	SURFACE AND SHALLOW WATER MINE COUNTERMEASURES	91,122	92,722	91,122		- 1,600
34	SURFACE SHIP TORPEDO DEFENSE	15,967	28,967	17,467	+ 1,500	- 11,500
35	CARRIER SYSTEMS DEVELOPMENT	84,806	89,306	84,806		- 4,500
36	SHIPBOARD SYSTEM COMPONENT DEVELOPMENT	9,450	27,050	34,550	+ 25,100	+ 7,500
37	PILOT FISH	132,131	132,131	127,131	- 5,000	- 5,000
38	RETRACT LARCH	89,601	89,601	89,601		
39	RETRACT JUNIPER	37,405	37,405	37,405		
40	RADIOLOGICAL CONTROL	1,546	1,546	1,546		
41	SURFACE ASW	25,560	50,560	27,560	+ 2,000	- 23,000
43	ADVANCED SUBMARINE SYSTEM DEVELOPMENT	134,882	139,382	155,182	+ 20,300	+ 15,800
44	SUBMARINE TACTICAL WARFARE SYSTEMS	9,865	10,865	11,515	+ 1,650	+ 650
45	SHIP CONCEPT ADVANCED DESIGN	30,858	32,858	39,858	+ 9,000	+ 7,000
46	SHIP PRELIMINARY DESIGN & FEASIBILITY STUDIES	18,736	18,736	26,436	+ 7,700	+ 7,700
47	ADVANCED NUCLEAR POWER SYSTEMS	166,196	166,196	166,196		
49	CHALK EAGLE	211,201	211,201	211,201		
50	LITTORAL COMBAT SHIP (LCS)	217,502	229,002	300,502	+ 83,000	+ 71,500
51	COMBAT SYSTEM INTEGRATION	53,427	58,427	53,427		- 5,000
52	CONVENTIONAL MUNITIONS	8,941	8,941	8,941		
53	MARINE CORPS ASSAULT VEHICLES	288,220	288,220	190,220	- 98,000	- 98,000
54	MARINE CORPS MINE/COUNTERMEASURES SYSTEMS—ADV DEV	657	657	657		
55	MARINE CORPS GROUND COMBAT/SUPPORT SYSTEM	80,403	83,903	54,403	- 26,000	- 29,500
56	JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT	83,361	83,361	83,361		
57	COOPERATIVE ENGAGEMENT	33,283	38,283	33,283		- 5,000
58	OCEAN ENGINEERING TECHNOLOGY DEVELOPMENT	5,122	5,122	5,122		
59	ENVIRONMENTAL PROTECTION	19,850	21,350	19,850		- 1,500
60	NAVY ENERGY PROGRAM	5,335	6,335	5,335		- 1,000
61	FACILITIES IMPROVEMENT	4,131	10,581	4,131		- 6,450

62	CHALK CORAL	28,297	28,297	28,297	.....	.....
63	NAVY LOGISTIC PRODUCTIVITY	3,547	15,547	9,547	+ 6,000	- 6,000
64	RETRACT MAPLE	346,144	346,144	346,144	.....	.....
65	LINK PLUMERIA	88,748	88,748	88,748	.....	.....
66	RETRACT ELM	79,144	79,144	79,144	.....	.....
67	SHIP SELF DEFENSE	10,954	10,954	10,954	.....	.....
68	LINK EVERGREEN	31,607	31,607	31,607	.....	.....
69	SPECIAL PROCESSES	40,940	40,940	40,940	.....	.....
70	NATO RESEARCH AND DEVELOPMENT	9,934	9,934	9,934	.....	.....
71	LAND ATTACK TECHNOLOGY	31,021	62,021	31,021	.....	- 31,000
72	NONLETHAL WEAPONS	45,892	48,892	45,892	.....	- 3,000
74	JOINT PRECISION APPROACH AND LANDING SYSTEMS	70,811	70,811	70,811	.....	.....
75	SINGLE INTEGRATED AIR PICTURE (SIAP) SYSTEM ENGINEER	46,450	46,450	46,450	.....	.....
76	COUNTER-DRUG RDT&E PROJECTS .....	.....	10,000	.....	.....	- 10,000
77	DIRECTED ENERGY AND ELECTRIC WEAPON SYSTEMS .....	.....	2,500	.....	.....	- 2,500
78	TACTICAL AIR DIRECTIONAL INFRARED COUNTERMEASURES	27,569	34,569	27,569	.....	- 7,000
79	HARD AND DEEPLY BURIED TARGET DEFEAT SYSTEM (HDBTDS)	126,434	.....	.....	- 126,434	.....
80	JOINT AIR-TO-GROUND MISSILE (JAGM)	15,000	15,000	15,000	.....	.....
81	SPACE & ELECTRONIC WARFARE (SEW) ARCHITECTURE/ENGINE	42,295	42,295	42,295	.....	.....
	TOTAL, DEMONSTRATION & VALIDATION	2,998,086	3,056,302	2,905,402	- 92,684	- 150,900
	ENGINEERING & MANUFACTURING DEVELOPMENT					
83	OTHER HELO DEVELOPMENT	46,815	42,815	41,815	- 5,000	- 1,000
84	AV-8B AIRCRAFT—ENG DEV	17,360	17,360	17,360	.....	.....
85	STANDARDS DEVELOPMENT	106,242	110,242	106,242	.....	- 4,000
86	MULTI-MISSION HELICOPTER UPGRADE DEVELOPMENT	78,151	78,151	78,151	.....	.....
87	AIR/OCEAN EQUIPMENT ENGINEERING	5,162	5,162	5,162	.....	.....
88	P-3 MODERNIZATION PROGRAM	8,621	4,621	8,621	.....	+ 4,000
89	WARFARE SUPPORT SYSTEM	2,911	4,911	2,911	.....	- 2,000
90	TACTICAL COMMAND SYSTEM	86,921	89,421	86,921	.....	- 2,500
91	ADVANCED HAWKEYE	808,993	808,993	808,993	.....	.....
92	H-1 UPGRADES	3,608	3,608	3,608	.....	.....
93	ACOUSTIC SEARCH SENSORS	18,325	19,325	18,325	.....	- 1,000
94	V-22A	117,997	117,997	117,997	.....	.....
95	AIR CREW SYSTEMS DEVELOPMENT	24,267	24,267	24,267	.....	.....
96	EA-18	272,699	274,699	272,699	.....	- 2,000
97	ELECTRONIC WARFARE DEVELOPMENT	41,064	44,564	41,064	.....	- 3,500
98	VHXX EXECUTIVE HELO DEVELOPMENT	270,971	230,971	270,971	.....	+ 40,000
99	JOINT TACTICAL RADIO SYSTEM—NAVY (JTRS-NAVY)	853,676	853,676	853,676	.....	.....
100	SC-21 TOTAL SHIP SYSTEM ENGINEERING	621,544	629,544	637,544	+ 16,000	+ 8,000

[In thousands of dollars]

Line	Item	2008 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
101	SURFACE COMBATANT COMBAT SYSTEM ENGINEERING	142,810	146,810	142,810		— 4,000
102	LPD-17 CLASS SYSTEMS INTEGRATION	4,300	4,300	4,300		
103	SMALL DIAMETER BOMB (SDB)	9,832	9,832	9,832		
104	STANDARD MISSILE IMPROVEMENTS	231,791	231,791	231,791		
105	AIRBORNE MCM	54,761	57,761	54,761		— 3,000
106	NAVAL INTEGRATED FIRE CONTROL-COUNTER AIR SYSTEMS ENG	11,497	15,497	11,497		— 4,000
107	ADVANCED ABOVE WATER SENSORS	121,494	121,494	121,494		
108	SSN-688 AND TRIDENT MODERNIZATION	114,789	115,789	122,789	+ 8,000	+ 7,000
109	AIR CONTROL	4,166	4,166	4,166		
111	SHIPBOARD AVIATION SYSTEMS	28,100	28,100	28,100		
112	COMBAT INFORMATION CENTER CONVERSION	17,139	17,139	19,139	+ 2,000	+ 2,000
113	NEW DESIGN SSN	223,958	249,958	228,958	+ 5,000	— 21,000
114	SSN-21 DEVELOPMENTS	2,457	2,457	2,457		
115	SUBMARINE TACTICAL WARFARE SYSTEM	53,703	55,703	55,703	+ 2,000	
116	SHIP CONTRACT DESIGN/LIVE FIRE T&E	62,404	63,404	67,304	+ 4,900	+ 3,900
118	MINE DEVELOPMENT	2,092	2,092	2,092		
120	LIGHTWEIGHT TORPEDO DEVELOPMENT	27,056	27,056	27,056		
122	JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT	10,382	10,382	10,382		
123	PERSONNEL, TRAINING, SIMULATION, AND HUMAN FACTORS	8,830	8,830	8,830		
125	JOINT STANDOFF WEAPON SYSTEMS	24,851	30,851	24,851		— 6,000
126	SHIP SELF DEFENSE (DETECT & CONTROL)	33,064	35,064	35,064	+ 2,000	
127	SHIP SELF DEFENSE (ENGAGE: HARD KILL)	67,366	70,366	75,866	+ 8,500	+ 5,500
128	SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)	34,323	37,323	36,323	+ 2,000	— 1,000
129	INTELLIGENCE ENGINEERING	1,959	1,959	1,959		
130	MEDICAL DEVELOPMENT	7,973	37,573	20,873	+ 12,900	— 16,700
131	NAVIGATION/ID SYSTEM	42,121	42,121	42,121		
133	JOINT STRIKE FIGHTER (JSF)	1,707,372	2,038,872	1,805,772	+ 98,400	— 233,100
135	INFORMATION TECHNOLOGY DEVELOPMENT	22,181	26,181	22,181		— 4,000
136	INFORMATION TECHNOLOGY DEVELOPMENT	54,098	62,098	77,098	+ 23,000	+ 15,000
138	CH-53X	417,161	407,161	397,161	— 20,000	— 10,000
139	MULTI-MISSION MARITIME AIRCRAFT (MMA)	880,106	881,106	880,106		— 1,000
140	TACTICAL CRYPTOLOGIC SYSTEMS	39,053	41,053	39,053		— 2,000
	TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT	7,848,516	8,244,616	8,008,216	+ 159,700	— 236,400

	RDT&E MANAGEMENT SUPPORT					
141	THREAT SIMULATOR DEVELOPMENT	23,924	23,924	23,924		
142	TARGET SYSTEMS DEVELOPMENT	32,376	32,376	32,376		
143	MAJOR T&E INVESTMENT	37,614	41,714	42,614	+ 5,000	+ 900
144	STUDIES AND ANALYSIS SUPPORT—NAVY	7,516	7,516	7,516		
145	CENTER FOR NAVAL ANALYSES	49,360	49,360	49,360		
148	TECHNICAL INFORMATION SERVICES	694	5,694	19,194	+ 18,500	+ 13,500
149	MANAGEMENT, TECHNICAL & INTERNATIONAL SUPPORT	49,498	49,498	49,498		
150	STRATEGIC TECHNICAL SUPPORT	3,452	3,452	3,452		
151	RDT&E SCIENCE AND TECHNOLOGY MANAGEMENT	68,180	68,180	68,180		
152	RDT&E INSTRUMENTATION MODERNIZATION	1,423	1,423	1,423		
153	RDT&E SHIP AND AIRCRAFT SUPPORT	184,541	184,541	184,541		
154	TEST AND EVALUATION SUPPORT	336,130	336,130	336,130		
155	OPERATIONAL TEST AND EVALUATION CAPABILITY	12,176	12,176	12,176		
156	NAVY SPACE AND ELECTRONIC WARFARE (SEW) SUPPORT	2,439	2,439	2,439		
157	SEW SURVEILLANCE/RECONNAISSANCE SUPPORT	29,071	24,071	29,071		+ 5,000
158	MARINE CORPS PROGRAM WIDE SUPPORT	20,166	25,166	21,166	+ 1,000	- 4,000
159	TACTICAL CRYPTOLOGIC ACTIVITIES	1,508	1,508	1,508		
160	SERVICE SUPPORT TO JFCOM, JNTC	5,078		5,078		+ 5,078
	TOTAL, RDT&E MANAGEMENT SUPPORT	865,146	869,168	889,646	+ 24,500	+ 20,478
	OPERATIONAL SYSTEMS DEVELOPMENT					
163	HARPOON MODIFICATIONS	43,470	43,470	43,470		
164	UNMANNED COMBAT AIR VEHICLE (UCAV) ADVANCED COMPONENT	161,665	161,665	161,665		
165	STRATEGIC SUB & WEAPONS SYSTEM SUPPORT	81,398	54,398	69,398	- 12,000	+ 15,000
166	SSBN SECURITY TECHNOLOGY PROGRAM	33,109	33,109	33,109		
167	SUBMARINE ACOUSTIC WARFARE DEVELOPMENT	4,149	4,149	4,149		
168	NAVY STRATEGIC COMMUNICATIONS	36,531	36,531	36,531		
169	RAPID TECHNOLOGY TRANSITION (RTT)	44,756	40,756	40,056	- 4,700	- 700
170	F/A-18 SQUADRONS	44,891	50,891	48,891	+ 4,000	- 2,000
171	E-2 SQUADRONS	22,691	22,691	22,691		
172	FLEET TELECOMMUNICATIONS (TACTICAL)	23,108	24,108	23,108		- 1,000
173	TOMAHAWK AND TOMAHAWK MISSION PLANNING CENTER (TMPC)	11,405	17,005	11,405		- 5,600
174	INTEGRATED SURVEILLANCE SYSTEM	27,740	29,740	29,740	+ 2,000	
175	AMPHIBIOUS TACTICAL SUPPORT UNITS	1,845	1,845	1,845		
176	CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT	6,987	10,487	6,987		- 3,500
177	CRYPTOLOGIC DIRECT SUPPORT	1,443	1,443	1,443		
178	ELECTRONIC WARFARE (EW) READINESS SUPPORT	34,340	34,340	34,340		
179	HARM IMPROVEMENT	34,762	38,262	34,762		- 3,500
180	TACTICAL DATA LINKS	5,534	5,534	5,534		

[In thousands of dollars]

Line	Item	2008 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
181	SURFACE ASW COMBAT SYSTEM INTEGRATION	11,200	18,200	19,200	+ 8,000	+ 1,000
182	MK-48 ADCAP	17,941	20,941	17,941	.....	- 3,000
183	AVIATION IMPROVEMENTS	100,284	108,284	115,284	+ 15,000	+ 7,000
184	NAVY SCIENCE ASSISTANCE PROGRAM	3,473	3,473	3,473	.....	.....
185	OPERATIONAL NUCLEAR POWER SYSTEMS	71,720	71,720	71,720	.....	.....
186	MARINE CORPS COMMUNICATIONS SYSTEMS	280,140	285,640	261,240	- 18,900	- 24,400
187	MARINE CORPS GROUND COMBAT/SUPPORTING ARMS SYSTEMS	57,177	66,177	59,177	+ 2,000	- 7,000
188	MARINE CORPS COMBAT SERVICES SUPPORT	12,946	12,946	12,946	.....	.....
189	TACTICAL AIM MISSILES	4,445	4,445	4,445	.....	.....
190	ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM)	4,579	4,579	2,579	- 2,000	- 2,000
191	JOINT HIGH SPEED VESSEL (JHSV)	18,934	18,934	18,934	.....	.....
192	MARITIME INTELLIGENCE .....	.....	.....	6,000	+ 6,000	+ 6,000
195	SATELLITE COMMUNICATIONS (SPACE)	736,572	741,572	722,572	- 14,000	- 19,000
196	INFORMATION SYSTEMS SECURITY PROGRAM	28,393	32,393	31,893	+ 3,500	- 500
197	JOINT COMMAND AND CONTROL PROGRAM (JC2)	1,007	1,007	1,007	.....	.....
198	JOINT COMMAND AND CONTROL PROGRAM (JC2)	5,015	5,015	5,015	.....	.....
199	COBRA JUDY	132,679	132,679	132,679	.....	.....
200	NAVY METEOROLOGICAL AND OCEAN SENSORS—SPACE (METOC)	4,887	4,887	4,887	.....	.....
202	JOINT MILITARY INTELLIGENCE PROGRAMS	5,444	5,444	5,444	.....	.....
203	TACTICAL UNMANNED AERIAL VEHICLES	50,185	59,185	54,185	+ 4,000	- 5,000
204	ENDURANCE UNMANNED AERIAL VEHICLES	116,666	116,666	116,666	.....	.....
205	AIRBORNE RECONNAISSANCE SYSTEMS	50,677	56,977	55,677	+ 5,000	- 1,300
206	MANNED RECONNAISSANCE SYSTEMS	22,488	22,488	23,988	+ 1,500	+ 1,500
207	DISTRIBUTED COMMON GROUND SYSTEMS	19,350	21,350	19,350	.....	- 2,000
208	AERIAL COMMON SENSOR (ACS)	16,606	6,606	16,606	.....	+ 10,000
209	MODELING AND SIMULATION SUPPORT	7,832	7,832	7,832	.....	.....
210	DEPOT MAINTENANCE (NON-IF)	19,402	19,402	19,402	.....	.....
211	AVIONICS COMPONENT IMPROVEMENT PROGRAM	1,635	1,635	1,635	.....	.....
212	INDUSTRIAL PREPAREDNESS	56,445	58,445	56,445	.....	- 2,000
213	MARITIME TECHNOLOGY (MARITECH) .....	.....	1,500	16,000	+ 16,000	+ 14,500
	TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT	2,477,946	2,520,846	2,493,346	+ 15,400	- 27,500
999	CLASSIFIED PROGRAMS	1,219,225	1,161,225	1,219,225	+ 58,000

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TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY	17,075,536	17,718,624	17,472,210	+ 396,674	- 246,414
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COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2008 budget estimate	Committee recommendation	Change from budget estimate	Requested by
1	University Research Initiatives	76,637	90,637	+ 14,000	Isakson Baucus, Tester Bayh, Clinton, Collins, Johnson, Kennedy, Kerry, Levin, Lieberman, Pryor, Stabenow
	Cell-Based Sensors for Chemical Threats			+ 1,500	
	Low Acoustic and Thermal Signature Battlefield Power Source			+ 2,500	
	University Research Initiatives			+ 10,000	
2	In-House Laboratory Independent Research	16,556	17,556	+ 1,000	Ensign
	Alternative Futures at the Range Complex level for the Southwest U.S.			+ 1,000	
3	Defense Research Sciences	374,052	385,752	+ 11,700	Craig, Crapo Warner, Webb Smith, Wyden Hutchison Coleman
	Evaluating ELF Signals in Maritime Environment			+ 1,700	
	Navy Science and Technology Outreach			+ 1,000	
	ONAMI Nanoelectronics and Nanometrology Initiative			+ 2,500	
	Texas Microfactory			+ 3,500	
	Rotational Molded Double Wall for Un-manned Patrol Boat			+ 3,000	
4	Power Projection Applied Research	83,419	99,419	+ 16,000	Snowe Biden, Carper Byrd Bingaman, Cardin, Domenici, Miluiski Bond Clinton, Schumer
	Advanced Propulsion for Gun Launched Projectiles and Missiles			+ 1,000	
	Clustered Millimeter Wave Imaging Sensors & Manufacturing			+ 2,000	
	Combustion Light Gas Gun Projectile			+ 4,000	
	High Energy Conventional Energetics			+ 5,000	
	High Performance Alloy Materials, Steel Castings			+ 2,000	
	Unmanned Aerial Vehicle Fuel Cell Power Source			+ 2,000	
5	Force Protection Applied Research	155,936	196,436	+ 40,500	Bond Committee Initiative Collins, Snowe Martinez Bond Kohl Inouye Bennett, Hatch Reed
	Advanced Simulation Tools for Aircraft Structures			+ 2,000	
	Alternative Energy Research			+ 20,000	
	Critical Composite Technologies for SOF Medium Range Craft			+ 1,000	
	Force Protection Applied Research			+ 2,500	
	Lithium-Ion Cell Development			+ 3,000	
	Magnetic Refrigeration Technology			+ 4,000	
	PMRF Force Protection Lab			+ 2,500	
	Shipboard Production of Synthetic Logistics and Aviation Fuel			+ 2,000	
	Undersea Perimeter Security Integrated Defense Environment			+ 3,500	
6	Marine Corps Landing Force Technology	26,785	31,285	+ 4,500	Craig, Crapo
	Survivability Program			+ 1,500	

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[In thousands of dollars]

Line	Item	2008 budget estimate	Committee recommendation	Change from budget estimate	Requested by
	Warfighter Rapid Awareness Processing Technology for Distributed Operations			+ 3,000	Akaka
7	Materials, Electronics and Computer Technology		2,000	+ 2,000	
	Infrared Materials Center			+ 2,000	Inhofe
8	Common Picture Applied Research	93,376	104,376	+ 11,000	
	All Weather Sense and Avoid for UAVs			+ 3,000	Cardin, Mikulski
	M2C2			+ 4,000	Inouye
	Theater Undersea Warfare Initiative (TUSW)			+ 4,000	Akaka, Inouye
9	Warfighter Sustainment Applied Research	88,297	101,397	+ 13,100	
	Advanced Fouling and Corrosion Control Coatings			+ 2,000	Conrad, Dorgan
	Amelioration of Military Hearing Loss			+ 1,000	Baucus, Tester
	Biosensors for Defense Applications			+ 2,500	Landrieu, Vitter
	Digital Directed Manufacturing Project			+ 1,600	McConnell
	Miniaturization, Systemization of Semiconducting Metal Oxide			+ 1,000	Collins
	Nanotechnology Research			+ 5,000	Committee Initiative
10	RF Systems Applied Research	45,451	51,451	+ 6,000	
	Gallium Nitride RF Power Technology			+ 2,500	Burr, Dole
	National Initiatives for Applications of Multifunctional Materials			+ 2,000	Hutchison
	Silicon Carbide MOSFETs for Electric Power Systems			+ 1,500	Burr, Dole
13	Undersea Warfare Applied Research	68,455	71,455	+ 3,000	
	Galfenol Energy Harvesting			+ 2,000	Grassley, Harkin
	High Power Lithium Battery			+ 1,000	Kohl
14	Mine and Expeditionary Warfare Applied Research	59,874	64,374	+ 4,500	
	Electromagnetic Signature Assessment System Using Multiple Autonomous Underwater Vehicles			+ 2,500	Crapo
	NMSU Water Security Program			+ 1,000	Domenici
	Virtual Onboard Analyst (VIRONA) for Multi-Sensor Mine Detection			+ 1,000	Inouye
15	Power Projection Advanced Technology	49,684	89,184	+ 39,500	
	Advanced Motor-Propulsor Development and Testing			+ 5,000	Craig
	Autonomous Unmanned Surface Vessel (AUSV)			+ 1,000	Akaka
	Excalibur			+ 1,000	Warner, Webb
	Expeditionary Craft			+ 20,000	Murkowski, Stevens
	Free Electron Laser Naval Applications			+ 2,000	Warner, Webb
	Information Sharing for ISRTE			+ 1,000	Akaka
	Long Wavelength Array			+ 3,000	Bingaman, Domenici
	Smart Instrument Development for Magdalena Ridge Observatory			+ 6,500	Bingaman, Domenici
16	Force Protection Advanced Technology	70,850	99,850	+ 29,000	
	Accelerating Fuel Cells Manufacturability			+ 3,000	Clinton, Schumer

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	Advanced Volume Sensor System			+ 2,000	Gregg, Sununu
	Electrochemical Field-Deployable System for Potable Water Generation			+ 3,000	Ensign, Reid
	Formable Textile for Complex Shaped Aerospace Composites			+ 2,000	Collins, Snowe
	Future Fuel Non-Tactical Vehicle Initiative			+ 2,000	Clinton, Levin, Schu- mer, Stabenow
	Manufacturing and Repair Cell			+ 4,000	Levin, Stabenow
	Maritime Mobile Force Protection Program			+ 2,000	Reed, Whitehouse
	Secure Infrastructure Technology Laboratory			+ 4,000	Lautenberg, Menendez
	Single Generator Operations Lithium Ion Battery			+ 5,000	Reid
	Wide-Band Gap Semiconductor Materials			+ 2,000	Levin, Stabenow
17	Common Picture Advanced Technology	40,782	111,540	+ 70,758	
	GPS Extension Program, transfer from RDT&E, AF, line 29			+ 70,758	
18	Warfighter Sustainment Advanced Technology	102,124	95,124	- 7,000	
	Slow execution			- 10,000	
	Defense Modernization and Sustainment Initiative			+ 2,000	Clinton, Schumer
	Protective Apparel Technology Systems			+ 1,000	Inhofe
19	RF Systems Advanced Technology	22,676	38,676	+ 16,000	
	Pacific Airborne Surveillance and Testing			+ 16,000	Inouye
20	USMC Advanced Technology Demonstration (ATD)	70,968	74,968	+ 4,000	
	MEMS Microdetonator Packaging Technology			+ 3,000	Johnson
	Marine Air-Ground Task Force Situational Awareness			+ 1,000	Akaka, Inouye
23	Warfighter Protection Advanced Technology	12,145	19,145	+ 7,000	
	Integrated Warfighter Biodefense Program			+ 3,000	Biden, Carper
	Massive Tissue Injury/Amputation Repair with Composite Tissue Transplantation			+ 3,000	Cardin
	Neural Control of External Devices (artificial limb movement)			+ 1,000	Bennett
24	Undersea Warfare Advanced Technology	73,626	76,826	+ 3,200	
	Deep Water Acoustic Detection System			+ 3,200	Lautenberg, Menendez
27	Air/Ocean Tactical Applications	47,914	48,914	+ 1,000	
	Semi-Submersible UUV			+ 1,000	Vitter
28	Aviation Survivability	6,252	11,752	+ 5,500	
	Intelligence Gathering Uninhabited System			+ 2,000	Burr
	Unmanned Aircraft Systems Optimization Technologies			+ 3,500	Byrd
34	Surface Ship Torpedo Defense	15,967	17,467	+ 1,500	
	Sensor Arrays for Multiple Applications			+ 1,500	Bill Nelson
36	Shipboard System Component Development	9,450	34,550	+ 25,100	
	Advanced Fluid Controls for Shipboard Applications			+ 3,000	Lautenberg, Menendez
	Advanced Steam Turbine			+ 5,000	Clinton, Schumer
	DDG-51 Homopolar Hybrid Drive			+ 6,100	Cochran
	MTTC/PI and National Surface Treatment Center			+ 4,000	McConnell
	Power Conversion Equipment for High Density Power Generation			+ 1,000	Inhofe

[In thousands of dollars]

Line	Item	2008 budget estimate	Committee recommendation	Change from budget estimate	Requested by
	Propulsor Manufacturing Technology			+ 3,000	Cochran, Lott
	Smart Valve			+ 3,000	Collins, Snowe
37	PILOT FISH	132,131	127,131	- 5,000	
	Slow execution			- 5,000	
41	Surface ASW	25,560	27,560	+ 2,000	
	Improved Surface Vessel Torpedo Launcher			+ 2,000	Reed
43	Advanced Submarine System Development	134,882	155,182	+ 20,300	
	CISRT Enabling Materials Technology			+ 3,000	Reid
	Controllable Shock Absorber for Advanced Submarines			+ 1,800	Ensign, Reid
	Organic Submarine Airborne ISRT Demonstration			+ 3,500	Reed
	Submarine Artificial Intelligence-Based Combat System Kernel			+ 3,000	Reed, Whitehouse
	Twinline Thin Line Submarine Towed Array			+ 4,000	Dodd, Lieberman
	Undersea Launched Missile Study			+ 5,000	Dodd, Lieberman, Reed
44	Submarine Tactical Warfare Systems	9,865	11,515	+ 1,650	
	Submarine Targeting Agile Array with Rapid Zooming			+ 1,650	Durbin
45	Ship Concept Advanced Design	30,858	39,858	+ 9,000	
	Autonomous Maritime Navigation Program			+ 6,000	Byrd
	Low-Signature Modular Weapon Platform			+ 3,000	Smith, Wyden
46	Ship Preliminary Design & Feasibility Studies	18,736	26,436	+ 7,700	
	Common Composite Island Concept			+ 2,700	Cochran, Lott
	Support for Naval Ship Hydrodynamic Facilities			+ 5,000	Mikulski
50	Littoral Combat Ship (LCS)	217,502	300,502	+ 83,000	
	Fully Fund LCS 1 and 2			+ 81,000	
	New Payloads and Sensors Unmanned Surface Vehicle System			+ 2,000	Cardin
53	Marine Corps Assault Vehicles	288,220	190,220	- 98,000	
	Expeditionary Fighting Vehicle Program Delay			- 100,000	
	Intelligent Machining of Advanced Defense Materials			+ 2,000	Voinovich
55	Marine Corps Ground Combat/Support System	80,403	54,403	- 26,000	
	Joint Light Tactical Vehicle Contract Delay			- 35,000	
	Anti-Sniper Infrared Targeting System			+ 5,000	Bunning, McConnell
	Urban Operations Environmental Lab			+ 4,000	Brownback, Roberts
63	Navy Logistic Productivity	3,547	9,547	+ 6,000	
	Highly Integrated Optical Interconnects			+ 2,000	Levin, Stabenow
	Multi-Colored Infrared Sensors			+ 4,000	Gregg
79	Conventional TRIDENT [Hard and Deeply Buried Target Defeat System]	126,434		- 126,434	
	Transfer to RDT&E, DW, line 135			- 126,434	

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83	Other Helo Development	46,815	41,815	- 5,000	
	Program delay			- 5,000	
100	SC-21 Total Ship System Engineering	621,544	637,544	+ 16,000	
	Permanent Magnet Motor			+ 9,000	Dodd, Kennedy, Kohl, Lieberman
	Advanced Wireless Encryption Module			+ 3,000	Ben Nelson
	Bio/Nano-MEMS for Defense Applications			+ 4,000	McConnell
108	SSN-688 and Trident Modernization	114,789	122,789	+ 8,000	
	Advanced Intercept Ranging Systems (AIRS)			+ 4,000	Kerry, Reed
	Improved Submarine Thin Line Towed Array Handler			+ 4,000	Reed
112	Combat Information Center Conversion	17,139	19,139	+ 2,000	
	Environmentally Sealed, Ruggedized Large Scale Display for Tactical Operations Centers			+ 2,000	Graham
113	New Design SSN	223,958	228,958	+ 5,000	
	Combat Control for Distributed Netted Systems			+ 2,000	Reed
	Submarine Electronic Chart Updates			+ 3,000	Bill Nelson
115	Submarine Tactical Warfare System	53,703	55,703	+ 2,000	
	Automated Submarine Command and Control Center			+ 2,000	Reed
116	Ship Contract Design/Live Fire T&E	62,404	67,304	+ 4,900	
	Transfer from NDSF for ship design			+ 4,900	
126	Ship Self Defense (Detect & Control)	33,064	35,064	+ 2,000	
	Expeditionary Swimmer Defense System			+ 2,000	Cantwell, Murray
127	Ship Self Defense (Engage: Hard Kill)	67,366	75,866	+ 8,500	
	Next Generation Phalanx			+ 8,500	Bennett, Hatch, McCon- nell, Sessions
128	Ship Self Defense (Engage: Soft Kill/EW)	34,323	36,323	+ 2,000	
	Advanced Radar Absorbing Tiles for Surface Ships			+ 2,000	Feinstein
130	Medical Development	7,973	20,873	+ 12,900	
	Granular Chitosan Clotting Agent for Anti-Coagulated Hypothermic Blood			+ 1,000	Smith, Wyden
	Multivalent Dengue Vaccine Program			+ 3,000	Graham
	Next Generation Networking Electronic Medical Records Project			+ 4,900	Cochran
	Phase 1 Clinical Trials for Infusible Hemostatic Agent			+ 4,000	Burr, Dole
133	Joint Strike Fighter (JSF)	1,707,372	1,805,772	+ 98,400	
	Joint Strike Fighter overbilling			- 133,000	
	Competitive Engine Program			+ 240,000	Bayh, Cochran, Ken- nedy, Leahy, McCon- nell, Warner
	Excessive unearned award fee carry over			- 8,600	
136	Information Technology Development	54,098	77,098	+ 23,000	
	Condition Based Maintenance Enabling Technologies			+ 3,000	Byrd
	Digitization of NCIS Investigative Files			+ 8,000	Byrd

[In thousands of dollars]

Line	Item	2008 budget estimate	Committee recommendation	Change from budget estimate	Requested by
	Integration of Logistics Info for Knowledge Projection and Readiness			+ 2,000	Byrd
	SPAWAR Systems Center, Information Technology Center			+ 10,000	Landrieu, Vitter
138	CH-53X RDTE	417,161	397,161	- 20,000	
	Program delay			- 20,000	
143	Major T&E Investment	37,614	42,614	+ 5,000	
	Network Expansion & Integration of Navy/NASA RDT&E Ranges			+ 5,000	Mikulski
148	Technical Information Services	694	19,194	+ 18,500	
	HTDV			+ 10,000	Inouye
	Naval Aviation Technology Exploration Initiative			+ 1,000	Cardin
	Pacific-Based Joint Info Tech Center			+ 7,500	Inouye
158	Marine Corps Program Wide Support	20,166	21,166	+ 1,000	
	Individual Chemical Alert System			+ 1,000	Boxer
165	Strategic Sub & Weapons System Support	81,398	69,398	- 12,000	
	Reliable Replacement Warhead			- 15,000	
	Advanced Linear Accelerator Facility			+ 3,000	Bayh, Lugar
169	Rapid Technology Transition (RTT)	44,756	40,056	- 4,700	
	Reduce growth			- 4,700	
170	F/A-18 Squadrons	44,891	48,891	+ 4,000	
	F/A-18 Tactical Operational Flight Trainers Fidelity Upgrade			+ 2,000	Cornyn
	NAVAIR CPI Tech Manual Conversion and Support			+ 2,000	Baucus
174	Integrated Surveillance System	27,740	29,740	+ 2,000	
	Distributed Maritime Surveillance System			+ 2,000	Hutchison
181	Surface ASW Combat System Integration	11,200	19,200	+ 8,000	
	Advanced Composite Materials for Acoustic Windows Applications			+ 8,000	Cochran, Lott
183	Aviation Improvements	100,284	115,284	+ 15,000	
	Real-Time Weight and Balance Measurement System for C-130s			+ 4,000	Murray
	Arc Fault Circuit Breaker with Arc Location System			+ 1,000	Bennett
	Rapid Repair UV Curable Structural Adhesives			+ 4,000	Reed, Whitehouse
	Structural Life Tracking			+ 2,000	Warner, Webb
	F/A-18 Avionics Ground Support System			+ 2,000	Casey, Specter
	Wireless Sensors for Navy Aircraft			+ 2,000	Leahy
186	Marine Corps Communications Systems	280,140	261,240	- 18,900	
	Slow execution			- 25,000	
	Performance Enhancements for Information Assurance and Information Systems			+ 6,100	Cochran, Lott
187	Marine Corps Ground Combat/Supporting Arms Systems	57,177	59,177	+ 2,000	
	Mobile Oxygen, Ventilation, and External Suction (MOVES)			+ 2,000	Cornyn

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190	Advanced Medium Range Air-to-Air Missile (AMRAAM)	4,579	2,579	- 2,000	
	Unjustified Request: Medium Range Missile Concept			- 2,000	
192	Maritime Intelligence		6,000	+ 6,000	
	Secure Data Sharing for Digital Radiographic Imaging			+ 1,500	Cantwell
	Surf Eagle Open Source Environmental Intelligence			+ 4,500	Lott
195	Satellite Communications (SPACE)	736,572	722,572	- 14,000	
	IPv6			+ 1,000	Akaka
	Program delay: EHF SATCOM Terminals			- 15,000	
196	Information Systems Security Program	28,393	31,893	+ 3,500	
	Universal Description, Discovery and Integration			+ 3,500	Conrad, Dorgan
203	Tactical Unmanned Aerial Vehicles	50,185	54,185	+ 4,000	
	Advanced Airship Flying Laboratory			+ 2,000	Smith, Wyden
	Skybus 80k and 130k LTA-UAS Multirole Technologies			+ 2,000	Collins, Snowe
205	Airborne Reconnaissance Systems	50,677	55,677	+ 5,000	
	Fusion, Exploitation, Algorithm, Targeting, High-Altitude Reconnaissance (FEATHAR)			+ 5,000	Bennett
206	Manned Reconnaissance Systems	22,488	23,988	+ 1,500	
	Collective Aperture Multi-Band Sensor System			+ 1,500	Sununu
213	Maritime Technology (MARITECH)		16,000	+ 16,000	
	National Shipbuilding Research Program			+ 15,000	Lott, Sessions
	Navy Automatic Identification Technology (AID) Engineering Support			+ 1,000	Cochran, Lott

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, AIR FORCE

Appropriations, 2007	\$24,516,276,000
Budget estimate, 2008	26,711,940,000
House allowance	26,163,917,000
Committee recommendation	26,070,841,000

The Committee recommends an appropriation of \$26,070,841,000. This is \$641,099,000 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]

Line	Item	2008 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
RESEARCH, DEVELOPMENT, TEST & EVAL, AF						
	BASIC RESEARCH					
1	DEFENSE RESEARCH SCIENCES	258,259	265,759	268,959	+ 10,700	+ 3,200
2	UNIVERSITY RESEARCH INITIATIVES	104,304	104,304	123,304	+ 19,000	+ 19,000
3	HIGH ENERGY LASER RESEARCH INITIATIVES	12,636	12,636	12,636	.....	.....
	TOTAL, BASIC RESEARCH	375,199	382,699	404,899	+ 29,700	+ 22,200
	APPLIED RESEARCH					
4	MEDICAL DEVELOPMENT .....	.....	8,000	.....	.....	- 8,000
5	MATERIALS	122,794	164,294	161,094	+ 38,300	- 3,200
6	AEROSPACE VEHICLE TECHNOLOGIES	131,948	136,948	136,948	+ 5,000	.....
7	HUMAN EFFECTIVENESS APPLIED RESEARCH	79,856	84,856	87,856	+ 8,000	+ 3,000
8	AEROSPACE PROPULSION	179,161	201,461	212,961	+ 33,800	+ 11,500
9	AEROSPACE SENSORS	108,055	119,055	113,055	+ 5,000	- 6,000
10	MULTI-DISCIPLINARY SPACE TECHNOLOGY .....	.....	2,000	.....	.....	- 2,000
11	SPACE TECHNOLOGY	109,566	114,416	130,466	+ 20,900	+ 16,050
12	CONVENTIONAL MUNITIONS	57,804	59,304	57,804	.....	- 1,500
13	DIRECTED ENERGY TECHNOLOGY	54,883	57,883	54,883	.....	- 3,000
14	COMMAND CONTROL AND COMMUNICATIONS	116,705	125,105	118,705	+ 2,000	- 6,400
16	HIGH ENERGY LASER RESEARCH	50,303	50,303	50,303	.....	.....
	TOTAL, APPLIED RESEARCH	1,011,075	1,123,625	1,124,075	+ 113,000	+ 450
	ADVANCED TECHNOLOGY DEVELOPMENT					
20	ADVANCED MATERIALS FOR WEAPON SYSTEMS	39,730	65,230	51,730	+ 12,000	- 13,500
21	ADVANCED AEROSPACE SENSORS	55,549	65,549	55,549	.....	- 10,000
22	AEROSPACE TECHNOLOGY DEV/DEMO	64,922	29,822	64,922	.....	+ 35,100
23	AEROSPACE PROPULSION AND POWER TECHNOLOGY	117,990	125,990	140,890	+ 22,900	+ 14,900
24	CREW SYSTEMS AND PERSONNEL PROTECTION TECHNOLOGY	28,558	37,258	34,558	+ 6,000	- 2,700
25	ELECTRONIC COMBAT TECHNOLOGY	23,743	26,743	25,843	+ 2,100	- 900
28	ADVANCED SPACECRAFT TECHNOLOGY	78,704	98,004	93,004	+ 14,300	- 5,000
29	GLOBAL POSITIONING SYSTEM (GPS) EXTENSION PROGRAM	70,758	.....	.....	- 70,758	.....
30	MAUI SPACE SURVEILLANCE SYSTEM (MSSS)	5,237	7,237	46,737	+ 41,500	+ 39,500
32	CONVENTIONAL WEAPONS TECHNOLOGY	16,904	18,904	16,904	- 2,000
33	ADVANCED WEAPONS TECHNOLOGY	43,999	43,999	74,999	+ 31,000	+ 31,000

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[In thousands of dollars]

Line	Item	2008 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
34	C3I ADVANCED DEVELOPMENT	27,357	29,357	32,257	+ 4,900	+ 2,900
36	HIGH ENERGY LASER ADVANCED TECHNOLOGY PROGRAM	3,815	3,815	3,815	.....	.....
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT	577,266	551,908	641,208	+ 63,942	+ 89,300
	DEMONSTRATION & VALIDATION					
40	INTELLIGENCE ADVANCED DEVELOPMENT	4,930	5,930	4,930	.....	- 1,000
41	PHYSICAL SECURITY EQUIPMENT	466	2,466	3,466	+ 3,000	+ 1,000
42	NAVSTAR GLOBAL POSITIONING SYSTEM III	587,226	507,226	437,226	- 150,000	- 70,000
43	ADVANCED EHF MILSATCOM (SPACE)	603,179	603,179	603,179	.....	.....
44	POLAR MILSATCOM (SPACE)	178,754	178,754	178,754	.....	.....
45	SPACE CONTROL TECHNOLOGY	37,604	62,604	42,604	+ 5,000	- 20,000
46	COMBAT IDENTIFICATION TECHNOLOGY	26,054	26,054	26,054	.....	.....
47	NATO RESEARCH AND DEVELOPMENT	4,280	4,280	4,280	.....	.....
48	INTERNATIONAL SPACE COOPERATIVE R&D	619	619	619	.....	.....
49	TRANSFORMATIONAL SATCOM (TSAT)	963,585	963,585	763,585	- 200,000	- 200,000
50	INTEGRATED BROADCAST SERVICE	21,192	21,192	21,192	.....	.....
51	INTERCONTINENTAL BALLISTIC MISSILE	26,519	32,519	26,519	.....	- 6,000
52	WIDEBAND GAPFILLER SYSTEM RDT&E (SPACE)	19,213	19,213	19,213	.....	.....
53	SPACE-BASED RADAR .....	.....	186,000	.....	.....	- 186,000
54	POLLUTION PREVENTION (DEM/VAL)	2,838	8,838	7,838	+ 5,000	- 1,000
55	JOINT PRECISION APPROACH AND LANDING SYSTEMS	7,544	7,544	7,544	.....	.....
60	COMMON AERO VEHICLE (CAV)	32,806	37,806	.....	- 32,806	- 37,806
61	OPERATIONALLY RESPONSIVE SPACE	87,032	107,032	87,032	.....	- 20,000
63	NATIONAL POLAR-ORBITING OPERATIONAL ENVIRONMENTAL SAT	334,871	334,871	334,871	.....	.....
	TOTAL, DEMONSTRATION & VALIDATION	2,938,712	3,109,712	2,568,906	- 369,806	- 540,806
	ENGINEERING & MANUFACTURING DEVELOPMENT					
64	GLOBAL BROADCAST SERVICE (GBS)	29,407	29,407	29,407	.....	.....
66	NUCLEAR WEAPONS SUPPORT	20,319	20,319	20,319	.....	.....
67	B-1B	159,126	144,126	169,126	+ 10,000	+ 25,000
68	SPECIALIZED UNDERGRADUATE FLIGHT TRAINING	12,622	12,622	15,622	+ 3,000	+ 3,000
70	B-2 ADVANCED TECHNOLOGY BOMBER	244,019	289,219	292,019	+ 48,000	+ 2,800
71	PERSONNEL RECOVERY SYSTEMS	290,059	190,059	98,059	- 192,000	- 92,000
72	ELECTRONIC WARFARE DEVELOPMENT	101,649	103,149	103,649	+ 2,000	+ 500

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74	PHYSICAL SECURITY EQUIPMENT	34	34	34
75	SMALL DIAMETER BOMB (SDB)	145,191	145,191	145,191
76	COUNTERSPACE SYSTEMS	53,412	53,412	65,412	+ 12,000	+ 12,000
77	SPACE SITUATION AWARENESS SYSTEMS	187,804	197,604	187,804	.....	- 9,800
78	AIRBORNE ELECTRONIC ATTACK	20,007	20,007	20,007	.....	.....
79	SPACE BASED INFRARED SYSTEM (SBIRS) HIGH EMD	587,004	614,604	587,004	.....	- 27,600
80	ALTERNATIVE INFRARED SPACE SYSTEM (AIRSS)	230,887	75,887	75,000	- 155,887	- 887
82	ARMAMENT/ORDNANCE DEVELOPMENT	1,985	3,485	1,985	.....	- 1,500
83	SUBMUNITIONS	1,988	1,988	1,988	.....	.....
84	AGILE COMBAT SUPPORT	10,623	12,623	10,623	.....	- 2,000
86	LIFE SUPPORT SYSTEMS	12,649	13,649	12,649	.....	- 1,000
87	COMBAT TRAINING RANGES	17,657	17,657	17,657	.....	.....
88	INTEGRATED COMMAND & CONTROL APPLICATIONS (IC2A)	189	13,189	8,189	+ 8,000	- 5,000
89	INTELLIGENCE EQUIPMENT	1,469	1,469	5,969	+ 4,500	+ 4,500
91	JOINT STRIKE FIGHTER (JSF)	1,780,874	2,137,374	1,879,324	+ 98,450	- 258,050
94	RDT&E FOR AGING AIRCRAFT	17,021	19,021	19,021	+ 2,000	.....
95	TEST AND EVALUATION SUPPORT	3,044	3,044	3,044	.....	.....
96	LINK-16 SUPPORT AND SUSTAINMENT	199,363	196,363	199,363	.....	+ 3,000
98	E-10 SQUADRONS	39,703	39,703	39,703	.....	.....
99	SINGLE INTEGRATED AIR PICTURE (SIAP)	4,976	4,976	4,976	.....	.....
100	FULL COMBAT MISSION TRAINING	87,096	72,096	87,096	.....	+ 15,000
102	JOINT CARGO AIRCRAFT (JCA)	42,368	42,368	.....	- 42,368	- 42,368
103	CV-22	16,688	16,688	16,688	.....	.....
	TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT	4,319,233	4,491,333	4,116,928	- 202,305	- 374,405
	RDT&E MANAGEMENT SUPPORT					
104	THREAT SIMULATOR DEVELOPMENT	39,892	39,892	39,892	.....	.....
105	MAJOR T&E INVESTMENT	59,064	61,064	63,564	+ 4,500	+ 2,500
106	RAND PROJECT AIR FORCE	30,999	30,999	30,999	.....	.....
109	INITIAL OPERATIONAL TEST & EVALUATION	30,203	30,203	30,203	.....	.....
110	TEST AND EVALUATION SUPPORT	737,558	712,558	737,558	.....	+ 25,000
111	ROCKET SYSTEMS LAUNCH PROGRAM (SPACE)	15,145	20,145	15,145	.....	- 5,000
112	SPACE TEST PROGRAM (STP)	47,430	47,430	47,430	.....	.....
113	FACILITIES RESTORATION & MODERNIZATION—TEST & EVAL	59,131	60,131	59,131	.....	- 1,000
114	FACILITIES SUSTAINMENT—TEST AND EVALUATION SUPPORT	30,865	34,865	30,865	.....	- 4,000
117	INTERNATIONAL ACTIVITIES	4,041	4,041	4,041	.....	.....
	TOTAL, RDT&E MANAGEMENT SUPPORT	1,054,328	1,041,328	1,058,828	+ 4,500	+ 17,500

[In thousands of dollars]

Line	Item	2008 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
	OPERATIONAL SYSTEMS DEVELOPMENT					
118	ANTI-TAMPER TECHNOLOGY EXECUTIVE AGENCY	10,930	10,930	10,930		
120	B-52 SQUADRONS	41,916	47,416	41,916		- 5,500
122	AIR-LAUNCHED CRUISE MISSILE (ALCM)	4,672	4,672	4,672		
123	STRAT WAR PLANNING SYSTEM—USSTRATCOM	20,340	20,340	20,340		
124	NIGHT FIST—USSTRATCOM	5,296	5,296	5,296		
126	REGION/SECTOR OPERATION CONTROL CENTER MODERNIZATION	23,495	23,495	23,495		
127	WARFIGHTER RAPID ACQUISITION PROCESS (WRAP) RAPID TRAN	14,245	14,245	14,245		
128	MQ-9 UAV	61,069	61,069	65,069	+ 4,000	+ 4,000
129	A-10 SQUADRONS	1,963	1,963	1,963		
130	F-16 SQUADRONS	90,620	90,620	70,620	- 20,000	- 20,000
131	F-15E SQUADRONS	101,251	114,251	104,251	+ 3,000	- 10,000
133	F-22 SQUADRONS	743,593	379,563	611,393	- 132,200	+ 231,830
135	TACTICAL AIM MISSILES	7,927	7,927	7,927		
136	ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM)	36,838	36,838	33,638	- 3,200	- 3,200
139	AF TENCAP	11,526	11,526	11,526		
141	COMPASS CALL	4,603	4,603	9,603	+ 5,000	+ 5,000
142	AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM	139,042	139,042	139,042		
144	JOINT AIR-TO-SURFACE STANDOFF MISSILE (JASSM)	12,152	12,152	12,152		
145	AIR AND SPACE OPERATIONS CENTER (AOC)	111,557	111,557	101,057	- 10,500	- 10,500
146	CONTROL AND REPORTING CENTER (CRC)	16,505	16,505	25,005	+ 8,500	+ 8,500
147	AIRBORNE WARNING AND CONTROL SYSTEM (AWACS)	152,721	152,721	152,721		
148	TACTICAL AIRBORNE CONTROL SYSTEMS	3,387	3,387	3,387		
149	ADVANCED COMMUNICATIONS SYSTEMS	33,584	33,584	33,584		
150	EVALUATION AND ANALYSIS PROGRAM	650,608	652,608	650,608		- 2,000
152	THEATER BATTLE MANAGEMENT (TBM) C4I	9,961	9,961	9,961		
153	FIGHTER TACTICAL DATA LINK	39,545	39,545	39,545		
154	BOMBER TACTICAL DATA LINK	37,130	37,130	37,130		
155	C2ISR TACTICAL DATA LINK	1,809	1,809	1,809		
156	COMMAND AND CONTROL (C2) CONSTELLATION	45,049	45,049	45,049		
157	JOINT SURVEILLANCE AND TARGET ATTACK RADAR SYSTEM	65,924	82,924	65,924		- 17,000
158	SEEK EAGLE	22,969	22,969	22,969		
160	USAF MODELING AND SIMULATION	23,044	25,044	24,244	+ 1,200	- 800
161	WARGAMING AND SIMULATION CENTERS	6,490	6,490	6,490		
162	DISTRIBUTED TRAINING AND EXERCISES	7,522	7,522	7,522		

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163	MISSION PLANNING SYSTEMS	105,371	105,371	105,371
164	INFORMATION WARFARE SUPPORT	12,111	12,111	12,111
165	SPECIAL EVALUATION SYSTEM	760,312	760,312	760,312	.....	.....
167	COBRA BALL .....	.....	.....	2,500	+ 2,500	+ 2,500
171	E-4B NATIONAL AIRBORNE OPERATIONS CENTER (NAOC)	19,529	19,529	19,529	.....	.....
172	AIR FORCE COMMUNICATIONS (AIRCOM)	2,022	2,022	2,022	.....	.....
173	MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK	103,846	83,846	88,846	- 15,000	+ 5,000
174	INFORMATION SYSTEMS SECURITY PROGRAM	229,657	187,610	210,457	- 19,200	+ 22,847
175	GLOBAL COMBAT SUPPORT SYSTEM	10,631	12,131	10,631	.....	- 1,500
176	GLOBAL COMMAND AND CONTROL SYSTEM	3,397	14,897	3,397	.....	- 11,500
177	JOINT COMMAND AND CONTROL PROGRAM (JC2)	5,841	5,841	5,841	.....	.....
178	MILSATCOM TERMINALS	388,491	388,491	388,491	.....	.....
180	AIRBORNE SIGINT ENTERPRISE	139,627	124,627	147,627	+ 8,000	+ 23,000
183	GLOBAL AIR TRAFFIC MANAGEMENT (GATM)	6,681	6,681	6,681	.....	.....
184	SATELLITE CONTROL NETWORK (SPACE)	27,256	27,256	27,256	.....	.....
185	WEATHER SERVICE	39,747	40,747	40,747	+ 1,000	.....
186	AIR TRAFFIC CONTROL, APPROACH, AND LANDING SYSTEM (ATC)	4,672	5,392	7,672	+ 3,000	+ 2,280
187	AERIAL TARGETS	7,376	7,376	7,376	.....	.....
190	SECURITY AND INVESTIGATIVE ACTIVITIES	829	829	829	.....	.....
194	NAVSTAR GLOBAL POSITIONING SYSTEM (USER EQUIPMENT)	93,267	156,467	156,267	+ 63,000	- 200
195	NAVSTAR GLOBAL POSITIONING SYSTEM (SPACE AND CONTROL)	120,931	120,931	120,931	.....	.....
197	SPACE AND MISSILE TEST AND EVALUATION CENTER	3,089	3,089	3,089	.....	.....
198	SPACE WARFARE CENTER	1,678	1,678	1,678	.....	.....
199	SPACELIFT RANGE SYSTEM (SPACE)	27,300	27,300	27,300	.....	.....
200	INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS	1,134	1,134	1,134	.....	.....
202	AIRBORNE RECONNAISSANCE SYSTEMS	64,869	64,869	64,869	.....	.....
203	MANNED RECONNAISSANCE SYSTEMS	12,672	15,672	17,672	+ 5,000	+ 2,000
204	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	107,117	108,117	107,117	.....	- 1,000
205	PREDATOR UAV (JMIP)	22,296	25,796	35,296	+ 13,000	+ 9,500
206	GLOBAL HAWK UAV	298,501	260,501	291,501	- 7,000	+ 31,000
207	NETWORK-CENTRIC COLLABORATIVE TARGET (TIARA)	8,641	8,641	8,641	.....	.....
208	INTELLIGENCE SUPPORT TO INFORMATION WARFARE	5,362	5,362	5,362	.....	.....
209	NCMC—TW/AA SYSTEM	11,882	11,882	11,882	.....	.....
211	NUDET DETECTION SYSTEM (SPACE)	38,974	38,974	38,974	.....	.....
213	NATIONAL SECURITY SPACE OFFICE	10,821	10,821	10,821	.....	.....
214	SPACE SITUATION AWARENESS OPERATIONS	23,980	23,980	23,980	.....	.....
215	NASS, IO TECHNOLOGY INTEGRATION & TOOL DEV	15,681	15,681	15,681	.....	.....
216	SHARED EARLY WARNING (SEW)	3,152	3,152	3,152	.....	.....
217	C-130 AIRLIFT SQUADRON	188,069	192,069	251,569	+ 63,500	+ 59,500
218	C-5 AIRLIFT SQUADRONS	203,585	185,585	178,585	- 25,000	- 7,000

[In thousands of dollars]

Line	Item	2008 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
219	C-17 AIRCRAFT	181,734	181,734	181,734	.....	.....
220	C-130J PROGRAM	74,223	74,223	74,223	.....	.....
222	LARGE AIRCRAFT IR COUNTERMEASURES (LAIRCM)	19,324	19,324	19,324	.....	.....
223	KC-135S	8,766	8,766	8,766	.....	.....
224	KC-10S	36,790	13,790	13,790	-23,000	.....
225	KC-135 TANKER REPLACEMENT	314,454	114,454	314,454	.....	+200,000
226	OPERATIONAL SUPPORT AIRLIFT	4,868	4,868	4,868	.....	.....
227	AIR MOBILITY TACTICAL DATA LINK .....	.....	.....	.....	.....	.....
228	SPECIAL TACTICS/COMBAT CONTROL	5,225	5,225	8,825	+3,600	+3,600
229	DEPOT MAINTENANCE (NON-IF)	1,510	1,510	1,510	.....	.....
230	ACQUISITION AND MANAGEMENT SUPPORT	22,317	22,317	22,317	.....	.....
231	INDUSTRIAL PREPAREDNESS	39,906	48,906	45,906	+6,000	-3,000
233	LOGISTICS INFORMATION TECHNOLOGY (LOGIT)	114,176	115,676	114,176	.....	-1,500
234	SUPPORT SYSTEMS DEVELOPMENT	11,076	17,576	22,576	+11,500	+5,000
235	JOINT NATIONAL TRAINING CENTER	3,128	.....	3,128	.....	+3,128
236	OTHER PERSONNEL ACTIVITIES	115	115	115	.....	.....
237	JOINT PERSONNEL RECOVERY AGENCY	5,377	5,377	5,377	.....	.....
238	SERVICE-WIDE SUPPORT (NOT OTHERWISE ACCOUNTED FOR)	6,495	6,495	6,495	.....	.....
239	CIVILIAN COMPENSATION PROGRAM	8,070	8,070	8,070	.....	.....
240	PERSONNEL ADMINISTRATION	16,832	16,832	16,832	.....	.....
241	FINANCIAL MANAGEMENT INFORMATION SYSTEMS DEVELOPMENT	47,105	37,105	47,105	.....	+10,000
	TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT	6,611,171	6,023,886	6,557,871	-53,300	+533,985
999	CLASSIFIED PROGRAMS	9,824,956	9,439,426	9,598,126	-226,830	+158,700
	TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, AF	26,711,940	26,163,917	26,070,841	-641,099	-93,076

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COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2008 budget estimate	Committee recommendation	Change from budget estimate	Requested by
1	Defense Research Sciences	258,259	268,959	+ 10,700	
	Coal Transformation Laboratory			+ 1,000	Lugar
	Development and Validation of Advanced Design Technologies for Hypersonic Research			+ 3,000	Coleman, Klobuchar
	High Energy Laser for Detection, Inspection and Non-destructive Testing			+ 5,000	Ben Nelson, Hagel
	Hybrid Materials for Thermal Management			+ 1,000	Stabenow
	UNR-Millimeter Wave-Based Fatigue Countermeasure Technology			+ 700	Reid
2	University Research Initiatives	104,304	123,304	+ 19,000	
	Battlespace: Reducing Military Decision Cycles			+ 3,000	Ben Nelson, Hagel
	High Temperature Hydrogen Energy Production Facility			+ 1,000	Hutchison
	Partnership in Innovative Preparation for Educators and Students (PIPES) and the Space Education Consortium (SEC)			+ 2,000	Allard, Salazar
	Secure Grids for Network Centric Operations			+ 3,000	Cornyn
	University Research Initiatives			+ 10,000	Bayh, Clinton, Collins, Johnson, Kennedy, Kerry, Levin, Lieberman, Pryor, Stabenow
5	Materials	122,794	161,094	+ 38,300	
	Affordable structural and non-structural materials for space-program growth			- 3,500	
	Accelerated Insertion of Advanced Materials and Certification for Military Aircraft Structure Material Substitution and Repair			+ 3,500	Brownback, Roberts
	Advanced Aerospace Carbon Foam Heat Exchangers			+ 2,000	Voinovich
	Advanced Carbon Fiber Research & Testing Initiative			+ 3,000	Graham
	Advanced Engineered Non-Linear Optical Materials for Critical Wavelengths			+ 1,200	Baucus, Tester
	Air Force Minority Leaders Program			+ 7,500	Alexander, Hutchison, Landrieu
	Aircraft Fatigue Modeling and Simulation			+ 2,500	Hutchison
	Consortium for Nanomaterials for Aerospace Commerce and Technology (CONTACT)			+ 2,000	Hutchison
	Durable Hybrid Coatings for Aircraft Systems			+ 1,500	Conrad, Dorgan
	Fire and Blast Resistant Materials for Force Protection			+ 2,000	Kohl
	Fully Integrated Solar-Powered Interior Lighting Technology			+ 2,000	Brown
	Nanocomposites for Lightning Protection of Composite Airframe Structures			+ 2,000	Brownback
	Nanotechnology research			+ 5,000	Committee Initiative
	ONAMI Safer Nanomaterials and Nanomanufacturing			+ 4,000	Smith, Wyden
	Polymer Stress and Sensor Damage Sensors for Composites			+ 3,600	Cochran
6	Aerospace Vehicle Technologies	131,948	136,948	+ 5,000	

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	Characterization of Airborne Environment for Tactical Lasers			+ 4,000	Voinovich
	Single-Mode Optical Connectors for Advanced Air Vehicles			+ 1,000	Levin
7	Human Effectiveness Applied Research	79,856	87,856	+ 8,000	
	Component Object Model (COM) Attitude Control System Simulation/Trainer			+ 4,000	Murray
	Solid Electrolyte Oxygen Separator			+ 4,000	Casey, Specter
8	Aerospace Propulsion	179,161	212,961	+ 33,800	
	Active Combustion Control Systems for Military Aircraft			+ 4,000	Grassley, Harkin
	Advanced Fuel Cell Based Power System for Small UAVs			+ 800	Reid
	Alternative Energy Research			+ 20,000	Committee Initiative
	High Energy Superior Lithium Battery Technology			+ 6,000	Bond
	Modified F-22 Maintenance-Free Nickel Cadmium Aircraft Batteries for the F-16			+ 1,000	Chambliss, Isakson
	VDVP for UAW/UCAV Aircraft Engines			+ 2,000	Dodd, Lieberman
9	Aerospace Sensors	108,055	113,055	+ 5,000	
	Super-Resolution Sensor System (S3)			+ 5,000	Allard
11	Space Technology	109,566	130,466	+ 20,900	
	Advanced Modular Avionics for Operationally Responsive Space Use			+ 2,500	Bingaman, Domenici
	Deployable Structure Systems for Space			+ 2,000	Allard
	Field Programmable Gate Arrays			+ 2,000	Bingaman, Domenici
	HAARP			+ 4,000	Stevens
	High Energy Matter Space Propulsion Initiative			+ 1,000	Murray
	Microsatellite Target System			+ 2,000	Allard, Salazar
	Multicontinuum Technology for Space Structures			+ 2,000	Enzi
	Nuclear Test Seismic Research			+ 3,000	Leahy, Kerry
	Reconfigurable Electronics and Non-Volatile Memory Research			+ 2,000	Craig, Crapo
	Shielding Rocket Payloads			+ 400	Johnson, Thune
14	Command Control and Communications	116,705	118,705	+ 2,000	
	Cyber Attack Mitigation and Exploitation Laboratory II (CAMEL II)			+ 2,000	Clinton, Schumer
20	Advanced Materials for Weapon Systems	39,730	51,730	+ 12,000	
	Aircraft Evaluation Readiness Initiative (AERI)			+ 2,000	Grassley, Harkin
	Hybrid Bearings			+ 3,000	Gregg, Voinovich
	Metals Affordability Initiative			+ 5,000	Bennett, Bingaman, Brown, Casey, Dodd, Kohl, Lieberman, Reed, Reid, Rocke- feller, Smith, Wyden
	Strategic Bio-fuels Supply Program			+ 2,000	Cornyn
23	Aerospace Propulsion and Power Technology	117,990	140,890	+ 22,900	
	Bi-Polar Wafer-cell Nickel Metal Hydride Battery			+ 2,000	Dodd, Lieberman
	Family of Motors Capability Demonstration			+ 8,000	Bennett, Hatch
	Silicon Carbide Power Electronics for More Electric Aircraft			+ 6,900	Cochran, Lott

[In thousands of dollars]

Line	Item	2008 budget estimate	Committee recommendation	Change from budget estimate	Requested by
	Versatile Affordable Advanced Turbine Engine, High Speed Turbine Engine Demonstrator			+ 6,000	Bennett, Dodd, Hatch
24	Crew Systems and Personnel Protection Technology	28,558	34,558	+ 6,000	
	Low Cost/Improved Performance Helmet Display and Life Support Technologies			+ 3,000	Casey
	Water Purification with Fused Carbon Nanotube Nanostructured Material			+ 3,000	Leahy
25	Electronic Combat Technology	23,743	25,843	+ 2,100	
	Advanced Threat Alert Advanced Technology Demonstration			+ 2,100	Gregg, Sununu
28	Advanced Spacecraft Technology	78,704	93,004	+ 14,300	
	Advanced space-based infrared technology and hardened focal plane arrays program growth			- 1,500	
	COTS Technology for Space Situational Awareness			+ 2,500	Specter
	Intelligent Free Space Optical Satellite Communications Node			+ 2,000	Lincoln, Pryor
	Large Automated Production of Expendable Launch Structures (LAPELS)			+ 4,300	Cochran, Lott, Sessions
	Systematic Hierarchical Approach to Radiation-Hardened Electronics (SHARE)			+ 3,000	Craig, Crapo
	Thin Film Amorphous Solar Arrays			+ 4,000	Levin
29	Global Positioning System (GPS) Extension Program	70,758		- 70,758	
	GPS extension transfer to RDN, Line 17			- 70,758	
30	Maui Space Surveillance System (MSSS)	5,237	46,737	+ 41,500	
	Maui Space Surveillance System (MSSS) Operations & Research			+ 24,000	Inouye
	High Accuracy Network Determination System (HANDS)			+ 6,500	Akaka, Inouye
	PanSTARRS			+ 11,000	Inouye
33	Advanced Weapons Technology	43,999	74,999	+ 31,000	
	All Electric Laser			+ 2,000	Bond
	Applications of LIDAR to Vehicles with Analysis (ALVA)			+ 9,000	Inouye
	Real-time Optical Surveillance Applications			+ 2,000	Inouye
	Satellite Active Imaging National Testbed Program			+ 3,000	Bingaman, Domenici
	Space Situational Awareness research			+ 15,000	Committee Initiative
34	C3I Advanced Development	27,357	32,257	+ 4,900	
	Massively Parallel Optical Interconnects for Battlespace Information Exchange			+ 4,900	Ensign, Reid
41	Physical Security Equipment	466	3,466	+ 3,000	
	Tactical Automated Security System (TASS) Advanced Communications Module			+ 3,000	Mikulski
42	NAVSTAR Global Positioning System III	587,226	437,226	- 150,000	
	Premature request (Transfer to RDAF, Line 194)			- 150,000	
45	Space Control Technology	37,604	42,604	+ 5,000	
	Multi-mission Deployable Optical System			+ 5,000	Inouye
49	Transformational SATCOM (TSAT)	963,585	763,585	- 200,000	
	TSAT program growth			- 200,000	
54	Pollution Prevention	2,838	7,838	+ 5,000	

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	02 Diesel Air Quality Project			+ 2,000	Reid
	Assessment of Alternative Energy for Aircraft Ground Equipment (AGE)			+ 3,000	Smith, Wyden
60	Common Aero Vehicle (CAV)	32,806		- 32,806	
	CAV (HTV and CSM)—transfer to RDDW, Line 135			- 32,806	
67	B-1B	159,126	169,126	+ 10,000	
	B-1 Bomber 16 Carry Adapter			+ 10,000	Thune
68	Specialized Undergraduate Flight Training	12,622	15,622	+ 3,000	
	AT-6B			+ 3,000	Brownback
70	B-2 Advanced Technology Bomber	244,019	292,019	+ 48,000	
	Transfer from APAF Line 23 for restructured radar modernization			+ 38,000	
	Massive Ordnance Penetrator for B-2			+ 10,000	Feinstein, Inhofe
71	Personnel Recovery Systems	290,059	98,059	- 192,000	
	CSAR-X—contract award delay			- 192,000	
72	Electronic Warfare Development	101,649	103,649	+ 2,000	
	Rapid Replacement of Mission Critical Logistics Electronic Components			+ 2,000	Chambliss, Isakson
76	Counterspace Systems	53,412	65,412	+ 12,000	
	Space Control Test Capabilities			+ 5,000	Sessions, Shelby
	RAIDRS Block 20 (Air Force unfunded requirement)			+ 7,000	Committee Initiative
80	Alternative Infrared Space System (AIRSS)	230,887	75,000	- 155,887	
	AIRSS			- 155,887	
88	Integrated Command & Control Applications (IC2A)	189	8,189	+ 8,000	
	ASSET eWing and Data Fusion Technology Integration Base			+ 5,000	Byrd
	Global Awareness Presentation Services (GAPS)			+ 3,000	Ben Nelson
89	Intelligence Equipment	1,469	5,969	+ 4,500	
	Electronic Warfare Modeling, Simulation and Wireless Testing Center			+ 4,500	Craig, Crapo
91	Joint Strike Fighter (JSF)	1,780,874	1,879,324	+ 98,450	
	Excessive unearned award fee carryover			- 8,550	
	Joint Strike Fighter overbilling			- 133,000	
	Joint Strike Fighter F136 Alternate Engine			+ 240,000	Bayh, Cochran, Kennedy, Leahy, McConnell, Warner
94	RDT&E for Aging Aircraft	17,021	19,021	+ 2,000	
	Aging Landing Gear Life Extension			+ 2,000	Bennett, Hatch
102	Joint Cargo Aircraft (JCA)	42,368		- 42,368	
	Unjustified request			- 42,368	
105	Major T&E Investment	59,064	63,564	+ 4,500	
	Holloman High Speed Test Track			+ 4,500	Domenici
128	MQ-9 UAV	61,069	65,069	+ 4,000	
	Predator Aircrew Mission Training System (PMATS) Upgrade			+ 4,000	Clinton, Schumer
130	F-16 Squadrons	90,620	70,620	- 20,000	

[In thousands of dollars]

Line	Item	2008 budget estimate	Committee recommendation	Change from budget estimate	Requested by
	Program execution			-20,000	
131	F-15E Squadrons	101,251	104,251	+3,000	Feinstein, Lott
	F-15 AESA Radar Upgrade			+3,000	
133	F-22A Squadrons	743,593	611,393	-132,200	
	F-22A program growth			-132,200	
136	Advanced Medium Range Air-to-Air Missile (AMRAAM)	36,838	33,638	-3,200	
	JDRADM premature request			-3,200	
141	Compass Call	4,603	9,603	+5,000	Gregg, Lugar
	Compass Call			+5,000	
145	Air & Space Operations Center (AOC)	111,557	101,057	-10,500	
	Space C2 Operations—Reduction for Space C2 System only—premature request			-10,500	
146	Control and Reporting Center (CRC)	16,505	25,005	+8,500	
	BCS-Mobile Upgrades—transfer from OPAF, Line 19			+8,500	
160	USAF Modeling and Simulation	23,044	24,244	1,200	Reid
	Research Visualization Facility			+1,200	
167	COBRA BALL		2,500	+2,500	Bill Nelson
	Pointing and Stabilization System Upgrade for Cobra Ball			+2,500	
173	Minimum Essential Emergency Communications Network (MEECN)	103,846	88,846	-15,000	
	Ground Element MEECN System—program delay			-15,000	
174	Information Systems Security Program	229,657	210,457	-19,200	
	Program execution			-20,000	
	Cyber Security Attack and Defend Exercises			+800	Baucus, Tester
180	Airborne SIGINT Enterprise	139,627	147,627	+8,000	Bennett, Hatch
	Ku Beyond Line of Sight Satcom Datalink for Senior Scout			+8,000	
185	Weather Service	39,747	40,747	+1,000	Ben Nelson
	Operations Risk Management Visualization and Integration			+1,000	
186	Air Traffic Control, Approach, and Landing System (ATCAL)	4,672	7,672	+3,000	Smith, Wyden
	Terminal Surveillance and Approach System (TSAS)/ATCAL			+3,000	
194	NAVSTAR Global Positioning System (User Equipment) (SPACE)	93,267	156,267	+63,000	
	GPS User Equipment—transfer from RDAF, Line 42 (authorization adjustment)			+63,000	
203	Manned Reconnaissance Systems	12,672	17,672	+5,000	Ensign
	Combat Sent Wideband Sensor Upgrade Program			+5,000	
205	MQ-1 Predator A UAV	22,296	35,296	+13,000	Conrad, Dorgan Cantwell, Murray, Smith, Wyden
	Center of Excellence for Defense UAV Education			+4,000	
	Integrator Unmanned Aircraft System Advanced Concepts Development			+4,000	

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	Multi-Sensor Detect, See, & Avoid			+ 5,000	Reid
206	Global Hawk UAV	298,501	291,501	- 7,000	
	Transfer to APAF, Line 63 for spares			- 7,000	
217	C-130 Airlift Squadron	188,069	251,569	+ 63,500	
	C-130 AMP transfer from APAF, Line 47			+ 60,000	
	C-130 Automated Inspection, Repair, Corrosion and Aircraft Tracking Condition Based Maintenance Plus			+ 2,000	Chambliss, Isakson
	C-130 De-Icing System			+ 1,500	Warner, Webb
218	C-5 Airlift Squadrons (IF)	203,585	178,585	- 25,000	
	C-5 RERP—production delay and program restructure			- 25,000	
224	KC-10s	36,790	13,790	- 23,000	
	KC-10 AMP contract award delay			- 23,000	
228	Special Tactics/Combat Control	5,225	8,825	+ 3,600	
	Combat Casualty Management System			+ 3,600	Reid
231	Industrial Preparedness	39,906	45,906	+ 6,000	
	High Temperature, Laser Sintered Polymeric Material Digital Product Definition			+ 2,000	Ben Nelson
	Rapid Manufacturing and Repair of Composite Components			+ 2,000	Reid
	Refigurable Tooling Systems			+ 2,000	Ensign
234	Support Systems Development	11,076	22,576	+ 11,500	
	Alternate Carbon Stationary Fuel Cell Demonstrator			+ 4,000	Landrieu, Vitter
	Alternative Energy Fuel Cell Power Generation			+ 2,500	Brown
	Heavy Duty Hybrid Electric Vehicle			+ 2,000	Mikulski
	WR-ALC Special Operations Forces			+ 3,000	Isakson
999	Classified Programs			- 226,830	

MSSS/AMOS.—The Committee recommends an increase of \$24,000,000 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 here shall be subject to Air Force taxes or withholds. Furthermore, research funds should be allocated by Air Force officials on-site to local programs that offer the greatest potential return and merit.

Joint Cargo Aircraft.—The Committee recommends no funding for the Air Force's Joint Cargo Aircraft program and, therefore, reduces the request by \$42,368,000. The Air Force has no formal requirement for this aircraft and can execute the light cargo mission with its fleet of C-130 aircraft. If the Department of Defense's Intra-Theater Fleet Mix Analysis, due to be completed in December 2007, concludes that the Joint Cargo Aircraft is an essential capability for the Air Force, the Committee will consider a reprogramming or future request.

F-22A.—The budget request for F-22A research and development in fiscal year 2008 is \$743,593,000, an increase of \$271,118,000 over fiscal year 2007. The Committee believes that it is premature to begin research and development on future increments of modernization efforts beyond the current increment 3.1. The F-22A is the country's pre-eminent fighter aircraft and is decades ahead of our adversary's capabilities. It is unclear why there are such large requests for modernization efforts to an aircraft that is just beginning to be fielded. Thus, the Committee recommends a reduction of \$29,900,000 for initiation of the next increment of upgrades and a reduction of \$56,300,000 for the Enhanced Stores Management Systems for design work to add new weapons systems. The Committee is also concerned over the growth in lab infrastructure from \$52,400,000 in fiscal year 2007 to \$92,100,000 in fiscal year 2008 and recommends a reduction of \$46,000,000.

Space Command and Control Operations.—The Space Command and Control Operations system plans to provide integrated space information and command and control of space forces for the Joint Forces Combatant Commander, Space (U.S. Strategic Command). The fiscal year 2008 budget request includes \$8,600,000 for space command and control technology risk reduction and \$10,500,000 for the space command and control system itself. The Committee believes the request for the space command and control system is premature since the technology risk reduction efforts have not yet begun and recommends no funds for this purpose.

Global Positioning System [GPS] Extension Program.—The GPS Extension program has the potential to provide the warfighter a significant increase in jam-resistant GPS capability and precision navigation and timing enhancements in restricted environments years earlier than currently planned. The Committee is concerned, however, with the Air Force execution of this program and directs that the Research, Development, Test and Evaluation, Air Force funding for the GPS Extension program be transferred to the Re-

search, Development, Test and Evaluation, Navy appropriation Line 17.

Global Positioning System User Equipment.—The Committee recommends a transfer of \$63,000,000 from GPS III for GPS User Equipment in order to maintain competition between multiple contractors for GPS handsets.

Global Hawk.—The Air Force has underfunded spare parts for the existing Global Hawk assets in order to invest in the next generation of Global Hawk aircraft. The existing assets are being used heavily in theater and are providing tremendous support to the warfighters on the ground. The Committee believes it should be the Air Force's priority to fully fund the operational aircraft to ensure that the few Global Hawk's in the Air Force inventory can be used when needed. Therefore, the Committee transfers \$7,000,000 of Air Force research and development funding to the Aircraft Procurement, Air Force account to fully fund spares for the existing Global Hawk aircraft.

C-5 Re-Engining Program [RERP].—The Committee recommends a reduction of \$25,000,000 for the C-5 RERP program due to instability in the future program plans, cost growth, and inadequate cost estimates for re-engining the C-5 fleet. The goal of the re-engining program is to increase mission availability rates by 10 percent, thereby saving operating and support costs in future years. The program does not extend the life of the aircraft beyond the current structural design. The Air Force is currently analyzing the cost estimates of the RERP program and whether it will actually produce any savings in the out-years. Indeed, the program was recently restructured, adding \$224,500,000 in research and development funding from fiscal year 2008 to fiscal year 2012 and 7 months to the system development and demonstration phase of the program. Furthermore, a Milestone C decision is expected in January 2008, and at that time, the Department of Defense will decide the future of the C-5 RERP program.

Counter-Man Portable Air Defense Systems [MANPADS] for the Civil Reserve Air Fleet [CRAF].—The Committee is concerned that the CRAF aircraft are not protected from MANPADS, which inhibits their ability to operate efficiently overseas and puts our troops, cargo and CRAF in hazardous operating environments. The Committee directs the Air Force to provide a report to the Defense Appropriations Subcommittees within 30 days of the passage of this act that provides an analysis of putting counter-MANPADS systems on the CRAF aircraft, including a cost estimate and schedule for equipping the fleet.

Chinese Rocket Program.—The Committee directs the Secretary of Defense to report to the Committees on Appropriations and Armed Services of the House and Senate within 180 days providing an assessment of the current Chinese rocket program identifying non-Chinese companies which are contracting to use Chinese launch vehicles.

SATELLITE PROGRAMS

The Committee is concerned with the Department of Defense's current strategy for managing satellite programs. The Committee finds that the Defense Department is too eager to reach for chal-

lenging technological advances while forgoing ongoing programs. As satellite systems are on the verge of recovering after years of technical challenges and significant cost growth, the Department reduces its plans and seeks to begin new more complex replacements for these systems that have not yet been launched.

While the Committee commends the Air Force's new block upgrade approach to the next generation systems, it still believes that the current strategy is unaffordable, unjustifiably risky, and increases instability in the industrial base. By cutting off the current satellite programs and moving to the next generation of unproven technologies, the Department of Defense puts at risk essential military and national capabilities, such as communications, positioning, precision timing and navigation, and missile warning. Therefore, the Committee recommends several adjustments to the satellite programs described further below.

Global Positioning System.—In fiscal year 2007, the Global Positioning System IIF program was curtailed from 15 to 12 satellites after experiencing technical and cost challenges and will be replaced by GPS III earlier than originally planned. While GPS III promises to bring additional capability to the warfighter with an incremental upgrade approach, it will require the development of a completely new satellite with unknown costs. The third block upgrade will be particularly challenging to produce. The Committee believes the request for GPS III is premature based on the current schedule of the GPS IIR–M launches, the GPS IIF procurement and launch schedule, and the capability of the current GPS constellation to last longer than its original design life. Therefore, the Committee recommends a reduction of \$150,000,000 from GPS III development activities. Of this reduction, \$63,000,000 shall be transferred to GPS User Equipment.

Communication Satellites.—The Air Force is currently producing, but has not yet launched, the first Advanced Extremely High Frequency [AEHF] satellite. After many delays and significant cost growth, AEHF seems to have finally resolved its technical and engineering challenges. Because of the earlier challenges, the AEHF program was reduced to a constellation of three satellites in December 2002 in order to accelerate its replacement, the Transformational Communications Satellite [TSAT]. It is now evident that funding for AEHF was reduced prematurely and that the Department of Defense requires at least one additional AEHF to avoid a communications shortfall in the future. Therefore, the Committee has included \$125,000,000 in the Missile Procurement, Air Force account for the advance procurement of an additional AEHF satellite. The Committee encourages the Air Force to include an option for a second AEHF satellite in the follow-on contract in order to get the best pricing should they determine another AEHF is required.

The follow-on TSAT program is a technically challenging and unproven system with unknown total costs. The Committee understands that the technologies associated with the TSAT satellite are reaching high levels of technical maturity for this stage in the program and that the program has adopted a block upgrade approach to help ensure the program's success. However, the program is still in its infancy with many technical, manufacturing and engineering risks ahead.

In addition, the TSAT program will be extremely expensive. The budget request for the TSAT program from fiscal year 2008 through fiscal year 2013 alone is currently projected to be \$11,413,800,000. That amount does not include the cost of the program after 2013, which at this point is unknown, but will certainly be significant considering the first TSAT is not scheduled to launch until fiscal year 2016. The recent history of satellite programs would strongly suggest that costs will increase significantly as the program goes forward. The Air Force has already faced challenges fully funding this program when weighed against other Air Force priorities and reduced the fiscal year 2008 budget request from last year's estimate by \$572,400,000. Furthermore, the Committee has been informed that other options for improving communications for the military are being examined by the Department of Defense, including using airborne and existing telecommunications networks that could potentially accomplish TSAT's objectives at far lesser expense to the nation. The Committee encourages the Department to seriously consider these alternatives to enhance the military's communications architecture.

Due to the fact that AEHF has not yet launched, the uncertainties over the affordability of the current TSAT program, and potential communications alternatives, the Committee believes TSAT should be slowed down to ensure that it is fiscally and technically executable. Therefore, the Committee recommends a reduction of \$200,000,000 to TSAT program, which leaves \$763,585,000 for the program, an increase of \$33,640,000 over the fiscal year 2007 appropriation.

Missile Warning Satellites.—The Committee is concerned that the Air Force is beginning an acquisition program to replace Space-Based Infrared System-High [SBIRS-High] with the Advanced Infrared Space System [AIRSS] program prematurely. While SBIRS still has a few challenges to overcome, it appears to be making good progress after more than 12 years of development and an estimated \$9,900,000,000 for the total program cost. The SBIRS Highly Elliptical Orbit [HEO] payload is performing better than anticipated and, although there are still development and testing issues with SBIRS Geosynchronous Orbit [GEO] satellites, it seems like the program is finally on track.

The Committee is encouraged by the Department of Defense's recent announcement that it will buy two additional SBIRS satellites and two additional SBIRS HEO payloads. However, the Committee understands that the SBIRS technology will be challenging to maintain since it will be outdated before it even launches. In addition, the complexity of the satellite could impact its design life. Therefore, the Committee believes that technology development for the AIRSS program is warranted and provides \$75,000,000 to continue those efforts.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, DEFENSE-WIDE

Appropriations, 2007	\$21,291,056,000
Budget estimate, 2008	20,559,850,000
House allowance	20,659,095,000
Committee recommendation	20,303,726,000

The Committee recommends an appropriation of \$20,303,726,000. This is \$256,124,000 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]

Line	Item	2008 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
	RESEARCH, DEVELOPMENT, TEST & EVAL, DW					
	BASIC RESEARCH					
1	DTRA UNIVERSITY STRATEGIC PARTNERSHIP BASIC RESEARCH	5,000	8,000	9,000	+ 4,000	+ 1,000
2	DEFENSE RESEARCH SCIENCES	152,622	163,422	160,922	+ 8,300	- 2,500
3	GOVERNMENT/INDUSTRY COSPONSORSHIP OF UNIVERSITY RESEAR	8,000	8,000	2,500	+ 2,500	- 5,500
4	DEFENSE EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE	5,878	5,878	19,878	+ 14,000	+ 14,000
5	NATIONAL DEFENSE EDUCATION PROGRAM	44,372	44,372	44,372	.....	.....
6	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	72,003	101,253	75,403	+ 3,400	- 25,850
	TOTAL, BASIC RESEARCH	279,875	330,925	312,075	+ 32,200	- 18,850
	APPLIED RESEARCH					
	ADVANCED DEVELOPMENT INITIATIVES FUNDS		50,000	.....	.....	- 50,000
7	INSENSITIVE MUNITIONS—EXPLORATORY DEVELOPMENT	15,542	11,542	15,542	.....	+ 4,000
8	MEDICAL FREE ELECTRON LASER		2,000	3,000	+ 3,000	+ 1,000
9	HISTORICALLY BLACK COLLEGES & UNIV (HBCU) SCIENCE	15,150	15,150	18,450	+ 3,300	+ 3,300
10	LINCOLN LABORATORY RESEARCH PROGRAM	29,524	29,524	29,524	.....	.....
11	INFORMATION AND COMMUNICATIONS TECHNOLOGY	229,739	235,139	227,667	- 2,072	- 7,472
12	COGNITIVE COMPUTING SYSTEMS	179,728	179,728	176,355	- 3,373	- 3,373
13	BIOLOGICAL WARFARE DEFENSE	99,137	85,466	67,007	- 32,130	- 18,459
14	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	305,327	348,777	239,727	- 65,600	- 109,050
15	HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) APP	7,300	.....	7,300	.....	+ 7,300
16	TACTICAL TECHNOLOGY	374,717	365,341	347,358	- 27,359	- 17,983
17	MATERIALS AND BIOLOGICAL TECHNOLOGY	306,022	306,022	306,871	+ 849	+ 849
19	ELECTRONICS TECHNOLOGY	213,529	203,929	198,565	- 14,964	- 5,364
21	WEAPONS OF MASS DESTRUCTION DEFEAT TECHNOLOGIES	182,416	222,916	185,416	+ 3,000	- 37,500
23	SPECIAL OPERATIONS TECHNOLOGY DEVELOPMENT	21,282	31,782	25,282	+ 4,000	- 6,500
24	SOF MEDICAL TECHNOLOGY DEVELOPMENT	2,388	2,388	2,388	.....	.....
	TOTAL, APPLIED RESEARCH	1,981,801	2,089,704	1,850,452	- 131,349	- 239,252
	ADVANCED TECHNOLOGY DEVELOPMENT					
25	INSENSITIVE MUNITIONS—ADVANCED DEVELOPMENT	6,000	.....	6,000	.....	+ 6,000
27	SO/LIC ADVANCED DEVELOPMENT	32,669	41,669	32,669	.....	- 9,000
28	COMBATING TERRORISM TECHNOLOGY SUPPORT	76,276	109,276	88,976	+ 12,700	- 20,300
29	COUNTERPROLIFERATION INITIATIVES—PROLIF PREV & DEFEAT	213,240	220,740	213,240	.....	- 7,500

[In thousands of dollars]

Line	Item	2008 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
30	BALLISTIC MISSILE DEFENSE TECHNOLOGY	118,569	101,569	131,569	+ 13,000	+ 30,000
31	JOINT DOD-DOE MUNITIONS TECHNOLOGY DEVELOPMENT	23,488	23,488	23,488	.....	.....
32	ADVANCED AEROSPACE SYSTEMS	86,385	70,385	71,232	- 15,153	+ 847
33	SPACE PROGRAMS AND TECHNOLOGY	224,551	217,803	135,851	- 88,700	- 81,952
34	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM—ADVANCED DEV	232,302	278,602	208,702	- 23,600	- 69,900
35	JOINT ELECTRONIC ADVANCED TECHNOLOGY	9,219	9,219	13,219	+ 4,000	+ 4,000
36	JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS	194,352	196,352	203,452	+ 9,100	+ 7,100
37	NETWORKED COMMUNICATIONS CAPABILITIES	40,000	.....	40,000	.....	+ 40,000
38	BIOMETRICS SCIENCE AND TECHNOLOGY	8,000	.....	12,000	+ 4,000	+ 12,000
39	HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) ADV	9,000	.....	9,000	.....	+ 9,000
40	DEFENSE-WIDE MANUFACTURING SCIENCE AND TECHNOLOGY PROG	10,000	3,500	25,000	+ 15,000	+ 21,500
41	JOINT ROBOTICS PROGRAM/AUTONOMOUS SYSTEMS	11,256	16,756	16,256	+ 5,000	- 500
42	GENERIC LOGISTICS R&D TECHNOLOGY DEMONSTRATIONS	18,736	33,736	49,336	+ 30,600	+ 15,600
44	STRATEGIC ENVIRONMENTAL RESEARCH PROGRAM	68,874	68,874	69,874	+ 1,000	+ 1,000
45	MICROELECTRONIC TECHNOLOGY DEVELOPMENT AND SUPPORT .....	.....	28,000	27,800	+ 27,800	- 200
46	JOINT WARFIGHTING PROGRAM	11,060	11,060	11,060	.....	.....
47	ADVANCED ELECTRONICS TECHNOLOGIES	220,548	224,048	203,300	- 17,248	- 20,748
48	SYNTHETIC APERTURE RADAR (SAR) COHERENT CHANGE DETECTI	6,500	.....	3,500	- 3,000	+ 3,500
49	ADVANCED CONCEPT TECHNOLOGY DEMONSTRATIONS .....	.....	2,000	.....	.....	- 2,000
50	HIGH PERFORMANCE COMPUTING MODERNIZATION PROGRAM	187,587	189,587	208,487	+ 20,900	+ 18,900
51	COMMAND, CONTROL AND COMMUNICATIONS SYSTEMS	256,868	256,868	251,645	- 5,223	- 5,223
52	LAND WARFARE TECHNOLOGY	24,711	19,011	21,641	- 3,070	+ 2,630
53	CLASSIFIED DARPA PROGRAMS	188,188	188,188	185,028	- 3,160	- 3,160
54	NETWORK-CENTRIC WARFARE TECHNOLOGY	151,641	144,641	142,765	- 8,876	- 1,876
55	SENSOR TECHNOLOGY	196,462	196,462	187,509	- 8,953	- 8,953
56	GUIDANCE TECHNOLOGY	127,777	127,777	122,576	- 5,201	- 5,201
57	DISTRIBUTED LEARNING ADVANCED TECHNOLOGY DEVELOPMENT	13,282	13,282	13,282	.....	.....
58	SOFTWARE ENGINEERING INSTITUTE	29,851	29,851	25,951	- 3,900	- 3,900
60	QUICK REACTION SPECIAL PROJECTS	109,514	112,414	112,514	+ 3,000	+ 100
61	JOINT EXPERIMENTATION	112,017	108,717	113,017	+ 1,000	+ 4,300
62	JOINT WARGAMING SIMULATION MANAGEMENT OFFICE	37,837	27,837	17,837	- 20,000	- 10,000
63	TEST & EVALUATION SCIENCE & TECHNOLOGY	62,889	62,889	62,889	.....	.....
64	TECHNOLOGY LINK	2,234	4,234	4,734	+ 2,500	+ 500
65	SPECIAL OPERATIONS ADVANCED TECHNOLOGY DEVELOPMENT	29,935	42,435	32,935	+ 3,000	- 9,500

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	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT	3,151,818	3,181,270	3,098,334	- 53,484	- 82,936
	DEMONSTRATION & VALIDATION					
66	NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT R	38,060	45,060	44,060	+ 6,000	- 1,000
67	PHYSICAL SECURITY EQUIPMENT			2,000	+ 2,000	+ 2,000
68	RETRACT LARCH	22,365	22,365	22,365		
69	JOINT ROBOTICS PROGRAM	11,860	16,860	19,860	+ 8,000	+ 3,000
71	ENVIRONMENTAL SECURITY TECHNICAL CERTIFICATION PROGRAM	33,199	40,699	33,199		- 7,500
72	BALLISTIC MISSILE DEFENSE TERMINAL DEFENSE SEGMENT	962,585	1,032,585	1,037,585	+ 75,000	+ 5,000
73	BALLISTIC MISSILE DEFENSE MIDCOURSE DEFENSE SEGMENT	2,520,064	2,233,864	2,318,764	- 201,300	+ 84,900
73A	SBX			166,300	+ 166,300	+ 166,300
74	BALLISTIC MISSILE DEFENSE BOOST DEFENSE SEGMENT	548,759	498,108	548,759		+ 50,651
75	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	57,160	62,160	62,160	+ 5,000	
76	BALLISTIC MISSILE DEFENSE SENSORS	778,163	611,663	753,163	- 25,000	+ 141,500
77	BALLISTIC MISSILE DEFENSE SYSTEM INTERCEPTOR	227,499	372,853	197,499	- 30,000	- 175,354
78	BALLISTIC MISSILE DEFENSE TEST & TARGETS	586,150	586,150	636,150	+ 50,000	+ 50,000
80	BALLISTIC MISSILE DEFENSE SYSTEMS CORE	482,016	431,788	387,416	- 94,600	- 44,372
81	SPECIAL PROGRAMS—MDA	323,250	198,250	198,850	- 124,400	+ 600
82	AEGIS BMD	1,059,103	1,116,103	1,059,103		- 57,000
83	SPACE SURVEILLANCE & TRACKING SYSTEM	331,525	286,167	272,525	- 59,000	- 13,642
84	MULTIPLE KILL VEHICLES	271,151	274,251	221,151	- 50,000	- 53,100
85	BALLISTIC MISSILE DEFENSE SYSTEM SPACE PROGRAMS	27,666	17,666	12,666	- 15,000	- 5,000
86	BALLISTIC MISSILE DEFENSE C2BMC	258,913	460,703	248,913	- 10,000	- 211,790
87	BALLISTIC MISSILE DEFENSE HERCULES	53,658	52,824	53,658		+ 834
88	BALLISTIC MISSILE DEFENSE JOINT WARFIGHTER SUPPORT	48,787	50,235	48,787		- 1,448
89	BALLISTIC MISSILE DEFENSE JOINT NATIONAL INTERGRATION	104,012	79,099	104,012		+ 24,913
91	REGARDING TRENCH	2,000	2,000	2,000		
92	HUMANITARIAN DEMINING	14,013	14,013	14,013		
93	COALITION WARFARE	14,047	10,047	14,047		+ 4,000
94	DEPARTMENT OF DEFENSE CORROSION PROGRAM	4,983	4,983	19,083	+ 14,100	+ 14,100
95	JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS	2,960	2,960	2,960		
96	HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) RES	5,700		5,700		+ 5,700
97	JOINT SYSTEMS INTEGRATION COMMAND (JSIC)	19,375	19,375	19,375		
98	JOINT FIRES INTEGRATION & INTEROPERABILITY TEAM	16,596	16,596	16,596		
99	REDUCTION OF TOTAL OWNERSHIP COST	25,225	25,225	25,225		
100	JOINT ELECTROMAGNETIC TECHNOLOGY (JET) PROGRAM	3,482	4,982	8,782	+ 5,300	+ 3,800
	PROMPT GLOBAL STRIKE		100,000			- 100,000
	TOTAL, DEMONSTRATION & VALIDATION	8,854,326	8,689,634	8,576,726	- 277,600	- 112,908

[In thousands of dollars]

Line	Item	2008 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
	ENGINEERING & MANUFACTURING DEVELOPMENT					
101	DEPLOYMENT AND DISTRIBUTION ENTERPRISE TECHNOLOGY	25,000	10,000	25,000	.....	+ 15,000
102	DEFENSE ACQUISITION CHALLENGE PROGRAM (DACP)	28,970	28,970	28,970	.....	.....
103	NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT R	3,281	3,281	3,281	.....	.....
104	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	247,935	249,935	251,935	+ 4,000	+ 2,000
106	JOINT ROBOTICS PROGRAM	2,911	7,911	2,911	.....	- 5,000
107	ADVANCED IT SERVICES JOINT PROGRAM OFFICE (AITS-JPO)	9,832	9,832	9,832	.....	.....
108	JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM (JTIDS)	16,527	16,527	16,527	.....	.....
109	WEAPONS OF MASS DESTRUCTION DEFEAT CAPABILITIES	15,394	15,394	15,394	.....	.....
110	INFORMATION TECHNOLOGY DEVELOPMENT	11,297	11,297	11,297	.....	.....
113	DEFENSE INTEGRATED MILITARY HUMAN RESOURCES SYSTEM	79,300	79,300	79,300	.....	.....
116	BUSINESS TRANSFORMATION AGENCY R&D ACTIVITIES	127,970	128,970	107,970	- 20,000	- 21,000
117	HOMELAND PERSONNEL SECURITY INITIATIVE	1,800	1,800	1,800	.....	.....
118	TRUSTED FOUNDRY	43,604	43,604	43,604	.....	.....
119	DEFENSE ACQUISITION EXECUTIVE (DAE) PILOT PROGRAM	5,838	5,838	5,838	.....	.....
121	GLOBAL COMBAT SUPPORT SYSTEM	18,129	18,129	18,129	.....	.....
122	JOINT COMMAND AND CONTROL PROGRAM (JC2)	70,283	70,283	55,283	- 15,000	- 15,000
	TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT	708,071	701,071	677,071	- 31,000	- 24,000
	RDT&E MANAGEMENT SUPPORT					
126	GENERIC LOGISTICS R&D TECHNOLOGY DEMONSTRATIONS	4,000	4,000	4,000	.....	.....
127	TRAINING TRANSFORMATION (T2)	51,752	54,252	60,252	+ 8,500	+ 6,000
129	DEFENSE READINESS REPORTING SYSTEM (DRRS)	11,886	11,886	11,886	.....	.....
130	JOINT SYSTEMS ARCHITECTURE DEVELOPMENT	14,437	14,437	14,437	.....	.....
131	CENTRAL TEST AND EVALUATION INVESTMENT DEVELOPMENT	133,772	144,272	145,772	+ 12,000	+ 1,500
132	ASSESSMENTS AND EVALUATIONS	1,645	1,645	.....	- 1,645	- 1,645
133	THERMAL VICAR	7,822	7,822	9,467	+ 1,645	+ 1,645
134	JOINT MISSION ENVIRONMENT TEST CAPABILITY (JMETC)	6,925	6,925	6,925	.....	.....
135	TECHNICAL STUDIES, SUPPORT AND ANALYSIS	31,263	35,263	156,263	+ 125,000	+ 121,000
136	USD(A&T)—CRITICAL TECHNOLOGY SUPPORT	4,021	4,021	4,021	.....	.....
137	FOREIGN MATERIAL ACQUISITION AND EXPLOITATION	52,683	52,683	52,683	.....	.....
139	JOINT THEATER AIR AND MISSILE DEFENSE ORGANIZATION	53,653	53,653	53,653	.....	.....
140	CLASSIFIED PROGRAM USD(P) .....	.....	98,200	98,200	+ 98,200	.....
141	FOREIGN COMPARATIVE TESTING	32,919	32,919	32,919	.....	.....
142	NUCLEAR MATTERS—PHYSICAL SECURITY	4,513	4,513	4,513	.....	.....

143	SUPPORT TO NETWORKS AND INFORMATION INTEGRATION	11,152	11,152	11,152		
144	GENERAL SUPPORT TO USD (INTELLIGENCE)	4,574	4,574	4,574		
145	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	99,053	99,053	99,053		
150	SMALL BUSINESS INNOVATION RESEARCH/CHALLENGE ADMINISTR	2,162	3,162	2,162		- 1,000
151	DEFENSE TECHNOLOGY ANALYSIS	11,927	11,927	13,927	+ 2,000	+ 2,000
153	FORCE TRANSFORMATION DIRECTORATE	20,585	20,585	20,585		
154	DEFENSE TECHNICAL INFORMATION CENTER (DTIC)	51,800	51,800	51,800		
155	R&D IN SUPPORT OF DOD ENLISTMENT, TESTING & EVALUATION	9,326	9,326	9,326		
156	DEVELOPMENT TEST AND EVALUATION	18,712	18,712	18,712		
157	MANAGEMENT HEADQUARTERS (RESEARCH & DEVELOPMENT)	52,992	52,992	52,992		
158	BUDGET AND PROGRAM ASSESSMENTS	5,750		5,750		+ 5,750
161	SUPPORT TO INFORMATION OPERATIONS (IO) CAPABILITIES	28,652	28,652	36,452	+ 7,800	+ 7,800
162	INFORMATION TECHNOLOGY RAPID ACQUISITION	5,197	5,197	5,197		
163	INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS (IO)	9,932	9,932	9,932		
165	WARFIGHTING AND INTELLIGENCE-RELATED SUPPORT	827	827	827		
166	PENTAGON RESERVATION	6,058	6,058	6,058		
167	MANAGEMENT HEADQUARTERS—MDA	85,906	85,906	80,906	- 5,000	- 5,000
168	IT SOFTWARE DEV INITIATIVES	888	888	888		
	TOTAL, RDT&E MANAGEMENT SUPPORT	836,784	947,234	1,085,284	+ 248,500	+ 138,050
	OPERATIONAL SYSTEMS DEVELOPMENT					
170	DEFENSE INFORMATION SYSTEM FOR SECURITY (DISS)	34,417	34,417	34,417		
171	PARTNERSHIP FOR PEACE (PFP) INFORMATION MANAGEMENT SYS	2,000	2,000	2,000		
172	CHEMICAL AND BIOLOGICAL DEFENSE (OPERATIONAL SYSTEMS D	7,716	7,716	7,716		
173	JOINT INTEGRATION AND INTEROPERABILITY	53,892	53,892	53,892		
174	JOINT STAFF ANALYTICAL SUPPORT	7,744	7,744	7,744		
175	CLASSIFIED PROGRAMS	1,694	1,694	1,694		
176	C4I INTEROPERABILITY	76,179	76,179	76,179		
177	CRYPTOLOGIC ACTIVITIES			9,900	+ 9,900	+ 9,900
178	JOINT/ALLIED COALITION INFORMATION SHARING	26,321	26,321	26,321		
184	NATIONAL MILITARY COMMAND SYSTEM-WIDE SUPPORT	713	713	713		
185	DEFENSE INFO INFRASTRUCTURE ENGINEERING AND INTEGRATIO	5,548	5,548	5,548		
186	LONG HAUL COMMUNICATIONS (DCS)	16,487	16,487	16,487		
187	MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK	9,482	9,482	9,482		
188	PUBLIC KEY INFRASTRUCTURE (PKI)	9,389	9,389	9,389		
189	KEY MANAGEMENT INFRASTRUCTURE (KMI)	52,090	52,090	52,090		
190	INFORMATION SYSTEMS SECURITY PROGRAM	13,256	16,256	13,256		- 3,000
191	INFORMATION SYSTEMS SECURITY PROGRAM	394,314	394,314	394,314		
192	INFORMATION SYSTEMS SECURITY PROGRAM	2,300	2,300	2,300		
194	C4I FOR THE WARRIOR	3,624	3,624	3,624		

[In thousands of dollars]

Line	Item	2008 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
196	GLOBAL COMMAND AND CONTROL SYSTEM	47,237	47,237	47,237	.....	.....
197	JOINT SPECTRUM CENTER	18,653	18,653	18,653	.....	.....
198	NET-CENTRIC ENTERPRISE SERVICES (NCES)	43,424	43,424	23,424	- 20,000	- 20,000
199	TELEPORT PROGRAM	5,798	5,798	5,798	.....	.....
200	SPECIAL APPLICATIONS FOR CONTINGENCIES	15,687	17,687	15,687	.....	- 2,000
202	DEFENSE GEOSPATIAL—INTELLIGENCE .....	.....	.....	1,000	+ 1,000	+ 1,000
203	CRITICAL INFRASTRUCTURE PROTECTION (CIP)	12,667	12,667	12,667	.....	.....
204	FOREIGN COUNTERINTELLIGENCE ACTIVITIES .....	.....	.....	2,000	+ 2,000	+ 2,000
205	DEFENSE JOINT COUNTERINTELLIGENCE ACTIVITIES	2,951	2,951	2,951	.....	.....
207	POLICY R&D PROGRAMS	4,627	5,627	10,627	+ 6,000	+ 5,000
209	NET CENTRICITY	10,243	10,243	10,243	.....	.....
215	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	15,800	17,800	15,800	.....	- 2,000
217	MQ-1 PREDATOR A UAV	13,100	13,100	13,100	.....	.....
219	COMBATANT COMMAND INTELLIGENCE OPERATIONS .....	.....	.....	14,000	+ 14,000	+ 14,000
226	INDUSTRIAL PREPAREDNESS	20,114	33,114	56,114	+ 36,000	+ 23,000
227	LOGISTICS SUPPORT ACTIVITIES	2,846	2,846	2,846	.....	.....
228	MANAGEMENT HEADQUARTERS (JCS)	3,210	3,210	3,210	.....	.....
229	NATO JOINT STARS	41,466	31,466	41,466	.....	+ 10,000
230	STORM	27,107	27,107	27,107	.....	.....
232	SPECIAL OPERATIONS AVIATION SYSTEMS ADVANCED DEV	60,750	81,909	56,909	- 3,841	- 25,000
233	SPECIAL OPERATIONS TECHNOLOGY DEVELOPMENT	42,262	54,262	55,612	+ 13,350	+ 1,350
234	SPECIAL OPERATIONS TACTICAL SYSTEMS DEVELOPMENT	35,783	46,283	52,383	+ 16,600	+ 6,100
235	SOF OPERATIONAL ENHANCEMENTS	53,418	58,118	55,518	+ 2,100	- 2,600
236	SPECIAL OPERATIONS CV-22 DEVELOPMENT	23,473	23,473	23,473	.....	.....
237	SPECIAL OPERATIONS AIRCRAFT DEFENSIVE SYSTEMS	5,195	5,195	5,195	.....	.....
238	OPS ADVANCED SEAL DELIVERY SYSTEM (ASDS) DEVELOPMENT	20,292	20,292	20,292	.....	.....
239	MISSION TRAINING AND PREPARATION SYSTEMS (MTPS)	6,405	6,405	6,405	.....	.....
240	UNMANNED VEHICLES (UV)	1,500	1,500	1,500	.....	.....
241	MC130J SOF TANKER RECAPITALIZATION	12,701	12,701	12,701	.....	.....
	TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT	1,263,875	1,323,234	1,340,984	+ 77,109	+ 17,750
999	CLASSIFIED PROGRAMS	3,483,300	3,396,023	3,362,800	- 120,500	- 33,223
	TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, DW	20,559,850	20,659,095	20,303,726	- 256,124	- 355,369

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COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2008 budget estimate	Committee recommendation	Change from budget estimate	Requested by
1	DTRA Basic Research Initiative	5,000	9,000	+ 4,000	
	University Strategic Partnership			+ 4,000	Bingaman, Domenici
2	Defense Research Sciences	152,622	160,922	+ 8,300	
	Advanced Nano-Engineered Composites (AMRI)			+ 5,000	Landrieu, Vitter
	Advanced Photonic Composites Research			+ 3,300	Graham
3	Government/Industry Cosponsorship of University Research		2,500	+ 2,500	
	High power densities research			+ 2,500	Martinez
4	Defense Experimental Program to Stimulate Competitive Research	5,878	19,878	+ 14,000	
	DEPSCoR program adjustment			+ 14,000	Byrd, Collins, Inhofe, Johnson, Snowe, Thune
6	Chemical and Biological Defense Program	72,003	75,403	+ 3,400	
	CB 1—Unjustified TCTI funding			- 5,300	
	DNA Safeguard			+ 1,700	Craig, Crapo
	High Speed, High Volume Laboratory Network for Infectious Diseases			+ 3,000	Boxer, Domenici
	Multisignal Nanosensors for Detection of IEDs			+ 2,000	Reid
	PhotoScrub			+ 2,000	Hutchison
8	Medical Free Electron Laser		3,000	+ 3,000	
	MFEL program adjustment			+ 3,000	Alexander, Boxer, Burr, Dole, Feinstein, Ken- nedy
9	Historically Black Colleges and Universities (HBCU) Science	15,150	18,450	+ 3,300	
	Instrumentation Program for Tribal Colleges and Universities			+ 3,300	Baucus, Bingaman, Conrad, Johnson, Leahy, Tester
11	Information & Communications Technology	229,739	227,667	- 2,072	
	Execution adjustment			- 2,072	
12	Cognitive Computing Systems	179,728	176,355	- 3,373	
	Execution adjustment			- 3,373	
13	Biological Warfare Defense	99,137	67,007	- 32,130	
	Execution adjustment			- 32,130	
14	Chemical and Biological Defense Program	305,327	239,727	- 65,600	
	TMTI—program delays			- 50,000	
	CB 2—Unjustified TCTI funding			- 26,100	
	Advanced Emergency Medical Response Training Program			+ 2,000	Durbin
	Antibody-based Therapeutic against Smallpox			+ 1,000	Cardin

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	Chemical/Biological Infrared Detection System			+ 2,000	Collins
	HyperAcute Vaccine Development			+ 1,000	Grassley, Harkin
	Multi-purpose Biodefense Immunoarray			+ 1,000	Dodd, Lieberman, Mi- kulski
	Rapid Detection of Bacterial Pathogens			+ 2,000	Allard
	Research on a Molecular Approach to Hazardous Materials Decontamination			+ 1,500	Craig, Crapo
16	Tactical Technology	374,717	347,358	- 27,359	
	Execution adjustment			- 37,359	
	CEROS			+ 10,000	Inouye
17	Materials and Biological Technology	306,022	306,871	+ 849	
	Execution adjustment			- 12,151	
	Bioceramic Bones for Battlefield Trauma			+ 2,000	Hagel, Ben Nelson
	Economic production of coal-to-liquid fuels			+ 3,000	Byrd
	Reduce environmental impact of coal-to-liquid fuels			+ 3,000	Byrd
	Strategic Materials and Silicon Carbide Optics			+ 5,000	Inouye
19	Electronics Technology	213,529	198,565	- 14,964	
	Execution adjustment			- 17,964	
	3-D Technology for Advanced Sensor Systems			+ 3,000	Craig, Crapo, Dole
21	Weapons of Mass Destruction Defeat Technologies	182,416	185,416	+ 3,000	
	Center for Blast Mitigation and Protection			+ 1,000	Warner, Webb
	Comprehensive National Incident Management System			+ 2,000	Warner, Webb
23	Special Operations Technology Development	21,282	25,282	+ 4,000	
	Flashlight Soldier to Soldier Combat Identification System			+ 2,000	Cornyn
	Foliage Penetrating Reconnaissance and Surveillance System			+ 2,000	Akaka
28	Combating Terrorism Technology Support	76,276	88,976	+ 12,700	
	Advanced Multi-sensor ISR Testbed			+ 1,600	Cochran
	Autonomous Intrusion Surveillance Sensor Networks			+ 2,000	Conrad, Dorgan
	Bioterrorism Operations Policy for Public Emergency Response (BOPPER)			+ 2,000	Burr
	Contextual Arabic Blog and Slang Analysis Program			+ 1,000	Lott, Warner, Webb
	Interagency, Near-Term Engineering R&D to Increase the Survivability of Personnel Exposed to IED Attacks			+ 3,000	Cornyn
	Robotic Mobility Platform Systems			+ 1,000	Gregg
	Ruggedized Mobile Gamma Radiation Detection System (GuARDS)			+ 1,100	Cochran, Lott
	Ruggedized Mobile Secure 1000			+ 1,000	Lott
30	Ballistic Missile Defense Technology	118,569	131,569	+ 13,000	
	Massively Parallel Optical Interconnects for Microsatellite Applications			+ 4,000	Ensign, Reid
	Multi-Target Tracking Optical Sensor-Array Tracking			+ 3,000	Akaka
	Net Centric Airborne Defense Element (NCADE)			+ 6,000	Kyl
32	Advanced Aerospace Systems	86,385	71,232	- 15,153	
	Execution adjustment			- 15,153	
33	Space Programs and Technology	224,551	135,851	- 88,700	

[In thousands of dollars]

Line	Item	2008 budget estimate	Committee recommendation	Change from budget estimate	Requested by
	Execution adjustment			- 38,700	
	Falcon transfer to Research and Development, Defense-Wide, line 135 for Prompt global strike			- 50,000	
34	Chemical and Biological Defense Program—Advanced Development	232,302	208,702	- 23,600	
	TMTI—program delays			- 50,000	
	Fastman Analyzer Platform			+ 2,000	Bond
	Improved Chemical, Biological, and Radiological Filters			+ 2,000	Warner, Webb
	Joint Biological Agent Identification and Diagnostic System			+ 2,000	Bennett
	Long-Range Stand-Off System for Detection of Biological Materials			+ 1,400	Enzi
	Mobile Rapid Response Prototype			+ 4,000	Lautenberg, Menendez
	Mobile Real-time, non-specific Viral Agent Detector			+ 1,500	Dole
	Next Generation Gas Chromatographic Mass Spectrometer for WMD Civil Support Teams			+ 1,000	Bayh, Lugar
	NIDS Automated Biological Agent Identifier			+ 3,000	Biden, Carper
	Plant Vaccine Development			+ 3,000	Biden, Carper
	Portable Rapid Bacterial Warfare Detection Unit			+ 3,000	Grassley, Harkin
	Reactive Coatings Enhanced to Resist Chemical/Biological Contamination			+ 2,200	Kennedy, Kerry
	Small Accelerators and Detection Systems for Defense Applications			+ 1,300	Craig, Crapo
35	Joint Electronic Advanced Technology	9,219	13,219	+ 4,000	
	Joint Technology Insertion and Accelerated System Integration Capability for Electronic Warfare			+ 4,000	Bayh, Lugar
36	Joint Capability Technology Demonstrations	194,352	203,452	+ 9,100	
	Hardware Encryption Technology Program			+ 2,000	Cochran
	Louisiana Command and Control, Interoperable Communications and Information Sharing			+ 2,000	Vitter
	Simultaneous Field Radiation Technology (SFRT)			+ 3,100	Cochran, Lott
	Spartan Advanced Composite Technology			+ 2,000	Conrad, Dorgan
38	Biometrics Science and Technology	8,000	12,000	+ 4,000	
	Variable Distance Iris Identification on the Move			+ 4,000	Kennedy
40	Defense-Wide Manufacturing Science and Technology Program	10,000	25,000	+ 15,000	
	Reduction to new start			- 5,000	
	Disruptive Manufacturing Technology Initiative			+ 10,000	Brown, Casey, Clinton, Collins, Dodd, Ken- nedy, Kerry, Levin, Lieberman, Reed, Snowe, Stabenow, Voinovich, Warner, Webb

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	High Performance Manufacturing Technology Initiative			+ 10,000	Brown, Casey, Clinton, Collins, Dodd, Ken- nedy, Kerry, Levin, Lieberman, Reed, Snowe, Stabenow, Voinovich, Warner, Webb
41	Joint Robotics Program/Autonomous Systems	11,256	16,256	+ 5,000	
	Warrior Unmanned Ground Vehicle			+ 5,000	Kennedy, Kerry
42	Generic Logistics R&D Technology Demonstrations	18,736	49,336	+ 30,600	
	Accelerate Defense Supply Chain			+ 2,000	Kohl
	Advanced Mobile Microgrid Program			+ 2,000	Levin, Stabenow
	Biofuels Program			+ 2,000	Levin
	Defense Fuelcell Locomotive			+ 3,000	Brownback
	Green Product Evaluation Program			+ 2,000	Graham
	High Energy Battery for Unmanned Aerial Vehicles			+ 2,600	Bayh, Lugar
	Hydrogen Storage Program			+ 5,000	Levin
	New England Manufacturing Supply Chain Initiative			+ 2,000	Collins, Kennedy, Leahy, Reed, Sanders, Snowe
	Spray Technique Analysis and Research for Defense (STAR4D)			+ 2,000	Grassley, Harkin
	Vehicle Fuel Cell and Hydrogen Logistics Program			+ 8,000	Levin
44	Strategic Environmental Research Program	68,874	69,874	+ 1,000	
	Dendrimer Enhanced Water Remediation Research			+ 1,000	Levin
45	Microelectronics Technology Development and Support		27,800	+ 27,800	
	Advanced Surface Radar Technologies (ASuRT)			+ 5,500	Mikulski
	Demonstrations,T&E of Mini-Sensors			+ 6,000	Conrad, Dorgan
	Electronics and Materials for Flexible Sensors and Transponders (EMFST)			+ 3,000	Conrad, Dorgan
	Feature Size Migration at DMEA ARMS Foundry			+ 5,000	Feinstein
	Networked Micro-Sensors Technology Testbed			+ 2,000	Hutchison
	Rapid Prototyping/Low Rate Production of Mini-Sensors			+ 4,500	Conrad, Dorgan
	Self-sensing Array container pre-screening sensor system			+ 1,800	Reid
47	Advanced Electronics Technologies	220,548	203,300	- 17,248	
	Execution adjustment			- 20,048	
	MilTech Extension Program			+ 1,500	Baucus, Tester
	Ultra Low Power Electronics for Special Purpose Computers			+ 1,300	Craig, Crapo
48	Synthetic Aperture Radar (SAR) Coherent Change Detection (CDD)	6,500	3,500	- 3,000	
	Phase 2 funding ahead of need			- 3,000	
50	High Performance Computing Modernization Program	187,587	208,487	+ 20,900	
	ARSC			+ 5,000	Stevens

[In thousands of dollars]

Line	Item	2008 budget estimate	Committee recommendation	Change from budget estimate	Requested by
	High Performance Computational Design of Novel Materials			+ 1,900	Cochran, Lott
	High Performance Computing for Defense Modeling and Simulation Research			+ 2,000	Bill Nelson
	High Performance Computing Infrastructure Enhancement			+ 7,000	Lott
	MHPCC			+ 5,000	Inouye
51	Command, Control and Communications Systems	256,868	251,645	- 5,223	
	Execution adjustment			- 5,223	
52	Land Warfare Technology	24,711	21,641	- 3,070	
	Execution adjustment			- 3,070	
53	Classified DARPA Programs	188,188	185,028	- 3,160	
	Execution adjustment			- 3,160	
54	Network-Centric Warfare Technology	151,641	142,765	- 8,876	
	Execution adjustment			- 8,876	
55	Sensor Technology	196,462	187,509	- 8,953	
	Execution adjustment			- 8,953	
56	Guidance Technology	127,777	122,576	- 5,201	
	Execution adjustment			- 5,201	
58	Software Engineering Institute	29,851	25,951	- 3,900	
	DeVenCI			- 3,900	
60	Quick Reaction Special Projects	109,514	112,514	+ 3,000	
	Small Craft Integrated Common Operational Picture			+ 1,000	Collins, Snowe
	Unmanned Aerial Vehicles			+ 2,000	Stevens
61	Joint Experimentation	112,017	113,017	+ 1,000	
	East Coast Asymmetric Warfare Initiative			+ 1,000	Collins, Snowe, Warner, Webb
62	Joint Wargaming Simulation Management Office	37,837	17,837	- 20,000	
	Unjustified request			- 20,000	
64	Technology Transfer	2,234	4,734	+ 2,500	
	DOD Springboard			+ 2,500	Stevens
65	Special Operations Advanced Technology Development	29,935	32,935	+ 3,000	
	Special Operations Portable Power Source			+ 3,000	Levin, Stabenow
66	Nuclear and Conventional Physical Security Equipment RDT&E ADC&P	38,060	44,060	+ 6,000	
	Intelligent Decision Exploration			+ 6,000	Inouye
67	Physical Security Equipment		2,000	+ 2,000	
	Shipboard Visitor Control Center			+ 2,000	Cantwell, Murray
69	Joint Robotics Program	11,860	19,860	+ 8,000	
	Joint Training and Experimentation Center (JTEC) Joint Robotics Program			+ 8,000	Barrasso

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72	Ballistic Missile Defense Terminal Defense Segment	962,585	1,037,585	+ 75,000	
	Arrow Co-production			+ 25,000	Cochran, Feinstein, Lott, Sessions, Shel- by, Thune
	Arrow ASIP			+ 15,000	Cochran, Feinstein, Lott, Sessions, Shel- by, Thune
	Short-range ballistic missile defense			+ 35,000	Bond, Kyl, Lott, Mikul- ski, Sessions
73	Ballistic Missile Defense Midcourse Defense Segment	2,520,064	2,318,764	- 201,300	
	European 3rd Site Construction			- 85,000	
	GMD upgrades			+ 50,000	Committee Initiative
	SBX Transfer to Line 73A			- 166,300	
73A	SBX		+ 166,300	+ 166,300	
	SBX Transferred from Line 73			+ 166,300	
75	Chemical and Biological Defense Program	57,160	62,160	+ 5,000	
	Improved skin decontamination system			+ 1,000	Brownback
	Vacuum Sampling Pathogen Collection & Concentration			+ 4,000	Craig
76	Ballistic Missile Defense Sensors	778,163	753,163	- 25,000	
	Sensor program growth			- 25,000	
77	Ballistic Missile Defense System Interceptor	227,499	197,499	- 30,000	
	Kinetic Energy Interceptor			- 30,000	
78	Ballistic Missile Defense Test & Targets	586,150	636,150	+ 50,000	
	Test Range Support and Upgrades			+ 50,000	Committee Initiative
80	Ballistic Missile Defense Systems Core	482,016	387,416	- 94,600	
	BMD Systems Core—program growth			- 50,000	
	Intelligence and Security—reduction only for Intelligence and Counterintelligence activities			- 21,265	
	Producibility and Manufacturing Technology			- 23,335	
81	Special Programs—MDA	323,250	198,850	- 124,400	
	BMD Special Programs			- 124,400	
83	Space Tracking & Surveillance System	331,525	272,525	- 59,000	
	STSS Follow-On—Premature Request			- 45,000	
	STSS Follow-On—Program growth for program management support			- 10,000	
	STSS Program Wide Support			- 4,000	
84	Multiple Kill Vehicle	271,151	221,151	- 50,000	
	MKV—program growth			- 50,000	
85	Ballistic Missile Defense System Space Programs	27,666	12,666	- 15,000	
	Space Experimentation Center			- 5,000	
	BMD Space Testbed			- 10,000	
86	Ballistic Missile Defense Command and Control, Battle Management and Communicati	258,913	248,913	- 10,000	

[In thousands of dollars]

Line	Item	2008 budget estimate	Committee recommendation	Change from budget estimate	Requested by
	C2BMC program growth			- 10,000	
94	Department of Defense Corrosion Program	4,983	19,083	+ 14,100	
	Department of Defense Corrosion Program			+ 14,100	Cochran
100	Joint Electromagnetic Technology (JET) Program	3,482	8,782	+ 5,300	
	Antenna, Diagnostic and Microwave Characterization Facility			+ 1,300	Reid
	JET—Digital Aurora Radio Technology Program			+ 4,000	Stevens
104	Chemical and Biological Defense Program	247,935	251,935	+ 4,000	
	ParallelaVax Rapid Vaccine Testing Technology			+ 2,000	Conrad, Dorgan
	Rapid Identification of Biological Warfare Agents			+ 2,000	Hagel, Ben Nelson
116	Business Transformation Agency R&D Activities	127,970	107,970	- 20,000	
	Program adjustment			- 20,000	
122	Joint Command and Control Program (JC2)	70,283	55,283	- 15,000	
	Program adjustment			- 15,000	
127	Training Transformation (T2)	51,752	60,252	+ 8,500	
	Agile Software Capability Intervention			+ 2,000	Bond
	Playas Mobile Command, Control and Communications Shelter			+ 2,500	Bingaman, Domenici
	Playas Training and Research Center Joint Training Experiment			+ 4,000	Bingaman, Domenici
131	Central Test and Evaluation Investment Development (CTEIP)	133,772	145,772	+ 12,000	
	Advanced SAM Hardware Simulator Development			+ 4,000	Chambliss, Isakson
	Pacific Region Interoperability Test and Evaluation Capability			+ 3,000	Inouye
	UAV Systems and Operations Validation Program			+ 5,000	Bingaman, Domenici
132	Assessments and Evaluations	1,645		- 1,645	
	Transfer to Research and Development, Defense-Wide, line 133			- 1,645	
133	Thermal Vicar	7,822	9,467	+ 1,645	
	Transfer from Research and Development, Defense-Wide, line 132			+ 1,645	
135	Technical Studies, Support and Analysis	31,263	156,263	+ 125,000	
	Prompt global strike capability development, transfer from Research, Development, Test and Evaluation, Navy and Defense-Wide, line 79 and 33.			+ 125,000	
140	Classified Program USD(P)		98,200	+ 98,200	
	Classified adjustment			+ 98,200	
151	Defense Technology Analysis	11,927	13,927	+ 2,000	
	Commodity Management Systems Consolidation			+ 2,000	Byrd
161	Support to Information Operations (IO) Capabilities	28,652	36,452	+ 7,800	
	Enhanced Simulation Capabilities for Information Operations			+ 7,800	Cochran, Lott
167	Management HQ—MDA	85,906	80,906	- 5,000	
	Management HQ reduction			- 5,000	

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177	Cryptologic Activities		9,900	+ 9,900	
	National Biometrics Security Project			+ 4,000	Byrd
	MatchBox (Biometrics Analysis and Identification)			+ 5,900	Byrd
198	Net-Centric Enterprise Services (NCES)	43,424	23,424	- 20,000	
	Execution delays			- 20,000	
202	Defense Geospatial-Intelligence Program		1,000	+ 1,000	
	Digital Data High Quality Recorder			+ 1,000	Brownback
204	Foreign Counterintelligence Activities		2,000	+ 2,000	
	Credibility Assessment Research Initiative			+ 2,000	Craig, Crapo
207	Policy R&D Programs	4,627	10,627	+ 6,000	
	Pacific Disaster Center			+ 6,000	Inouye
219	Combatant Command Intelligence Operations		14,000	+ 14,000	
	Armed Forces Health and Food Supply Research			+ 3,000	Roberts
	Biological and Chemical Warfare Online Respository of Technical Holdings System			+ 1,000	Murray
	Missile-related Threat Representation—Shared			+ 2,000	Shelby
	National Consortium for MASINT Research			+ 3,000	Bingaman, Durbin, Obama
	Pat Roberts Intelligence Scholars Program (PRISP)			+ 2,000	Roberts
	Project FORTITUDE			+ 3,000	Bunning
226	Industrial Preparedness	20,114	56,114	+ 36,000	
	Castings for Improved Defense Readiness Program			+ 2,000	Casey, Durbin, Reed, Roberts, Whitehouse
	Industrial Base Innovation Fund			+ 30,000	Brown, Casey, Clinton, Collins, Dodd, Ken- nedy, Kerry, Levin, Lieberman, Reed, Snowe, Stabenow, Voinovich, Warner, Webb
	Military High Pressure Packaging			+ 4,000	Bayh, Lugar
232	Special Operations Aviation Systems Advanced Development	60,750	56,909	- 3,841	
	Excess to requirement			- 3,841	
233	Special Operations Tactical Systems Development	42,262	55,612	+ 13,350	
	Communications Enhancements to Fielded TACTI-NET Systems to Extend Range and Increase Capacity			+ 1,000	Shelby
	Covert WPM Waveform Modules			+ 2,000	Chambliss, Isakson
	Multi-User Panoramic Synthetic Vision System			+ 3,000	Gregg, Sununu
	NSW RIB Payload Capacity Project			+ 2,100	Cochran, Lott
	SOCOM computer research			+ 1,250	Hutchison
	Special Ops Mission Planning			+ 4,000	Bond
234	Special Operations Intelligence Systems Development	35,783	52,383	+ 16,600	

[In thousands of dollars]

Line	Item	2008 budget estimate	Committee recommendation	Change from budget estimate	Requested by
	Advanced, Long Endurance Unattended Ground Sensor Technologies			+ 2,600	Cochran, Lott
	Advanced Tactical Threat Warning Radio (ATTWR)			+ 2,000	Boxer
	Application Specific Integrated Circuit (ASIC) development			+ 4,000	Leahy
	Automated Threat Warning for Improved Warfighter Survivability			+ 2,000	Graham
	Joint METOC Program (SOCOM)			+ 2,000	Allard, Salazar
	Multi-Spectral Laboratory and Analytical Services Program			+ 1,000	Inhofe
	Picoceptor and Processor for Manportable Threat Warning			+ 3,000	Gregg
235	SOF Operational Enhancements	53,418	55,518	+ 2,100	
	Parser Multi-Level Security			+ 2,100	Sanders
999	CLASSIFIED PROGRAMS	3,483,300	3,362,800	- 120,500	

Transformational Countermeasures Technologies Initiative [TCTI].—The fiscal year 2008 budget request includes \$24,300,000 for TCTI. The Committee has fully funded this request and notes that this is an increase of \$19,300,000 over amounts provided in fiscal year 2007. Subsequent to the budget submission, the request for TCTI increased to \$55,800,000. Given the lack of fully developed program objectives and transition plans, the Committee sees no reason to provide any additional funding for TCTI at this time and denies the request to move an additional \$31,400,000 into the TCTI program.

Transformational Medical Technology Initiative [TMTI].—The fiscal year 2008 budget request includes \$247,800,000 for TMTI, an increase of \$124,300,000, or 101 percent, over amounts provided in fiscal year 2007. In light of the program's severe execution delays in both fiscal years 2006 and 2007, the Committee finds the request excessive. The Committee provides \$147,700,000 for TMTI, a reasonable increase over amounts provided in fiscal year 2007. The Committee commends the Special Assistant for Chemical and Biological Defense for the TMTI report that was provided in response to congressional mandate and directs the Special Assistant for Chemical and Biological Defense to continue to provide this report annually. The Committee will work with the program office to ensure that the Committee's concerns continue to be addressed in the report.

Defense Advanced Research Projects Agency [DARPA].—The fiscal year 2008 budget request includes \$3,085,617,000 for DARPA. The Committee recommends a funding level of \$2,909,283,000, a reduction of \$176,334,000 to the request. The Committee reduction is primarily based on DARPA's underexecution of previously provided funding. For example, with one quarter remaining for the obligation of fiscal year 2006 funds, over \$500,000,000, or 17 percent, of funds appropriated in fiscal year 2006 for DARPA were unobligated or reprogrammed for higher priorities. This trend of underexecution continues in fiscal year 2007, where despite a congressional reduction of \$199,000,000 to the budget request more than 7.5 percent of appropriated funding has been identified as excess to DARPA requirements within the first 9 months of availability for obligation. Therefore, the Committee does not believe that additional program growth is justified at this time and recommends funding DARPA's fiscal year 2008 program at a level consistent with current expenditures in the fiscal year 2007 program. The Committee notes that the recommended fiscal year 2008 amount provides \$400,000,000 more than is being executed in the fiscal year 2006 program.

Additionally, an analysis of DARPA's top technical performers over the past 3 years shows that roughly one-third of DARPA's budget is consistently awarded to the same top 15 performers, most of which rank among the world's leading defense companies. The Committee is concerned that by repeatedly relying on the same performers, DARPA may be missing out on innovative ideas originating from non-traditional, non-defense sources, to include small businesses, creative individuals and small universities and colleges. The Committee encourages DARPA to increase its outreach and awareness initiatives to these potential partners with the specific

goal of enhancing greater participation from non-traditional defense sources.

The Committee commends DARPA for its attempts to comply with guidance previously issued in Senate Report 108–284 regarding transition plans for programs funded with Advanced Technology Development research funds. The fiscal year 2008 budget request includes \$1,477,131,000, almost 50 percent of DARPA’s budget, in Advanced Technology Development funding for 182 programs. According to DARPA, transition objectives exist for 88 percent of those programs—short of the Committee’s mandate of 100 percent, but certainly a vast improvement from previous years. The Committee directs DARPA to continue to strive towards achieving transition plans for 100 percent of Advanced Technology Development programs and to maintain a minimum of at least 90 percent. The Committee further directs the Director, DARPA to submit to the congressional defense committees with the fiscal year 2009 budget submission a written report detailing DARPA’s transition successes by fiscal year since fiscal year 2006, and its transition plans for programs funded in the fiscal year 2009 request. The report shall include the identification of projects by Program Element and name (to include potential name changes over the years), funding history by fiscal year, transition agents, the year of transition, and the projects’ name and funding by procurement/research and development line upon transitioning to a transition agent Program of Record. Additionally, the report shall include an assessment of Technology Readiness Levels [TRLs] for each project at the time of its initiation at DARPA and at the time of its transition to the transition agent.

The fiscal year 2007 Department of Defense Appropriations Act directed DARPA to provide more individual programmatic detail in its budget justification materials. While some improvements were made with the fiscal year 2008 budget submission, the Committee notes that several Program Element numbers still include roll-up programs containing a multitude of smaller projects for which no schedule, programmatic or funding detail is included in the justification materials. The Committee expects this to be rectified with the fiscal year 2009 budget submission.

Synthetic Fuel Utilization.—The Committee supports the Department’s efforts to evaluate synthetic fuels, including those produced through the Fischer-Tropsch process, which may lead to greater fuel efficiency and lesser dependence on foreign energy sources. However, the Committee is concerned that there has been insufficient attention to the infrastructure requirements and investment planning for a transition to synthetic fuels. This uncertainty undermines the ability of commercial producers to generate the necessary investment capital to build facilities capable of producing synthetic fuels to meet defense requirements.

The Committee directs the Secretary of Defense to submit a report to the congressional defense committees no later than March 31, 2008, which, for each military department, describes the anticipated fuel requirement that may be met by synthetic fuel, including the amounts and types of such fuel; a schedule for the transition to synthetic fuels; the infrastructure required for the distribution of synthetic fuels, including cost estimates for construction and

operation and maintenance; and the status of any long-term contracts or other agreements to encourage private sector investment to ensure the availability of synthetic fuels that meet military requirements.

Joint Wargaming Simulation Management Office.—The fiscal year 2008 budget request includes \$37,837,000 for the Joint Wargaming Simulation Management Office. This request consists of \$11,000,000 for program office support and roughly \$26,000,000 in unencumbered funding for Department-wide Modeling and Simulation [M&S] efforts. This is in addition to an estimated \$10,000,000,000 annual Department of Defense investment in M&S. Recognizing the need for Department-wide coordination and jointness among the services' and defense agencies' M&S efforts in order to maximize effectiveness and eliminate redundancy, the Committee fully funds the program office so that it may exercise its oversight role. However, given the Department's significant annual M&S investment, the Committee finds the request for additional M&S funding unwarranted. The Committee directs the Joint Wargaming Simulation Management Office to submit to the congressional defense committees along with the fiscal year 2009 budget submission a report detailing M&S efforts conducted by the services and defense agencies annually since fiscal year 2006, to include the type of effort, participants and associated funding.

Budget and Program Assessments.—The fiscal year 2008 budget request includes \$5,750,000 to support both the Office of the Director, Program, Analysis & Evaluation [PA&E] and the Office of the Under Secretary of Defense (Comptroller) to resolve budget and programmatic issues across the full range of the Department's activities. The Committee has fully funded this request. However, the Committee is distressed to learn that the Department plans to outsource this funding to Federally Funded Research and Development Centers [FFRDCs]. The Committee believes that research and analysis capabilities in support of budgeting, programming and acquisition decisions should remain within the Department's organic workforce and directs PA&E and the Under Secretary of Defense (Comptroller) to report to the congressional defense committees on the execution plan for these funds.

New Starts.—The budget request includes several new programs in fiscal year 2008. The Committee commends the Department for addressing validated capability gaps and supports many of these new initiatives. However, the Committee is concerned that several proposed new start programs lack specific exit criteria and transition goals. Therefore, the Committee directs the Department to implement a plan for transitioning these new start programs and to report to the congressional defense committees no later than 30 days after enactment of this act.

New Starts in the Year of Execution.—The budget request includes over \$300,000,000 in various program elements for projects that will be selected and initiated in the year of execution. Recognizing the need for the Department to conduct research projects in support of urgent warfighter requirements, the Committee supports this funding and retains the reporting requirement set forth in Senate Report 109–292.

MISSILE DEFENSE PROGRAMS

Ground-based Missile Defense Upgrades.—The Committee provides an additional \$50,000,000 for upgrades to the ground-based missile defense [GMD] system, including \$28,000,000 for incorporating Concurrent Test, Training, and Operations [CTTO] Upgrades for GMD fire control enhanced training and situational awareness and SBX program, and \$22,000,000 for expanding test infrastructure for operational ground based interceptor quantities.

Kinetic Energy Interceptor [KEI].—According to the budget justification materials, KEI has three objectives: “(1) to develop a midcourse interceptor capable of replacing the current fixed Ground-based interceptor [GBI] when the deployed GBIs become obsolete; (2) to develop this interceptor so that it could be strategically deployed as an additional midcourse capability with mobile land- or sea-based launchers; and (3) to assume the boost- and ascent-phase intercept mission within the Ballistic Missile Defense System [BMD] if the Airborne Laser [ABL] fails to meet its performance objectives.” The Committee believes that these objectives are premature, that existing systems can achieve the same goals, and that the missile is not suitable for Navy platforms.

The Committee is concerned that MDA is developing KEI as a replacement for the GBI's prematurely since the GBI's are still under development, the fielded GBI's undergo continuous upgrades and retrofits, and the GBI's still have to undergo significant testing. Furthermore, additional midcourse capability can be achieved with upgrading current mobile systems, such as Theater High Altitude Area Defense [THAAD]. In addition, a study is currently underway on sea-basing the KEI, including an examination of Navy platforms suitable for hosting the large KEI. The Committee has not been informed that any current or future Navy ship will be outfitted with the KEI, and it appears that there are few, if any, viable platforms. Therefore, the Committee recommends a reduction of \$30,000,000 for the KEI program.

Test Range Support and Upgrades.—The Committee recommends an additional \$50,000,000 for test and training range support and upgrades to ensure the ranges are able to keep pace with the additional demands required to support MDA testing.

Ballistic Missile Defense Systems Core.—The budget request includes \$24,190,000 for intelligence, counterintelligence, and information assurance activities in the BMD System Core program element. The Committee is concerned that MDA is engaging in activities that should more appropriately be conducted by the intelligence community, namely the Missile and Space Intelligence Center, the National Air and Space Intelligence Center, and other entities in the Department of Defense. Therefore, the Committee recommends a reduction of \$18,020,000 for intelligence and security and a reduction of \$3,245,000 for counterintelligence. The remaining funding shall be used only for information assurance systems certification.

In addition, the request includes \$37,615,000 for Producibility and Manufacturing Technology. This funding supports research and development activities on projects such as high performance batteries, radiation hardened devices, electro-optical and infrared

producibility and reliability, radar electronics improvements, affordable and reliable propulsion, advanced materials and structures, and anti-tamper technologies. The Committee recommends a reduction of \$23,335,000 for this program since these technologies are repetitive of activities underway in the core missile defense programs and duplicative of research and development programs done by the military services and the Defense Advanced Research Projects Agency.

Furthermore, the BMD Systems Core program element grows from \$429,420,000 in fiscal year 2007 to \$482,016,000 in the fiscal year 2008 request. The Committee recommends a reduction of \$50,000,000 for general program growth in the BMD Systems Core program element.

Procurement Funding Pilot Program.—The Committee is concerned that MDA continues to fund its programs incrementally with research and development funds when they should more appropriately be funded in the procurement or operation and maintenance accounts. Several MDA programs have stable production and have graduated from the research and development phase, such as Standard Missiles, Ground-based Interceptors, TPY-2 radars, and THAAD fire units. In order to begin this transition away from incremental funding to build stability in the production lines and gain efficiencies in unit costs, the Committee directs MDA to begin a pilot program in fiscal year 2009 that funds THAAD Fire Units 3 and 4 with Procurement, Defense-wide funding. In addition, the Committee encourages MDA to fully fund Standard Missiles with procurement funding beginning in fiscal year 2010.

Space Tracking and Surveillance System.—The budget request includes \$331,525,000 for the Space Tracking and Surveillance System [STSS]. The Committee understands that MDA will be launching two prototype satellites to assess how they will enhance the missile defense system. At the same time, MDA is requesting funds to develop the follow-on STSS satellites without sufficient knowledge from the experimental satellites. Therefore, the Committee recommends a reduction of \$45,000,000 from the STSS-Follow-On. In addition, program management support for the STSS-Follow-On grows from \$1,500,000 in fiscal year 2007 to \$12,600,000 in fiscal year 2008. Given the premature request for STSS-Follow-On, the Committee recommends a \$10,000,000 reduction for program management support. Similarly, the Committee recommends an additional \$4,000,000 reduction for program growth in Program-wide support activities.

Multiple Kill Vehicle [MKV].—The Committee recommends a reduction of \$50,000,000 for the MKV program. The MKV budget request nearly doubles from \$144,362,000 in fiscal year 2007 to \$271,151,000 in the fiscal year 2008 request. The Committee is concerned that MDA changed its acquisition strategy in fiscal year 2007 prematurely and has not provided cost estimates or adequate justification for adding another contractor to the program. The justification materials provide no detail on how the fiscal year 2008 funding will be distributed between the two efforts.

In addition, the Committee is concerned that MDA has not fully consulted the Japanese about their intention to replace the Standard Missile-3 [SM-3] Block IIA program with MKV. The Japanese

have already committed to funding half of the \$2,500,000,000 SM-3 Block IIA development effort with the United States. The Standard Missile is performing extremely well in the Aegis sea-based tests, and upgrades to that system are less risky and will provide near-term capability sooner than moving to an unproven, technically immature MKV for the Aegis system.

The Committee directs that no funding in the Aegis BMD program element can be used for the MKV program.

Space Test Bed.—The Committee provides no funding for the Space Test Bed. The test bed is intended to be the initial step toward deploying space-based interceptors. The Committee believes the request is premature and the costs of a space-based system are unknown and likely unaffordable. MDA should focus its efforts on near-term missile defense systems.

Space Experimentation Center.—The Committee recommends a reduction of \$5,000,000 for the Space Experimentation Center, a new activity requested in fiscal year 2008. Since MDA terminated its microsatellite technology development program, no funding is provided for the Space Test Bed (described above), and the N-FIRE experiment ends in fiscal year 2009, there is no requirement for an experimentation center since the STSS program is MDA’s only ongoing space program.

Air Launched Hit to Kill.—The Committee is encouraged by MDA’s investment in research and development for air launched weapons for tactical fighter aircraft. These weapons include equipping fighter aircraft with an Advanced Medium Range Air-to-Air Missile [AMRAAM] equipped with an AIM-9X seeker, Patriot Advanced Capability-3 [PAC-3], or THAAD interceptors. The Committee believes that the Air Launched Hit to Kill program should be considered as another option for boost/ascent-phase missile defense since this program has the potential to provide boost-phase capability to the warfighter in the near-term at a relatively low cost.

OPERATIONAL TEST AND EVALUATION, DEFENSE

Appropriations, 2007	\$185,420,000
Budget estimate, 2008	180,264,000
House allowance	180,264,000
Committee recommendation	180,264,000

The Committee recommends an appropriation of \$180,264,000. 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]

Line	Item	2008 budget estimate	House allowance	Committee recommendation	Change from—	
					Budget estimate	House allowance
	OPERATIONAL TEST & EVAL, DEFENSE					
	RDT&E MANAGEMENT SUPPORT					
2	OPERATIONAL TEST AND EVALUATION	48,627	48,627	48,627	.....	.....
4	LIVE FIRE TESTING	11,133	11,133	11,133	.....	.....
6	OPERATIONAL TEST ACTIVITIES AND ANALYSES	120,504	120,504	120,504	.....	.....
	TOTAL, RDT&E MANAGEMENT SUPPORT	180,264	180,264	180,264	.....	.....
	TOTAL, OPERATIONAL TEST & EVAL, DEFENSE	180,264	180,264	180,264	.....	.....