

TITLE IV—RESEARCH, DEVELOPMENT, TEST AND EVALUATION

The conference agreement on items addressed by either the House or the Senate is as follows:

	(In thousands of dollars)			
	Budget	House	Senate	Conference

RECAPITULATION				
Research, Development, Test and Evaluation, Army	10,855,559	11,834,882	11,245,040	11,054,958
Research, Development, Test and Evaluation, Navy	16,912,223	17,654,518	17,048,238	18,673,894
Research, Development, Test and Evaluation, Air Force	24,396,767	24,457,062	23,974,081	24,516,276
Research, Development, Test and Evaluation, Defense-Wide	20,809,939	21,208,264	20,543,393	21,291,056
Operational Test and Evaluation, Defense	181,520	181,520	187,520	185,420
GRAND TOTAL	73,156,008	75,336,246	72,998,272	75,721,604

SPECIAL INTEREST ITEMS

Items for which additional funds have been provided as shown in the project level tables or in paragraphs using the phrase "only for" or "only to" in this report are congressional interest items for the purpose of the Base for Reprogramming (DD 1414). Each of these items must be carried on the DD Form 1414 at the stated amount, specifically addressed in the conference report. These items remain special interest items whether or not they are repeated in a subsequent conference report.

REPROGRAMMING GUIDANCE FOR ACQUISITION ACCOUNTS

The conferees direct the Department of Defense to continue to follow the reprogramming guidance specified in the report accompanying the House version of the fiscal year 2006 Department of Defense Appropriations bill (H.R. 109-119). Specifically, the dollar threshold for reprogramming funds will remain at \$20,000,000 for procurement, and \$10,000,000 for research, development, test and evaluation. The Department shall continue to follow the limitation that prior approval reprogrammings are set at either the specified dollar threshold or 20% of the procurement or research, development, test and evaluation line, whichever is less. These thresholds are cumulative. Therefore, if the combined value of transfers into or out of a procurement (P-1) or research, development, test and evaluation (R-1) line exceeds the identified threshold, the Department of Defense must submit a prior approval reprogramming to the congressional defense committees. In addition, guidelines on the application of prior approval reprogramming procedures for congressional special interest items are established elsewhere in this report.

FUNDING INCREASES

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

JOINT TACTICAL RADIO SYSTEM (JTRS)

In July 2006, the Department of Defense established a new management arrangement for the JTRS program. As a result, the Department of the Navy is now the lead component for JTRS development. In support of this new arrangement, the conferees agree to transfer JTRS research and development funding from the "Research, Development, Test and Evaluation, Army" account to the "Research, Development, Test and Evaluation, Navy" account. The conferees note the JTRS Joint Program Executive Office remains in control of JTRS development funding and must approve any obligation or transfer of execution year funds for radio development associated with any of the JTRS program elements.

PROMPT GLOBAL STRIKE

The budget request includes \$127,000,000 to demonstrate the feasibility of using existing TRIDENT II (D-5) missiles with conventional payloads to provide a prompt global strike capability. The conferees believe that funda-

mental issues about the requirement for and use of this weapon must be addressed prior to determining the efficacy of this program. Therefore, the conferees are providing \$5,000,000 in Research, Development, Test and Evaluation, Defense-Wide for a study to be conducted by the National Academy of Sciences to analyze the mission requirement and, where appropriate, consider and recommend alternatives that meet the prompt global strike mission in the near term (1-2 years), the mid-term (3-5 years), and the long term. The study should include analyses of the military, political and international issues associated with each alternative. The study should consider technology options for achieving desired objectives as well as mitigating policy concerns. The study is due to the congressional defense committees by March 15, 2007. In addition, the conferees are providing \$20,000,000 in Research, Development, Test and Evaluation, Navy for developmental efforts under the Conventional Trident Modification program. These funds should be used to focus on those developmental items which are common to all the global strike alternatives until the completion of the study and a determination has been made on the best course of action in this matter.

JOINT STRIKE FIGHTER ALTERNATE ENGINE DEVELOPMENT AND COST ANALYSIS

The conferees recommend an additional \$170,000,000 in Research, Development, Test and Evaluation, Air Force and \$170,000,000 in Research, Development, Test and Evaluation, Navy for continuing development of the F-136 engine for the Joint Strike Fighter program. The conferees direct the Under Secretary of Defense for Acquisition, Technology and Logistics to sponsor a comprehensive independent cost analysis of the Joint Strike Fighter engine program. The conferees strongly encourage the analysis be conducted by the Institute for Defense Analyses (IDA). This analysis shall include but not be limited to: (1) a comparison of costs associated with the development of the F-135 and F-136 engines; (2) an evaluation of potential savings achieved by eliminating or continuing the development and production of an alternate engine over the program's life cycle; and (3) the potential effects on the industrial base of eliminating or continuing the development and production of an alternate engine over the program's life cycle. This analysis shall be transmitted to the congressional defense committees not later than March 15, 2007.

The conferees in no way intend for this analysis to be an excuse for the Department of Defense not to fully fund the development of both the F-135 and the F-136 engines in fiscal year 2008. All evidence suggests that the development of two alternate engines will lead to cost savings through competition, increased capabilities for the warfighter, and a strengthened industrial base. Accordingly, the conferees direct the Department of Defense to fund the continued development of both the engines in the fiscal year 2008 budget submission while this cost analysis is ongoing.

DEPARTMENT OF DEFENSE BIOMETRICS PROGRAMS

The conferees reaffirm the authority of the Secretary of the Army as Executive Agent for all biometrics within the Department of Defense under Public Law 106-246, and encourage the Department of Defense to designate a Principal Staff Assistant to define policy, architecture, and interagency cooperation. The conferees look forward to receiving the final report of the Defense Science Board study on biometrics and receiving the associated recommendations of the Secretary of Defense by January 15, 2007.

ALTERNATIVE FUELS

At the behest of Congress, the Air Force initiated research into developing alternatives to jet fuels in current use. That research has paid dividends. A recent report from the Air Force indicates that substituting standard jet fuels (such as JP-4 and JP-8) with coal-based synthetic fuels and natural gas derivatives could result in savings of up to two-thirds of the cost of a gallon of JP-8. Moreover, the Air Force research shows that these alternative fuels burn cleaner than standard jet fuels, a result that portends savings from lower maintenance and engine replacement costs. In light of these findings, the Navy reports that it plans to initiate a pilot program to develop alternative fuels. Given the high costs of fuel and maintenance, the conferees are encouraged by these reports and believe that the military services should continue to pursue alternative fuels research and development. As such, the conferees encourage the Department to provide sufficient funding in its fiscal year 2008 and future budget requests to continue these important research programs.

SPECIALTY STEEL INDUSTRIAL BASE

The Department of Defense's demand for iron-based alloy aviation specialty steels has dramatically increased as a result of continuing deployments to the overseas theaters of operation. Today, there is only one domestic supplier for a unique process which utilizes vacuum inducted melt/vacuum arc remelt, the process which gives aviation grade steels their required properties. These specialty steels are critical to building high technology U.S. military weapon systems. Further, there has been a related and dramatic increase in the raw material needed to make these specialty steels. Lead times for these raw materials have grown from 3 months to 1 year. According to the Army, the overall effect on lead times for spare part deliverables has swelled in some cases to greater than 24 months. As such, the conferees encourage the Department of Defense to partner with domestic industry to develop a greater capacity to meet the delivery requirements for aviation parts to the military within an acceptable time frame. The conferees suggest that the Department explore a 50/50 cost share project between the Federal government, private industry, and/or state governments as the best means to create this capacity as rapidly as possible.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY

The conference agreement on items addressed by either the House or the Senate is as follows:

		(In thousands of dollars)			
		Budget	House	Senate	Conference

RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY					
	BASIC RESEARCH				
1	IN-HOUSE LABORATORY INDEPENDENT RESEARCH.....	19,402	19,402	19,402	19,402
2	DEFENSE RESEARCH SCIENCES.....	137,568	157,968	162,168	172,018
3	UNIVERSITY RESEARCH INITIATIVES.....	68,545	84,545	72,545	81,745
4	UNIVERSITY AND INDUSTRY RESEARCH CENTERS.....	86,416	90,066	105,166	96,816

	TOTAL, BASIC RESEARCH.....	311,931	351,981	359,281	369,981

	APPLIED RESEARCH				
6	MATERIALS TECHNOLOGY.....	18,822	40,122	70,022	60,772
7	SENSORS AND ELECTRONIC SURVIVABILITY.....	38,428	52,678	45,728	49,878
8	TRACTOR HIP.....	8,466	8,466	8,466	8,466
9	AVIATION TECHNOLOGY.....	32,804	40,804	38,804	40,604
10	ELECTRONIC WARFARE TECHNOLOGY.....	19,218	36,018	22,718	31,318
11	MISSILE TECHNOLOGY.....	59,439	68,439	82,939	78,139
12	ADVANCED WEAPONS TECHNOLOGY.....	19,430	19,430	26,930	24,330
13	ADVANCED CONCEPTS AND SIMULATION.....	16,181	21,681	23,181	25,281
14	COMBAT VEHICLE AND AUTOMOTIVE TECHNOLOGY.....	59,304	98,904	73,304	92,504
15	BALLISTICS TECHNOLOGY.....	52,221	57,021	57,221	59,221
16	CHEMICAL, SMOKE AND EQUIPMENT DEFEATING TECHNOLOGY....	2,212	13,212	9,212	13,062
17	JOINT SERVICE SMALL ARMS PROGRAM.....	6,247	6,247	6,247	6,247
18	WEAPONS AND MUNITIONS TECHNOLOGY.....	35,344	109,944	90,094	120,094
19	ELECTRONICS AND ELECTRONIC DEVICES.....	42,175	85,975	74,175	83,075
20	NIGHT VISION TECHNOLOGY.....	23,907	45,857	25,907	36,607
21	COUNTERMINE SYSTEMS.....	22,088	22,088	30,588	27,438
22	HUMAN FACTORS ENGINEERING TECHNOLOGY.....	18,858	41,858	25,358	41,358
23	ENVIRONMENTAL QUALITY TECHNOLOGY.....	17,923	17,923	17,323	19,823
24	COMMAND, CONTROL, COMMUNICATIONS TECHNOLOGY.....	21,193	57,493	26,693	49,093
25	COMPUTER AND SOFTWARE TECHNOLOGY.....	3,844	6,844	5,644	6,794
26	MILITARY ENGINEERING TECHNOLOGY.....	50,098	50,698	48,948	51,848
27	MANPOWER/PERSONNEL/TRAINING TECHNOLOGY.....	16,200	16,200	16,200	16,200

		(In thousands of dollars)			
		Budget	House	Senate	Conference
28	WARFIGHTER TECHNOLOGY.....	25,436	38,536	42,236	44,536
29	MEDICAL TECHNOLOGY.....	75,407	252,907	105,107	232,457
TOTAL, APPLIED RESEARCH.....		685,245	1,209,345	973,045	1,219,145
ADVANCED TECHNOLOGY DEVELOPMENT					
30	WARFIGHTER ADVANCED TECHNOLOGY.....	45,666	63,666	62,166	66,366
31	MEDICAL ADVANCED TECHNOLOGY.....	50,757	357,907	114,257	302,357
32	AVIATION ADVANCED TECHNOLOGY.....	64,654	95,654	101,454	97,654
33	WEAPONS AND MUNITIONS ADVANCED TECHNOLOGY.....	74,717	100,117	77,717	93,117
34	COMBAT VEHICLE AND AUTOMOTIVE ADVANCED TECHNOLOGY.....	109,952	185,802	181,052	207,202
35	COMMAND, CONTROL, COMMUNICATIONS ADVANCED TECHNOLOGY..	10,851	12,651	10,851	12,301
36	MANPOWER, PERSONNEL AND TRAINING ADVANCED TECHNOLOGY..	6,794	6,794	11,794	9,444
37	ELECTRONIC WARFARE ADVANCED TECHNOLOGY	44,022	55,322	51,022	53,722
38	TRACTOR HIKE.....	9,324	9,324	9,324	9,324
39	NEXT GENERATION TRAINING & SIMULATION SYSTEMS.....	18,296	19,296	22,296	21,096
40	TRACTOR ROSE.....	5,183	5,183	5,183	5,183
41	IED DEFEAT TECHNOLOGY DEVELOPMENT.....	---	1,800	---	---
42	EXPLOSIVES DEMILITARIZATION TECHNOLOGY.....	10,376	18,376	26,276	25,926
43	MILITARY HIV RESEARCH.....	7,042	15,042	7,042	13,042
44	COMBATING TERRORISM, TECHNOLOGY DEVELOPMENT.....	7,497	9,497	7,497	8,597
45	GLOBAL SURVEILLANCE/AIR DEFENSE/PRECISION STRIKE TECHN	12,995	12,995	12,995	12,995
46	ELECTRONIC WARFARE TECHNOLOGY.....	18,612	28,412	18,612	25,562
47	MISSILE AND ROCKET ADVANCED TECHNOLOGY.....	42,127	65,627	55,294	63,644
48	TRACTOR CAGE.....	19,192	19,192	19,192	19,192
49	LANDMINE WARFARE AND BARRIER ADVANCED TECHNOLOGY.....	25,554	27,054	30,554	30,554
50	JOINT SERVICE SMALL ARMS PROGRAM.....	7,202	9,202	7,202	8,202
51	NIGHT VISION ADVANCED TECHNOLOGY.....	44,307	68,107	64,307	76,457
52	ENVIRONMENTAL QUALITY TECHNOLOGY DEMONSTRATIONS.....	14,089	18,089	14,089	17,289
53	MILITARY ENGINEERING ADVANCED TECHNOLOGY.....	7,848	19,848	26,348	27,998

	(In thousands of dollars)			
	Budget	House	Senate	Conference
54 ADVANCED TACTICAL COMPUTER SCIENCE & SENSOR TECHNOLOGY	64,604	76,004	60,736	71,054
TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT.....	721,661	1,300,961	997,260	1,278,278
DEMONSTRATION & VALIDATION				
55 UNIQUE ITEM IDENTIFICATION (UID).....	1,520	9,520	1,520	4,120
56 ARMY MISSILE DEFENSE SYSTEMS INTEGRATION.....	11,233	68,933	75,233	88,983
57 ARMY MISSILE DEFENSE SYSTEMS INTEGRATION (SPACE).....	11,771	11,771	33,771	39,171
58 AIR AND MISSILE DEFENSE SYSTEMS ENGINEERING.....	143,417	149,117	121,417	138,667
59 LANDMINE WARFARE AND BARRIER - ADV DEV.....	8,439	8,439	8,439	8,439
60 SMOKE, OBSCURANT AND TARGET DEFEATING SYS-ADV DEV.....	10,714	10,714	5,714	5,714
61 TANK AND MEDIUM CALIBER AMMUNITION.....	---	2,000	2,000	2,600
62 ADVANCED TANK ARMAMENT SYSTEM (ATAS).....	5,415	11,215	5,415	8,665
63 SOLDIER SUPPORT AND SURVIVABILITY.....	2,778	5,278	2,778	4,378
64 TACTICAL ELECTRONIC SURVEILLANCE SYSTEM - ADV DEV.....	20,077	20,077	20,077	20,077
65 NIGHT VISION SYSTEMS ADVANCED DEVELOPMENT.....	5,337	5,337	5,337	5,337
66 ENVIRONMENTAL QUALITY TECHNOLOGY.....	5,166	28,566	11,866	24,466
67 WARFIGHTER INFORMATION NETWORK-TACTICAL.....	158,157	118,157	128,157	123,157
68 NATO RESEARCH AND DEVELOPMENT.....	4,946	4,946	4,946	4,946
69 AVIATION - ADV DEV.....	6,542	6,542	10,442	9,642
71 LOGISTICS AND ENGINEER EQUIPMENT - ADV DEV.....	13,216	13,216	10,216	10,216
72 COMBAT SERVICE SUPPORT CONTROL SYSTEM EVALUATION.....	8,645	8,645	8,645	8,645
73 MEDICAL SYSTEMS - ADV DEV.....	11,973	27,373	21,973	23,873
74 SOLDIER SYSTEMS - ADVANCED DEVELOPMENT.....	10,605	12,605	10,605	11,605
75 INTEGRATED BROADCAST SERVICE.....	1,135	1,135	1,135	1,135
TOTAL, DEMONSTRATION & VALIDATION.....	441,086	523,586	489,686	543,836

	Budget	(In thousands of dollars)		Conference
		House	Senate	
ENGINEERING & MANUFACTURING DEVELOPMENT				
78 AIRCRAFT AVIONICS.....	61,946	44,646	51,946	49,096
79 ARMED, DEPLOYABLE OH-58D.....	132,781	112,781	132,781	132,781
80 ELECTRONIC WARFARE DEVELOPMENT.....	41,655	47,255	41,655	45,555
81 JOINT TACTICAL RADIO.....	832,259	797,259	832,259	---
82 ALL SOURCE ANALYSIS SYSTEM.....	7,074	7,074	7,074	7,074
83 TRACTOR CAGE.....	16,057	16,057	16,057	16,057
84 COMMON MISSILE.....	---	30,000	---	25,000
85 INFANTRY SUPPORT WEAPONS.....	31,748	37,648	48,748	43,648
86 MEDIUM TACTICAL VEHICLES.....	1,925	5,925	13,925	13,025
87 SMOKE, OBSCURANT AND TARGET DEFEATING SYS-SDD.....	5,297	5,297	5,297	5,297
89 FAMILY OF HEAVY TACTICAL VEHICLES.....	3,960	8,660	17,360	13,460
90 AIR TRAFFIC CONTROL.....	4,527	4,527	4,527	4,527
91 LIGHT TACTICAL WHEELED VEHICLES.....	---	10,000	---	4,500
92 ARMORED SYSTEMS MODERNIZATION (ASM)-SDD.....	3,310,477	2,984,677	3,064,677	2,989,977
93 NON-LIGHT OF SIGHT LAUNCH SYSTEM.....	322,880	322,880	325,880	324,230
94 NON-LINE OF SIGHT CANNON.....	112,237	112,237	112,237	112,237
95 NIGHT VISION SYSTEMS - SDD.....	38,821	43,621	38,821	41,621
96 COMBAT FEEDING, CLOTHING, AND EQUIPMENT.....	3,017	3,017	3,017	3,017
97 NON-SYSTEM TRAINING DEVICES - SDD.....	121,553	121,553	127,553	125,453
100 AIR DEFENSE COMMAND, CONTROL AND INTELLIGENCE -SDD....	21,757	21,757	21,757	21,757
101 CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT.....	40,006	40,006	40,006	40,006
102 AUTOMATIC TEST EQUIPMENT DEVELOPMENT.....	8,136	8,136	8,136	8,136
103 DISTRIBUTIVE INTERACTIVE SIMULATIONS (DIS) - SDD.....	19,596	21,896	19,596	20,646
107 COMBINED ARMS TACTICAL TRAINER (CATT) CORE.....	39,901	40,901	38,801	38,901
108 JOINT NETWORK MANAGEMENT SYSTEM.....	5,187	5,187	5,187	5,187
110 WEAPONS AND MUNITIONS - SDD.....	130,581	138,081	80,739	122,781
111 LOGISTICS AND ENGINEER EQUIPMENT - SDD.....	40,301	43,801	41,801	42,801
112 COMMAND, CONTROL, COMMUNICATIONS SYSTEMS - SDD.....	10,783	15,283	10,783	13,183
113 MEDICAL MATERIEL/MEDICAL BIOLOGICAL DEFENSE EQUIPMENT	14,509	24,109	19,009	24,809

	(In thousands of dollars)			
	Budget	House	Senate	Conference
114 LANDMINE WARFARE/BARRIER - SDD.....	118,078	122,078	90,078	93,278
115 ARTILLERY MUNITIONS	102,554	102,554	102,554	102,554
116 COMBAT IDENTIFICATION.....	39	39	39	39
117 ARMY TACTICAL COMMAND & CONTROL HARDWARE & SOFTWARE...	69,172	69,172	61,172	60,572
119 RADAR DEVELOPMENT.....	2,527	2,527	2,527	2,527
120 GENERAL FUND ENTERPRISE BUSINESS SYSTEM (GFEBs).....	61,194	21,994	---	21,994
121 FIREFINDER.....	70,151	70,151	55,151	55,151
122 SOLDIER SYSTEMS - WARRIOR DEM/VAL.....	27,498	27,498	30,498	29,148
123 ARTILLERY SYSTEMS	1,650	1,650	1,650	1,650
125 PATRIOT/MEADS COMBINED AGGREGATE PROGRAM (CAP).....	329,583	329,583	329,583	329,583
126 NUCLEAR ARMS CONTROL MONITORING SENSOR NETWORK.....	7,428	7,428	7,428	7,428
127 INFORMATION TECHNOLOGY DEVELOPMENT.....	70,185	61,385	63,685	62,385
TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT.....	6,239,030	5,890,330	5,873,994	5,061,071
RDT&E MANAGEMENT SUPPORT				
128 THREAT SIMULATOR DEVELOPMENT.....	21,180	23,180	23,180	23,780
129 TARGET SYSTEMS DEVELOPMENT.....	10,928	13,928	12,928	12,928
130 MAJOR T&E INVESTMENT.....	64,953	67,453	64,953	66,053
131 RAND ARROYO CENTER.....	20,171	20,171	22,171	21,471
132 ARMY KWAJALEIN ATOLL.....	178,891	178,891	178,891	178,891
133 CONCEPTS EXPERIMENTATION PROGRAM.....	21,626	25,126	24,626	25,576
135 ARMY TEST RANGES AND FACILITIES.....	389,840	389,840	389,840	389,840
136 ARMY TECHNICAL TEST INSTRUMENTATION AND TARGETS.....	74,066	77,066	83,066	81,366
137 SURVIVABILITY/LETHALITY ANALYSIS.....	40,780	42,780	45,780	44,030
138 DOD HIGH ENERGY LASER TEST FACILITY.....	16,622	16,622	16,622	16,622
139 AIRCRAFT CERTIFICATION.....	4,580	4,580	4,580	4,580
140 METEOROLOGICAL SUPPORT TO RDT&E ACTIVITIES.....	8,571	8,571	8,571	8,571
141 MATERIEL SYSTEMS ANALYSIS.....	16,526	16,526	16,526	16,526
142 EXPLOITATION OF FOREIGN ITEMS.....	4,993	4,993	4,993	4,993
143 SUPPORT OF OPERATIONAL TESTING.....	80,057	81,057	80,057	81,057
144 ARMY EVALUATION CENTER.....	60,129	60,129	60,129	60,129

	(In thousands of dollars)			
	Budget	House	Senate	Conference
145 SIMULATION & MODELING FOR ACQ, RQTS, & TNG (SMART)....	5,441	5,441	5,441	5,441
147 PROGRAMWIDE ACTIVITIES.....	72,214	72,214	72,214	72,214
148 TECHNICAL INFORMATION ACTIVITIES.....	34,834	51,834	38,334	47,884
149 MUNITIONS STANDARDIZATION, EFFECTIVENESS AND SAFETY...	18,726	36,126	33,626	37,326
150 ENVIRONMENTAL QUALITY TECHNOLOGY MGMT SUPPORT.....	4,418	4,418	4,418	4,418
151 MANAGEMENT HEADQUARTERS (RESEARCH AND DEVELOPMENT)....	14,092	14,092	14,092	14,092
TOTAL, RDT&E MANAGEMENT SUPPORT.....	1,163,638	1,215,038	1,205,038	1,217,788
OPERATIONAL SYSTEMS DEVELOPMENT				
153 MLRS PRODUCT IMPROVEMENT PROGRAM.....	74,506	74,506	74,506	75,506
154 WEAPONS CAPABILITY MODIFICATIONS UAV.....	16,532	16,532	3,500	1,600
155 AEROSTAT JOINT PROJECT OFFICE.....	264,491	245,491	264,491	245,491
156 ADV FIELD ARTILLERY TACTICAL DATA SYSTEM.....	17,394	18,394	17,394	18,394
157 COMBAT VEHICLE IMPROVEMENT PROGRAMS.....	12,741	16,741	12,741	14,541
158 MANEUVER CONTROL SYSTEM.....	37,976	37,976	34,976	34,976
159 AIRCRAFT MODIFICATIONS/PRODUCT IMPROVEMENT PROGRAMS...	301,739	295,939	307,139	307,239
160 AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM.....	860	860	860	860
161 DIGITIZATION.....	13,373	16,073	13,373	14,873
162 FORCE XXI BATTLE COMMAND, BRIGADE AND BELOW (FBCB2)...	26,375	26,375	26,375	26,375
163 MISSILE/AIR DEFENSE PRODUCT IMPROVEMENT PROGRAM.....	10,770	10,770	10,770	10,770
164 OTHER MISSILE PRODUCT IMPROVEMENT PROGRAMS.....	19,706	19,706	17,606	22,806
166 TRACTOR CARD.....	7,242	7,242	7,242	7,242
167 JOINT TACTICAL COMMUNICATIONS PROGRAM (TRI-TAC).....	5,804	5,804	5,804	5,804
168 JOINT TACTICAL GROUND SYSTEM.....	15,044	15,044	15,044	15,044
169 JOINT HIGH SPEED VESSEL (JHSV).....	20,397	20,397	20,397	20,397
173 SECURITY AND INTELLIGENCE ACTIVITIES.....	3,170	6,670	7,170	8,420
174 INFORMATION SYSTEMS SECURITY PROGRAM.....	23,828	24,751	25,828	25,751
175 GLOBAL COMBAT SUPPORT SYSTEM.....	55,272	58,272	39,272	48,522
176 SATCOM GROUND ENVIRONMENT (SPACE).....	41,336	41,336	33,336	33,336
177 WWMCCS/GLOBAL COMMAND AND CONTROL SYSTEM.....	12,200	12,200	12,200	12,200

	(In thousands of dollars)			
	Budget	House	Senate	Conference
178 JOINT COMMAND AND CONTROL PROGRAM (JC2).....	4,057	4,057	4,057	4,057
179 TACTICAL UNMANNED AERIAL VEHICLES.....	114,087	117,087	158,087	154,937
180 AIRBORNE RECONNAISSANCE SYSTEMS.....	12	12	1,012	1,012
181 DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS.....	120,562	140,112	125,562	135,812
182 AVIONICS COMPONENT IMPROVEMENT PROGRAM.....	1,031	1,031	1,031	1,031
183 END ITEM INDUSTRIAL PREPAREDNESS ACTIVITIES.....	68,075	101,375	102,575	113,475
184 NATO JOINT STARS.....	688	688	688	688
TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT.....	1,289,268	1,335,441	1,343,036	1,361,159
999 CLASSIFIED PROGRAMS.....	3,700	8,200	3,700	3,700
TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY.....	10,855,559	11,834,882	11,245,040	11,054,958

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	House	Senate	Conference
2 DEFENSE RESEARCH SCIENCES	137,568	157,968	162,168	172,018
Reduce program growth		-13,000		-7,000
Perpetually Assailable and Secure Information Systems (PASIS)		5,000		5,000
Technology Commercialization and Management Network		2,000		1,600
Cyber-Threat Analytics only for Cyber TA Phase 3 real-time detection/prevention of emerging internet threats including incorporation of IASM capabilities to guard against cyber-attack		5,000		4,000
Advanced Research and Technology Initiative (ARTI)		4,000	5,500	4,000
Advanced Carbon Nanotechnology Program		2,500	4,000	2,600
Broad Spectrum Anti-Viral Host Oriented Therapeutics		1,000		1,000
Functionally Integrated Reactive Surface Technologies (FIRST)		3,000		3,000
Optical Technologies Research		2,000	2,000	2,000
Imaging Research Center for Research of Disorders due to military training and performance		900		900
Combat Mental Health Initiative		4,000		2,600
Plasti-Bone Research		2,000		1,500
Viral Biosensors		1,000		1,000
Chemical Mechanical Planarization		1,000		1,000
Sci Prob with Military Applications/Network Behavior Research			-2,000	0
Army Landscape Dynamics Support Program			1,000	1,000
Biological Raman and Optical Imaging			1,000	1,000
Document Exploitation			1,000	1,000
Flexible Electronics Research Initiative			1,000	1,000
Fuel Logistics Reduction through Enhanced Engine Performance			1,000	1,000
Illicit Narcotics Lab Detection System			3,000	1,950
Integrated Nanosensor Technologies for NBC Detection Applications			2,000	1,000
Nanomaterials for ISR			1,000	1,000
Organic Semiconductor Modeling and Simulation Research			2,100	1,000
Terrain Atmosphere Research to Optimize Battlefield Operations			2,000	1,300

R-1	Budget Request	House	Senate	Conference
3 UNIVERSITY RESEARCH INITIATIVES	68,545	84,545	72,545	81,745
Cyber Enabled Technology Program		1,000		1,000
Desert Environmental Research only for the University-based GIS program initiative to enhance knowledge, skills and technology for DoD research facilities		2,500		2,000
Collaboration Skills for Time Critical Teams - only to build on the success of the High-Rise Evacuation Learning Platform (HELP) program		1,500		1,000
Nanosystems through Optical Biosensors		4,000		1,800
Laboratory for Engineered Human Protection		2,000		1,100
Physical and Behavioral Rehabilitation		1,000		1,000
Nanomaterial Technologies Research		2,000		1,000
Nanocrystal Therapeutic Agents and Screening Tools		1,000	1,000	1,000
Transmission Electron Microscope		1,000		1,000
Advanced Precision Supply Parts Manufacturing			2,000	1,300
Low Temperature Vehicle Performance Research			1,000	1,000
4 UNIVERSITY AND INDUSTRY RESEARCH CENTERS	86,416	90,066	105,166	96,816
Program adjustment		-6,000		-5,000
Center for Ferroelectric Electronic-Photonic Nanodevices		1,600	3,000	1,600
Nanosensor Stagegate Accelerator - U.S. Army Benet Laboratories, Watervliet Arsenal		1,000		1,000
Northern California Institute for Research and Education (Transferred to RDTE, Army, Line 29)		4,000		0
Center for Advanced Sensors		1,500		1,000
Florida Collaborative Development of Advanced Materials for defense applications		300		300
Western Hemisphere Security Analysis Center (WHSAC)		1,000		1,000
Transparent Nanocomposite Armor		250	250	250
Army Corrosion Control: Inhibition and Detection			1,500	1,000
Automotive Research			2,000	1,300
Center for Education in Nanoscience and Nanotechnology			2,000	1,300
Center for Information Assurance and Cyberwarfare			1,000	1,000
Integrated Systems in Sensing, Imaging and Communications Research			1,000	1,000
Nanotubes Composite Materials Research			3,000	1,350
National Center for Infotonics			2,000	1,000
National Network Security Test Bed			2,000	1,300
Visualization for Training and Simulation in Urban Terrains			1,000	1,000

R-1	Budget Request	House	Senate	Conference
6 MATERIALS TECHNOLOGY	18,822	40,122	70,022	60,772
Spinel Tactical Armor Manufacturing Production Technology		2,000	5,000	3,250
Cutting Tools for Aerospace Materials		3,000		2,350
FCA Advanced Ballistic Technology Program		3,000		1,650
Future Affordable Multi-Utility Materials for the Army				
Future Combat Systems		2,000	2,000	2,000
Control System for Laser Powder Deposition		300	300	300
Improvised Explosive Device Simulation in Different Soils		500	500	500
Production of Turtle Shell Armor for E-SAPI and Future AP Threats		3,000		1,350
Lightweight Transparent Armor for Force Protection		1,500		1,000
Nanomanufacturing of Multifunctional Sensors		2,000	2,000	2,000
Defense Materials Technology Center (Transferred to line 149)		1,000		0
MEMS Sensors for Rolling Element Bearings		3,000	3,000	3,000
Airfield Matting System Replacement			2,900	1,900
Composite Materials Technology for Future Combat System			2,000	1,000
Erosion Resistant Surface Engineering for Helicopter Compressor Blades			4,000	2,600
LASSO Ground Mobility Vehicle Testing			5,000	4,000
Materials Joining for Army Weapons Systems			3,000	1,650
Multifunctional Nanostructured Materials for Future Combat System			4,000	2,200
Munitions Shape Charge Control Research			6,000	2,700
Precision Polishing of Large Optics			2,000	1,300
Structural Reliability of Smart Munitions and Lightweight Structures			2,000	1,300
Thermal Sprays for Polymeric-Based Ballistic Mitigation Materials			4,000	2,600
Ultrasonic Consolidation for Advanced Materials Fabrication			3,500	2,300
Thermo Plastic Body Armor (From Senate section 8154)				1,000
7 SENSORS AND ELECTRONIC SURVIVABILITY	38,428	52,678	45,728	49,878
Program adjustment		-5,000		-3,000
Vertical/Horizontal Integration of Space Technologies and Applications (VISTA)		3,200		1,450
Advanced Detection of Explosives (ADE) Program		1,350		1,100
High Brightness Diode Source (HiBriDS)		3,000		1,350
Wearable Video Capture System		1,000		1,000
Graphics Simulation Hardware		1,000		0
ONYX OPTICS - Advanced Bonded Diamond for Optical Applications		3,000		1,950
Single Crystal Chemical Vapor Deposition Diamond Lens Elements for High Energy Lasers		1,000		1,000
Roll-to-Roll (R2R) Microelectronics in Support of FDI		1,700		1,000
Network Enabled Combat Identification Program		4,000		2,200

R-1	Budget Request	House	Senate	Conference
Biotechnology Applied Research			-2,000	-2,000
Center for Advanced Microelectronics Manufacturing			3,000	1,950
Lighter-Than-Air Unmanned Aerial Vehicle Multirole Technologies			3,300	1,500
Prometheus Spectrometer System and THazer Free Electron Laser			3,000	1,950
9 AVIATION TECHNOLOGY	32,804	40,804	38,804	40,604
Aircraft Structural Condition Monitoring System (ASCM) for Diagnostics and Prognostics		2,000		1,100
Center for Rotorcraft Innovation		4,000		1,800
Test and Evaluation of Energy Attenuating Seat for Military Aircraft		2,000		1,000
Composite Small Main Rotor Blades			4,000	2,600
Limited Visibility Landing System			2,000	1,300
10 ELECTRONIC WARFARE TECHNOLOGY	19,218	36,018	22,718	31,318
Dominant MOUT Viewer (DMV)		7,000		3,850
Silver Fox Unmanned Aerial Vehicle - Army		3,500	3,500	3,500
Integrated Information Technology Policy Analyses Research		2,000		1,600
Xenon Light Source for Non Lethal Deterrence from Small Unmanned Aerial Vehicle		2,300		1,850
Battlefield Connectivity, Multi-Level Secure Networks		2,000		1,300
11 MISSILE TECHNOLOGY	59,439	68,439	82,939	78,139
Materials Applications Research Center (UAB)		2,000		1,000
Jam Resistent Technology for INS/GPS Precision		2,000		1,300
Mariah II Hypersonic Wind Tunnel Development		5,000	3,000	3,000
Enhanced Area Protection and Survivability			2,500	1,650
LENS X Hypervelocity Ground Testing			3,500	1,600
Missile Aero-propulsion Computer System Modernization			10,000	6,500
Nanotechnology Research with AMRDEC			1,000	1,000
Novel Lightweight Armor Material for Insensitive Munitions			1,000	1,000
Unmanned Systems Initiative at AMRDEC			2,500	1,650
12 ADVANCED WEAPONS TECHNOLOGY	19,430	19,430	26,930	24,330
Army Missile and Space Technology Initiative			7,500	4,900
13 ADVANCED CONCEPTS AND SIMULATION	16,181	21,681	23,181	25,281
Automated MIST -- Man-in-Simulant		1,000		1,000
Photonics Center		4,500		3,600
RedOwl Acoustic Targeting Device/Photonics Center			7,000	4,500

R-1	Budget Request	House	Senate	Conference
14 COMBAT VEHICLE AND AUTOMOTIVE TECHNOLOGY	59,304	98,904	73,304	92,504
Mobile Secure Wireless Sensor		1,200		1,000
Component Optimization for Ground Systems (COGS)		2,000		1,000
Liquid Desiccant-Based Atmospheric Water Generation		2,000		1,600
Turbo Fuel Cell Engine		1,800		1,450
Multi-Sensor Payloads for Unmanned Systems		1,800		1,450
Nanofluids for Advanced Military Mobility Systems		1,300		1,000
Defense Transportation Energy Research		3,000		1,350
Transportable Synthetic Fuel Manufacturing Modules		2,000		1,300
Defect-Free Commercially Viable Si/C Semiconductors Using Superlattice Technology		1,000		1,000
HAMMER		6,000		3,900
Rapid Product Development and Deployment Portal		1,000		1,000
Globally Accessible Manufacturing Activity (GAMMA) for military repair parts		7,000		3,850
Plasma JP-8 Fuel Reformer for military auxiliary power		2,700		1,500
50% Weight Reduced, Multi-Hit Capable Transparent Vehicle Armor		1,800		1,000
HMMWV Hybrid Technology Conversion Kits (IIT)		1,000	1,000	1,000
Hydrogen PEM Ambient Pressure Fuel Cell Medium/Heavy Duty Vehicles		3,000	3,000	3,000
Advanced Composite Materials Research for Air and Ground Vehicles		1,000	5,000	2,250
Program Reduction			-5,000	-2,500
Advanced Electrical Drive			2,500	1,100
Advanced Manufacture of Lightweight Materials and Components			1,000	1,000
Ground Vehicle Reliability Prediction and Optimization			1,000	1,000
Light Weight Composite Brake for Armored Wheeled Vehicles			1,500	1,000
Maturation and User Evaluation of Hybrid Electric XM1124 HMMWVs			3,000	1,950
Military Fuels Research Program			1,000	1,000
15 BALLISTICS TECHNOLOGY	52,221	57,021	57,221	59,221
StandOff Explosives Detector		1,000		1,000
Advanced Tungsten Penetrators and Ballistic Materials		1,800		1,450
TAC-C Robotic Vehicles for Special Operations Forces		2,000		1,300
Laser Based Explosives - Chem/Bio Standoff and Point Detector			5,000	3,250

R-1	Budget Request	House	Senate	Conference
CHEMICAL, SMOKE AND EQUIPMENT DEFEATING				
16 TECHNOLOGY	2,212	13,212	9,212	13,062
Biomarker Molecular Toxicology Initiative		3,000		2,400
Bioaerosol Sampling for Base Protection		2,000		1,100
Application of CHP-105 to Class A Biowarfare Agents		1,000		1,000
Rapid and Accurate Pathogen Identification/Detection (RAPID) Program		2,000		1,300
Thermal Acceleration Decontamination with modified Vaporous Hydrogen Peroxide		3,000		1,350
Battlefield Production of Improved Vaporous Hydrogen Peroxide			6,000	2,700
Nanocrystalline Solid Decontamination Technology			1,000	1,000
18 WEAPONS AND MUNITIONS TECHNOLOGY	35,344	109,944	90,094	120,094
Electrolytic Super-Capacitors, Polymer for FCS application		2,000	4,000	2,600
Weapon System Integration Force Protection Vehicle		1,500		1,000
High Speed Data Communications System (HSDCS)		4,000		4,000
Nanoparticle Development for Energetic Materials and Protective Systems for Military Munitions and Armor Applications		2,300		1,850
Integrated Command Operations Program (ICOP)		4,500		3,600
Improved Airborne Command and Control System (IACCS) only for the Pennsylvania Army National Guard		1,800		1,450
SOSSEC Demonstration only for the Pennsylvania Army National Guard		1,800		1,450
Civilian Military Incident Management (CMIM) automated information tool - only for integration with the Integrated Command Operations Program		1,000		1,000
Sculpted Transparent Armor		2,700		2,150
Seamless Data to Display (SDD)		2,000		1,000
Energetic Formulation and Fabrication		3,000		2,950
Developmental Mission Integration		6,000		3,900
Remotely Operated Weapon/Sensor Technology		6,000		3,900
Perimeter Defense Technologies		4,000		2,600
Armament Manufacturing Model/Science		3,000		1,950
Armaments Systems Information Assurance		3,000		1,950
Green Armaments/Rangesafe Technology		3,000	3,000	3,000
Armament Systems Engineering - ASEI2		4,000		2,600
Lightweight Munitions and Surveillance System for Unmanned Air and Ground Vehicles		2,000		1,000
Advanced Rarefaction Weapon Engineered System		3,000		1,950
Advanced Materials and Process For Armament Structures (AMPAS)		8,000		4,400
Plasma Acoustic Dazzler Denial Systems Initiative (PADDS)		6,000		2,700
Hospital Emergency Planning and Integration System (Transferred from line 24)				1,000
Active Coatings Technology			2,000	1,000

R-1	Budget Request	House	Senate	Conference
Army Center of Excellence in Acoustics			5,700	4,600
Center for Micro/Nano Systems and Nanotechnology			3,500	2,300
Electroconversion of Energetic Materials			5,000	2,250
Engineered Surfaces for Weapons Life Extension			5,000	4,250
Fatigue Odometer for Vehicle Components and Gun Barrels Project			3,000	1,650
Non-Nuclear Earth Penetrator			3,000	1,950
Parts-on-Demand for CONUS Operations			3,850	2,500
Precision Manufacturing Initiative			3,000	1,950
Rarefaction Wave Gun			2,500	1,100
Steering Guided Munitions and Projectiles with Microactuators			2,000	1,100
Titanium Extraction Mining and Process Engineering Research			4,000	2,600
Toxin Guard Research			1,700	1,400
Transition Laser Engineered Shaping Technology			1,000	1,000
Unmanned Ground Vehicle Weaponization			2,500	1,100
19 ELECTRONICS AND ELECTRONIC DEVICES	42,175	85,975	74,175	83,075
Program adjustment			-5,000	-5,000
Tactical Jet-Fueled Fuel Cell Generator			3,000	3,000
PEM Fuel Cell Tactical Generators			2,500	2,500
Advanced High Energy Rechargeable Lithium Metal Air Battery			5,000	2,250
Weapons of Mass Destruction Marking Set			2,000	1,600
Flexible Polymer Multi-Laminate Packaging			2,000	1,600
Direct Methanol Fuel Cell – Battery Recharger Program			1,000	1,000
Soldier Fuel Cell System			2,000	1,300
Non-Flammable, High Energy Density, Low Temperature Warrior Battery			1,000	2,000
Pulse Tech Army Battery Management for Lithium Batteries			2,000	1,300
Conformal Lithium Ion Polymer Battery Belt			2,000	1,000
Renewable Energy for Military Applications			1,500	1,500
Miniature Tactical Energy Systems Development			1,000	1,700
Field-Ruggedized Mid-Range Direct Methanol Fuel Cells			1,000	1,000
Advanced Portable Power Institute			2,000	1,000
Portable Solid Oxide Fuel Cell (SOFC)/JP-8 Demonstrator			2,000	2,000
Revolutionary 1.5 Volt Alkaline Battery			1,500	1,500
Thin Lithium-Iron Disulfide Primary Batteries			1,000	1,000
Defense Systems Modernization and Sustainment Initiative			2,700	1,200
E-Beam Reticle and Lithography Inspection Tool			4,000	1,800
Nanofluidic Electronic BioSensor Technologies for Defense Applications			1,000	1,000
Micromachined Switches in Support of Transformational Communications Architecture			2,000	1,000
Manufacturing Technology Development of Advanced Components for High Power Solid State Lasers			3,600	1,600
Q-Band Millimeter Wave Power Module for Tactical Satellite Communications			1,000	1,000
Novel Zinc Air Power Sources for Military Applications			2,000	2,000

R-1	Budget Request	House	Senate	Conference
Compact Tactical Laser Program			3,000	1,950
Portable Energy Devices			4,800	2,000
Revolutionary Lithium Metal Air Technology			2,000	1,100
Soldier Portable Solid Fuel Hydrogen Generator			3,000	1,950
Transcritical Carbon Dioxide Environmental Control Unit			5,000	2,750
20 NIGHT VISION TECHNOLOGY	23,907	45,857	25,907	36,607
Millimeter/Terahertz Imaging Arrays		2,250		1,800
Advanced Multi-Spectral Fusion Sensors		1,350		1,100
Eyesafe Pulsed Fiber Laser for LADAR		1,350		1,100
Multispectrum Sensor Protection		1,350		1,100
Mid-Wave Infrared Sensor Technologies		1,350		1,100
Sensor Solutions for Unattended Surveillance		1,500		1,000
Enhanced Micro-Image Display Technology		3,000		1,350
Power Efficient Microdisplay Development for US Army Night Vision		3,000		1,350
ISR - Radar Module Cooling System (Transferred to RDTE, Navy)		3,000		0
Miniaturized Sensors for Small and Tactical Unmanned Aerial Vehicles (MINISENS)		2,000		1,000
Small Business Infrared Materials Manufacturing - Silicon Alternative Substrate		1,800	2,000	1,800
21 COUNTERMINE SYSTEMS	22,088	22,088	30,588	27,438
Biological Detection of Unexploded Ordnance and Land Mines			5,000	3,250
Mapping and Detection of Unexploded Ordnance			2,500	1,100
Small Synthetic Aperture Radar Buried Mine Detection			1,000	1,000
22 HUMAN FACTORS ENGINEERING TECHNOLOGY	18,858	41,858	25,358	41,358
Leonard Wood Research Institute		20,000		16,800
MANPRINT		3,000		2,000
High Optempo Performance Soldier Training			4,000	2,600
Team Performance and Optimization Research			2,500	1,100
23 ENVIRONMENTAL QUALITY TECHNOLOGY	17,923	17,923	17,323	19,823
Program Reduction			-3,000	0
Chemical Materials and Environmental Modeling Project			2,400	1,900
COMMAND, CONTROL, COMMUNICATIONS				
24 TECHNOLOGY	21,193	57,493	26,693	49,093
Integrated Lightweight Electronics Shelter		1,800		1,000
Lightweight, Intra-theater Transportable Tactical Operations Center (TOC)		4,500		3,600
Lightweight 10-Meter Antenna Mast		1,000		1,000
Ruggedized Cylinders for Expandable Mobile Shelters		3,500		2,800
Tactical Bandwidth Booster for Mobile Network Centric Warfare		2,000		1,600
Improved Bandwidth for Battle Command Communications		4,000		3,200

R-1	Budget Request	House	Senate	Conference
Enhanced Wireless Digital Communications for Urban First Responders		5,000		4,000
Ultra Wideband Chipset Technology		1,000		1,000
C4ISR Integrated Digital Environment Service Model (IDESM) (Incorrectly identified as "Communications Electronic Cost Module for Quick Response (CECM)" in the House report)		2,000		1,000
Digital Alert Display for Army Commanders		3,000		1,950
USB Data Acquisition for Voice Recognition/Response		2,000		1,000
Hospital Emergency Planning and Integration System (Transferred to line 18)		2,000		0
Highly Mobile Large-Scale C4ISR Command Post Systems, C-130 Compatible Command Trailer		3,000		1,650
Dynamically Managed Data Dissemination (DMDD)		1,500		1,000
Innovative Wireless Technologies			2,000	1,000
Nanophotonic Device Development			1,000	1,000
Portable Flexible Communication Display Devices			2,500	1,100
25 COMPUTER AND SOFTWARE TECHNOLOGY	3,844	6,844	5,644	6,794
Commercial Off The Shelf Military (COTS-M) Scout Robot		3,000		1,950
Biologically-Inspired Security Infrastructure for Tactical Environments			1,800	1,000
26 MILITARY ENGINEERING TECHNOLOGY	50,098	50,698	48,948	51,848
Program adjustment		-4,000		-3,000
Army Power and Energy Initiative		3,600		2,900
National Fuel Cell Research Center to advance fuel cell technology for military applications		1,000		1,000
Topographical Research			-2,000	0
Airborne Threats			850	850
28 WARFIGHTER TECHNOLOGY	25,436	38,536	42,236	44,536
Development of Protective Textile Fabric		1,500		1,000
Precision Guided Air-Dropped Equipment		3,600		2,900
Chemical and Biological-Protective Hangers (CAB-PH)		2,000		1,000
Advanced Warfighter Sustainment Systems for the 21st Century (AWSS-21)		2,000	2,000	2,000
Solar Powered Refrigerated Container for Food and Medicine Storage		2,000		1,000
Army Combat Uniform Advanced Fabric Treatment Technology Demonstration		1,000		1,000
Center of Excellence for High Performance Fibers at Natick Soldier Center		1,000		1,000
Biosecurity Research for Soldier Food Safety			2,000	1,300
Combat Effective Facial Armor			2,000	1,000
Electrochemical Field-Deployable System for Potable Water Generation			1,000	1,000
Flexible Monolithically Integrated Solar Panels on a Polymer Substrate			3,000	1,950
Improved Shelf-life for Vegetables			3,000	1,650
Inorganic Metallic Barriers for Chem-Bio Structures			2,000	1,300
Next Generation Chem-Bio Protection Suit			1,800	1,000

R-1	Budget Request	House	Senate	Conference
29 MEDICAL TECHNOLOGY	75,407	252,907	105,107	232,457
Advanced Antimicrobial-Nano Technology		1,000		1,000
Advanced Proteomics for Military Clinical Applications		1,500		1,000
Applied and Clinical Prosthetic Research Program at the Walter Reed Amputee Center		6,000		6,000
DoD Biological and Immunological Infectious Agent and Cancer Vaccine Research		2,500		1,900
Biomarkers: Evaluating and Treating Acute and Chronic TBI		2,250		1,800
Biomedical Materials Initiative		2,000		1,000
Bone and Tissue Repair and Regeneration Center		1,000		1,000
Bone Health and Military Medical Readiness		1,000		1,000
Center for Advanced Surgical and Interventional Technology (CASIT)		3,000		2,400
Center for Diagnosis of Pathogens		2,000		1,300
Center for Research on Integrative Medicine in the Military (CRIMM)		2,000		1,300
Center for Respiratory Biodefense		1,000		1,000
Center for the Advanced Studies of Brain Injury		1,500		1,000
CIC Interdisciplinary Research for Prevention, Diagnosis and Treatment of Cancer		5,000		2,250
Combat Stress Intervention Program		1,800		1,500
Comprehensive Management Initiative for Chronic Diseases (CMICD)		1,800		1,500
Computer-Based Training Methods for Surgical Training		1,000		1,000
CRF Spinal Cord Injury Clinical Trials DoD Research Initiative		2,500		2,000
Development of Minimally Invasive Cardiac-Assist Devices		1,000		1,000
Diabetes Research - Madigan Army Medical Center		500		500
Early and Rapid Analyzer for Diagnosis of Heart Attacks		1,000		1,000
Elgen Gene-based Vaccine Delivery Technology Program		1,500		1,100
Epigenetic Origin of Disease Research for Casualty Detection, Avoidance, Evacuation and Treatment		500		500
DoD Evaluation of p75 protein for Non-surgical Treatment of Central Nervous System Trauma		1,000		1,000
Hydrogen Sulfide Human Health and Disease Research		500		500
IDEAnet		1,000		1,000
Immunostimulating HIV Therapy		1,000		1,000
Improving Musculoskeletal Health and Function		2,000		1,000
Infectious Disease Research		1,000		1,000
Northern California Institute for Research and Education		4,000		2,600
Integrated Medicine, Communications, Compassion, Chronic Care Program (IC4)		2,500		1,600
Integrated Multimedia Medical Record		2,500		1,600
Lehman Injury Research Center/Ryder Trauma Center		1,300		2,000
Life Science Research Initiative		1,000		1,000
MCIS Portable Clinical Information Initiative		1,000		1,000

R-1	Budget Request	House	Senate	Conference
Medical Area Network for Virtual Technology		5,400		4,300
Medical Image Database Holographic Archiving Library System (MID-HALS)		1,000	1,000	1,000
Medical Resources Conservation Technology System		2,500		1,600
Military Interoperable Digital Hospital Testbed		5,000		4,000
Military Molecular Medicine Initiative (M3I) (To include funds for a pilot project to improve the operational readiness of Army National Guard and Reserve personnel through Integrative Cardiac Health Project (IHP) prevention strategies at the Walter Reed Army Medical center)		20,000		17,400
Nanofabricated Bioartificial Kidney		2,700		1,500
National Center for Cancer Prevention through Remote Biological Sensing		2,000		1,100
National Eye Evaluation and Research for Defense Applications		5,000		4,000
Neural Controlled Prosthetic Device for Amputees		1,800		1,450
Neutron/Hadron Particle Therapy		5,000		3,300
Non-Electric Disposable IV Infusion Pump		2,000		1,800
Online Health Services Optimization		1,000		1,000
Orthopedic Extremity Trauma Research		9,000	4,000	6,800
Orthopedic Implant Design and Manufacturing for Traumatic Injuries		1,000		1,000
Pain and Neuroscience Center Research (Only for a public/private effort among the Department of Defense Medical Treatment Facilities and a primary health care center to provide a comprehensive program in pain and neurosciences for Department of Defense medical beneficiaries)		13,000		10,400
Parallelavax Rapid Vaccine Testing Technology		2,000		1,000
Preventive Medicine Research Institute		2,000		1,800
Protein Hydrogel		1,500		1,000
Rapid Prototyping Prosthetic Limbs		1,500		1,000
Rapid Wound Healing Technology Development		1,000	1,000	1,000
Rare Blood Program		1,000		1,000
Reservist Medical Simulation Training		1,500		1,000
Robotic Surgical Systems		1,000		1,000
Silver Foam Technologies Healing Program		1,000		1,000
Storage Area Network Implementation - Eisenhower Medical Center		2,000		1,000
Synchrotron-Based Scanning Research		10,000		8,000
Synthetic Malaria Vaccine Research		2,000		1,000
Targeted Nanotherapy for Advanced Breast and Prostate Cancers		1,000		1,000
Transportable Pathogen Reduction and Blood Safety System		2,250		1,100
Type 1 Diabetes Regeneration Project		2,700		2,100
Ultrafiltration Catheter for Prevention of Compartment Syndrome in Battlefield Injuries		1,000		1,000
Viral Immunology Center Rapid Pathogen Identification		1,000		1,000
Weapons Agents Bio-Defense Analysis Program		4,500		2,100
Blast Protection Research (From Senate section 8141)				1,000

R-1	Budget Request	House	Senate	Conference
Advanced Bio-Engineering for Enhancement of Soldier Survivability			1,000	1,000
Carbon Nanotube Production			1,000	1,000
Combat Casualty Care - Battlefield Wounds			6,000	3,900
Hibernation Genomics			3,500	2,800
High Technology Mass Spectrometry Laboratory			1,500	1,000
Military Alternative Medicine Research			5,000	4,500
Neuroprosthetics and BioMEMS Development Project			1,000	1,000
Respiratory Bio-Defense			3,000	1,650
Science, Humanitarian Intervention, Education, and Leadership for Disasters			1,700	1,100
30 WARFIGHTER ADVANCED TECHNOLOGY	45,666	63,666	62,166	66,366
Joint Precision Airdrop Systems – 2 K lb. Resupply Requirements and Support		2,500		1,100
Monolithic Breatheable Film for Chemical and Biological Protective Clothing		2,000		1,600
Multi-Layer Coextrusion for High Performance Packaging Film		4,000		3,200
Ration Packaging Materials and Systems for Meals Ready-to-Eat		3,000		2,400
Multifunctional Protective Packaging Technology		3,000	3,000	3,000
Silicon Based Micro Fuel Cell on a Chip		1,000	3,000	1,350
Rapid Fielding of Precision Airdrop Technology to Iraq and Afghanistan		1,000		1,000
Center for Excellence for High Performance Fibers		1,500		1,000
Future Force Warrior			-5,000	-5,000
Chemical/Biological Agent Protection			3,000	1,950
High-Pressure/Microwave Meals-Ready-to-Eat Processing			6,000	3,300
Mosaic Extremity Protection			1,000	1,000
NBC Integrated Protection Membrane-Shelters			3,500	2,800
Small Business Development and Transition			2,000	2,000
31 MEDICAL ADVANCED TECHNOLOGY	50,757	357,907	114,257	302,357
Acellular Matrix Constructs for Military Casualties		1,500		1,000
Advance of Non-Invasive Glucose Monitoring		1,800		1,450
Advanced Lower Limb Prosthesis for Battlefield Amputees		1,000	2,000	1,000
Advanced Proteomics Program		3,000		1,350
Advanced Regenerative Medicine, Skin Cell Therapies: Burn, Limb and Digit Treatment		1,800		1,450
Advanced Diagnostic and Therapeutic Digital Technologies		2,000		1,600
Advanced Restoration Therapies in Spinal Cord Injuries		3,000		1,350
Alliance for Nanohealth		2,000		1,100
ALS Therapy Development for Gulf War Research		1,500		1,000
Anthrax Skin Patch Vaccine		2,000		1,000
Anti-Terror Medical Technology Program		2,000		1,000

R-1	Budget Request	House	Senate	Conference
Assistive Technology Research Center at the National Rehabilitation Hospital (Note: Only for assistive technology to support innovative applied technology programs for veterans, service members and their families at the Assistive Technology and Research Center at the National Rehabilitation Hospital)		2,700		2,200
Research on Autism Spectrum Disorder in the Military		7,500		7,500
Battlefield Extraction and Retrieval for Medical Intervention		2,500		1,100
Armed Forces and Dependents Behavioral Health Readiness Portal		2,000		1,000
Biodefense Vaccine Development and Engineering		1,000		1,000
Biomarker-Guided Therapy for Traumatic Brain Injury		2,000		1,000
Blood Safety and Decontamination Technology		1,000		1,000
Brain, Biology, and Machine Initiative		2,500	2,500	2,500
Cancer Biomolecular Markers Research		1,000		1,000
Warfighter Cancer Care Engineering		2,700		1,200
Candida/Staphylococcus Vaccine (Note: only to develop Candida and S.Sureus Vaccine based on recombinant DNA technologies)		1,000		1,000
Center for Integrated Functional Materials Research		1,000		1,000
Center for Integration of Medicine and Innovative Technology (CIMIT)		12,000	5,000	9,600
Center for Proteomics		1,800		1,400
Center for Resuscitation Research		3,000	3,000	3,000
Center for Targeted Cancer Therapy (NCTCT)		1,000		1,000
Center for Untethered Healthcare in the Military		1,000		1,000
Cancer Genomics Center for Women in the Military		4,000		1,800
Ophthalmology Research on Surgical Techniques and Treatment Modalities for Wounded Soldiers at Wills Eye Center		2,500		2,500
Military Dependent Childhood Cancer Research (USOC/COG)		3,000		3,000
Chitosan Hemorrhage Control Dressing		3,000		1,400
Combat Casualty Care Medical Technology Surgical Skills Lab		1,900		1,000
Combat Medic Training		1,350		1,000
Consortium on Preparedness Infectious Disease Research and Emergency, Bioterrorism and Pandemic Preparedness		1,000		1,000
Cooperative International Neuromuscular Research		3,000		1,900
Diabetes Management Program		100		100
Diagnostic and Therapeutic Cancer Care Equipment		5,000		3,000
DMCT Medical/Training Technology Enhancement Initiative - Pocket PC		2,000		1,300
Duchenne Muscular Dystrophy (DMD) Repair and Regeneration Clinical Trials		1,800		1,500
Durable Antimicrobial Technology for Healthcare Environments		2,000		1,000
Exceptional Family Transition (EFTT) for Soldiers, Sailors, Marines, and Airmen		1,000		1,000

R-1	Budget		
	Request	House	Senate Conference
Fibrinogen Bandages for Military Use		4,000	1,800
Field Medical Robotics for Military Combat Casualty Care		1,000	1,000
Genomic Medicine and Gene Therapy		4,000	1,800
Gynecological Disease Program		4,500	3,600
Hospital of the Future Program		2,700	1,200
Human Organ and Tissue Preservation Technology		2,000	1,000
Institute for Human Genetics and Military Health		4,000	1,800
Intelligent Orthopedic Fracture Implant Program		1,000	1,000
Joint Collaborative Medical Information System (JCMIS)		2,700	2,200
Joint US-Norwegian Telemedicine Program		2,000	1,300
Joslin Diabetes Center		2,700	2,200
Medvisor Secure Telemedicine		2,000	1,300
Metadata Language and Toolset		2,400	1,100
Military Low Vision Research		2,000	2,000
Model Patient Care Workflow		3,000	1,650
Modeling and Managing the Impact of Sleep Deprivation (MMISD)		3,600	2,800
National Bioterrorism Civilian Medical Response Center (CIMERC)		2,000	5,000 3,250
National Functional Genomics Center - Molecular Signature and Proteomics Research		12,000	9,000
National Functional Genomics Center - SNCC		2,500	1,100
Neurofibromatosis (NF) Research		15,000	10,000
Neuroprosthetics and Solutions for Spinal Cord Dysfunction		2,250	1,800
Neurotoxin Exposure Treatment Research Program (Note: only for the continuation of current program)		26,500	26,500
Next Generation Injury Creation Science		1,000	1,000
Smart Sensing Technologies for On-Body Sensing of Critical or Traumatic/Life Threatening Events		2,000	1,100
NVCI New Radiation Therapy Systems		2,000	1,000
Obesity in the military Medical Research Program at WRAMC		3,000	1,350
Oncogenomics Imaging Center - NFGC		4,500	2,500
Oxygen Diffusion Dressing for Accelerated Healing of Battlefield and Other Wounds		1,000	1,000
Military Dependant Pediatric Brain Tumor and Neurological Disease Research		2,700	1,200
Robotics Medical Simulation for defense applications		1,000	1,000
Personnel Readiness and Warfighter Performance		3,000	1,650
Post Traumatic Stress Disorder Research		2,000	1,000
Prader-Willi Syndrome (PWS) Resesarch		1,000	1,000
Project Battlefield Exercise and Combat Related Spinal Chord Injury Resesarch		2,700	1,200

R-1	Budget Request	House	Senate	Conference
Project Genesis Patient-Centric Healthcare Delivery System		1,300		1,000
Prostate Cancer DNA Detection Initiative		2,800		1,200
Proton Beam Therapy (Note: Only to continue a civilian-military collaborative proton beam therapy initiative on the East Coast of the United States in conjunction with WRAMC to provide state-of-the-art radiation treatment as well as clinical and non-clinical research)		7,200		5,800
Rapid Detection of Pathogens		1,000		1,000
Remote Bio-Medical Detector		1,500		1,200
Rural Health - CERMUSA		5,400		4,300
SEATreat - Cervical Cancer Research for the Military		2,000		1,600
Smart Bedside IV Pumps Automated Dose Error Reduction		2,500		1,600
Soldier Health Promotion and Preventative Medicine Strategies		2,000		1,100
Spinal Muscular Atrophy Research		3,500		3,300
Surgical Wound Disinfection and Biological Agents		1,000		1,000
Targeted Radiation Therapy for Cancer Initiative		3,000		2,000
Technologies for Metabolic Monitoring of Soldier Physiology (JWF Initiative)		3,000		1,900
Electronic Medical Records Technology Infrastructure		1,500		1,000
Telehealth and Medical Applications for Combat Injuries		2,000		1,000
Patient Monitor/Defibrillator for the Wounded Warrior		3,000		1,400
Tissue and Limb Transplantation Medical Technology Development		2,500		1,400
Trauma Institute of San Antonio (TRISTAT)		1,000		1,000
California Gallo Center Neurological Research		6,000		5,500
Ultra High Resolution Display for Army Medicine		3,000		1,400
Ultra High-Speed MEMS Electromagnetic Cell Sorter		3,000	3,000	3,000
Universal Medical/Surgical Product Catalog for the Department of Defense		3,500		2,300
Veterinary Manpower Development for Defense		500		500
Walter Reed Army Hospital Research Sustainment		10,000		10,000
Weight Measurements and Standards for Military Personnel		1,750		1,000
WFU Health Sciences Regenerative Research for Military Medicine		2,000		1,000
Wireless Personal Information Carrier (WPIC) (Note: Only to complete development and to productionize the WPIC wireless dog tag system)		2,500		2,000
Advanced Surface Technologies for Prosthetic Development			3,000	1,950
Biochemical-Organic-Radiological-Disaster Educational Response			2,000	1,300
Bio-Surveillance in a Highly Mobile Population			2,000	1,300
Chitosan Based Burn Dressing			4,800	2,150
Enhanced Blood Delivery and Preservation System			2,000	1,600
Extra Corporeal Membrane Oxygenation at Tripler			2,000	1,600
Fort Detrick Technology Transfer Initiative			1,500	1,500

R-1	Budget Request	House	Senate	Conference
Hand Transplant Technologies			3,000	1,400
Intravenous Membrane Oxygenator			1,000	1,000
Medical Imaging			1,000	1,000
Medical Modeling and Simulation Through Synthetic Genes			2,000	1,100
Minimally Invasive Removal of Ballistic Foreign Bodies			1,200	1,000
Pharmacological Countermeasures to Ionizing Radiation			4,000	1,800
Plasma Sterilizer (Transferred to line 113)			1,000	0
Robotic Telesurgery Research			5,000	2,250
Soldier Biomaterials Institute for Acute and Regenerative Care			4,000	1,800
Soldier Mounted Eye Tracking and Control Systems			2,500	1,650
Troop Recruitment Improvement			1,000	1,000
32 AVIATION ADVANCED TECHNOLOGY	64,654	95,654	101,454	97,654
Composite Tail for Armed Reconnaissance Helicopter		1,000	2,000	1,300
Process Technologies for Replacement Part Production		6,000	4,000	4,800
Small Heavy Fuel Engine (SHFE) VAATE Program		2,000		1,600
Drive System Composite Structural Component Reduction Program		2,000		2,000
Lightweight Sapphire Transparent Armor for Rotorcraft		1,000		1,000
Heavy Fuel Burning Engines for UAVs - to complete engine testing and flight tests with UAV prototypes		4,000		1,800
Rapid Prototyping for Special Projects		6,000		4,900
Helicopter Nanocrystalline Diamond Rotor Blade Leading Edge Protection - Army		1,500		1,000
Fuel Cells for Mobile Robotic Systems Project		1,000	1,000	1,000
Universal Control - Full Authority Digital Engine Control		4,000	2,000	3,000
Alternative Payload Bomb Live Unit (AP-BLU)		2,000		1,000
Directed Energy Systems for UAV Payloads		500		500
UAV Systems Demonstration			-15,700	-15,700
Joint Heavy Lift			-3,000	-3,000
Excalibur Unmanned Combat Aerial Vehicle			10,000	6,500
Helmet-Mounted Display/Visor Projection			3,000	1,950
Improved VAROC/UAV Compression System Development			4,000	2,600
Integrated Aircraft Test Bed			3,000	1,950
Mission Execution Technology Implementation			6,000	3,900
Quick-Materiel Express Delivery System			2,500	1,100
Rapid Tactical Integration and Fielding of Systems Initiative			3,000	1,950
Reconfigurable Tooling Systems			2,000	1,000
Unmanned Aerial Vehicle Resupply			5,000	2,250
Vertical Takeoff and Landing Unmanned Aerial Vehicle			3,000	1,350
VTDP Compound Helicopter Technology Flight Demonstration			5,000	3,250

R-1	Budget Request	House	Senate	Conference	
WEAPONS AND MUNITIONS ADVANCED					
33	TECHNOLOGY	74,717	100,117	77,717	93,117
	Program adjustment		-4,000		-4,000
	Armament Titanium Casting Advancement Program (ATCAP)		2,700		2,150
	Telepresent Rapid Aiming Platform (TRAP)		3,000		2,400
	Mid-Range Munition (MRM)		2,000		2,000
	Rapid Insertion of Development Tech		4,000		3,600
	Manufacturing of Precision Aspheric Optics for Military Use		1,000	1,000	1,000
	Disruptive Technology Acceleration		4,000		3,600
	Electromagnetic Gun Initiative to further develop advanced lightweight silicon switch technology for use as the primary pulse-power switching element in a mobile electromagnetic gun system, in conjunction with U.S. Army, ARDEC.		2,000		1,000
	Terramechanics Research to Reduce Vehicle Rollovers		1,700		1,000
	Optical Processing Realization for Army Armaments Systems		3,000		1,350
	National Nanotechnology Manufacturing Center		2,000	2,000	2,000
	Reactive Nanocomposite Materials		2,000		1,000
	Production-Class Nanopowder Processing Facility		2,000		1,300
COMBAT VEHICLE AND AUTOMOTIVE ADVANCED					
34	TECHNOLOGY	109,952	185,802	181,052	207,202
	Program adjustment		-5,000	-10,000	-4,000
	High Speed Machining of Ceramics for military application		4,700		3,100
	Battery Charging Technology		3,000		2,400
	Battery System Development		1,000		1,000
	Battlefield Requirements Management Support System		1,800		1,450
	Lightweight Aluminum Structures for Tactical Vehicles		2,550		2,050
	Vehicle Maintenance Prognostics System		1,800		1,450
	HMMWV Equipment Innovations in Lighting and Towing		1,000		1,000
	HAZ-MAT Material Vacuum Truck		1,000		1,000
	Secure Pervasive Computing for Advanced Combat Vehicles		2,000		1,300
	Mobile Armor Plant: In-Theater Battlefield Expedient Armor Manufacturing		2,000		1,000
	Advanced Drivetrains for Enhanced Mobility and Safety		1,500	1,500	1,500
	Light Weight Structural Composite Armor for Blast and Ballistic Protection		4,000	4,000	4,000
	Development of Logistical Fuel Processors to Meet Army/TARDEC/TACOM Needs		3,700	1,500	1,700
	Cross-Cue APS Radar		2,000		1,300
	Advanced Thermal Management System		5,000	2,000	3,000
	Fire Resistant Fuels		2,000		2,000
	Army Tactical RPG Airbag Protection System (TRAPS)		3,500	3,000	3,000
	LEAN Digital Product Development		1,000		1,000
	Antiballistic Windshield Armor (AWA)		2,000	3,000	2,000
	Fuel Cell Ground Support Equipment		2,000	6,000	3,900

R-1	Budget Request	House	Senate	Conference
Mobile Information Distribution and Access-Control System (MIDAS)		2,800		1,250
Light Weight Medium Tactical Trailer - Advanced Technology Development		1,000		1,000
Lightweight Armor Ready Composite Cab		3,000		1,950
Versatile Utility Vehicle		4,000		2,600
Advanced Tactical Vehicle Safety and Reliability		2,100		1,150
3D Advanced Battery Technology (3D ABT)		5,000		3,250
High Speed Diesel Combustion		5,500		3,600
Digital Humans and Virtual Reality for Future Combat Systems		1,200	3,000	1,950
Center for Innovative Materials Research (CIMR) Vehicle Armor Application Development		1,000	1,000	1,000
Low Quantity Precision Fabrication		3,000	3,000	3,000
National Center for Titanium Machining		2,000		1,000
CCMMC Lightweight Diesel Engine Initiative for Army Ground Vehicles		2,700		1,200
Advanced Lightweight Composite Armor			1,000	1,000
Alternative Fuels Validation Program/Military Ground Vehicles			2,000	1,600
Amphibious Personal Mobility Vehicle			4,500	3,600
Center for Military Vehicle Technologies			7,100	8,100
Composite Armored Cab Program			4,000	1,800
Compressible Magneto-Rheological Fluids			1,000	1,000
Heat Dissipation for Electronic Systems and Enclosures			3,000	1,950
Lightweight Road Wheels			1,000	1,000
Next Generation Non-Tactical Vehicle Propulsion			3,000	1,950
Pacific Rim Environmental Degradation of Materials			3,000	1,350
Purpose Built Armored Tractor Test and Evaluation			3,000	2,400
Segmented Band Track			1,500	1,000
Solid Oxide Fuel Cell Materials and Manufacturing			2,000	1,300
Tactical Vehicle Design Tools			2,000	1,300
Tactical Vehicle Fleet Management			2,000	1,300
Unmanned Ground Vehicle Initiative			10,000	6,500
Unmanned Ground Vehicle/Unmanned Air Vehicle Collaborative Operations			1,000	1,000
Vehicle Information Manager Display for Drivers			2,000	1,000
COMMAND, CONTROL, COMMUNICATIONS				
35 ADVANCED TECHNOLOGY	10,851	12,651	10,851	12,301
Exportable Combat Training Centers (E-CTC) - only for NTC to expand RIPPLE Program		1,800		1,450
MANPOWER, PERSONNEL AND TRAINING ADVANCED				
36 TECHNOLOGY	6,794	6,794	11,794	9,444
Adaptive Command and Control Team Training			2,000	1,300
Modeling and Simulation Technologies for Homeland Defense/Security Training			3,000	1,350

R-1	Budget Request	House	Senate	Conference
37 ELECTRONIC WARFARE ADVANCED TECHNOLOGY	44,022	55,322	51,022	53,722
Applied Communications and Information Networking (ACIN) Program		6,000		2,700
Joint Unified Maritime Protection system (JUMPS)		1,800		1,450
Portable Mobile Emergency Broadband Systems		2,000	5,000	3,250
Advanced Wireless Technologies		1,500		1,000
JEM Radio Communications Range Extension			2,000	1,300
NEXT GENERATION TRAINING & SIMULATION				
39 SYSTEMS	18,296	19,296	22,296	21,096
Vigilant Auto-ID and Access Control System		1,000		1,000
Joint Fires and Effects Training System			4,000	1,800
41 IED DEFEAT TECHNOLOGY DEVELOPMENT	0	1,800	0	0
IED Electronic Signature Detection (Transferred to RDTE,D-W Line 17)		1,800		0
42 EXPLOSIVES DEMILITARIZATION TECHNOLOGY	10,376	18,376	26,276	25,926
Sierra Army Depot (SIAD) Cryofracture/Plasma Arc System		2,000		1,100
Demilitarization of Obsolete Munitions		4,000		2,200
Missile Recycling Capability - Ammonium Perchlorate Recycling and Reuse		2,000	2,000	2,000
Combined Bomb Unit Decasing			3,000	1,950
Contained Static Rocket Motor			1,500	1,000
Demilitarization of Hazardous Munitions			5,000	4,000
HMX Requalification Program			2,000	1,300
Missile Recycling Capability - Letterkenny Munitions Center			1,400	1,000
Small Rocket Motor Disposal			1,000	1,000
43 MILITARY HIV RESEARCH	7,042	15,042	7,042	13,042
Test, Treatment and Preventive Vaccines		8,000		6,000
COMBATING TERRORISM, TECHNOLOGY				
44 DEVELOPMENT	7,497	9,497	7,497	8,597
Advanced Mobile Microgrid Fueler		2,000		1,100
46 ELECTRONIC WARFARE TECHNOLOGY	18,612	28,412	18,612	25,562
Advanced IED Jammer Research and Development Program		2,000		1,000
Portable Level I Fusion Toolset		2,300		1,850
US Army Future Force ELINT		2,500		1,600
Aerial Canopy MASINT System (ACMS)		1,000		1,000
WIZARD -- Remotely Controlled Improvised Explosive Device Countermeasures (RCIED) Equipment for Dismounted Soldiers		2,000		1,500

R-1	Budget Request	House	Senate	Conference
47 MISSILE AND ROCKET ADVANCED TECHNOLOGY	42,127	65,627	55,294	63,644
Persistent Surveillance for Active Protection of Army Ground and Air Vehicles		4,000		2,200
General Aviation Demonstration Optionally Piloted Aircraft including Reconnaissance, Surveillance, and Target Acquisition (RSTA) integration		10,000		8,000
Close Combat Lethal Recon (CCLR)		2,000		1,300
FTT50 High Efficiency Turbine Engine		3,000		1,350
Compact Kinetic Energy Missile (Only for finalizing Fire Control-Net integration, demonstration and rapid field deployment of the stabilized Compact Mobile Multi-missile Launcher with independent ITAS elevation drive and adaptive load tuning)		2,500		1,350
Smart Energetics Architecture for Missile Systems		2,000		1,000
Army Hypersonics Advanced Technology (Transferred \$2,000,000 to RDTE,D-W)			-8,833	-8,833
Loitering Attack Missile Development			-5,000	-5,000
Applied Counterspace Technology Testbed			17,000	13,600
Missile Simulation Technology Rapid Assessment and Deployment of Systems Initiative			7,000	4,600
Warfighter Protection and Homeland Security Lab			3,000	1,950
LANDMINE WARFARE AND BARRIER ADVANCED TECHNOLOGY				
49 TECHNOLOGY	25,554	27,054	30,554	30,554
EDIT Advanced Landmine Detection		1,500		1,000
Advanced Demining Technology			5,000	4,000
50 JOINT SERVICE SMALL ARMS PROGRAM	7,202	9,202	7,202	8,202
Lightweight Small Arms Technology (LSAT)		2,000		1,000
51 NIGHT VISION ADVANCED TECHNOLOGY	44,307	68,107	64,307	76,457
Buster Backpack		5,000		4,250
Camera Assisted Monitoring System (CAMS)		7,000		7,000
EO Sensor Technology for Suicide Bomber Detection		4,000		4,000
Additive Night Vision Capabilities for Deployed Systems		1,800		1,450
Ubiquitously Persistent Surveillance (UPS) for Force Protection		2,000		1,300
Intelligent Surveillance Sensor Suite (Cerberus)		4,000		1,800
Collimated Infrared Weapon Sniper Sight/Spotter Scope			2,500	1,600
Cost Effective Targeting System			3,000	1,350
Electron Bombarded Active Pixel Sensor Camera			2,000	1,300
Enhanced Digital Electronic Night Vision for Unmanned Ground Vehicles			6,000	3,900
Passive Millimeter Wave Imaging (PMMW)			2,500	1,600
Real-Time Geospatial Video Sensor Intelligence			4,000	2,600
ENVIRONMENTAL QUALITY TECHNOLOGY				
52 DEMONSTRATIONS	14,089	18,089	14,089	17,289
Alternate Power Fuel Cell Demonstration at Fort Irwin only to continue and expand the High Electric Efficiency Planar Solid Oxide Fuel Cell System Cluster Demonstration		4,000		3,200

R-1	Budget Request	House	Senate	Conference
53 MILITARY ENGINEERING ADVANCED TECHNOLOGY	7,848	19,848	26,348	27,998
Frameworks for Rapid Engineering Design Optimization Management Software for military vehicle application		1,000		1,000
Defense Applications of Carbonate Fuel Cells		3,000		1,350
Accelerating the Transition of Fuel Cell Systems Through Life-Cycle Engineering		3,000		1,350
Counter Rocket, Artillery, Mortar (C-RAM) Armor Development		1,000		1,000
Advanced Structures and Composites in Construction		2,000	2,000	3,000
Fuel Cell Hybrid Generation System - Ramgen Technology		2,000		1,000
Advanced Tactical Fuels			5,000	3,250
Concrete Sealing System			1,500	1,000
Defense Applications for Thermo-Electric Energy Devices			1,000	1,000
Fuel Cell Mobile Electric Power System			2,000	1,300
Fuel Cell Power for Continuity of Operations			6,000	3,900
Real-Time Drinking Water Security Program			1,000	1,000
ADVANCED TACTICAL COMPUTER SCIENCE & SENSOR TECHNOLOGY	64,604	76,004	60,736	71,054
Bi-Directional English-Iraqi Instant Language Translation System for the Warfighter		2,400	2,400	2,400
Digital Array Radar (DAR) Technology Development		2,000		1,000
Communications Electronics Cost Module for Quick Response (CECM) for military force structure/systems development		7,000		3,150
Foliage Penetrating Radar for Unmanned Aerial Vehicles			-25,268	-12,000
Aviation Responsive Maintenance System			1,000	1,000
Handheld Phraselator Translator Technology			2,000	1,000
Hyperspectral Imaging and Synthetic Aperture Radar			7,000	4,600
Lightweight Counter-Mortar Radar Base Protection Systems			1,500	1,000
Radar Tag Emitter			1,500	1,000
Sensor Visualization and Data Fusion			3,000	1,350
SharedVision			3,000	1,950
55 UNIQUE ITEM IDENTIFICATION (UID)	1,520	9,520	1,520	4,120
AERAM Turbine Engine Development		4,000		2,600
Geospatial Airship Research Platform (GARP) (Transferred to line 56)		4,000		0
56 ARMY MISSILE DEFENSE SYSTEMS INTEGRATION	11,233	68,933	75,233	88,983
Standoff Sensor for Radionuclide ID (SSRID) Program		3,000		1,650
Multiple Component Army Flight Test		3,000		2,400
Advanced Battery Technology		3,000		2,400
Modeling Environment for Target Scenario Testing		1,000		1,000
Combustion Driven Compaction		1,000		1,000
Orion High Altitude Long Loiter UAV		11,000		7,150
Ultra Light UAV Sensor Platform		4,500		2,900
Next Generation Passive Sensors		2,500		1,650
Dielectric Enhanced Sensor Systems		2,500		1,650
Aero Acoustic Test Facility (Phase II)		3,000		1,950

R-1	Budget Request	House	Senate	Conference
Geospatial Airship Research Platform (GARP) (Transferred from line 55)				2,600
Technology Transfer from Missile Defense for Improved Medical Imaging		2,000		1,000
Hypersonic Thermal Protection Materials Development		2,000		1,000
Standoff Hazardous Agent Detection and Evaluations System (SHADES)		2,000	4,000	2,000
Joint Wavelet Transform of Hyperspectral Data for space and missile defense		2,700		1,200
Army Missile Defense Systems Integration (Non Space) - Integrated Modeling of Air and Ground Environments (IMAGE)		3,000		1,650
Radiation Hardening Technology Knowledge Based (HardBase)		2,000		1,100
Micro Seeker System for Small Steerable Projectiles		2,000		1,000
Advanced Hypersonic Weapon BMC2 Hardware in the Loop HWIL Technology Demonstration		3,000	6,000	3,900
Next Generation Advanced Materials Research		2,000		1,000
Thermal and Electrical Nanoscale Transport (TENT)		1,500		1,000
Advanced Fuel Cell Research Program		1,000	4,000	2,600
Advanced Cavitation Power Technology			4,100	3,300
Advanced Electronics Integration Center			5,000	2,750
Carbon Foam Program - Missile Defense			5,000	4,000
Extended Range Attack Missile			2,000	1,100
Future Tactical Operations Center Hardware/Software Integration			3,000	1,950
Global Infrasonnd Monitoring			4,800	3,850
Integrated Air and Missile Defense BMC4I Hardware in the Loop Test Bed			3,000	1,950
Low Cost Avionics			2,000	1,000
Low Cost Uncooled Infrared Camera for Missile Defense and UAVs			2,000	1,300
Low-Earth Orbit Nanosatellite Integrated Defense Autonomous Systems			5,000	4,000
Missile and Space Modeling and Simulation Technology			4,000	1,600
P3 Micro-Power Devices			2,000	1,100
Reagan Test Site Distributed Operations Control Center			3,000	1,950
Transfer Missile Power System			5,100	4,100
ARMY MISSILE DEFENSE SYSTEMS INTEGRATION				
57 (SPACE)	11,771	11,771	33,771	39,171
Advanced Hypersonic Weapon Kill Vehicle Integration			5,000	4,000
Allen Army Airfield (Expeditionary Capability)			8,000	16,500
Divert Barriers at Allen Army Airfield			3,000	3,000
Low Cost Interceptor			6,000	3,900

R-1	Budget Request	House	Senate	Conference
58 AIR AND MISSILE DEFENSE SYSTEMS ENGINEERING	143,417	149,117	121,417	138,667
MultiView Integrated Engineering Environment Pilot		3,700		1,650
Joint Awareness Warfighter - Space (JAWS)		2,000		1,000
Joint SIAP System Engineering - Program Growth with no Acquisition Strategy			-25,000	-10,000
Area Security and Defense Systems Research			1,000	1,000
Command Responder			2,000	1,600
SMOKE, OBSCURANT AND TARGET DEFEATING SYS-				
60 ADV DEV	10,714	10,714	5,714	5,714
Program Execution/Milestone B Delay			-5,000	-5,000
61 TANK AND MEDIUM CALIBER AMMUNITION	0	2,000	2,000	2,600
Mid-Range Munition - CE		2,000		1,300
High Explosive Air Burst Munition			2,000	1,300
62 ADVANCED TANK ARMAMENT SYSTEM (ATAS)	5,415	11,215	5,415	8,665
M151E2 Protector Integration on Light Tactical Vehicle Program		1,800		1,450
Stryker Vehicle Open Architecture Electronic Enhancements		4,000		1,800
63 SOLDIER SUPPORT AND SURVIVABILITY	2,778	5,278	2,778	4,378
Biodegradable Soil Penetrant Dust Palliative for Land Surfaces		2,500		1,600
66 ENVIRONMENTAL QUALITY TECHNOLOGY	5,166	28,566	11,866	24,466
Strategic Biofuel Supply Program		3,000		1,950
Arsenic Removal		2,000		1,600
Biowastes to Bioenergy		1,000		1,000
Biodiesel Plastic Recycling for Reduction of Battlefield Clutter		5,000	3,700	3,700
No Rinse Decontamination of Battlefield Equipment		1,000		1,000
Vanadium Technology Partnership		3,000		1,350
Regional Sustainability Solutions		2,700		2,150
Mission Critical ESOH Technology Transition		2,700		2,150
Western Hemisphere Information Exchange Program		2,000		1,000
Plasma Energy Pyrolysis System(PEPS) Gasification Unit		1,000		1,000
HI Undersea Chemical Weapons Assessment Program			3,000	2,400
67 WARFIGHTER INFORMATION NETWORK-TACTICAL	158,157	118,157	128,157	123,157
Program decrease		-40,000	-30,000	-35,000
69 AVIATION - ADV DEV	6,542	6,542	10,442	9,642
Aviation Ground Power Unit II			3,900	3,100
71 LOGISTICS AND ENGINEER EQUIPMENT - ADV DEV	13,216	13,216	10,216	10,216
Marine Oriented Logistics			-3,000	-3,000

R-1	Budget Request	House	Senate	Conference
73 MEDICAL SYSTEMS - ADVANCED DEVELOPMENT	11,973	27,373	21,973	23,873
Electroosmotic Pain Therapy System Adjustable Rate				
Implantable Drug Delivery System		1,000		1,000
Future Medical Shelter System		10,000	5,000	6,500
Future Medical Shelter System - 44/48 Bed Combat				
Support Hospital		3,400	5,000	3,400
Iraqi Skin Disease Test		1,000		1,000
74 SOLDIER SYSTEMS - ADVANCED DEVELOPMENT	10,605	12,605	10,605	11,605
Nickel Boron Metal Coating Technology for Crew Served				
Weapons		2,000		1,000
78 AIRCRAFT AVIONICS	61,946	44,646	51,946	49,096
Program adjustment		-20,000	-10,000	-15,000
Army Airborne Avionics (AAA) Improved Data Modem		2,700		2,150
79 ARMED, DEPLOYABLE OH-58D	132,781	112,781	132,781	132,781
Program adjustment		-20,000		0
80 ELECTRONIC WARFARE DEVELOPMENT	41,655	47,255	41,655	45,555
AN/APR-39A(V)X Digital Receiver Upgrade		1,800		1,450
Warrior SIGINT Capability		2,000		1,000
Blue Marauder System		1,800		1,450
81 JOINT TACTICAL RADIO	832,259	797,259	832,259	0
Program adjustment		-35,000		-35,000
Transferred to RDTE,Navy Line 100				-797,259
84 COMMON MISSILE	0	30,000	0	25,000
Program sustainment		30,000		25,000
85 INFANTRY SUPPORT WEAPONS	31,748	37,648	48,748	43,648
Durable Nylon/Cotton Army Combat Uniform Fabric		2,400		1,100
CROWS Lightning Integrated Acoustic Sensor		2,000	5,000	3,250
Development of Enhanced Self-Sintered Silicon Carbide				
Body Armor		1,500	1,000	1,000
Polymer Cased Small Arms Ammunition Production				
Program			6,000	3,300
XM307 25mm Advanced Crew Served Weapon				
System			5,000	3,250
86 MEDIUM TACTICAL VEHICLES	1,925	5,925	13,925	13,025
Future Track Over Tire System		400		400
Universal Diagnostic Data Management system				
(UDDMS)		3,600		2,900
Family of Medium Tactical Vehicles - A2			7,000	4,550
Tactical Vehicle Technology Demonstrator Trucks			5,000	3,250

R-1	Budget Request	House	Senate	Conference
89 FAMILY OF HEAVY TACTICAL VEHICLES	3,960	8,660	17,360	13,460
Heavy Expanded Mobility Tactical Truck A3 (HEMTT A3)				
System Deployment and Demonstration Project		2,000	11,500	6,350
Family of Army Scalable Trailers (FAST)		2,700		2,150
Off Road Navigation Software For Augmenting Soldiers Decision Making			1,900	1,000
91 LIGHT TACTICAL WHEELED VEHICLES	0	10,000	0	4,500
PM Program for Bloc Improvement Program (HMMWV)		10,000		4,500
ARMORED SYSTEMS MODERNIZATION (ASM)-				
92 SYSTEM DEVELOPMENT AND DEMONSTRATION	3,310,477	2,984,677	3,064,677	2,989,977
Program Reduction		-325,800	-254,000	-325,800
Micro Air Vehicle			8,200	5,300
93 NON-LIGHT OF SIGHT LAUNCH SYSTEM	322,880	322,880	325,880	324,230
EnforcIT Anti-Tamper Software			3,000	1,350
NIGHT VISION SYSTEMS - SYSTEM DEVELOPMENT				
95 AND DEMONSTRATION	38,821	43,621	38,821	41,621
Digital Enhanced Night Vision Goggle		3,000		1,350
Soldier Wearable Acoustic Targeting System (SWATS)		1,800		1,450
97 NON-SYSTEM TRAINING DEVICES - SDD	121,553	121,553	127,553	125,453
Jamming Effects Training Module			6,000	3,900
DISTRIBUTIVE INTERACTIVE SIMULATIONS (DIS) -				
103 SYSTEM DEVELOPMENT AND DEMONSTRATION	19,596	21,896	19,596	20,646
Joint Training Integration and Evaluation Center (JTIEC)		2,300		1,050
107 COMBINED ARMS TACTICAL TRAINER (CATT) CORE	39,901	40,901	38,801	38,901
Gunner Crew Chief Station Program		1,000		1,000
Synthetic Environment Core Execution			-3,000	-3,000
Longbow Block III - Aviation Combined Arms Tactical Trainer			1,900	1,000
WEAPONS AND MUNITIONS - SYSTEM DEVELOPMENT				
110 AND DEMONSTRATION	130,581	138,081	80,739	122,781
HYBRID Propellant		4,000		2,200
XM932 120mm Mortar - Short Range Practice Cartridge		1,500		1,000
30mm Airburst Ammunition		2,000		1,000
Advanced Precision Kill Weapon System			-44,742	-10,000
Course Correcting Fuze Contract Award Delay			-5,100	-2,000
LOGISTICS AND ENGINEER EQUIPMENT - SYSTEM				
111 DEVELOPMENT AND DEMONSTRATION	40,301	43,801	41,801	42,801
2kw Military Tactical Generator Improvements		1,500	1,500	1,500
Improved Environmental Control Unit		2,000		1,000

R-1	Budget Request	House	Senate	Conference
COMMAND, CONTROL, COMMUNICATIONS SYSTEMS -				
112 SYSTEM DEVELOPMENT AND DEMONSTRATION	10,783	15,283	10,783	13,183
Software Based VOIP only for Army Reserve implementation and deployment of Sphericall JITC/DISA certified VOIP PBX-1 Technology		3,000		2,400
HIMARS Enhanced Command and Control (C2), XM142 (Transferred to line 153)		1,500		0
MEDICAL MATERIEL/MEDICAL BIOLOGICAL DEFENSE				
113 EQUIPMENT	14,509	24,109	19,009	24,809
Battlefield Respirator and Ventilator (BRAV)		3,600		1,600
Life Support for Trauma and Transport (LSTAT)		4,000		2,200
Plasma Sterilizer		1,000		1,000
Oxygen Generation Systems Advanced Development		1,000		1,000
Chitosan Bandage Component			4,500	4,500
LANDMINE WARFARE/BARRIER - SYSTEM				
114 DEVELOPMENT AND DEMONSTRATION	118,078	122,078	90,078	93,278
Magneto Inductive Remote Activation Munition System (MI-RAMS) XM40 Hybrid		4,000		3,200
Intelligent Munition System Contract Award Delay			-28,000	-28,000
ARMY TACTICAL COMMAND & CONTROL HARDWARE & SOFTWARE				
117	69,172	69,172	61,172	60,572
Mounted Battle Command on the Move (MBCOTM)			-6,500	-6,500
Program Reductions - Redundancies with DJC2			-4,500	-4,500
C34 Cross Domain Strategic and Operational Solution			3,000	2,400
GENERAL FUND ENTERPRISE BUSINESS SYSTEM				
120 (GFEBs)	61,194	21,994	0	21,994
Program adjustment		-39,200	-61,194	-39,200
121 FIREFINDER	70,151	70,151	55,151	55,151
Enhanced AN/TPQ-36 SDD Contract Award Delay			-15,000	-15,000
122 SOLDIER SYSTEMS - WARRIOR DEM/VAL	27,498	27,498	30,498	29,148
Mounted Warrior Command and Control Heads Up Display			3,000	1,650
127 INFORMATION TECHNOLOGY DEVELOPMENT	70,185	61,385	63,685	62,385
Future Business System		-9,800	-7,500	-9,800
ARDEC Knowledgebase System		1,000		1,000
Electronic Commodity Project			1,000	1,000
128 THREAT SIMULATOR DEVELOPMENT	21,180	23,180	23,180	23,780
Integration of Live and Virtual Threats -Towsend Range		2,000		1,300
Integrated RF/SAM Threat Environment			2,000	1,300

R-1	Budget Request	House	Senate	Conference
129 TARGET SYSTEMS DEVELOPMENT	10,928	13,928	12,928	12,928
Next Generation Ice Protection Technologies for Unmanned Aerial Vehicles		3,000	2,000	2,000
130 MAJOR TEST AND EVALUATION INVESTMENT	64,953	67,453	64,953	66,053
US Army Network Centric Warfare-Digital Battlefield Instrumentation		2,500		1,100
131 RAND ARROYO CENTER	20,171	20,171	22,171	21,471
Analytical and Technical Support			2,000	1,300
133 CONCEPTS EXPERIMENTATION PROGRAM	21,626	25,126	24,626	25,576
Automated Language Translation (Only for automated translation software proven in deployments within the Federal Government and employing a new statistical approach to machine translation)		3,500		2,300
Online Arabic Language Learning Community-Pilot			3,000	1,650
ARMY TECHNICAL TEST INSTRUMENTATION AND				
136 TARGETS	74,066	77,066	83,066	81,366
Mobile Optical Tracking System		3,000		1,950
Chemical Biological Defense Material Test and Evaluation Initiative			3,000	1,650
Dugway Testing and Infrastructure Upgrade			2,000	1,100
White Sands Missile Range Study			4,000	2,600
137 SURVIVABILITY/LETHALITY ANALYSIS	40,780	42,780	45,780	44,030
Rotorcraft Survivability Assessment Facility		2,000	5,000	3,250
143 SUPPORT OF OPERATIONAL TESTING	80,057	81,057	80,057	81,057
Track Conversion System for Light Wheeled Vehicles and Unmanned Ground Vehicles		1,000		1,000
148 TECHNICAL INFORMATION ACTIVITIES	34,834	51,834	38,334	47,884
Knowledge Integration and Management Center of Excellence - only for improving Actionable Intelligence and Fusion for Situational Understanding		2,000		1,000
Army High Performance Computing Research Center		15,000		9,750
Knowledge System and Relational Database			3,500	2,300
MUNITIONS STANDARDIZATION, EFFECTIVENESS				
149 AND SAFETY	18,726	36,126	33,626	37,326
Mitigation of Energetic Single Point Failures		3,500		2,800
Advanced Cluster Energetics (ACE)		4,000	4,000	4,000
Cadmium Zinc Telluride Detectors for Automated Munitions Inspection		2,000		1,000
Munitions Standardization, Effectiveness and Safety		1,400	1,400	1,400
Defense Materials Technology Center (Transferred from line 6)				1,000
Gun Propellant Demilitarization		2,500	2,400	2,400
Medium Caliber Metal Parts Upgrade			3,100	2,000
MEMS Technology Applications - Nano Consortium		4,000	4,000	4,000

R-1	Budget Request	House	Senate	Conference
153 MLRS PRODUCT IMPROVEMENT PROGRAM	74,506	74,506	74,506	75,506
HIMARS Enhanced Command and Control (C2), XM142 (Transferred from line 112)				1,000
154 WEAPONS CAPABILITY MODIFICATIONS UAV	16,532	16,532	3,500	1,600
Transferred to line 164			-7,700	-7,700
Program Reduction			-8,832	-8,832
Guided Dispenser System for Tactical Unmanned Aerial Vehicles			3,500	1,600
155 AEROSTAT JOINT PROJECT OFFICE	264,491	245,491	264,491	245,491
Joint Land Attack Cruise Missile Defense (JLENS)		-20,000		-20,000
MEMS Demonstration Radar System (MEMS DRS)		1,000		1,000
ADVANCED FIELD ARTILLERY TACTICAL DATA				
156 SYSTEM	17,394	18,394	17,394	18,394
Fire Support Technology Improvement		1,000		1,000
157 COMBAT VEHICLE IMPROVEMENT PROGRAMS	12,741	16,741	12,741	14,541
Bradley Fighting Vehicle Turret Drive Electronics System on Chip Consolidation		4,000		1,800
158 MANEUVER CONTROL SYSTEM	37,976	37,976	34,976	34,976
JTCW Development			-3,000	-3,000
AIRCRAFT MODIFICATIONS/PRODUCT IMPROVEMENT				
159 PROGRAMS	301,739	295,939	307,139	307,239
Aerial Common Sensor		-12,300	-9,600	-12,300
CH-47 Maintenance Analysis Safety and Training Program		4,000		3,200
Advanced Communications Intelligence for Army Intelligence Aircraft (COMINT)		2,500		1,600
CH-47 IVHMS-HUMS Demonstration			15,000	13,000
161 DIGITIZATION	13,373	16,073	13,373	14,873
Digitization Support to Fort Hood-University XXI		2,700		1,500
OTHER MISSILE PRODUCT IMPROVEMENT				
164 PROGRAMS	19,706	19,706	17,606	22,806
ATACMS PIP SDD Contract Award Delay			-9,800	-4,600
Transferred from line 154			7,700	7,700
173 SECURITY AND INTELLIGENCE ACTIVITIES	3,170	6,670	7,170	8,420
Mobile Objects for Net-Centric Operations		3,500		2,300
Portable Iris Enrollment and Recognition Device			3,000	1,950
Type-I TACTI-NET System Development			1,000	1,000

R-1	Budget Request	House	Senate	Conference
174 INFORMATION SYSTEMS SECURITY PROGRAM	23,828	24,751	25,828	25,751
MILS Separation Kernel Technology Demonstration		923		923
Retinal/Iris Multimodal Biometrics Technology			2,000	1,000
175 GLOBAL COMBAT SUPPORT SYSTEM	55,272	58,272	39,272	48,522
Army Legacy Systems Modernization (SAMS-E)- Standard Army Retail Supply Systems (SARSS)/Standard Army Ammunition System (SAAS) Integration		3,000	5,000	3,250
Product Life Cycle Management Plus (PLM+) Delay			-21,000	-10,000
176 SATCOM GROUND ENVIRONMENT (SPACE)	41,336	41,336	33,336	33,336
MIST Program			-8,000	-8,000
179 TACTICAL UNMANNED AERIAL VEHICLES	114,087	117,087	158,087	154,937
Smart Machine Platform Initiative (Transferred to line 183.)		3,000		0
Heavy Fuel Engine for Shadow Tactical UAV			5,000	3,250
Tactical Signals Intelligence Payload			4,000	2,600
Army Requested Transfer from Other Procurement, Army Lines 62 and 120			35,000	35,000
180 AIRBORNE RECONNAISSANCE SYSTEMS	12	12	1,012	1,012
Sentinel UAV, Phase II			1,000	1,000
DISTRIBUTED COMMON GROUND/SURFACE				
181 SYSTEMS	120,562	140,112	125,562	135,812
Asymmetric Threat Response and Analysis Project (ATRAP)		4,500		2,500
Joint Visualization System (JVS)		2,700		2,150
IMaG-ATC and Net-Centric Imagery Applications for Fixed and Mobile Sites of Multi-Service Distributed Common Ground System - Army (DCGS-A)		5,000		2,750
Intelligence Data Exchange for Execution and Planning, Distributed Common Ground Systems		5,000		4,000
Blast Risk Analysis and Mitigation Application		2,350		1,050
Effects Based Approach to Operations			1,000	1,000
National Defense Imagery Processing Program			4,000	1,800
183 END ITEM INDUSTRIAL PREPAREDNESS ACTIVITIES	68,075	101,375	102,575	113,475
Manufacturing Systems Demonstration for military machined parts application		3,000	3,000	3,000
National Center for Defense Manufacturing and Machining		3,600		2,900
Durable Gun Barrel Steel		1,000		1,000
Advanced Ceramic Manufacturing and Machining Process Development		1,800		1,450
Small Heavy Fuel Engines for Tactical UAVs		2,000		1,600
Spring Suspended Airless Tires for Convoy Protection		6,000		4,800
Reactive Atom Plasma Manufacturing of Silicon Carbide for Optics and Electronics		2,700		2,150

R-1	Budget Request	House	Senate	Conference
Replicable Defense Manufacturing Management and Solutions System		1,800		1,450
Industrial Preparedness		1,000		1,000
Vehicle Common Armor Manufacturing Process (VCAMP)		4,400		2,000
Short Pulse Laser Technology for Pulse Laser System Development for Turbine Engine Applications		2,000	3,500	2,000
Virtual Parts Engineering Research Center (VPERC)		1,000		1,000
Advanced Modeling Technology for Large StructureTitanium Machining		3,000	2,900	2,900
Electrodeposited Coatings Systems for Munitions			2,000	1,100
High Performance Alloy Materials/Advanced Manufacturing of Steel Castings			2,000	1,300
Laser Peening for Army Helicopters			4,000	2,200
Legacy Aerospace Gear Drive Re-Engineering Initiative			1,500	1,000
Low Cost Domestic Titanium Reduction to Powder Initiative			5,000	4,450
Next Generation Combat Helmet			2,000	1,300
Packaging and Interconnection Technologies			3,000	1,350
Rigid-Rod Polyphenylene Compositions for Light Weight Cartridge Cases			3,100	2,500
Solid Free Form Fabrication of Components from Low-Cost Titanium			2,500	1,600
Smart Machine Platform Initiative (Transferred from line 179.)				1,350
999 CLASSIFIED PROGRAMS	3,700	8,200	3,700	3,700
Program adjustment		4,500		0

MEDICAL COUNTERMEASURES AGAINST ACUTE RADIATION SYNDROME AND SIMILAR THREATS

The conferees recognize that acute radiation syndrome and other forms of radiation sickness could potentially afflict forward deployed members of the military, and that currently there are no effective means of treating individuals exposed to radiation or a nuclear attack. Therefore, the conferees direct the Secretary of Defense to submit to the congressional defense committees a report that outlines a plan for procuring medical countermeasures that will treat forward deployed service members against the lethal

effects of acute radiation syndrome, to include neutropenia and thrombocytopenia. This report will also identify the countermeasures required to protect service members in the event of a nuclear or bioterrorist attack, a plan to forward deploy those countermeasures, and an assessment of costs associated with implementing this plan. This report should be provided no later than March 15, 2007.

STRYKER UPGRADES

The conferees are pleased with the performance of the Stryker armored vehicle in

Iraq and encourage the Army to pursue new technologies and capabilities for the Stryker to improve the capabilities of the vehicle on the battlefield. The conferees encourage the Army to pursue these technology upgrades including an integrated power management system, increased improvised explosive device and mine blast protection, improved situational awareness, new brakes and suspension, and the addition of the XM307 gun, Javelin missile and target detection capabilities.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, NAVY

The conference agreement on items addressed by either the House or the Senate is as follows:

		(In thousands of dollars)			
		Budget	House	Senate	Conference

RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY					
BASIC RESEARCH					
1	UNIVERSITY RESEARCH INITIATIVES.....	73,322	96,822	81,822	92,072
2	IN-HOUSE LABORATORY INDEPENDENT RESEARCH.....	15,916	15,916	15,916	15,916
3	DEFENSE RESEARCH SCIENCES.....	366,649	386,149	380,649	385,649
TOTAL, BASIC RESEARCH.....		455,887	498,887	478,387	493,637
APPLIED RESEARCH					
4	POWER PROJECTION APPLIED RESEARCH.....	84,914	116,714	97,914	114,514
5	FORCE PROTECTION APPLIED RESEARCH.....	123,443	123,243	172,943	160,793
6	MARINE CORPS LANDING FORCE TECHNOLOGY.....	37,741	38,741	45,741	42,191
8	MATERIALS, ELECTRONICS AND COMPUTER TECHNOLOGY.....	---	1,000	---	1,000
9	COMMON PICTURE APPLIED RESEARCH.....	68,352	74,241	87,852	89,291
10	WARFIGHTER SUSTAINMENT APPLIED RESEARCH.....	89,964	115,664	104,264	120,214
11	RF SYSTEMS APPLIED RESEARCH.....	42,619	47,619	46,919	50,519
12	OCEAN WARFIGHTING ENVIRONMENT APPLIED RESEARCH.....	48,718	55,718	48,718	53,718
13	JOINT NON-LETHAL WEAPONS APPLIED RESEARCH.....	6,036	6,036	6,036	6,036
14	UNDERSEA WARFARE APPLIED RESEARCH.....	83,435	85,235	89,435	93,585
15	MINE AND EXPEDITIONARY WARFARE APPLIED RESEARCH.....	53,435	63,135	57,435	57,085
TOTAL, APPLIED RESEARCH.....		638,657	727,346	757,257	788,946
ADVANCED TECHNOLOGY DEVELOPMENT					
16	POWER PROJECTION ADVANCED TECHNOLOGY.....	76,806	89,306	115,306	114,656
17	FORCE PROTECTION ADVANCED TECHNOLOGY.....	61,504	162,104	108,004	147,704
18	COMMON PICTURE ADVANCED TECHNOLOGY.....	61,725	63,725	64,725	63,975
19	WARFIGHTER SUSTAINMENT ADVANCED TECHNOLOGY.....	82,035	89,735	92,035	99,134
20	RF SYSTEMS ADVANCED TECHNOLOGY.....	45,317	77,417	73,817	98,437
21	MARINE CORPS ADVANCED TECHNOLOGY DEMONSTRATION (ATD)..	59,170	78,670	86,670	83,320
22	JOINT NON-LETHAL WEAPONS TECHNOLOGY DEVELOPMENT.....	1,405	1,405	405	1,405
24	WARFIGHTER PROTECTION ADVANCED TECHNOLOGY.....	17,982	58,482	17,982	58,332
25	UNDERSEA WARFARE ADVANCED TECHNOLOGY.....	35,055	35,055	38,055	35,055
27	NAVY WARFIGHTING EXPERIMENTS AND DEMONSTRATIONS.....	41,308	41,308	41,308	41,308

		(In thousands of dollars)			
		Budget	House	Senate	Conference
28	MINE AND EXPEDITIONARY WARFARE ADVANCED TECHNOLOGY....	21,326	24,926	24,126	25,426
29	JOINT COMMAND AND CONTROL PROGRAM (JC2).....	1,001	1,001	1,001	1,001
TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT.....		504,634	723,134	663,434	769,753
DEMONSTRATION & VALIDATION					
30	AIR/OCEAN TACTICAL APPLICATIONS.....	31,778	28,278	31,778	32,778
31	AVIATION SURVIVABILITY.....	6,177	31,377	21,677	29,627
32	DEPLOYABLE JOINT COMMAND AND CONTROL.....	16,383	16,383	16,383	16,383
33	ASW SYSTEMS DEVELOPMENT.....	16,782	22,782	23,482	25,432
34	TACTICAL AIRBORNE RECONNAISSANCE.....	3,959	3,959	3,959	3,959
35	ADVANCED COMBAT SYSTEMS TECHNOLOGY.....	12,398	12,398	12,398	12,398
36	SURFACE AND SHALLOW WATER MINE COUNTERMEASURES.....	130,265	134,765	114,365	116,565
37	SURFACE SHIP TORPEDO DEFENSE.....	40,627	55,027	48,627	57,727
38	CARRIER SYSTEMS DEVELOPMENT.....	153,894	158,394	153,894	156,844
39	SHIPBOARD SYSTEM COMPONENT DEVELOPMENT.....	14,135	34,235	39,935	50,185
40	PILOT FISH.....	134,550	134,550	134,550	134,550
41	RETRACT LARCH.....	87,180	87,180	87,180	87,180
42	RETRACT JUNIPER.....	38,462	38,462	38,462	38,462
43	RADIOLOGICAL CONTROL.....	1,901	1,901	1,901	1,901
44	SURFACE ASW.....	38,696	42,696	35,696	34,146
45	SSGN CONVERSION.....	25,953	25,953	25,953	25,953
46	ADVANCED SUBMARINE SYSTEM DEVELOPMENT.....	140,432	155,432	158,932	157,582
47	SUBMARINE TACTICAL WARFARE SYSTEMS.....	10,357	10,357	10,357	10,357
48	SHIP CONCEPT ADVANCED DESIGN.....	21,549	14,721	26,649	21,771
49	SHIP PRELIMINARY DESIGN & FEASIBILITY STUDIES.....	21,314	24,314	28,314	25,864
50	ADVANCED NUCLEAR POWER SYSTEMS.....	174,648	174,648	174,648	174,648
51	ADVANCED SURFACE MACHINERY SYSTEMS.....	---	5,800	---	2,800
52	CHALK EAGLE.....	139,017	139,017	139,017	139,017
53	LITTORAL COMBAT SHIP (LCS).....	319,671	332,271	321,471	330,671
54	COMBAT SYSTEM INTEGRATION.....	62,095	74,745	63,095	72,195
55	CONVENTIONAL MUNITIONS.....	22,385	23,885	22,385	23,385

	Budget	(In thousands of dollars)		Conference
		House	Senate	
56 MARINE CORPS ASSAULT VEHICLES.....	188,306	194,906	191,306	349,206
57 MARINE CORPS MINE/COUNTERMEASURES SYSTEMS - ADV DEV...	3,777	3,777	3,777	3,777
58 MARINE CORPS GROUND COMBAT/SUPPORT SYSTEM.....	503	2,003	19,503	12,953
59 JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT.....	24,467	24,467	24,467	24,467
60 COOPERATIVE ENGAGEMENT.....	53,406	67,406	48,106	64,606
61 OCEAN ENGINEERING TECHNOLOGY DEVELOPMENT.....	16,324	18,324	16,324	17,324
62 ENVIRONMENTAL PROTECTION.....	20,271	26,771	24,271	26,071
63 NAVY ENERGY PROGRAM.....	1,600	1,600	1,600	1,600
64 FACILITIES IMPROVEMENT.....	4,194	6,194	6,194	8,294
65 CHALK CORAL.....	28,578	28,578	28,578	28,578
66 NAVY LOGISTIC PRODUCTIVITY.....	6,306	26,206	11,306	24,706
67 RETRACT MAPLE.....	344,912	344,912	344,912	344,912
68 LINK PLUMERIA.....	80,662	70,662	80,662	80,662
69 RETRACT ELM.....	64,133	64,133	64,133	64,133
70 SHIP SELF DEFENSE	8,897	8,897	8,897	8,897
71 LINK EVERGREEN.....	55,051	55,051	55,051	55,051
72 SPECIAL PROCESSES.....	47,180	47,180	47,180	47,180
73 NATO RESEARCH AND DEVELOPMENT.....	9,784	9,784	9,784	9,784
74 LAND ATTACK TECHNOLOGY.....	18,571	48,171	36,571	56,471
75 NONLETHAL WEAPONS.....	44,815	48,515	46,815	49,315
77 JOINT PRECISION APPROACH AND LANDING SYSTEMS.....	41,242	41,242	33,242	33,242
78 SINGLE INTEGRATED AIR PICTURE (SIAP) SYSTEM ENGINEER..	50,282	42,500	37,282	41,650
79 COUNTER-DRUG RDT&E PROJECTS.....	---	4,000	---	2,200
80 TACTICAL AIR DIRECTIONAL INFRARED COUNTERMEASURES	20,527	20,527	17,527	17,527
81 HARD AND DEEPLY BURIED TARGET DEFEAT SYSTEM (HDBTDS)..	77,000	30,000	---	20,000
82 SPACE & ELECTRONIC WARFARE (SEW) ARCHITECTURE/ENGINE..	43,909	43,909	43,909	43,909
DIRECTED ENERGY RESEARCH.....	---	---	30,000	19,500
TOTAL, DEMONSTRATION & VALIDATION.....	2,919,305	3,063,245	2,966,505	3,238,395

	(In thousands of dollars)			Conference
	Budget	House	Senate	
ENGINEERING & MANUFACTURING DEVELOPMENT				
84 OTHER HELO DEVELOPMENT.....	86,197	86,197	86,197	86,197
85 AV-8B AIRCRAFT - ENG DEV.....	13,878	13,878	13,878	13,878
86 STANDARDS DEVELOPMENT.....	112,257	92,257	70,987	73,237
87 MULTI-MISSION HELICOPTER UPGRADE DEVELOPMENT.....	19,259	19,259	19,259	19,259
88 AIR/OCEAN EQUIPMENT ENGINEERING.....	5,578	5,578	5,578	5,578
89 P-3 MODERNIZATION PROGRAM.....	16,139	16,139	6,139	17,139
90 WARFARE SUPPORT SYSTEM.....	2,203	2,203	2,203	2,203
91 TACTICAL COMMAND SYSTEM.....	74,225	60,625	57,625	56,625
92 ADVANCED HAWKEYE.....	497,842	497,842	497,842	497,842
93 H-1 UPGRADES.....	7,844	7,844	7,844	7,844
94 ACOUSTIC SEARCH SENSORS.....	36,764	47,064	38,764	42,164
95 V-22A.....	268,461	268,461	268,461	268,461
96 AIR CREW SYSTEMS DEVELOPMENT.....	12,434	14,234	12,434	13,884
97 EA-18.....	372,363	375,363	372,363	373,713
98 ELECTRONIC WARFARE DEVELOPMENT.....	39,842	41,042	39,842	40,842
99 VHXX EXECUTIVE HELO DEVELOPMENT.....	682,597	682,597	557,597	632,597
100 JOINT TACTICAL RADIO SYSTEM - NAVY (JTRS-NAVY).....	1,153	1,153	1,153	798,412
101 SC-21 TOTAL SHIP SYSTEM ENGINEERING.....	817,528	831,528	818,528	826,228
102 SURFACE COMBATANT COMBAT SYSTEM ENGINEERING.....	190,059	191,059	179,659	179,009
103 LPD-17 CLASS SYSTEMS INTEGRATION.....	5,960	5,960	5,960	5,960
105 SMALL DIAMETER BOMB (SDB).....	10,021	10,021	10,021	10,021
106 STANDARD MISSILE IMPROVEMENTS.....	186,144	187,244	176,144	177,144
107 AIRBORNE MCM.....	56,145	62,145	56,145	58,845
108 NAVAL INTEGRATED FIRE CONTROL-COUNTER AIR SYSTEMS ENG.	14,792	14,792	---	14,792
109 SSN-688 AND TRIDENT MODERNIZATION.....	94,839	109,139	106,839	109,639
110 AIR CONTROL.....	4,603	4,603	4,603	4,603
112 SHIPBOARD AVIATION SYSTEMS.....	33,392	35,392	32,892	32,892
113 COMBAT INFORMATION CENTER CONVERSION.....	6,708	7,708	8,208	7,708
114 NEW DESIGN SSN.....	169,580	189,980	216,780	202,130

	(In thousands of dollars)			
	Budget	House	Senate	Conference
115 SSN-21 DEVELOPMENTS.....	3,260	3,260	3,260	3,260
116 SUBMARINE TACTICAL WARFARE SYSTEM.....	51,656	54,156	53,656	54,806
117 SHIP CONTRACT DESIGN/ LIVE FIRE T&E.....	72,055	73,855	72,055	73,505
119 MINE DEVELOPMENT.....	5,631	5,631	5,631	5,631
121 LIGHTWEIGHT TORPEDO DEVELOPMENT.....	40,540	40,540	35,040	40,540
122 JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT.....	10,026	10,026	10,026	10,426
123 PERSONNEL, TRAINING, SIMULATION, AND HUMAN FACTORS....	8,754	9,754	8,754	9,754
124 BATTLE GROUP PASSIVE HORIZON EXTENSION SYSTEM.....	---	1,000	2,000	2,000
125 JOINT STANDOFF WEAPON SYSTEMS.....	27,524	27,524	27,524	27,524
126 SHIP SELF DEFENSE (DETECT & CONTROL).....	10,050	25,650	15,250	26,750
127 SHIP SELF DEFENSE (ENGAGE: HARD KILL).....	46,390	50,890	51,390	50,890
128 SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW).....	11,513	12,913	27,513	21,213
129 INTELLIGENCE ENGINEERING.....	4,865	4,865	4,865	4,865
130 MEDICAL DEVELOPMENT.....	7,663	35,263	9,663	29,663
131 NAVIGATION/ID SYSTEM.....	47,070	47,070	47,070	47,070
132 DISTRIBUTED SURVEILLANCE SYSTEM.....	58,273	60,773	58,273	60,273
133 JOINT STRIKE FIGHTER (JSF).....	2,030,979	2,033,679	2,172,285	2,172,135
135 INFORMATION TECHNOLOGY DEVELOPMENT.....	13,326	14,326	13,326	14,326
136 INFORMATION TECHNOLOGY DEVELOPMENT.....	88,323	92,323	127,423	115,423
137 MULTINATIONAL INFORMATION SHARING (MNIS).....	20,856	20,856	20,856	20,856
138 CH-53X.....	362,672	362,672	357,672	357,672
139 MULTI-MISSION MARITIME AIRCRAFT (MMA).....	1,131,655	1,131,655	1,131,655	1,131,655
140 TACTICAL CRYPTOLOGIC SYSTEMS.....	23,526	27,526	23,526	25,826
TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT.....	7,915,414	8,027,514	7,952,658	8,884,909

	(In thousands of dollars)			Conference
	Budget	House	Senate	

RDT&E MANAGEMENT SUPPORT				
141 THREAT SIMULATOR DEVELOPMENT.....	23,668	23,668	23,668	23,668
142 TARGET SYSTEMS DEVELOPMENT.....	45,666	45,666	50,666	47,916
143 MAJOR T&E INVESTMENT.....	39,750	47,250	48,750	48,600
144 STUDIES AND ANALYSIS SUPPORT - NAVY.....	7,093	7,093	7,093	7,093
145 CENTER FOR NAVAL ANALYSES.....	48,900	48,900	48,900	48,900
146 FLEET TACTICAL DEVELOPMENT.....	2,595	2,595	2,595	2,595
148 TECHNICAL INFORMATION SERVICES.....	670	9,170	21,670	25,070
149 MANAGEMENT, TECHNICAL & INTERNATIONAL SUPPORT.....	47,213	47,213	45,413	45,413
150 STRATEGIC TECHNICAL SUPPORT.....	3,347	3,347	3,347	3,347
151 RDT&E SCIENCE AND TECHNOLOGY MANAGEMENT.....	67,328	67,328	66,328	67,328
152 RDT&E INSTRUMENTATION MODERNIZATION.....	1,243	1,243	1,243	1,243
153 RDT&E SHIP AND AIRCRAFT SUPPORT.....	83,140	83,140	83,140	83,140
154 TEST AND EVALUATION SUPPORT.....	328,276	328,276	328,276	328,276
155 OPERATIONAL TEST AND EVALUATION CAPABILITY.....	11,532	11,532	11,532	11,532
156 NAVY SPACE AND ELECTRONIC WARFARE (SEW) SUPPORT.....	2,904	2,904	2,904	2,904
157 SEW SURVEILLANCE/RECONNAISSANCE SUPPORT.....	20,073	20,073	18,173	18,173
158 MARINE CORPS PROGRAM WIDE SUPPORT.....	25,343	31,343	31,343	31,343
159 TACTICAL CRYPTOLOGIC ACTIVITIES.....	1,004	1,004	1,004	1,004
160 SERVICE SUPPORT TO JFCOM, JNTC.....	5,202	12,802	5,202	12,802

TOTAL, RDT&E MANAGEMENT SUPPORT.....	764,947	794,547	801,247	810,347

	(In thousands of dollars)			
	Budget	House	Senate	Conference
OPERATIONAL SYSTEMS DEVELOPMENT				
163 HARPOON MODIFICATIONS.....	36,284	28,000	---	28,000
164 UNMANNED COMBAT AIR VEHICLE (UCAV) ADVANCED COMPONENT.	239,163	189,163	---	100,000
165 STRATEGIC SUB & WEAPONS SYSTEM SUPPORT.....	124,522	129,522	124,522	127,172
166 SSBN SECURITY TECHNOLOGY PROGRAM.....	42,869	42,869	42,869	42,869
167 SUBMARINE ACOUSTIC WARFARE DEVELOPMENT.....	2,131	2,131	2,131	2,131
168 NAVY STRATEGIC COMMUNICATIONS.....	37,464	37,464	37,464	37,464
169 RAPID TECHNOLOGY TRANSITION (RTT).....	39,285	44,285	35,485	39,485
170 F/A-18 SQUADRONS.....	31,098	38,698	41,598	39,448
171 E-2 SQUADRONS.....	1,540	6,240	7,540	9,840
172 FLEET TELECOMMUNICATIONS (TACTICAL).....	27,189	27,189	27,189	27,189
173 TOMAHAWK AND TOMAHAWK MISSION PLANNING CENTER (TMPC)...	18,635	25,635	18,635	24,235
174 INTEGRATED SURVEILLANCE SYSTEM.....	30,740	42,540	28,240	40,590
175 AMPHIBIOUS TACTICAL SUPPORT UNITS.....	1,812	1,812	1,812	1,812
176 CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT.....	17,857	19,857	17,857	19,157
177 CRYPTOLOGIC DIRECT SUPPORT.....	1,425	1,425	1,425	1,425
178 ELECTRONIC WARFARE (EW) READINESS SUPPORT.....	20,673	20,673	20,673	20,673
179 HARM IMPROVEMENT.....	99,208	105,208	94,208	100,208
180 TACTICAL DATA LINKS.....	41,967	41,967	41,967	41,967
181 SURFACE ASW COMBAT SYSTEM INTEGRATION.....	9,417	21,667	9,417	18,617
182 MK-48 ADCAP.....	24,988	24,988	24,988	24,988
183 AVIATION IMPROVEMENTS.....	71,612	80,412	89,212	88,312
184 NAVY SCIENCE ASSISTANCE PROGRAM.....	3,376	3,376	3,376	3,376
185 OPERATIONAL NUCLEAR POWER SYSTEMS.....	69,350	69,350	69,350	69,350
186 MARINE CORPS COMMUNICATIONS SYSTEMS.....	218,460	241,160	219,460	234,710
187 MARINE CORPS GROUND COMBAT/SUPPORTING ARMS SYSTEMS....	47,592	68,892	57,592	65,742
188 MARINE CORPS COMBAT SERVICES SUPPORT.....	17,524	17,524	17,524	17,524
189 TACTICAL AIM MISSILES.....	7,946	7,946	7,946	7,946
190 ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM).....	6,705	6,705	6,705	6,705
191 JOINT HIGH SPEED VESSEL (JHSV).....	14,163	14,163	14,163	14,163

	(In thousands of dollars)			Conference
	Budget	House	Senate	
195 SATELLITE COMMUNICATIONS (SPACE).....	748,662	751,662	750,662	751,612
196 INFORMATION SYSTEMS SECURITY PROGRAM.....	23,037	27,037	26,837	29,037
197 JOINT COMMAND AND CONTROL PROGRAM (JC2).....	5,073	5,073	5,073	5,073
198 COBRA JUDY.....	135,372	135,372	135,372	135,372
199 NAVY METEOROLOGICAL AND OCEAN SENSORS-SPACE (METOC)...	7,307	9,307	7,307	8,307
201 JOINT MILITARY INTELLIGENCE PROGRAMS.....	6,793	6,793	6,793	6,793
202 TACTICAL UNMANNED AERIAL VEHICLES.....	115,950	118,950	115,950	119,550
203 ENDURANCE UNMANNED AERIAL VEHICLES.....	26,357	26,357	26,357	26,357
204 AIRBORNE RECONNAISSANCE SYSTEMS.....	35,038	36,838	39,038	39,138
205 MANNED RECONNAISSANCE SYSTEMS.....	22,815	35,815	32,815	29,065
206 DISTRIBUTED COMMON GROUND SYSTEMS.....	16,587	18,587	16,587	17,887
207 AERIAL COMMON SENSOR (ACS)	17,182	17,182	---	17,182
208 MODELING AND SIMULATION SUPPORT.....	7,503	7,503	7,503	7,503
209 DEPOT MAINTENANCE (NON-IF).....	2,960	6,960	2,960	6,160
210 AVIONICS COMPONENT IMPROVEMENT PROGRAM.....	1,375	1,375	1,375	1,375
211 INDUSTRIAL PREPAREDNESS.....	55,048	63,848	57,048	61,048
212 MARITIME TECHNOLOGY (MARITECH).....	---	22,000	16,100	20,500
TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT.....	2,532,054	2,651,520	2,311,125	2,537,057
999 CLASSIFIED PROGRAMS.....	1,181,325	1,168,325	1,117,625	1,150,850
TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY.....	16,912,223	17,654,518	17,048,238	18,673,894

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	House	Senate	Conference
1 UNIVERSITY RESEARCH INITIATIVES	73,322	96,822	81,822	92,072
Center for Southeastern Tropical Advanced Remote Sensing (CSTARS)		4,000	4,000	4,000
Research infrastructure for the Applied Physics Laboratory		5,000		3,300
Neurotechnology Center		3,000		1,650
National security training		2,000		1,100
Defense Commercialization Research Initiative Technology, Research, Education and Commercialization Center (TRECC)		5,000		3,300
Smart, remote sensing systems using nanotechnology		3,000	2,000	2,400
Center for Nanoscience and Nanomaterials (CNN)		1,500		1,000
Multifunctional materials for naval structures			1,500	1,000
Blast and impact resistant composite structures for Navy ships			1,000	1,000
3 DEFENSE RESEARCH SCIENCES	366,649	382,149	380,649	385,649
Base program reduction		-8,000		-8,000
Navy use of UNOLS ships		5,000		4,400
DoD Agile Manufacturing Center for Castings Technology (AMCast)		1,500		1,000
ONAMI nanoelectronics and nanometrology initiative		2,500	2,500	2,500
Standoff bio-chem agent detection		1,000		1,000
Maritime domain awareness		2,500		1,600
Carbon nanotube-based radiation-hard non-volatile RAM		9,000		5,900
Mobile ad hoc data communications for unmanned systems		2,000		1,300
Evaluation of ELF signals in deep and shallow water			1,000	1,000
Bio-inspired materials			5,000	3,300
Energetics Technology Center/S&T workforce revitalization		4,000	5,500	5,000
4 POWER PROJECTION APPLIED RESEARCH	84,914	116,714	97,914	114,514
Marine mammal hearing and echolocation research		1,500		1,500
Retroreflecting optical communications for special operations		3,000		3,000
Millimeter terahertz imaging arrays		2,800		1,250
Multifunctional oxide materials MFMA		2,000		1,000
Computational design tools for high power sources for directed energy applications		1,500		1,000
Multifunctional oxide materials applications and devices		2,000		1,000
Electronic motion actuation systems		4,000		2,200
High performance frequency modulated (FM) fiberoptic link		2,000		1,100
High energy density capacitors for military applications		5,500		2,500
Device integration of wide bandgap semiconductors and multifunctional oxides		2,700		2,200
Development processes for full scale production of silicon carbide wafers		1,800		1,450
H.264 video compression		1,000		1,000
High energy superior battery technology for defense applications		2,000		1,000
Program growth			-4,500	-4,500
Thermal management systems for high density electronics			6,000	5,000
Combustion light gas gun projectile			5,000	4,000

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	House	Senate	Conference
Multi-sensor hyperspectral system for day/night reconnaissance			4,500	3,600
HALOH engine			2,000	1,300
5 FORCE PROTECTION APPLIED RESEARCH	123,443	123,243	172,943	160,793
Base program reduction		-20,000	-18,400	-18,400
Advanced simulation tools for aircraft structures made of composite materials		1,500	3,000	1,950
Mark V patrol boat replacement craft		5,000	5,000	5,000
Direct motor driven waterjets		2,300		1,000
Facial recognition technology		1,000		1,000
Blast resistant anechoic sprayable elastomeric coating for ships		1,500		1,000
Advanced material techniques for lithium ion large cell manufacturing		3,500		2,300
UTC SimCenter solid oxide fuel cell - military applications		3,000		1,650
Large unmanned underwater vehicle technologies		2,000		1,000
Nanostructured composite marine coatings			3,000	2,000
Small watercraft propulsion demonstrator			6,000	2,700
Magnetic refrigeration technology for naval applications			3,000	1,650
Undersea perimeter security integrated defense environment			2,000	1,000
Shipboard production of synthetic logistics and aviation fuel			1,000	1,000
Advanced receive-while-transmit sonar for UUVs			4,000	2,200
Aperstructures			27,900	21,800
Nano-magnetic materials for propulsion/energy systems			1,000	1,000
ADPICAS			2,000	1,600
PMRF force protection lab			4,000	3,200
High frequency acoustic signal processor system			6,000	2,700
6 MARINE CORPS LANDING FORCE TECHNOLOGY	37,741	38,741	45,741	42,191
High power lightweight zinc-air batteries <u>(Note: only for Department of Defense military activities)</u>		1,000	3,000	1,650
Warfighter rapid awareness processing technology for distributed ops			4,000	1,800
Integrated asymmetric urban warfare			1,000	1,000
MATERIALS, ELECTRONICS AND COMPUTER TECHNOLOGY				
8	0	1,000	0	1,000
Center for Microwave Ferrites and Multifunctional Integrated Circuits		1,000		1,000
9 COMMON PICTURE APPLIED RESEARCH	68,352	74,241	87,852	89,291
Base program reduction		-5,211	-2,000	-5,211
Radio sensor module (RASM)		4,000		2,200
Multicultural operations training and tactics systems (MCOTTS)		2,500		1,650
Pacific missile range facility/Pearl Harbor integrated network		3,600		2,900
Advanced panoramic sensor systems for UAVs		1,000		1,000
M2C2			7,500	6,000
Theater undersea warfare initiative			7,000	5,600
PACOM agile coalition environment			7,000	6,800

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	House	Senate	Conference
10 WARFIGHTER SUSTAINMENT APPLIED RESEARCH	89,964	115,664	104,264	120,214
Base program reduction		-10,000	-14,500	-12,000
Durability of composite materials and structures		2,500		1,100
Low observable aircraft sealants		3,400		1,500
Environmental microbiological energy harvesting		1,500		1,000
Advanced fouling and corrosion control coatings		2,000	9,000	7,000
National Center for Advanced Secure Systems Research (NCASSR)		7,500	4,000	4,900
Magnetic resonance imaging and magnetic resonance angiography for accurate diagnosis of traumatic brain injury		1,000		1,000
Partnership simulation laboratory for military health		3,000		1,350
Virtual clinical learning lab reality simulation environment		2,000		1,000
Sensory substitution for wounded service members		5,000		4,000
Neurobiologically inspired computational architectures and methodologies		4,000		3,200
Atmospheric water harvesting -- military applications		1,000		1,000
Continuation of hydrate desalination technology		1,800		1,450
Mast-mounted in-port video force protection surveillance system		1,000		1,000
Materials and coatings enhancements through high performance materials			10,800	8,650
Advanced reinforced materials and new materials for aircraft tires			1,000	1,000
Friction stir welding			2,000	1,100
Amelioration of military hearing loss			1,000	1,000
Biosensors for defense applications			1,000	1,000
11 RF SYSTEMS APPLIED RESEARCH	42,619	47,619	46,919	50,519
ND Center for the Engineering of Oxide Nitride Structures (CEONS)		2,000		1,300
Reparative health initiative		1,000		1,000
DoD reparative medicine initiative		1,000		1,000
Silicon carbide MOSFETs for electric power systems		1,000		1,000
Gallium nitride RF power technology			1,300	1,000
Advanced microwave ferrite research phase IV <u>(Note: House bill provided funding in line 12)</u>			1,000	1,000
Pacific theater data fusion testbed			2,000	1,600
OCEAN WARFIGHTING ENVIRONMENT APPLIED RESEARCH				
12 RESEARCH	48,718	55,718	48,718	53,718
Extended capability underwater optics		1,000		1,000
Advanced microwave ferrite research (AMFeR) phase IV <u>(Note: Conference funding is provided in line 11)</u>		1,000		0
Autonomous marine sensors and networks for rapid littoral assessment		5,000		4,000
14 UNDERSEA WARFARE APPLIED RESEARCH	83,435	85,235	89,435	93,585
ATT (6.75-in diameter) multi-mission weapon		1,800		1,450
Advanced acoustic transducer concepts			3,000	1,950
Micro electro mechanical systems - inertial measurement units			3,000	1,950
Acoustic littoral glider <u>(Note: Transferred from line 15)</u>				4,800

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	House	Senate	Conference
MINE AND EXPEDITIONARY WARFARE APPLIED				
15 RESEARCH	53,435	63,135	57,435	57,085
Detection and neutralization of electronically initiated IEDs		3,000		1,650
NSW unattended sensor network		2,700		2,200
AUV docking and recharging station		4,000		1,800
Program growth			-3,000	-3,000
Acoustic littoral glider <u>(Note:</u> Conference funding provided in line 14)			6,000	
NMSU water security program			1,000	1,000
16 POWER PROJECTION ADVANCED TECHNOLOGY	76,806	89,306	115,306	114,656
Laser radar (LADAR) - Naval Air Warfare Center China Lake		1,000		1,000
DP-2 vectored thrust aircraft		6,000		3,900
Laser radar (LADAR)		4,000		3,200
Computational analysis of cyber-terrorism against the United States		1,500		1,000
Program reduction			-10,000	-5,000
Time critical strike ramjet			1,000	1,000
Long wavelength array			2,500	1,650
Smart instrument development for Magdalena Ridge Observatory			6,000	3,900
High Energy Laser Systems Test Facility			4,000	2,600
Expeditionary craft			10,000	9,400
Quiet high-speed propulsion			8,000	4,400
Advanced lifting body ship research			7,000	5,600
Articulated stable ocean platform			2,000	1,600
Autonomous unmanned surface vessel			4,000	1,800
Information sharing for ISRTE of mobile targets			4,000	1,800
17 FORCE PROTECTION ADVANCED TECHNOLOGY	61,504	162,104	108,004	147,704
Phase II virent-NAVSEA antifreeze hydrogen project		2,000		1,000
SMART micro-sensor arrays		1,400		1,000
Transparent armor		500		500
Wave power electric power generating system for Hawaii Naval Base		1,500		1,000
Pure hydrogen supply from logistic fuel		2,700		1,200
High speed power node switching center		5,400	1,000	2,400
Porous silicon-based direct methanol fuel cell		3,000		1,350
Protective apparel technology systems <u>(Note:</u> Conference funding is provided in line 19)		2,500		0
Solid state DC protection system		2,000		1,000
High power density motor drive		3,000		1,350
HTS AC synchronous Navy propulsion motor		3,000	6,000	3,000
Wireless condition-based maintenance monitoring for naval shipyard equipment and facilities		3,000		1,650
Accelerated development of mobile acoustic countermeasure for force protection FNC		1,500		1,000
Agile port and high speed ship technology		2,400	3,500	2,400
Detecting IEDs		1,000		1,000
Stabilized laser designation capability		1,500		1,000
Superconducting DC homopolar motor for electric drive ships		4,000		2,600
Mobile manufacturing and repair cell		2,000	5,000	3,250
Sea fighter		23,000		15,000
Damage control wireless communications and experimentation (DCWC&E)		2,700		2,200

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	House	Senate	Conference
Missile warning sensor		3,500		2,800
Aviation ground advanced technology		2,700		2,200
Lightweight, ruggedized reconnaissance robot		1,000		1,000
Center for Applied Research for Autonomous Systems		1,800		1,450
Unmanned systems technologies for explosive ordnance disposal		1,000		1,000
Affordable distributed aperture IRCM for helicopters and regional jets		5,000		4,000
Strategic mobility 21 deployment technology		3,500		2,800
Multipolar motor		2,000		1,100
Secure infrastructure technology laboratory (SINTEL)		8,000		6,400
Development of high performance sandwich panel construction		4,000		1,800
Fuel cell fast-start battery for ship propulsion			5,000	3,300
High temperature superconducting (HTS) generator			5,000	2,250
Wide-area sensor for force protection targeting			4,000	2,600
Large unmanned undersea vehicle (LUUV) test bed			2,000	1,300
Advanced technology to reduce vulnerability of military installations (<u>Note:</u> Conference funding is provided in line 64)			2,000	0
Completion of advanced ship service fuel cell power plant			2,000	1,000
Wide-band gap semiconductor materials research			8,000	5,200
Remote continuous energetic material manufacturing for pyrotechnic IR decoys			2,000	1,100
Solid oxide fuel cells (SOFCs)			1,000	1,000
18 COMMON PICTURE ADVANCED TECHNOLOGY	61,725	63,725	64,725	63,975
Maritime identification surveillance technology (MIST)		1,000		1,000
Urban data delivery in the virtual battle lab		1,000		1,000
Program growth			-4,000	-4,000
Improved shipboard combat information center			3,000	1,350
Rail sensor testbed			2,000	1,300
4D data fusion visualization			2,000	1,600
WARFIGHTER SUSTAINMENT ADVANCED				
19 TECHNOLOGY	82,035	89,735	92,035	99,134
Sea base planning, operations, and logistics		-1,829		-1,829
Sea base mobility and interfaces		-6,145		-6,145
Sea basing		-2,320		-2,320
Friction drag reduction		-2,497		-2,497
Manpower and personnel development		-3,898		-1,500
Training systems		-1,851		-1,000
Airframe/ship corrosion		-1,360		-1,360
Program underexecution			-4,000	0
Program growth			-3,000	0
Curve plate technology		1,000		1,000
NADEP Cherry Point Center for Vertical Lift - Institute for Maintenance Science and Technology		3,000		1,350
Autonomous sustainment cargo container (ASCC) delivery system		2,000	2,000	2,000
SEAPRINT		3,000		2,000
On-demand distributed training for the warfighter (ODTW)		2,700		2,200
Photonic machining of electronic materials		1,000		1,000
Mission readiness advancements for vertical lift aircraft		1,800		1,450
Adaptive IED tactical system		1,800		1,450

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	House	Senate	Conference
National Center for Research on Evaluation, Standards, and Student Testing (CRESST) skill set analysis (<u>Note:</u> Including \$2,000,000 to formalize CRESST relationship as UARC for educational and training technology assessment		6,500		5,200
Intelligent work management		1,800		1,450
Training transformation for the littoral combat ship		1,000		1,000
Shipboard personal locator beacon		2,000		1,300
Protective apparel technology systems			2,000	2,000
Advanced composite materials research			5,000	3,250
Defense systems modernization and sustainment initiative			4,000	1,500
HEET			4,000	3,200
Training transformation for the Pacific (<u>Note:</u> Funding of \$3,000,000 was provided in the Senate bill under "Research and Development, Defense Wide", line 112)				2,400
20 RF SYSTEMS ADVANCED TECHNOLOGY	45,317	77,417	73,817	98,437
HESS		1,500		1,500
Command and control on the move network digital over the horizon relay (CONDOR)		8,000		6,400
AN/SPS-67 C-band active array radar (CBAAR)		17,000		16,470
Common radar signal processor		3,600		2,900
APY-6 real time precision targeting radar		2,000	3,000	2,000
Joint electronic attack unmanned vehicles			1,500	1,000
Polyimide macro electromechanical systems			2,000	1,100
Common affordable radar processor			7,000	6,800
Open architecture computer test bed			2,000	1,600
Advanced wideband open architecture radar system			13,000	12,000
Advanced low cost radar module cooling system (<u>Note:</u> Transfer from RDT&E, Army)				1,350
MARINE CORPS ADVANCED TECHNOLOGY				
21 DEMONSTRATION (ATD)	59,170	78,670	86,670	83,320
Craft integrated electronic suite (CIES)		3,000		1,650
Dual stage ultra reliable water filtration technology development		1,000		1,000
Indirect fire multi-grenade launcher		1,500		1,000
Laser integrated target engagement system (LITES)		7,000		4,850
C3RP		4,000		3,200
ULTRA program		3,000	6,000	3,000
Expeditionary unit water purification			5,000	3,250
USMC advanced tech demo			8,000	5,200
Warfighter protection: integrated warfighter bio-defense (<u>Note:</u> Conference funding provided in line 24)			7,500	0
Maritime air-ground task force situation awareness			1,000	1,000
JOINT NON-LETHAL WEAPONS TECHNOLOGY				
22 DEVELOPMENT	1,405	1,405	405	1,405
Program underexecution			-1,000	0
WARFIGHTER PROTECTION ADVANCED				
24 TECHNOLOGY	17,982	58,482	17,982	58,332
Joint experimentation visualization		2,000		1,300
Mobile oxygen, ventilation, and external suction (MOVES)		2,500		1,100

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	House	Senate	Conference
Brain injury disease management initiative		2,000		2,000
C. W. Bill Young Bone Marrow Donor Recruitment and Research Program		31,500		31,500
Navy special warfare performance and injury prevention program		2,500		1,100
Warfighter protection: integrated warfighter bio-defense (Note: Transfer from line 21)				3,350
25 UNDERSEA WARFARE ADVANCED TECHNOLOGY	35,055	35,055	38,055	35,055
Program growth			-5,000	-5,000
Demonstration wave power buoy for advanced deployable system			4,000	1,800
Undersea vehicle test and training environment			4,000	3,200
MINE AND EXPEDITIONARY WARFARE ADVANCED				
28 TECHNOLOGY	21,326	24,926	24,126	25,426
JEOD diver situational awareness system		2,000		1,800
Upward looking sensor		1,600		1,050
Visual integrated bridge system			2,800	1,250
30 AIR/OCEAN TACTICAL APPLICATIONS	31,778	28,278	31,778	32,778
Base program reduction		-5,000		0
Gateway concept		1,500		1,000
31 AVIATION SURVIVABILITY	6,177	31,377	21,677	29,627
Unmanned force augmentation system		2,000		1,000
Smart visor		1,500		1,000
Intelligence gathering uninhabited system (IGUS)		2,000	2,000	2,000
Equipment life extension project		2,700		1,200
Intelligent autonomy technology transition program		4,000		1,800
Rotorcraft external airbag protection system (REAPS)		3,000	4,000	3,000
Integrated command decision work environment		5,000		4,000
Joint helmet mounted cueing system (JHMCS) QuadEye		5,000		3,250
Unmanned aircraft systems optimization technologies program			3,500	2,800
Silver Fox unmanned aerial vehicle			4,000	1,800
Air Sentinel			2,000	1,600
33 ASW SYSTEMS DEVELOPMENT	16,782	22,782	23,482	25,432
Electro-optical passive ASW system		3,000	6,700	6,700
Tactical e-field buoy development program		3,000		1,950
SURFACE AND SHALLOW WATER MINE				
36 COUNTERMEASURES	130,265	134,765	114,365	116,565
AN/SQQ-32 mine hunting sonar upgrade		4,500		3,600
Program growth			-3,000	-3,000
Delay in MRUUV program			-16,900	-16,900
Surface Navy integrated undersea tactical technology - mine warfare			4,000	2,600
37 SURFACE SHIP TORPEDO DEFENSE	40,627	55,027	48,627	57,727
TDCL commonality - shipboard DCL technology demonstration and transfer		9,000		7,200
AN/SLQ-25A torpedo countermeasure system		3,600		2,900
Affordable fast ASW response weapon system		1,800		1,450
Torpedo detection, classification, localization capability			1,000	1,000
Integrated multi-platform sonar system (IMPSS)			7,000	4,550

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	House	Senate	Conference
38 CARRIER SYSTEMS DEVELOPMENT	153,894	158,394	153,894	156,844
QuilPS integration with CV tactical support center (CV-TSC)		2,000		1,300
Sentinel Net for Ship Anti-Terrorism/Force Protection		2,500		1,650
39 SHIPBOARD SYSTEM COMPONENT DEVELOPMENT	14,135	34,235	39,935	50,185
Intelligent systems consortium		1,000		1,000
Advanced repair technology for the expeditionary Navy		2,000		1,000
Integrated power system converter		2,000		1,000
Smart machinery spaces system		4,200		2,750
High efficiency quiet electric drive		1,500	1,500	1,500
Air gun shock testing of naval vessels		1,000		1,000
Advanced combatant materials research		5,400		4,300
Fuel contaminate detection system		2,000		2,500
Smart valve		1,000	2,500	1,150
MTTC/IPI and National Surface Treatment Center			6,000	3,900
Advanced steam turbine			2,000	1,000
Water mist fire protection			1,000	1,000
Advanced fluid controls for shipboard applications			2,000	1,000
Carbon foam, Navy			3,500	2,800
Propulsor manufacturing technology development			5,300	4,250
Critical on demand information support for shipboard maintainers			1,000	1,000
Carrier strike group forward sensor network (Note: House bill provided funds in line 101)				3,900
Braided ropes for US Navy ship salvage			1,000	1,000
44 SURFACE ASW	38,696	42,696	35,696	34,146
Automated readiness measurement system (ARMS) - SBIR phase III		4,000		1,800
Program growth			-10,000	-10,000
Advanced receive while transmit sonar			2,000	1,000
Improved surface vessel torpedo launcher			3,000	1,350
All electric torpedo launcher			2,000	1,300
46 ADVANCED SUBMARINE SYSTEM DEVELOPMENT	140,432	155,432	158,932	157,582
Experimental research transformational submersible		4,500		4,500
Cryogenic power system for unmanned underwater vehicles		2,000		1,300
Large displacement UUV at sea launch and recovery		4,000	10,000	4,500
Inner and outer decoupler materials for fiberoptic conformal arrays		4,500		2,000
Low cost thin line fiber optic towed array			1,000	1,000
Fiber optic conformal acoustic velocity system (FO-CAVES)			4,500	2,500
Submarine automated simulation			3,000	1,350
48 SHIP CONCEPT ADVANCED DESIGN	21,549	14,721	26,649	21,771
Reduction to growth		-9,828		-9,828
Program underexecution			-5,500	0
Machinery analytics for controls and monitoring systems (ACMS)		3,000		1,350
Scout radar stealth upgrades for special warfare craft			1,000	1,000
Autonomous maritime navigation program			7,000	5,600
Advanced capabilities group			2,600	2,100

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	House	Senate	Conference
49 SHIP PRELIMINARY DESIGN & FEASIBILITY STUDIES	21,314	24,314	28,314	25,864
Support for naval ship hydrodynamic test facilities		3,000	7,000	4,550
51 ADVANCED SURFACE MACHINERY SYSTEMS	0	5,800	0	2,800
Lightweight metals technology for aluminum intensive marine structures		1,800		1,000
LCS advanced lightweight metals technology for aluminum marine structures		4,000		1,800
53 LITTORAL COMBAT SHIP (LCS)	319,671	332,271	321,471	330,671
LCS ASW mission area commonality		3,500		2,300
Unmanned surface vehicles concepts and technology		2,700		2,200
LCS mission module enhanced tactical response		5,400		4,300
Remote operation of active sonar technology (ROAST)		1,000		1,000
Advanced lightweight metals tech for aluminum intensive marine structures			1,800	1,200
54 COMBAT SYSTEM INTEGRATION	62,095	74,745	63,095	72,195
Open architecture/maintenance free operating period (OA/MFOP)		2,000		1,300
Lasers for Navy applications		4,000		3,200
Deployable ultra-short pulse laser development		3,150		2,500
Optical line replaceable units (O-LRUs) for high energy laser systems		1,000		1,000
Prototype instrumentation system for MUTC		2,500		1,100
Visualization and service-oriented architecture for strike force interoperability			1,000	1,000
55 CONVENTIONAL MUNITIONS	22,385	23,885	22,385	23,385
Non-discarding sabot ammunition		1,500		1,000
56 MARINE CORPS ASSAULT VEHICLES	188,306	194,906	191,306	349,206
Intelligent machining of advanced defense materials		3,000	3,000	3,000
AN/UXC-10 digital facsimile upgrade for the EFV		3,600		2,900
Adjustment to EFV acquisition strategy				155,000
MARINE CORPS GROUND COMBAT/SUPPORT SYSTEM				
58 SYSTEM	503	2,003	19,503	12,953
Marine sensor integrated, modular protection-combat helmet (MSIMP-CH)		1,500		1,000
Moldable fabric armor			2,000	1,000
Anti-sniper infrared targeting system			3,000	1,350
Urban operations environment laboratory			11,000	7,150
Marine expeditionary rifle squad			3,000	1,950
60 COOPERATIVE ENGAGEMENT	53,406	67,406	48,106	64,606
Cooperative engagement capability integration		14,000		11,200
Program underexecution			-5,300	0
61 OCEAN ENGINEERING TECHNOLOGY DEVELOPMENT	16,324	18,324	16,324	17,324
Advanced composite riverine craft		2,000		1,000
62 ENVIRONMENTAL PROTECTION	20,271	26,771	24,271	26,071
U. S. Navy marine mammal program increase		2,500		2,000
Puget Sound anoxia research		3,000		2,000
Auditory electro-physiological testing program		1,000		0

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	House	Senate	Conference
Integrated marine mammal monitoring and protection system			4,000	1,800
64 FACILITIES IMPROVEMENT	4,194	6,194	6,194	8,294
Development of regenerative fuel cell back-up power systems for naval land-based installations		2,000		1,100
Advanced technology to reduce vulnerability of military installations (<u>Note:</u> Senate provided funding in line 17)				2,000
Permanent magnet linear generator power buoy system			2,000	1,000
66 NAVY LOGISTIC PRODUCTIVITY	6,306	26,206	11,306	24,706
Navy operational logistics innovation		1,000		1,000
Defense integrated technical data center		6,000		3,900
Reliability testing of lead free circuits/components		2,000		1,300
High density power electronics		1,800		1,450
Fiber optic interconnect technology		2,250		1,800
Unique identification of tangible items		5,500		3,600
Fiber optic components for military applications		1,350		1,100
Wireless maritime inspection system (<u>Note:</u> Senate bill addressed in a general provision)				1,000
Multi-color infrared sensors			5,000	3,250
68 LINK PLUMERIA	80,662	70,662	80,662	80,662
Program adjustment		-10,000		0
74 LAND ATTACK TECHNOLOGY	18,571	48,171	36,571	56,471
Extended range munition program reduction		-8,000		0
Affordable weapon system		24,000		15,600
Millenium gun system		2,000	3,000	2,000
EX-171 extended range guided munitions (ERGM) EMD		2,700		2,200
Projectile common guidance		2,700		2,200
Automated explosive safety assessment tools		1,000		1,000
Advanced medium gun demonstrator		1,400		1,100
76mm super rapid medium caliber gun		1,800		1,800
Ballistic trajectory extended range munition		2,000	15,000	12,000
75 NONLETHAL WEAPONS	44,815	48,515	46,815	49,315
3-dimensional through wall imaging of terrorist activities		1,000		1,000
Non-lethal defense technology		2,700		2,200
Boat trap system for port security/water craft interdiction			2,000	1,300
JOINT PRECISION APPROACH AND LANDING				
77 SYSTEMS	41,242	41,242	33,242	33,242
Program reduction			-8,000	-8,000
SINGLE INTEGRATED AIR PICTURE (SIAP) SYSTEM				
78 ENGINEERING	50,282	42,500	37,282	41,650
Reduction to program growth		-10,282	-13,000	-10,282
SIAP open architecture automated test and retest		2,500		1,650
79 COUNTER-DRUG RDT&E PROJECTS	0	4,000	0	2,200
Project Athena		4,000		2,200
TACTICAL AIR DIRECTIONAL INFRARED				
80 COUNTERMEASURES (TADIRCM)	20,527	20,527	17,527	17,527
Program underexecution			-3,000	-3,000

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	House	Senate	Conference
HARD AND DEEPLY BURIED TARGET DEFEAT				
81 SYSTEM (HDBTDS)	77,000	30,000	0	20,000
Program reduction		-47,000	-72,000	-52,000
Transfer to RDT&E, DW			-5,000	-5,000
DIRECTED ENERGY RESEARCH				
	0	0	30,000	19,500
Directed energy research			30,000	19,500
86 STANDARDS DEVELOPMENT				
	112,257	92,257	70,987	73,237
CNS/ATM upgrades		-25,000		0
Navy and Marine Corps sensor metrology R & D		5,000		2,250
Defer new start -- CNS/ATM upgrades			-40,770	-40,770
Sustain calibration standards at FY 2006 funded level			-500	-500
89 P-3 MODERNIZATION PROGRAM				
	16,139	16,139	6,139	17,139
Defer new start			-11,000	0
Personal digital assistant maintenance application			1,000	1,000
91 TACTICAL COMMAND SYSTEM				
	74,225	60,625	57,625	56,625
Joint Mission Planning System - reduction to growth		-13,600	-13,600	-13,600
Defer new start			-5,000	-5,000
Navy logistics common operation picture (LOGCOP)			2,000	1,000
94 ACOUSTIC SEARCH SENSORS				
	36,764	47,064	38,764	42,164
Acoustic environmental sensor system		2,300		1,000
AN/USQ-78B acoustic processor improvements		8,000	2,000	4,400
96 AIR CREW SYSTEMS DEVELOPMENT				
	12,434	14,234	12,434	13,884
SIIS ejection seat improvement		1,800		1,450
97 EA-18				
	372,363	375,363	372,363	373,713
Next generation electronic warfare simulator		3,000		1,350
98 ELECTRONIC WARFARE DEVELOPMENT				
	39,842	723,639	39,842	40,842
IR signature reduction		1,200		1,000
99 VHXX EXECUTIVE HELO DEVELOPMENT				
	682,597	682,597	557,597	632,597
Program underexecution			-125,000	-50,000
100 JOINT TACTICAL RADIO SYSTEM - NAVY				
	1,153	0	0	798,412
Transfer from RDT&E, Army line 81				797,259
101 SC-21 TOTAL SHIP SYSTEM ENGINEERING				
	817,528	831,528	818,528	826,228
Carrier strike group forward sensor network (Note: Conference funding provided in line 39)		6,000		0
MEMS center for defense applications		1,000		1,000
Surface vessel electric actuator technology development		2,500		1,400
SmartLink planar scanner antenna modernization		2,000		1,000
Floating area network		2,500	2,000	2,000
Defer funding for CG(X) integration			-18,000	-9,000
Bio/nano-MEMS Center for Defense Applications			2,000	1,300
Permanent magnet motor system			15,000	11,000

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	House	Senate	Conference
SURFACE COMBATANT COMBAT SYSTEM				
102 ENGINEERING	190,059	191,059	179,659	179,009
Smart integrated data environment		1,000		1,000
Program underexecution			-13,400	-13,400
Gas turbine electric start system technology			3,000	1,350
106 STANDARD MISSILE IMPROVEMENTS	186,144	187,244	176,144	177,144
Alternative thermal battery production capability		1,100		1,000
Program growth			-10,000	-10,000
107 AIRBORNE MCM	56,145	62,145	56,145	58,845
Airborne mine countermeasures open architecture technology insertion		6,000		2,700
NAVAL INTEGRATED FIRE CONTROL - COUNTER AIR				
108 SYSTEMS ENGINEERING	14,792	14,792	0	14,792
Defer new start			-14,792	0
109 SSN-688 AND TRIDENT MODERNIZATION	94,839	109,139	106,839	109,639
Twin thin line towed array processing improvements in ARCI		2,500		1,650
Connectionless technology for towed arrays		3,000		1,650
SONAR advanced optical co-processor		1,800		1,000
Submarine-enabling airborne data exchange and enhancement (SEADeep)		3,000		2,400
Common submarine radio room		4,000	4,000	4,000
Affordable towed array construction			2,000	1,300
Improved submarine towed array and array handler			4,000	1,800
Active intercept and ranging system			2,000	1,000
112 SHIPBOARD AVIATION SYSTEMS	33,392	35,392	32,892	32,892
Aircraft carrier launch and recovery (ALRE)/support equipment continued modernization		2,000	2,000	2,000
Program underexecution			-3,500	-3,500
Synthetic material arresting cable			1,000	1,000
113 COMBAT INFORMATION CENTER CONVERSION	6,708	7,708	8,208	7,708
C2 web-based architecture		1,000	1,500	1,000
114 NEW DESIGN SSN	169,580	189,980	216,780	202,130
Submarine low power computing advanced technology insertion and cost reduction initiative for command and control		2,000		1,000
Large aperture bow array on Virginia class		9,000	16,000	9,000
Flexible payload module and Virginia payload interface module development		4,000	15,000	6,750
Large scale demonstration item for Virginia class bow dome			6,200	5,000
Multilevel secure wireless network			2,000	1,300
Advanced submarine research			8,000	5,200
Submarine modernization and technology insertion		5,400		4,300
116 SUBMARINE TACTICAL WARFARE SYSTEM	51,656	54,156	53,656	54,806
Submarine maintenance automation and communication system		2,500		2,150
Automated submarine command and control center			2,000	1,000

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	House	Senate	Conference
117 SHIP CONTRACT DESIGN/ LIVE FIRE T&E	72,055	73,855	72,055	73,505
Integrated lifecycle management environment for the surface fleet		1,800		1,450
121 LIGHTWEIGHT TORPEDO DEVELOPMENT	40,540	40,540	35,040	40,540
Defer new start			-5,500	0
122 JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT	10,026	10,026	10,026	10,426
Independent testing of the joint improvised explosive device neutralizer III (<u>Note:</u> Senate addressed this in a general provision)				400
PERSONNEL, TRAINING, SIMULATION, AND HUMAN FACTORS				
123 SEAPRINT	8,754	9,754	8,754	9,754
		1,000		1,000
BATTLE GROUP PASSIVE HORIZON EXTENSION SYSTEM				
124 TREX/MILDEC tactical target generator system	0	1,000	2,000	2,000
COBLU-direction finding enhancement		1,000		1,000
			2,000	1,000
126 SHIP SELF DEFENSE (DETECT & CONTROL)	10,050	25,650	15,250	26,750
Shipboard swimmer defense system		3,000		2,400
Integrated display and enhanced architecture/surface combatant systems engineering (common display architecture - CDA)		12,600		10,100
Reusable unambiguous swimmer warning vehicle			5,200	4,200
127 SHIP SELF DEFENSE (ENGAGE: HARD KILL)	46,390	50,890	51,390	50,890
Future phalanx next generation improvements		4,500	5,000	4,500
128 SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)	11,513	12,913	27,513	21,213
Advanced radar absorbing tiles for surface ships		1,400	2,000	1,400
Shipboard electronic warfare improvement program			5,000	3,250
MK53 (Nulka) decoy system			4,000	1,800
SLQ-32 ESM system interference cancellation			5,000	3,250
130 MEDICAL DEVELOPMENT	7,663	35,263	9,663	29,663
Advanced molecular medicine initiative - City of Hope National Medical Center		3,000		1,350
Community Hospital Telehealth Consortium		1,500		1,000
Diabetes research, somatic cell processing program		3,000		1,400
HUUCTC proton beam therapy research		2,000		1,000
Infusible hemostatic therapeutic trials		2,000	2,000	2,000
Military dental research		4,000		4,000
On-demand custom body implants/prosthesis for injured personnel		3,000		1,350
Discovery, early detection, evaluation, treatment, and prevention in cancer		5,000		4,000
Defense graduate psychology education program (<u>Note:</u> Only to continue program between WRAMC and USUHS)		3,600		2,900
Thermotube battlefield body temperature regulator		500		500
Validation of prognostic and health management systems (<u>Note:</u> House recommended \$2,500,000 out of available funds)				2,500

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	House	Senate	Conference
132 DISTRIBUTED SURVEILLANCE SYSTEM	58,273	60,773	58,273	60,273
SureTrak		1,500		1,000
Off-board sensor		1,000		1,000
133 JOINT STRIKE FIGHTER (JSF)	2,030,979	2,033,679	2,172,285	2,172,135
Innovative technology for an open architecture JSF/F/A-18 E/F core processor		2,700		1,200
Maintain development of 2nd source for engine			170,000	170,000
Excess award fee			-31,694	-31,694
JSF heat exchanger development; weight reduction and performance			3,000	1,650
135 INFORMATION TECHNOLOGY DEVELOPMENT	13,326	14,326	13,326	14,326
Oblique imaging and software tool for Marine installations		1,000		1,000
136 INFORMATION TECHNOLOGY DEVELOPMENT	88,323	92,323	127,423	115,423
SPAWAR Systems Center ITC, including joint Naval/local university information systems research		4,000	15,000	8,250
Internet relay chat improvement and upgrade project			3,000	1,950
Enterprise resource planning (Navy converged)			8,100	6,500
Digitization of NCIS files			8,000	6,400
Integration of logistics info for knowledge projection and readiness assessments			2,000	1,600
Condition-based maintenance enabling technologies program			3,000	2,400
138 CH-53X RDT&E	362,672	362,672	357,672	357,672
Program underexecution			-5,000	-5,000
140 TACTICAL CRYPTOLOGIC SYSTEMS	23,526	27,526	23,526	25,826
ANS/SSQ-137(V) ships signals exploitation equipment increment E		2,000		1,300
Scan Eagle UAV advanced datalink and sensor development		2,000		1,000
142 TARGET SYSTEMS DEVELOPMENT	45,666	45,666	50,666	47,916
Supersonic sea skimming target - air diver/Coyote			5,000	2,250
143 MAJOR T&E INVESTMENT	39,750	47,250	48,750	48,600
Low cost Coyote ramjet demonstration		2,000		1,000
Upgrading range instrumentation to support network centric operations		2,500	4,000	2,600
Network expansion of RDT&E ranges		3,000		2,000
Network expansion & integration of Navy/NASA RDT&E ranges and facilities			5,000	3,250
148 TECHNICAL INFORMATION SERVICES	670	9,170	21,670	25,070
Illinois Technology Transition Center		2,500		1,650
Commercialization of advanced technology (CAT)		6,000		4,800
Integrated manufacturing enterprise			3,000	1,650
Joint Information Technology Center			6,000	4,800
HTDV			4,000	4,000
Pacific-based Joint Info Tech Center			8,000	7,500
MANAGEMENT, TECHNICAL & INTERNATIONAL				
149 SUPPORT	47,213	47,213	45,413	45,413
Program growth			-1,800	-1,800

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	House	Senate	Conference
151 RDT&E SCIENCE AND TECHNOLOGY MANAGEMENT	67,328	67,328	66,328	67,328
Program growth			-1,000	0
157 SEW SURVEILLANCE/RECONNAISSANCE SUPPORT	20,073	20,073	18,173	18,173
Program underexecution			-1,900	-1,900
158 MARINE CORPS PROGRAM WIDE SUPPORT	25,343	31,343	31,343	31,343
Corrosion service teams		2,000		1,000
Individual chemical alert system (ICAS)		1,000	1,000	1,000
Tactical air sentinel		3,000	3,000	3,000
Field rapid assay biological system			2,000	1,000
160 SERVICE SUPPORT TO JFCOM, JNTC	5,202	12,802	5,202	12,802
Training transformation for training and test and evaluation ranges		7,600		7,600
163 HARPOON MODIFICATIONS	36,284	28,000	0	28,000
Program reduction		-8,284		-8,284
Defer new start			-36,284	0
UNMANNED COMBAT AIR VEHICLE (UCAV)				
164 ADVANCED COMPONENT DEVELOPMENT	239,163	189,163	0	100,000
Program execution reduction		-50,000	-239,163	-139,163
165 STRATEGIC SUB & WEAPONS SYSTEM SUPPORT	124,522	129,522	124,522	127,172
Advanced conventional strike capability (SLIRBM)		2,000		1,300
Free electron laser facility		3,000		1,350
169 RAPID TECHNOLOGY TRANSITION (RTT)	39,285	44,285	35,485	39,485
120mm tank high explosive plastic (HEP) cartridge		5,000		4,000
Program underexecution			-3,800	-3,800
170 F/A-18 SQUADRONS	31,098	38,698	41,598	39,448
F/A-18 C/D digital electronic warfare system		7,600	5,000	5,000
F/A-18 A-D series tech manual conversion			3,000	1,350
Military rapid response command information system			2,500	2,000
171 E-2 SQUADRONS	1,540	6,240	7,540	9,840
E-2C open architecture computing framework		2,000		1,300
Airborne advanced networks		2,700		2,200
Makaha Ridge FORCEnet Lab			4,000	3,200
E-2C/Advanced Hawkeye transmitter technologies			2,000	1,600
TOMAHAWK AND TOMAHAWK MISSION PLANNING				
173 CENTER (TMPC)	18,635	25,635	18,635	24,235
Precision terrain aided navigation		7,000		5,600
174 INTEGRATED SURVEILLANCE SYSTEM	30,740	42,540	28,240	40,590
Program increase		8,200		8,200
Program underexecution			-2,500	-1,200
High channel count interrogator for sensor arrays		1,800		1,450
Tunable laser and laser array		1,800		1,400

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	House	Senate	Conference
176 CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT	17,857	19,857	17,857	19,157
Total ship training capability support system		2,000		1,300
179 HARM IMPROVEMENT	99,208	105,208	94,208	100,208
Joint common missile		5,000		5,000
Program underexecution (Note: None of the reduction shall be applied against the Joint Common Missile program)			-5,000	-5,000
Aircraft composite rocket launcher improvement program		1,000		1,000
181 SURFACE ASW COMBAT SYSTEM INTEGRATION	9,417	21,667	9,417	18,617
Advanced materials for acoustic window applications		2,000		1,000
Surface ship sonar integrated data fusion initiative		2,250		1,800
Surface ship ASW R&D improvements (SQQ-89)		8,000		6,400
183 AVIATION IMPROVEMENTS	71,612	80,412	89,212	88,312
Rotor blade protection		1,000		1,000
Real time measurement weight and balance system for C-130s		1,000	4,500	2,500
AGE exploration model extension to multi-signal diagnostics		3,000		2,000
Low maintenance material applications		1,800		1,450
Navair obsolescence management and tools		1,000		1,000
Aircraft sustainment technology rapid deployment initiative		1,000		1,000
Nanocrystalline diamond coatings for complex curved impeller blades			2,300	1,050
Arc fault circuit breaker with arc location system			2,500	1,400
Wireless sensors for Navy aircraft			3,000	1,950
Sacrificial film laminates for Navy helicopter windscreens			2,300	1,050
F/A-18 avionics ground support system			1,000	1,000
Advanced avionics miniaturization program			2,000	1,300
186 MARINE CORPS COMMUNICATIONS SYSTEMS	218,460	241,160	219,460	234,710
Battlefield management system (BMS)/advanced situational awareness system (AS2) (BMS/AS2)		5,000		3,250
Foliage penetrating synthetic aperture radar		1,000		1,000
Ground/air task-oriented radar (G/ATOR)		5,000		2,750
Marine Corps battlefield fusion		3,000		1,350
Remote tactical collection and transmission system		3,000		2,400
Marine Corps composite tracking network sensor/comms integration		2,700		2,200
Improved Marine communications		2,000		1,300
Trident - soldier training		1,000		1,000
Wireless tactical remote video/sensor surveillance system			1,000	1,000
MARINE CORPS GROUND COMBAT/SUPPORTING				
187 ARMS SYSTEMS	47,592	68,892	57,592	65,742
Amplifying fluorescent polymer based IED detection		2,800	2,000	2,000
Particulate matter filter system		1,000		500
USMC light armored vehicles integrated digital and collaborative environment (IDCE) service network		2,700		2,200
Precision extended range munition (PERM) - EFSS - USMC		8,000	8,000	8,000

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	House	Senate	Conference
Lightweight prime mover vehicle		5,000		4,000
Development of lightweight, flexible, multi-threat body and appendage armor		1,800		1,450
195 SATELLITE COMMUNICATIONS (SPACE)	748,662	751,662	750,662	751,612
Joint integrated systems for advanced digital networking (JIST-NET)		3,000		1,950
Internet protocol version 6 transition planning laboratory			2,000	1,000
196 INFORMATION SYSTEMS SECURITY PROGRAM	23,037	27,037	26,837	29,037
Tactical key loader		4,000		3,200
Universal description, discovery and integration SECUREkit			2,800	1,800
			1,000	1,000
NAVY METEOROLOGICAL AND OCEAN SENSORS-				
199 SPACE (METOC)	7,307	9,307	7,307	8,307
Radiation hardened vector processor		2,000		1,000
202 TACTICAL UNMANNED AERIAL VEHICLES	115,950	118,950	115,950	119,550
Unmanned air systems tactical control system open architecture migration		1,000		1,000
Advanced airship flying laboratory <i>(Note: Senate addressed this in a general provision)</i>				1,000
UAV payload for nuclear, biological, and chemical (NBC) detection		2,000		1,600
204 AIRBORNE RECONNAISSANCE SYSTEMS	35,038	36,838	39,038	39,138
C4ISR aircraft		1,800		1,450
Deployable unmanned aerial vehicle system for targeting, exploitation			3,000	1,650
Passive collision avoidance and reconnaissance			1,000	1,000
205 MANNED RECONNAISSANCE SYSTEMS	22,815	35,815	32,815	29,065
Classified program increase		12,000		0
Miniature radar responsive tag (MRRT)		1,000		1,000
High altitude hyperspectral imaging for Navy's SHARP program			3,000	1,000
Sonochute-launched VTOL UAVs			2,000	1,000
Collective aperture multi-band sensor system			5,000	3,250
206 DISTRIBUTED COMMON GROUND SYSTEMS	16,587	18,587	16,587	17,887
Maritime intelligence integration for shared situational awareness		2,000		1,300
207 AERIAL COMMON SENSOR (ACS)	17,182	17,182	0	17,182
Defer funding pending plan			-17,182	0
209 DEPOT MAINTENANCE (NON-IF)	2,960	6,960	2,960	6,160
Portable laser depainting system		4,000		3,200
211 INDUSTRIAL PREPAREDNESS	55,048	63,848	57,048	61,048
Formable aligned carbon thermoSets (FACTS)/stretch broken carbon fiber		4,000		2,200
Nano-imprint at manufacturing scale (NIMS)		1,800		1,450

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
 [In thousands of dollars]

R-1	Budget Request	House	Senate	Conference
U. S. Navy nuclear power plant and ship propulsion shaft manufacturing improvement		3,000		1,350
Polyetherimide resin foam domestic manufacturing capability			2,000	1,000
212 MARITIME TECHNOLOGY (MARITECH)	0	22,000	16,100	20,500
National Shipbuilding Research Program		20,000	10,000	15,000
Shipyards enterprise warehouse management system with integrated radio frequency system (EWMS/RFID) and CAC card technology pilot		2,000		1,000
Naval Air Warfare Center asset visibility business process improvement			3,000	2,000
Navy automatic ID technology engineering support center			3,100	2,500

MICROMANUFACTURING PROCESSES

The conferees are aware of the growing need for microdevices and improved micromanufacturing processes to meet Defense requirements for smart micromachines. Streamlined micromanufacturing processes will enhance the Department's development and use of embedded biochemical sensors and miniature safe-and-arm devices. The Department is encouraged to work with univer-

sities with demonstrated expertise in novel micromanufacturing processes and equipment.

CORROSION PROTECTION

The Navy spends significant amounts of its fleet maintenance budget on corrosion protection. The conferees are aware of important research performed by the Center for Photochemical Sciences that develops corro-

sion resistant marine paint using photo-cure technology. These new photo-cure technologies can increase corrosion protection while reducing environmentally harmful emissions. This technology may provide unique advantages over current materials. The conferees encourage the Office of Naval Research to consider continued funding for this important research project.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION,
AIR FORCE

The conference agreement on items addressed by either the House or
the Senate is as follows:

		(In thousands of dollars)			
		Budget	House	Senate	Conference

RESEARCH, DEVELOPMENT, TEST & EVAL, AF					
BASIC RESEARCH					
1	DEFENSE RESEARCH SCIENCES.....	250,232	259,832	259,732	262,232
2	UNIVERSITY RESEARCH INITIATIVES.....	107,571	112,571	114,471	115,471
3	HIGH ENERGY LASER RESEARCH INITIATIVES.....	12,403	12,403	12,403	12,403
TOTAL, BASIC RESEARCH.....		370,206	384,806	386,606	390,106

APPLIED RESEARCH					
4	MEDICAL DEVELOPEMENT.....	---	24,300	---	23,900
5	MATERIALS.....	111,073	144,273	146,473	149,973
6	AEROSPACE VEHICLE TECHNOLOGIES.....	112,751	124,351	118,751	125,851
7	HUMAN EFFECTIVENESS APPLIED RESEARCH.....	92,991	104,691	103,591	107,491
8	AEROSPACE PROPULSION.....	170,885	204,835	200,885	213,485
9	AEROSPACE SENSORS.....	117,553	132,553	127,053	133,753
10	MULTI-DISCIPLINARY SPACE TECHNOLOGY.....	---	3,500	2,500	4,400
11	SPACE TECHNOLOGY.....	85,594	90,344	106,579	100,879
12	CONVENTIONAL MUNITIONS.....	62,105	62,105	64,105	63,405
13	DIRECTED ENERGY TECHNOLOGY.....	48,422	57,422	50,922	52,722
14	COMMAND CONTROL AND COMMUNICATIONS.....	119,267	122,267	121,767	123,367
16	HIGH ENERGY LASER RESEARCH.....	50,166	51,166	54,166	53,366
17	JOINT HELMET MOUNTED CUEING SYSTEM (JHMCS).....	2,287	2,287	2,287	2,287
TOTAL, APPLIED RESEARCH.....		973,094	1,124,094	1,099,079	1,154,879

		(In thousands of dollars)			
		Budget	House	Senate	Conference

ADVANCED TECHNOLOGY DEVELOPMENT					
18	ADVANCED MATERIALS FOR WEAPON SYSTEMS.....	48,901	66,501	79,201	81,901
19	ADVANCED AEROSPACE SENSORS.....	55,150	60,450	55,150	58,450
20	AEROSPACE TECHNOLOGY DEV/DEMO.....	27,424	69,548	38,424	58,524
21	AEROSPACE PROPULSION AND POWER TECHNOLOGY.....	115,546	141,546	140,346	148,446
22	CREW SYSTEMS AND PERSONNEL PROTECTION TECHNOLOGY.....	32,156	49,006	32,156	42,756
23	ELECTRONIC COMBAT TECHNOLOGY.....	24,436	30,436	27,936	29,636
24	BALLISTIC MISSILE TECHNOLOGY.....	---	9,000	4,500	9,400
26	ADVANCED SPACECRAFT TECHNOLOGY.....	68,026	92,926	102,026	101,226
27	MAUI SPACE SURVEILLANCE SYSTEM (MSSS).....	6,074	6,074	52,074	50,574
29	CONVENTIONAL WEAPONS TECHNOLOGY.....	19,658	45,958	19,658	40,058
30	ADVANCED WEAPONS TECHNOLOGY.....	51,336	62,336	73,336	77,036
32	C3I ADVANCED DEVELOPMENT.....	35,785	48,535	38,785	47,385
33	SPECIAL PROGRAMS.....	316,605	316,605	316,605	316,605
35	HIGH ENERGY LASER ADVANCED TECHNOLOGY PROGRAM.....	3,713	3,713	3,713	3,713
36	TACTICAL AIRBORNE CONTROL SYSTEMS.....	26	26	26	26
TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT.....		804,836	1,002,660	983,936	1,065,736

DEMONSTRATION & VALIDATION					
40	INTELLIGENCE ADVANCED DEVELOPMENT.....	4,776	6,776	4,776	5,776
41	PHYSICAL SECURITY EQUIPMENT.....	298	298	298	298
42	NAVSTAR GLOBAL POSITIONING SYSTEM III.....	315,314	315,314	315,314	315,314
43	ADVANCED EHF MILSATCOM (SPACE).....	633,258	633,258	633,258	633,258
44	POLAR MILSATCOM (SPACE).....	35,685	35,685	35,685	35,685
45	SPACE CONTROL TECHNOLOGY.....	27,076	27,076	31,076	30,276
46	COMBAT IDENTIFICATION TECHNOLOGY.....	26,517	26,517	26,517	26,517
47	NATO RESEARCH AND DEVELOPMENT.....	4,095	4,095	4,095	4,095
48	INTERNATIONAL SPACE COOPERATIVE R&D.....	593	593	593	593
49	TRANSFORMATIONAL SATCOM (TSAT).....	867,102	767,102	637,102	737,102
50	INTEGRATED BROADCAST SERVICE.....	20,592	20,592	20,592	20,592
51	INTERCONTINENTAL BALLISTIC MISSILE.....	45,538	65,038	45,538	61,138

	(In thousands of dollars)			
	Budget	House	Senate	Conference
52 WIDEBAND GAPFILLER SYSTEM RDT&E (SPACE).....	37,672	37,672	37,672	37,672
53 SPACE-BASED RADAR.....	266,401	200,000	166,401	186,401
54 POLLUTION PREVENTION (DEM/VAL).....	2,853	7,553	4,353	7,053
55 JOINT PRECISION APPROACH AND LANDING SYSTEMS.....	10,011	10,011	10,011	10,011
56 NEXT GENERATION BOMBER.....	25,598	25,598	25,598	25,598
60 COMMON AERO VEHICLE (CAV).....	33,386	33,386	33,386	33,386
61 OPERATIONALLY RESPONSIVE SPACE.....	35,625	23,601	35,625	35,625
63 NATIONAL POLAR-ORBITING OPERATIONAL ENVIRONMENTAL SAT.....	349,311	349,311	349,311	349,311
TOTAL, DEMONSTRATION & VALIDATION.....	2,741,701	2,589,476	2,417,201	2,555,701
ENGINEERING & MANUFACTURING DEVELOPMENT				
64 GLOBAL BROADCAST SERVICE (GBS).....	23,599	25,599	23,599	24,899
65 JOINT HELMET MOUNTED CUEING SYSTEM (JHMCS).....	2,792	2,792	2,792	2,792
66 NUCLEAR WEAPONS SUPPORT.....	14,895	14,895	14,895	14,895
67 B-1B.....	130,546	130,546	130,546	130,546
68 SPECIALIZED UNDERGRADUATE FLIGHT TRAINING.....	3,703	3,703	3,703	3,703
70 B-2 ADVANCED TECHNOLOGY BOMBER.....	224,177	240,177	231,177	242,577
71 PERSONNEL RECOVERY SYSTEMS.....	254,310	224,310	201,455	201,455
72 ELECTRONIC WARFARE DEVELOPMENT.....	87,784	92,184	93,684	93,184
74 PHYSICAL SECURITY EQUIPMENT.....	93	93	93	93
75 SMALL DIAMETER BOMB (SDB).....	104,080	106,080	104,080	105,880
76 COUNTERSPACE SYSTEMS.....	47,292	47,292	50,319	50,492
77 SPACE SITUATION AWARENESS SYSTEMS.....	121,157	121,157	123,157	122,157
78 AIRBORNE ELECTRONIC ATTACK.....	12,421	12,421	12,421	12,421
79 SPACE BASED INFRARED SYSTEM (SBIRS) HIGH EMD.....	668,902	668,902	668,902	668,902
80 ALTERNATIVE INFRARED SPACE SYSTEM (AIRSS).....	102,962	67,962	102,962	67,962
83 ARMAMENT/ORDNANCE DEVELOPMENT.....	5,039	5,039	5,039	5,039
84 SUBMUNITIONS.....	5,759	5,759	9,759	8,359
85 AGILE COMBAT SUPPORT.....	10,095	10,095	10,095	10,095
86 JOINT DIRECT ATTACK MUNITION.....	15,450	15,450	15,450	15,450
87 LIFE SUPPORT SYSTEMS.....	12,370	14,170	12,370	14,270

	(In thousands of dollars)			
	Budget	House	Senate	Conference
88 COMBAT TRAINING RANGES.....	14,363	17,363	14,363	16,763
89 INTEGRATED COMMAND & CONTROL APPLICATIONS (IC2A).....	167	17,467	9,167	15,667
90 INTELLIGENCE EQUIPMENT.....	1,426	3,426	5,426	4,926
91 COMMON LOW OBSERVABLES VERIFICATION SYSTEM (CLOVERS)...	---	4,500	4,500	4,500
92 JOINT STRIKE FIGHTER (JSF)	1,999,068	2,200,568	2,137,374	2,138,374
94 EVOLVED EXPENDABLE LAUNCH VEHICLE PROGRAM (SPACE).....	18,513	20,513	18,513	19,813
95 RDT&E FOR AGING AIRCRAFT.....	25,490	26,490	27,490	26,590
96 TEST AND EVALUATION SUPPORT.....	2,388	2,388	2,388	2,388
97 LINK-16 SUPPORT AND SUSTAINMENT.....	172,625	174,625	172,625	174,225
99 E-10 SQUADRONS.....	390,896	390,896	390,896	390,896
100 SINGLE INTEGRATED AIR PICTURE (SIAP).....	40,124	40,124	40,124	40,124
101 FULL COMBAT MISSION TRAINING.....	32,243	35,843	32,243	35,143
103 CV-22.....	26,601	26,601	26,601	26,601
TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT.....	4,571,330	4,769,430	4,698,208	4,691,181
RDT&E MANAGEMENT SUPPORT				
104 THREAT SIMULATOR DEVELOPMENT.....	38,131	38,131	38,131	38,131
105 MAJOR T&E INVESTMENT.....	58,506	63,506	58,506	61,906
106 RAND PROJECT AIR FORCE.....	25,211	28,211	25,211	26,611
109 INITIAL OPERATIONAL TEST & EVALUATION.....	34,802	34,802	34,802	34,802
110 TEST AND EVALUATION SUPPORT.....	740,134	740,134	740,134	740,134
111 ROCKET SYSTEMS LAUNCH PROGRAM (SPACE).....	14,704	29,704	14,704	26,104
112 SPACE TEST PROGRAM (STP).....	46,310	46,310	46,310	46,310
113 FACILITIES RESTORATION & MODERNIZATION - TEST & EVAL..	54,683	55,683	54,683	55,683
114 FACILITIES SUSTAINMENT - TEST AND EVALUATION SUPPORT..	25,579	29,579	25,579	28,179
115 GENERAL SKILL TRAINING.....	305	305	305	305
118 INTERNATIONAL ACTIVITIES.....	3,911	3,911	3,911	3,911
TOTAL, RDT&E MANAGEMENT SUPPORT.....	1,042,276	1,070,276	1,042,276	1,062,076

	(In thousands of dollars)			Conference
	Budget	House	Senate	
OPERATIONAL SYSTEMS DEVELOPMENT				
119 ANTI-TAMPER TECHNOLOGY EXECUTIVE AGENCY.....	8,014	8,014	8,014	8,014
121 B-52 SQUADRONS.....	71,379	77,379	71,379	76,279
122 ADVANCED CRUISE MISSILE.....	6,983	6,983	6,983	6,983
123 AIR-LAUNCHED CRUISE MISSILE (ALCM).....	3,736	3,736	3,736	3,736
124 STRAT WAR PLANNING SYSTEM - USSTRATCOM.....	27,285	27,285	30,285	28,685
125 NIGHT FIST - USSTRATCOM.....	5,162	5,162	5,162	5,162
126 ADVANCED STRATEGIC PROGRAMS.....	22,423	22,423	22,423	22,423
127 REGION/SECTOR OPERATION CONTROL CENTER MODERNIZATION..	14,853	14,853	14,853	14,853
128 WARFIGHTER RAPID ACQUISITION PROCESS (WRAP) RAPID TRAN	30,584	30,584	30,584	30,584
129 A-10 SQUADRONS.....	80,771	16,771	31,971	31,971
130 F-16 SQUADRONS.....	148,373	152,373	151,273	152,573
131 F-15E SQUADRONS.....	125,062	138,062	125,062	138,062
132 MANNED DESTRUCTIVE SUPPRESSION.....	515	515	515	515
133 F-22 SQUADRONS.....	584,290	484,290	434,290	474,290
134 F-117A SQUADRONS.....	14,093	14,093	14,093	14,093
135 TACTICAL AIM MISSILES.....	8,850	8,850	8,850	8,850
136 ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM).....	43,417	43,417	43,417	43,417
138 AF TENCAP.....	11,202	11,202	11,202	11,202
139 SPECIAL EVALUATION PROGRAM.....	530,038	530,038	530,038	530,038
140 COMPASS CALL.....	4,469	15,969	4,469	9,969
141 AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM.....	154,319	154,319	154,319	154,319
142 CSAF INNOVATION PROGRAM.....	1,612	1,612	1,612	1,612
143 JOINT AIR-TO-SURFACE STANDOFF MISSILE (JASSM).....	40,881	40,881	40,881	40,881
144 AIR AND SPACE OPERATIONS CENTER (AOC).....	87,483	77,483	77,483	77,483
145 CONTROL AND REPORTING CENTER (CRC).....	8,798	8,798	8,798	8,798
146 AIRBORNE WARNING AND CONTROL SYSTEM (AWACS).....	165,820	165,820	165,820	165,820
147 TACTICAL AIRBORNE CONTROL SYSTEMS.....	2,286	2,286	2,286	2,286
148 ADVANCED COMMUNICATIONS SYSTEMS.....	53,093	53,093	43,093	43,093
149 EVALUATION AND ANALYSIS PROGRAM.....	---	3,250	---	2,600

	(In thousands of dollars)			
	Budget	House	Senate	Conference
150 ADVANCED PROGRAM TECHNOLOGY.....	313,251	313,251	313,251	313,251
151 THEATER BATTLE MANAGEMENT (TBM) C4I.....	31,835	31,835	31,835	31,835
152 FIGHTER TACTICAL DATA LINK.....	113,388	113,388	113,388	113,388
153 BOMBER TACTICAL DATA LINK.....	168,168	101,168	101,168	101,168
154 C2ISR TACTICAL DATA LINK.....	4,338	4,338	4,338	4,338
155 COMMAND AND CONTROL (C2) CONSTELLATION.....	44,027	44,027	44,027	44,027
156 JOINT SURVEILLANCE AND TARGET ATTACK RADAR SYSTEM	152,696	152,696	160,696	156,296
157 SEEK EAGLE.....	16,426	16,426	16,426	16,426
158 ADVANCED PROGRAM EVALUATION.....	437,057	437,057	437,057	437,057
159 USAF MODELING AND SIMULATION.....	23,470	28,970	6,470	23,770
160 WARGAMING AND SIMULATION CENTERS.....	6,595	6,595	6,595	6,595
161 DISTRIBUTED TRAINING AND EXERCISES.....	6,138	6,138	6,138	6,138
162 MISSION PLANNING SYSTEMS.....	146,396	129,896	146,396	129,896
163 INFORMATION WARFARE SUPPORT.....	24,758	24,758	24,758	24,758
169 E-4B NATIONAL AIRBORNE OPERATIONS CENTER (NAOC).....	283	283	283	283
170 MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK ...	64,109	64,109	64,109	64,109
171 INFORMATION SYSTEMS SECURITY PROGRAM.....	183,523	185,523	183,523	185,523
172 GLOBAL COMBAT SUPPORT SYSTEM.....	19,895	19,895	19,895	19,895
173 GLOBAL COMMAND AND CONTROL SYSTEM.....	3,348	15,848	3,348	11,448
174 JOINT COMMAND AND CONTROL PROGRAM (JC2).....	5,818	5,818	5,818	5,818
175 MILSATCOM TERMINALS.....	271,562	271,562	271,562	271,562
177 AIRBORNE SIGINT ENTERPRISE.....	117,834	117,834	117,834	117,834
181 GLOBAL AIR TRAFFIC MANAGEMENT (GATM).....	6,620	6,620	6,620	6,620
182 SATELLITE CONTROL NETWORK (SPACE).....	19,907	19,907	19,907	21,787
183 WEATHER SERVICE.....	34,899	35,899	34,899	35,899
184 AIR TRAFFIC CONTROL, APPROACH, AND LANDING SYSTEM (ATC	---	2,000	---	1,600
185 AERIAL TARGETS.....	5,203	5,203	5,203	5,203
187 SECURITY AND INVESTIGATIVE ACTIVITIES.....	509	509	509	509
191 DEFENSE METEOROLOGICAL SATELLITE PROGRAM (SPACE).....	969	969	969	969
192 NAVSTAR GLOBAL POSITIONING SYSTEM (USER EQUIPMENT)....	131,083	133,083	136,083	134,383

	Budget	(In thousands of dollars)		Conference
		House	Senate	
193 NAVSTAR GLOBAL POSITIONING SYSTEM (SPACE AND CONTROL) .	177,792	177,792	177,792	177,792
195 SPACE AND MISSILE TEST AND EVALUATION CENTER.....	4,675	4,675	4,675	4,675
196 SPACE WARFARE CENTER.....	726	726	726	726
197 SPACELIFT RANGE SYSTEM (SPACE).....	38,044	39,044	38,044	39,044
198 INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS.....	3,813	3,813	3,813	3,813
200 AIRBORNE RECONNAISSANCE SYSTEMS.....	52,824	52,824	52,824	52,824
201 MANNED RECONNAISSANCE SYSTEMS.....	10,132	13,132	13,132	13,132
202 DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS.....	120,777	124,577	120,777	122,477
203 PREDATOR UAV (JMIP).....	61,466	63,966	67,466	68,166
204 GLOBAL HAWK UAV.....	247,665	248,665	247,665	248,665
205 NETWORK-CENTRIC COLLABORATIVE TARGET (TIARA).....	8,499	8,499	8,499	8,499
206 INTELLIGENCE SUPPORT TO INFORMATION WARFARE.....	5,163	5,163	5,163	5,163
207 NCMC - TW/AA SYSTEM.....	50,908	16,308	57,908	43,500
209 NUDET DETECTION SYSTEM (SPACE).....	60,281	60,281	60,281	60,281
211 NATIONAL SECURITY SPACE OFFICE.....	13,437	13,437	13,437	13,437
212 SPACE SITUATION AWARENESS OPERATIONS.....	31,401	31,401	31,401	31,401
213 NASS, IO TECHNOLOGY INTEGRATION & TOOL DEV.....	15,449	15,449	15,449	15,449
214 SHARED EARLY WARNING (SEW).....	2,999	2,999	2,999	2,999
215 C-130 AIRLIFT SQUADRON.....	248,283	213,783	250,283	233,183
216 C-5 AIRLIFT SQUADRONS.....	150,209	152,209	150,209	151,209
217 C-17 AIRCRAFT.....	173,781	173,781	173,781	173,781
218 C-130J PROGRAM.....	40,542	44,542	40,542	40,542
220 LARGE AIRCRAFT IR COUNTERMEASURES (LAIRCM).....	34,916	39,916	42,416	40,616
221 KC-135S.....	1,126	1,126	1,126	1,126
222 KC-10S.....	4,781	4,781	4,781	4,781
223 KC-135 TANKER REPLACEMENT.....	203,932	203,932	---	70,000
224 AIR MOBILITY TACTICAL DATA LINK.....	32,099	20,099	22,099	22,099
225 SPECIAL TACTICS / COMBAT CONTROL.....	1,024	3,024	1,024	2,024
226 DEPOT MAINTENANCE (NON-IF).....	1,457	1,457	1,457	1,457

	Budget	(In thousands of dollars)		Conference
		House	Senate	
228 ACQUISITION AND MANAGEMENT SUPPORT.....	17,706	17,706	17,706	17,706
229 INDUSTRIAL PREPAREDNESS.....	36,673	54,473	69,073	66,373
230 LOGISTICS SUPPORT ACTIVITIES.....	---	2,000	---	1,300
231 LOGISTICS INFORMATION TECHNOLOGY (LOGIT).....	166,338	136,338	106,338	121,338
232 SUPPORT SYSTEMS DEVELOPMENT.....	10,596	26,696	27,996	32,896
233 JOINT NATIONAL TRAINING CENTER.....	3,073	3,073	3,073	3,073
234 OTHER PERSONNEL ACTIVITIES.....	113	113	113	113
235 JOINT PERSONNEL RECOVERY AGENCY.....	992	992	992	992
236 CIVILIAN COMPENSATION PROGRAM.....	7,779	7,779	7,779	7,779
237 PERSONNEL ADMINISTRATION.....	18,262	18,262	18,262	18,262
238 FINANCIAL MANAGEMENT INFORMATION SYSTEMS DEVELOPMENT..	27,541	27,541	27,541	27,541
LIGHT CARGO AIRCRAFT.....	---	15,783	15,783	15,783
TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT.....	6,697,170	6,467,303	6,230,421	6,366,993
999 CLASSIFIED PROGRAMS.....	7,196,154	7,049,017	7,116,354	7,229,604
TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, AF.....	24,396,767	24,457,062	23,974,081	24,516,276

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1	Budget Request	House	Senate	Conference
1 DEFENSE RESEARCH SCIENCES	250,232	259,832	259,732	262,232
Fully-Integrated Solar-Powered Interior Lighting Technology		1,000		1,000
NanoPhotonic Components		3,000		1,700
Coal-Based Jet Fuel (Note: only for the continuation of efforts between the Energy Institute and the USAF)		3,600		2,900
National Hypersonic Research Center		2,000	2,000	2,000
New Methods for Designing and Testing Aircraft Coatings			2,500	1,600
Smart Surfaces & Interfaces			1,000	1,000
Virtual Tele-operation for Unmanned Aerial Vehicles			4,000	1,800
2 UNIVERSITY RESEARCH INITIATIVES	107,571	112,571	114,471	115,471
Single Chip Multi-modal Nanosensors		5,000		4,000
High Assurance Software Engineering			3,900	1,800
High Temperature Hydrogen Energy Producton			1,000	1,000
Partnership in Innovative Preparation for Educators and Students			2,000	1,100
4 MEDICAL DEVELOPMENT	0	24,300	0	23,900
National Diabetes Model Program (Note: To include funds for a clinical data investigation for bariatric surgery)		22,000		22,000
Retinal Eye Scan for Pilots		500		500
Assessment and Demonstration Center for USAF Surgeon General		1,800		1,400
5 MATERIALS	111,073	144,273	144,473	149,973
Secure Coating Systems Technology		2,000		1,000
NanoMaterials Commercialization Center		1,000		1,000
Chrome Free Environmentally Friendly Corrosion Protection for Aircraft		2,000		1,000
Integral Fuel Tank Protective Coating System		1,000		1,000
Accelerated Insertion of Advanced Materials for Materials Substitution and Repair - National Institute for Aviation Research		2,000		1,300
Wide Bandgap Materials Integration for Power Electronic, Sensor, and Optical Devices		3,600		2,900
Power Electronics Reliability		1,800		1,400
Fabrication and Processing of Adaptive Optics and Optical Materials		1,800		1,400
Electronic Type-specific Buckytubes for Next Generation Defense Electronics		3,000		2,000
Blast Resistant Panels for Buildings, Shelters, and Vehicles		2,000	2,000	2,000
High Temperature Aerogel Materials for Global Strike Vehicles		2,000		1,000
Hybrid Materials Integration		2,000		1,000
Domestic Titanium Powder Manufacturing Initiative		1,000		1,000
Quantum Wire Progam for Defense		1,000		1,000
Consortium for Nanomaterials for Aerospace Commerce and Technology (CONTACT)		3,000	1,000	1,400
ONAMI Safer Nanomaterials and Nanomanufacturing		2,000	5,000	2,300
Domestic High Modulus PAN Carbon Fiber Qualification Initiative		2,000	3,000	2,000
Advanced Aerospace Manufacturing Technologies			5,000	3,300

R-1	Budget Request	House	Senate	Conference
Advanced Materials Deposition for Semiconductor Nanostructure			1,400	1,000
Advanced Materials Development for Force Protection			2,000	1,000
Air Force Minority Leader Program			10,000	5,500
Durable Hybrid Coatings for Aircraft Systems			2,000	1,300
Engineered Optical Materials for Quantum Cryptography			2,000	1,000
Fire and Blast Resistant Materials for Force Protection			2,000	1,100
6 AEROSPACE VEHICLE TECHNOLOGIES	112,751	124,351	118,751	125,851
AIRPRINT		3,000		2,000
Neurobiologically Enabled Autonomous Vehicle		3,000		2,400
Advanced Coating Technologies for JSF and F-22				
Survivability		3,600		2,900
C4ISR Fusion System		2,000		1,600
Characterization of Airborne Environment for Tactical Lasers			4,000	2,200
Sentient Adaptive Systems Technology for Vehicle Condition-based Maintenance			1,000	1,000
Unmanned Aerial Vehicle Research			1,000	1,000
7 HUMAN EFFECTIVENESS APPLIED RESEARCH	92,991	104,691	103,591	107,491
Active Combustion Control Systems for Military Aircraft		4,000		1,800
Bio Medical DNA Program		1,000		1,000
Battlefield Automatic Life Status Monitor		2,000		1,300
Miniature Tri-Axial Accelerometer		1,000		1,000
Eyewear Display for Battlefield Operations		1,200		1,000
Unmasking Deception and Denial		1,000		1,000
Networked Warfighter Decision Support		1,500		1,000
COM Attitude Control System Simulation/Trainer			2,500	1,100
Solid Electrolyte Oxygen Separator			6,600	4,300
Warfighter Sustainability: Maximizing Human Performance (Note: Only for AFSOC)			1,500	1,000
8 AEROSPACE PROPULSION	170,885	204,835	200,885	213,485
Advanced High Speed Propulsion Development		1,000		1,000
MEPS Thermal Management		2,000		1,300
Integrated Electrical Starter/Generator		1,000		1,000
Methane Second Stage Rocket Engine		2,000		1,600
Intelligent Engine Technology Development for UAV's		3,000		1,400
Chemical Hydride Power System		2,550		2,500
Solid Boost Propulsion Technology - Technology for the Sustainment of Strategic Systems		1,000		1,000
VAATE-TMC FLADE Technology Demonstration		2,000		1,100
Advanced Vehicle and Propulsion Center		4,000		3,200
High Flux ESC System with TES for Military High Energy Laser		1,400		1,100
Advanced Liquid Rocket Booster Propulsion Technology		3,000		1,400
Military Purpose Electrolyte Supported Fuel Cells		1,000		1,000
Aerospace Lab Equipment Upgrade		1,000		1,000
Advanced Affordability Assurance Tools for the Versatile Affordable Advanced Turbine Engine (VAATE) Initiative		1,500		1,000
Center for Solar Electricity and Hydrogen		5,500		3,600
Ultrafast, Ultraintense Laser Microfabrication and Diagnostics		1,000		1,000
High-Energy Laser for Detection, Inspection, and Non-destructive Testing		1,000	6,000	2,700
Active Combustion Control System for Military Aircraft			6,000	3,900
Advanced Vortex Hybrid Propulsion System			3,000	1,700

R-1	Budget Request	House	Senate	Conference
Affordable Lightweight Power Supply Development			1,000	1,000
Manufacturing of High Energy Superior Lithium Battery Technology			8,000	5,200
X-51 Robust Scramjet Flight Research			6,000	3,900
9 AEROSPACE SENSORS	117,553	132,553	127,053	133,753
Optically Pumped Atomic Laser		3,000		2,000
Compact, Ultra-sensitive Optical Receiver for Smart and Loitering Standoff Weapons		2,000		2,000
Hanscom AFB Collaboration on Meta-Materials and Conformal Antenna Technologies		1,000		1,000
Phased Array Antenna Control Computer		1,000		1,000
3-D Packaging Technology for High Speed RF Communications		2,500		1,400
Center for Advanced Sensor and Communication Antennas		2,500		1,600
WBI LADAR Development and Demonstration		3,000		2,000
Advanced Sensor Aided Vigilance Technologies			2,000	1,100
Super-Resolution Sensor System			3,000	1,700
Sensor Network Technology			1,500	1,000
Wideband Digital Airborne Electronic Sensing Array			3,000	1,400
10 MULTI-DISCIPLINARY SPACE TECHNOLOGY	0	3,500	2,500	4,400
Engineering Tool Improvement Program		3,500		2,800
Integrated Control for Autonomous Space Systems			2,500	1,600
11 SPACE TECHNOLOGY	85,594	90,344	106,294	100,879
Elastic Memory Composites		1,000		1,000
Three Dimensional Deployable Structure Systems for Space		2,500		1,100
Shielding Rocket Payloads		250	285	285
Multicontinuum Technology for Space Structures		1,000	2,200	1,000
Deployable Structures Experiment			2,000	1,100
Field Programmable Gate Array			2,000	1,000
Flexible CIGS Solar Cells on Silicone Substrates for Spacecraft			1,500	1,000
HAARP			4,000	3,200
Joint Micro Power Initiative			1,000	1,000
Nanoscale Microelectronic Circuit Technology Development			2,000	1,100
USAF National Security Research - Signature			2,000	1,300
Space-Qualified Common Data Link			4,000	2,200
12 CONVENTIONAL MUNITIONS	62,105	62,105	64,105	63,405
Advanced Energy Technology for Munitions - Dominator Program			2,000	1,300
13 DIRECTED ENERGY TECHNOLOGY	48,422	57,422	50,922	52,722
Adaptive Optics Lasercom System		2,500	2,500	2,500
Digital Free Space Optical Laser Transmitter Modems (Transferred to Line 14)		2,500		0
Ceramics for Next-Generation Tactical Lasers Systems		4,000		1,800
14 COMMAND CONTROL AND COMMUNICATIONS	119,267	122,267	121,767	123,367
MASINT Warfighter Visualization Tools		3,000	1,500	1,500
Advanced Collaboration Platform for Net Centric C2			1,000	1,000
Digital Free Space Optical Laser Transmitter Modems (Transferred from Line 13)				1,600

R-1	Budget Request	House	Senate	Conference
16 HIGH ENERGY LASER RESEARCH	50,166	51,166	54,166	53,366
Quantitative Inspection Techniques for Assessing Aging Military Aircraft		1,000		1,000
Air Laser Technology Development			4,000	2,200
18 ADVANCED MATERIALS FOR WEAPON SYSTEMS	48,901	66,501	79,201	81,901
Large Panel Sapphire Producibility		2,700		1,200
Metals Affordability Initiative		3,500		2,300
Encapsulated Ballistic Protection System		2,000		1,600
Combined Agent Fire Fighting System		1,000		1,000
Continuous Integrated Vehicle Health Monitoring System		1,400		1,000
Aging Aircraft Fleet Support - National Institute for Aviation Research		3,000		2,000
Low Observable Multi-Purpose Inspection Tool		1,500		1,000
Coated Field Repair		1,500		1,000
Optical Filters for Hardened Night Vision Goggles		1,000		1,000
Blast-Resistant Barriers and Structural Design for Homeland Defense			2,000	1,300
Advanced Power Technology: Silicon-Carbide Power, Bipolar Junction Transistors			4,000	1,800
Assessing Aging of Military Aircraft			3,000	2,000
Hybrid Bearing			3,000	1,700
Hydrothermal Oxidation (HTO) for Alaska			4,100	3,300
Improved Stealth Aircraft Availability/Functionality			3,000	2,000
Inspection and Analysis Methods for Aging Military Aircraft			3,000	2,000
Materials Integrity Management Research for AF Systems			1,000	1,000
Silicon Carbide Electronics Material Producibility Initiative			7,200	5,800
19 ADVANCED AEROSPACE SENSORS	55,150	60,450	55,150	58,450
TACNODES		1,500		1000
National Operational Radar Signature Production and Research Capability (Combat Identification Signature Center)		2,000		1300
Precision Image Tracking and Registration Program		1,800		1000
AEROSPACE TECHNOLOGY				
20 DEVELOPMENT/DEMONSTRATION	27,424	69,548	38,424	58,524
Advanced Aerospace Titanium Structures (AATS)		1,300		1,000
ARES Transfer from Line 61, RDTE, AF		12,024		0
National Aerospace Leadership Initiative		25,000		20,000
Advanced Satellite Thermal Control Program		1,800		1,400
Large Scale Affordable Composite Structures		2,000		1,300
3-D Woven/Braided Composites			1,000	1,000
Advanced Aluminum Aerostructures Initiative			2,000	1,300
Hybrid Radio Frequency / Optical Communications Terminal			1,000	1,000
Phasor-Bird Helmet Tracker			2,000	1,300
Titanium Honeycomb Sandwich and Composite Structures			2,000	1,100
National Capabilities Analysis Collaborative, Phase III			3,000	1,700
AEROSPACE PROPULSION AND POWER TECHNOLOGY				
21 TECHNOLOGY	115,546	141,546	140,346	148,446
Research Institute for Environmental Studies (TRIES)		2,000		2,000
Versatile Affordable Advanced Turbine Engines (Note: only for project 681B)		4,000		2,200

R-1	Budget Request	House	Senate	Conference
Field Renewable Energy System Hybrids Li Ion Battery Program		2,000		1,000
Assured Fuels Process Demonstration Unit		7,000		4,600
XTC58F Technology Versatile Affordable Advanced Turbine Engine Program		8,000	2,500	8,000
Flexible JP-8 Military Fuel Certification		3,000	2,000	2,000
Acceleration VAATE Adv Supersonic Cruise Missile Engine			10,000	5,500
Development of Bi-Polar Wafer-cell NI-MH battery			2,000	1,000
Silicon Carbide Power Electronics for More Electric AC			8,300	6,600
22 CREW SYSTEMS AND PERSONNEL PROTECTION TECHNOLOGY	32,156	49,006	32,156	42,756
Authentic Tactical Flight Simulator for JSF		2,000		1,300
Full Spectrum Laser Eye Protection		1,000		1,000
Variable Transmittance Visor		2,000		1,000
Virtual Medical Trainer		2,700		2,200
Deployment Environmental & Biological Surveillance System (DEBS)		1,350		1,000
Field Deployable Influenza Genotyping System		1,000		1,000
Telepharmacy Robotic Medical Device Unit		1,800		0
Database Integration Tools		1,500		1,000
Low Cost Improved Performance Helmet Display		2,000		1,100
Air Force Advanced Micro-Compression Sock Program		1,500		1,000
23 ELECTRONIC COMBAT TECHNOLOGY	24,436	30,436	27,936	29,636
Enabling Polymeric Materials for Three-Dimensional (3D) Microdevice Construction		1,000		1,000
RAPCEval		1,500		1,000
Electronic Combat Battle Management		1,500		0
BLADES		2,000		1,300
Affordable Visible Missile Warning System			3,500	1,900
24 BALLISTIC MISSILE TECHNOLOGY	0	9,000	4,500	9,400
Forward Based Conventional Strike		4,000		1,800
Minuteman III		5,000		4,000
Pacific Ballistic Missile Technology Program			1,500	1,200
P-Net			3,000	2,400
26 ADVANCED SPACECRAFT TECHNOLOGY	68,026	92,926	102,026	101,226
Precision Integrated Navigation and Position-Intelligent Networking Technology		6,500		2,900
Space Situational Awareness / Star Tracking System		2,900		1,600
Information Sciences Institute Microsatellite Serial Manufacturing Demonstration Program		1,000		1,000
Small Low-Cost Reconnaissance Spacecraft		2,500		1,100
Photovoltaic Module Development for Lighter Than Air Vehicles		1,000		1,000
Radially Segmented Launch Vehicle (RSLV) Risk Reduction		2,000		1,000
Micromachined Switches for Next-Generation Modular Satellites		2,000		1,000
Large Automated Production of Expendable Launch Structures		4,000		2,600
Microsatellite Serial Manufacturing		2,000	2,000	2,000
Systemic Hierarchical Approach to Radiation Hardened Electronics		1,000	5,000	2,800
COTS Technology for Situational Space Awareness			2,000	1,000

R-1	Budget Request	House	Senate	Conference
Integrated Passive Microelectronic Components			1,500	1,000
Integrated Spacecraft Engineering Tool			2,000	1,300
Intelligent Free Space Optical Satellite Communications Node			3,000	1,400
Massively Parallel Optical Interconnects			2,500	1,100
Thin Film Amorphous Solar Arrays			16,000	10,400
27 MAUI SPACE SURVEILLANCE SYSTEM (MSSS)	6,074	6,074	52,074	50,574
High Accuracy Network Determination System (HANDS)			8,000	8,000
Maui Space Surveillance System (MSSS) Operations and Research			25,000	25,000
PanSTARRS			13,000	11,500
29 CONVENTIONAL WEAPONS TECHNOLOGY	19,658	45,958	19,658	40,058
Falcon Eye Seeker		3,000		2,000
Air Force Special Ops Innovative Miniature Infrared Camera		1,800		1,400
Clandestine Electric Reconnaissance Vehicle (CERV) for AFSOC		4,000		3,200
Next Generation Fixed Wing S-3B Heavy Aerial Firefighting Tanker		4,000		3,200
UAV Sensor Interface and Payloads for Targeting		1,800		1,400
Weapons Data Link		1,800		1,400
Ground Mobile Gateway System		1,800		1,400
Under Vehicle Mobile Inspection		4,500		3,600
Body Armor Underarm and Side Protection with Smart Materials		1,800		1,400
Micro-Sized Air-Launched Atmospheric Visibility Sensor		1,800		1,400
30 ADVANCED WEAPONS TECHNOLOGY	51,336	62,336	73,336	77,036
Laser Spark System Integration		3,000		2,000
Near Earth Space Surveillance Initiative (NESSI)		2,500		1,600
High Energy Laser - Directed Energy Weapon (HEL- DEW) Scaling Optimization		3,000		2,400
Mobile Active Targeting Resource for Integrated Experiments		1,000		1,000
Hyper/multispectral Data Reduction and Archiving (HyDRA) Project		1,500		1,000
Advanced Weapons and Laser Diode Development			4,000	2,600
Applications of LIDAR to Vehicles with Analysis (ALVA)			7,000	6,800
Lightweight Multi-purpose Laser			6,000	5,000
Mid-Infrared Semiconductor Laser Technology			3,000	1,700
Real-time Optical Surveillance Applications			2,000	1,600
32 C3I ADVANCED DEVELOPMENT	35,785	48,535	38,785	47,385
Advanced Course in Engineering		1,000		1,000
Advanced Fusion for Urban Operations for Forensic Anticipation of Insurgent Activity (Note: Only to expand the recently demonstrated Intelligence Fusion System to provide dynamic situational awareness of insurgent activities as precursors to critical events.)			6,000	4,800
Non-Traditional Intelligence Surveillance and Reconnaissance		1,500		1,000
Semantic SOA for Dynamic Intelligence Fusion Program		2,250		1,800
National Center for Multi-Source Information Fusion Research		2,000		1,000
MPOI for Battlespace Information Exchange			3,000	2,000

R-1	Budget Request	House	Senate	Conference
40 INTELLIGENCE ADVANCED DEVELOPMENT	4,776	6,776	4,776	5,776
TASS Advanced Communications Module		2,000		1,000
45 SPACE CONTROL TECHNOLOGY	27,076	27,076	31,076	30,276
Multi-mission Deployable Optical System			4,000	3,200
49 TRANSFORMATIONAL SATCOM (TSAT)	867,102	767,102	637,102	737,102
Program moderation, unexecutable growth		-100,000		-130,000
Program moderation			-230,000	0
51 INTERCONTINENTAL BALLISTIC MISSILE	45,538	65,038	45,538	61,138
Conventional Ballistic Missile Systems Engineering Studies		15,000		12,000
InfraLynx Security Vehicle		4,500		3,600
53 SPACE-BASED RADAR	266,401	200,000	166,401	186,401
Program moderation		-66,401		-80,000
Program moderation			-100,000	0
54 POLLUTION PREVENTION (DEM/VAL)	2,853	7,553	4,353	7,053
Assessment of Alternate Energy for Aircraft Ground Equipment		2,000		1,000
Automating Department of Defense Processes to Fulfill Depot Transformation and Maintenance Needs		2,700		2,200
O2 Diesel Particulate Emission Reduction Research Project			1,500	1,000
61 OPERATIONALLY RESPONSIVE SPACE	35,625	23,601	35,625	35,625
ARES Transfer to Line 20, RDTE, AF		-12,024		0
64 GLOBAL BROADCAST SERVICE (GBS)	23,599	25,599	23,599	24,899
Global Broadcast Service		2,000		1,300
70 B-2 ADVANCED TECHNOLOGY BOMBER	224,177	240,177	231,177	242,577
SDB Integration		16,000		12,800
Massive Ordnance Penetrator (MOP)			7,000	5,600
71 PERSONNEL RECOVERY SYSTEMS	254,310	224,310	201,455	201,455
Contract Award Delays		-30,000	-52,855	-52,855
72 ELECTRONIC WARFARE DEVELOPMENT	87,784	92,184	93,684	93,184
Air Force requested transfer from APAF Line 53		4,400	4,400	4,400
Rapid Replacement of Mission Critical Logistics Electronics			1,500	1,000
75 SMALL DIAMETER BOMB (SDB)	104,080	106,080	104,080	105,880
High Pressure Pure Air Generator		2,000		1,800
76 COUNTERSPACE SYSTEMS	47,292	47,292	50,319	50,492
Rapid Identification Detection and Reporting System			-4,973	-2,000
Space Control Test Capabilities			8,000	5,200
77 SPACE SITUATION AWARENESS SYSTEMS	121,157	121,157	123,157	122,157
Joint Space Intelligent Decision Support			2,000	1,000
80 ALTERNATIVE INFRARED SPACE SYSTEM (AIRSS)	102,962	67,962	102,962	67,962
Program moderation		-35,000		-35,000

R-1	Budget Request	House	Senate	Conference
84 SUBMUNITIONS	5,759	5,759	9,759	8,359
Virtual Teleoperation for Unmanned Aerial Vehicles			4,000	2,600
87 LIFE SUPPORT SYSTEMS	12,370	14,170	12,370	14,270
ACES II Ejection Seat Improvement		1,800		1,900
88 COMBAT TRAINING RANGES	14,363	17,363	14,363	16,763
National Training Center Air Warrior Training Range		3,000		2,400
89 INTEGRATED COMMAND & CONTROL APPLICATIONS	167	17,467	9,167	15,667
Airborne Web Services (AWS) Spiral 4		1,800		1,400
MEDSTARS		3,500		2,300
Integration of Force Protection Enterprise Systems		1,800		1,400
Program Engineering Interoperability Framework		2,500		1,600
Enterprise Services for Reach Back Capabilities		2,700		1,500
Distributed Mission Interoperability Toolkit (DMIT)		5,000	2,000	2,300
Asset eWing			5,000	4,000
Global Awareness Presentation System			2,000	1,000
90 INTELLIGENCE EQUIPMENT	1,426	3,426	5,426	4,926
Hard and Deeply Buried Targets		2,000		1,300
Electronic Warfare Modeling & Simulation			4,000	2,200
COMMON LOW OBSERVABLES VERIFICATION				
91 SYSTEM	0	4,500	4,500	4,500
Air Force requested transfer from APAF Line 70		4,500	4,500	4,500
92 JOINT STRIKE FIGHTER (JSF)	1,999,068	2,200,568	2,137,374	2,138,374
Alternate Engine		200,000	170,000	170,000
Second Source Tire Research		1,500		1,000
Excess accumulation of withheld award fees			-31,694	-31,694
EVOLVED EXPENDABLE LAUNCH VEHICLE PROGRAM				
94 (SPACE)	18,513	20,513	18,513	19,813
Evolved Expendable Launch Vehicle Program		2,000		1,300
95 RDT&E FOR AGING AIRCRAFT	25,490	26,490	27,490	26,590
Common Reconfigurable Advanced Thermal Management System (Transfer to Line 121)		1,000		0
Aging Landing Gear Life Extension (ALGLE)			2,000	1,100
97 LINK-16 SUPPORT AND SUSTAINMENT	172,625	174,625	172,625	174,225
Suitcase Pocket J for Continuity of Homeland Air Defense		2,000		1,600
101 FULL COMBAT MISSION TRAINING	32,243	35,843	32,243	35,143
Distributed Mission Training		3,600		2,900
105 MAJOR T&E INVESTMENT	58,506	63,506	58,506	61,906
Enterprise Test Data Management System (ETDMS) at Edwards AFB		3,000		1,400
High Resolution Optical Sensor for Test and Evaluation		1,000		1,000
Eglin Air Armament Center		1,000		1,000
106 RAND PROJECT AIR FORCE	25,211	28,211	25,211	26,611
RAND Project Air Force		3,000		1,400

R-1	Budget Request	House	Senate	Conference
111 ROCKET SYSTEMS LAUNCH PROGRAM (SPACE)	14,704	29,704	14,704	26,104
Space Launch Advanced Technology Research Demonstration		2,000		1,000
Ballistic Missile Range Safety Technology (BMRST) Program		13,000		10,400
FACILITIES RESTORATION & MODERNIZATION - TEST & EVALUATION				
113	54,683	55,683	54,683	55,683
Internal Base Facility Energy Independence - Wind/Turbine		1,000		1,000
FACILITIES SUSTAINMENT - TEST AND EVALUATION				
114 SUPPORT	25,579	29,579	25,579	28,179
Base Facility Energy Independence		4,000		2,600
121 B-52 SQUADRONS	71,379	77,379	71,379	76,279
B-52 1760 Acceleration		6,000		3,900
Common Reconfigurable Advanced Thermal Management System (Transfer from Line 95)		1,000		1,000
124 STRAT WAR PLANNING SYSTEM - USSTRATCOM	27,285	27,285	30,285	28,685
Global Command and Control Development			3,000	1,400
129 A-10 SQUADRONS	80,771	16,771	31,971	31,971
Propulsion Upgrade Program Cancellation		-64,000	-48,800	-48,800
130 F-16 SQUADRONS	148,373	152,373	151,273	152,573
AN/APG-68(V)10 Radar Development		4,000		2,600
F-16 Helmet Mounted Cueing System			2,900	1,600
131 F-15E SQUADRONS	125,062	138,062	125,062	138,062
AESA Development and Demonstration		13,000		13,000
133 F-22 SQUADRONS	584,290	484,290	434,290	474,290
Program Growth		-100,000	-150,000	-110,000
140 COMPASS CALL	4,469	15,969	4,469	9,969
EC-130H Compass Call		10,000		4,500
Radar Situational Awareness and Targeting System		1,500		1,000
144 AIR AND SPACE OPERATIONS CENTER (AOC)	87,483	77,483	77,483	77,483
Modernization and Integration program growth		-10,000	-10,000	-10,000
148 ADVANCED COMMUNICATIONS SYSTEMS	53,093	53,093	43,093	43,093
Program moderation due to JTRS delays			-10,000	-10,000
149 EVALUATION AND ANALYSIS PROGRAM	0	3,250	0	2,600
Critical Technologies Protection		3,250		2,600
153 BOMBER TACTICAL DATA LINK	168,168	101,168	101,168	101,168
CoNECT Program Restructure		-67,000	-67,000	-67,000
JOINT SURVEILLANCE AND TARGET ATTACK RADAR				
156 SYSTEM	152,696	152,696	160,696	156,296
Communications, Navigation, and Surveillance ATM			8,000	3,600

R-1	Budget Request	House	Senate	Conference
159 USAF MODELING AND SIMULATION	23,470	28,970	6,470	23,770
Synthetic Theater Operations Research Model		1,000		1,000
Civil Support Enhanced Responsiveness		2,500		2,000
Modeling and Simulation Collaborative Environment		2,000		1,300
Program under-execution			-17,000	-4,000
162 MISSION PLANNING SYSTEMS	146,396	129,896	146,396	129,896
Program Growth		-16,500		-16,500
171 INFORMATION SYSTEMS SECURITY PROGRAM	183,523	185,523	183,523	185,523
Cyber Security Defend and Attack Exercises		2,000		2,000
173 GLOBAL COMMAND AND CONTROL SYSTEM	3,348	15,848	3,348	11,448
Defense Energy Awareness and Management Center		2,500		1,600
Command and Control Service Level Management		10,000		6,500
182 SATELLITE CONTROL NETWORK (SPACE)	19,907	19,907	19,907	21,787
Transportable Transponder Landing System (From Senate Sec. 8127)				1,880
183 WEATHER SERVICE	34,899	35,899	34,899	35,899
Airborne Meteorological Data Reporting Modernization (Note: Only for Predator Meteorological Data Reporting)		1,000		1,000
AIR TRAFFIC CONTROL, APPROACH, AND LANDING				
184 SYSTEM	0	2,000	0	1,600
Notice to Airman (NOTAMS) Program Upgrade		2,000		1,600
NAVSTAR GLOBAL POSITIONING SYSTEM (USER				
192 EQUIPMENT)	131,083	133,083	136,083	134,383
Satellite Assets for Joint Navigation Warfare Center		2,000	5,000	3,300
197 SPACELIFT RANGE SYSTEM (SPACE)	38,044	39,044	38,044	39,044
California Space Infrastructure Program Continuity		1,000		1,000
201 MANNED RECONNAISSANCE SYSTEMS	10,132	13,132	13,132	13,132
Combat Sent Tactical ELINT System Modernization		3,000	3,000	3,000
DISTRIBUTED COMMON GROUND/SURFACE				
202 SYSTEMS	120,777	124,577	120,777	122,477
Distributed Common Ground Station (DCGS) Formal Training Unit		3,800		1,700
203 PREDATOR UAV (JMIP)	61,466	63,966	67,466	68,166
Sense and Avoid for Predator		1,500		1,000
Selectively Targeted Skeet Munition		1,000		1,000
Center for Defense UAV Education			3,000	3,000
ScanEagle UAV Advanced Concepts Development			3,000	1,700
204 GLOBAL HAWK UAV	247,665	248,665	247,665	248,665
Night Hunter II Integration on RQ-4 Global Hawk		1,000		1,000
207 NCMC - TW/AA SYSTEM	50,908	16,308	57,908	43,500
CCIC2S		-34,600		-11,308
CCIC2S Single Integrated Space Picture			7,000	3,900

R-1	Budget Request	House	Senate	Conference
215 C-130 AIRLIFT SQUADRON	248,283	213,783	250,283	233,183
Avionics Modernization Program		-20,000		0
AMP Training Systems Development		-20,000		-20,000
STOL Herk I Continuation		2,500		1,600
C-130 Automated Inspection, Repair, Corrosion, and Aircraft Tracking		3,000		2,000
Electro-Magnetic In-Flight Propeller Balancing System			2,000	1,300
216 C-5 AIRLIFT SQUADRONS	150,209	152,209	150,209	151,209
Inductive Thermography Systems Inspections		2,000		1,000
218 C-130J PROGRAM	40,542	44,542	40,542	40,542
Aerial Multi-Axis Platform (Transfer to Line 229)		4,000		0
220 LARGE AIRCRAFT IR COUNTERMEASURES (LAIRCM)	34,916	39,916	42,416	40,616
Large Aircraft Infrared Countermeasures (LAIRCM) for Air Force Special Operations Forces (AFSOC) AC-130U LAIRCM for AFSOC H/MC-130P		5,000		2,300
			7,500	3,400
223 KC-135 TANKER REPLACEMENT	203,932	203,932	0	70,000
Delay in SDD contract award, early to need			-203,932	-133,932
224 AIR MOBILITY TACTICAL DATA LINK	32,099	20,099	22,099	22,099
Program scope		-12,000	-10,000	-10,000
225 SPECIAL TACTICS / COMBAT CONTROL	1,024	3,024	1,024	2,024
Biostatic Protective Clothing		2,000		1,000
229 INDUSTRIAL PREPAREDNESS	36,673	54,473	69,073	66,373
Technology Insertion Demonstration and Evaluation		3,000		3,000
Ceramic Ballistic Armor for Soldier and Vehicle Protection		2,000		1,000
Laser Peening Fatigue Life Extension Technology for Military Aircraft Landing Gear		3,000		1,400
Improving MANPADS Survivability Coatings		1,800		1,200
F-35 Joint Strike Fighter Composite Engine Case		4,000	4,000	4,000
WBI-RFID Rapid Adoption Initiative Phase 2		4,000	9,000	5,000
EFG Sapphire Sheets for Large Aperture EO/IR Windows			3,000	2,000
Nanomaterial Advanced Prototyping - NMAP			7,000	4,600
Rapid Manufacturing and Repair of Composite Components			2,000	1,300
Reactive Plastic CO2 Absorbent Production Capacity			4,400	2,000
Supply Chain Optimization Universal Tool Kit			3,000	2,000
Aerial Multi-Axis Platform (Transfer from line 218)		4,000		2,200
230 LOGISTICS SUPPORT ACTIVITIES	0	2,000	0	1,300
REMIS		2,000		1,300
231 LOGISTICS INFORMATION TECHNOLOGY (LOGIT)	166,338	136,338	106,338	121,338
Expeditionary Combat Support System		-30,000	-60,000	-45,000
232 SUPPORT SYSTEMS DEVELOPMENT	10,596	26,696	27,996	32,896
Air Force Advanced Power and Energy Initiative		3,600		2,900
Production of Alternative Energy for Defense from Alaskan Raw Materials		1,000		1,000
Composite Occupational Health and Operational Risk Tracking System		1,000		3,000

R-1	Budget Request	House	Senate	Conference
Air Force Medical Service Personal Health Record		2,500		1,100
Fuel Cell Power - Non Tactical Vehicle		1,000		1,000
WR-ALC C-5 Maintenance Transformation		4,000		2,600
Heavy Duty Hybrid Electric Vehicle		3,000	3,000	3,000
RFID Inventory Management and Patient ID			3,900	3,200
Advanced Modular Lithium-Ion Energy Storage			2,000	1,100
Defense Assured Fuels Initiative			2,500	2,000
Distributed Generation of Liquid Fuels			3,000	0
WR-ALC Aircraft Sustainment Wing Aircraft Availability			3,000	1,400
New				
Line LIGHT CARGO AIRCRAFT	0	15,783	15,783	15,783
Air Force requested transfer from APAF, Line 14		15,783	15,783	15,783

TANKER REPLACEMENT DEVELOPMENT PROGRAM

The conference agreement provides \$70,000,000 for development of the KC-135 tanker replacement, as opposed to \$203,932,000 as proposed by the House. The Senate provided no funding for this purpose. The amount provided in the conference agreement was identified in writing by the Department of Defense as the level needed to meet all fiscal year 2007 requirements.

B-52 STAND-OFF JAMMER

The conferees note that the Air Force has terminated the B-52 Stand-off Jammer program for airborne electronic attack and agree to rescind fiscal year 2006 funds appropriated for this purpose in a General Provision. However, there remains a future requirement for a persistent stand-off jamming platform, despite the longer than originally anticipated service life of the Navy's re-winged EA-6B fleet. The conferees expect that the Air Force will reevaluate the future persistent stand-off jammer requirement in fiscal year 2007 and encourage the Department to submit a reprogramming request should the Air Force determine that the B-52 is the proper platform to conduct this mission.

A-10 SQUADRONS

The budget request includes \$64,000,000 for continued development of a propulsion upgrade program for the A-10 aircraft. However, since the budget submission, this program has been terminated by the Air Force. The House provided \$16,771,000 for A-10 Squadrons, a reduction of \$64,000,000, due to the cancellation of the program. The Senate included \$31,971,000, a reduction of \$48,800,000. The conferees agree to provide the Senate amount and expect that the remaining \$15,200,000 identified for the cancelled propulsion upgrade program will be dedicated to the shortfall in the A-10 precision engagement development program.

HYBRID FUEL CELL POWER SYSTEMS

The conferees encourage continued development and testing of hybrid fuel cell power systems for SATCOM systems by the Air Force's Research Lab—Information Directorate in Rome, New York. The conferees encourage the Air Force to continue this important research as it pertains to current and future Air Force missions.

J-STARS COMMUNICATION, NAVIGATION, SURVEILLANCE AND AIR TRAFFIC MANAGEMENT (CNS/ATM)

A significant investment of over \$50,000,000 to date has been made to accomplish the Communication, Navigation, Surveillance and Air Traffic Management (CNS/ATM) modification on the E-8C fleet. The fiscal year 2007 budget request includes \$20,000,000 for this effort. The program is on budget, on schedule, and is meeting its program goals. The conferees believe CNS/ATM modification is crucial to the long term sustainment of the E-8C Joint STARS Weapon System to support current and future military oper-

ations and therefore provide an additional \$3,600,000 for this effort. The conferees expect the Air Force to complete development activities and initiate a timely retrofit of the E-8C fleet.

COMBAT IDENTIFICATION

Multiple incidents in current and past conflicts and exercises have repeatedly demonstrated that positive hostile identification is crucial to using the full military capabilities and enabling joint interoperability of our technologically advanced weapon systems, such as the F-22, F/A-18, and MEADS. Furthermore, fratricide and strict combat Rules of Engagement can limit and restrict their combat employment, thereby losing U.S. technological advantage and putting our forces at risk. Since combat identification is only as good as the target signature databases, securing the continued development and sustainment of these databases and coordinating their joint applications must be a priority. Due to the critical nature of this joint military requirement and since databases continue to receive low priority, the conferees encourage the following: (1) Joint Theater and Missile Defense Organization and Joint Forces Command should coordinate and integrate combat ID signature database requirements, applications, and interoperability, in coordination with the National Signatures Program (NSP); (2) the Department of Defense should include funding for combat ID database development, support, and sustainment through the Future Years Defense Program; and (3) Aeronautical Systems Center (ASC) should be designated the Department of Defense executing agent for the long-term development, application, support, and sustainment of these databases and associated technologies and tools. Funding for these database efforts should be joint, with the respective services funding their specific production and support requirements.

TRANSFORMATIONAL SATELLITE COMMUNICATIONS SYSTEM (TSAT)

The conferees agree to provide \$737,102,000 for the TSAT program, \$130,000,000 below the budget request. This amount provides sufficient resources to support continued competition with two industry teams and to support continued development of the program's ground segment. Further, the conferees direct the Air Force to provide a quarterly program performance report on the program that: (1) includes Earned Value Management System information and a narrative summary that addresses technical milestones, program cost, schedule, performance, and any corrective action required for departure from the plan for the previous quarter, and (2) includes the program plan for the next quarter.

OPERATIONALLY RESPONSIVE SPACE

The conferees provide the budget request of \$35,625,000 for Operationally Responsive Space, of which \$19,524,000 is for the Affordable Responsive Space-lift (ARES) program, \$16,000,000 is for the FALCON small launch

vehicle program, and the remaining amount for the TACSAT program. The conferees are pleased that the Air Force initiated a program element for Operationally Responsive Space and strongly support the concept.

The conferees note that, among projects planned by the Air Force and the National Reconnaissance Office over the next few years, several missions will require small launch vehicles of similar capability. Therefore, the conferees encourage these organizations to consider opportunities to partner and use their combined purchasing power to leverage capability and cost through procuring small launch vehicles for future space missions.

The conferees support the concept of a reusable launch vehicle, but question the pursuit of the ARES program as it exists. Further, the conferees note the lack of a comprehensive strategy for space launch. Therefore, the conferees direct no funds appropriated in this bill may be used for the ARES program. Of the \$19,524,000 budgeted for ARES, the conferees direct that \$7,500,000 be used for the purposes described in the classified annex and the remaining \$12,024,000 be used to complete the purchase of multiple small launch vehicles. Should any funds appropriated to this program element for the above specific purposes become available for any reason, the conferees urge the Air Force to supplement the funds provided for the purchase of multiple small launch vehicles.

COMBATANT COMMANDERS' INTEGRATED COMMAND AND CONTROL SYSTEM (CCIC2S)

The budget requests \$50,908,000 for the CCIC2S. CCIC2S was planned to provide combatant commanders a command and control system for Integrated Tactical Warning and Attack Assessment (ITW/AA) that would incorporate air, missile defense, and space components. The conferees understand the Air Force Space Command and United States Strategic Command plan to remove the space mission from Cheyenne Mountain Operations Center (CMOC) and therefore from CCIC2S. However, the conferees believe that in order to accomplish the ITW/AA mission effectively a closer relationship should exist between the missile defense mission at CMOC and activity at the Joint National Integration Center.

As a result, the conferees recommend \$43,500,000, a reduction of \$7,408,000, in research and development funding for the CCIC2S program. These funds are provided to complete the missile defense activity and restart work on the Single Integrated Space Picture (SISP) as a part of the aforementioned plan. The conferees note the growing importance for the SISP as a national capability to provide situational awareness of space and support improvements in that mission area. No funds have been provided for the other space-related items as requested due to pending changes in Air Force Space Command. A similar reduction is made to "Other Procurement, Air Force" for the same purposes.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION,
DEFENSE-WIDE

The conference agreement on items addressed by either the House or
the Senate is as follows:

		(In thousands of dollars)			
		Budget	House	Senate	Conference

RESEARCH, DEVELOPMENT, TEST & EVAL, DW					
BASIC RESEARCH					
1	DTRA UNIVERSITY STRATEGIC PARTNERSHIP BASIC RESEARCH P	5,000	12,300	6,500	10,000
2	DEFENSE RESEARCH SCIENCES.....	150,690	173,190	139,715	145,790
3	GOVERNMENT/INDUSTRY COSPONSORSHIP OF UNIVERSITY RESEAR	---	2,700	---	9,200
4	DEFENSE EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE	9,532	9,532	9,532	9,532
5	NATIONAL DEFENSE EDUCATION PROGRAM.....	19,532	19,532	15,332	19,532
6	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.....	99,182	117,782	84,082	104,652
TOTAL, BASIC RESEARCH.....		283,936	335,036	255,161	298,706
APPLIED RESEARCH					
7	INSENSITIVE MUNITIONS--EXPLORATORY DEVELOPMENT.....	10,447	10,447	11,197	11,197
8	MEDICAL FREE ELECTRON LASER.....	10,255	10,255	18,955	15,905
9	HISTORICALLY BLACK COLLEGES & UNIV (HBCU) SCIENCE.....	14,423	17,923	17,423	19,073
10	LINCOLN LABORATORY RESEARCH PROGRAM.....	28,975	28,975	28,975	28,975
11	INFORMATION AND COMMUNICATIONS TECHNOLOGY.....	242,852	242,852	229,452	234,952
12	COGNITIVE COMPUTING SYSTEMS.....	220,085	222,085	149,274	180,685
13	BIOLOGICAL WARFARE DEFENSE.....	112,242	112,242	113,342	113,242
14	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.....	280,422	284,822	236,522	259,872
15	TACTICAL TECHNOLOGY.....	383,680	388,280	315,622	363,460
16	MATERIALS AND BIOLOGICAL TECHNOLOGY.....	297,277	297,277	296,277	299,277
17	WMD DEFEAT TECHNOLOGY.....	213,152	215,552	219,152	219,902
18	ELECTRONICS TECHNOLOGY.....	246,978	248,978	215,597	240,278
19	WMD DEFENSE TECHNOLOGIES.....	105,021	111,021	105,021	111,021
21	SPECIAL OPERATIONS TECHNOLOGY DEVELOPMENT.....	12,698	22,698	14,698	18,198
22	SOF MEDICAL TECHNOLOGY DEVELOPMENT.....	2,293	2,293	2,293	2,293
23	MEDICAL ADVANCED TECHNOLOGY.....	---	---	2,000	1,100
TOTAL, APPLIED RESEARCH.....		2,180,800	2,215,700	1,975,800	2,119,430

		(In thousands of dollars)			
		Budget	House	Senate	Conference
24	ADVANCED TECHNOLOGY DEVELOPMENT SO/LIC ADVANCED DEVELOPMENT.....	30,575	41,575	30,575	35,875
25	COMBATING TERRORISM TECHNOLOGY SUPPORT.....	65,768	121,018	73,268	115,388
26	COUNTERPROLIFERATION INITIATIVES--PROLIF PREV & DEFEAT	104,582	114,682	113,782	117,072
27	BALLISTIC MISSILE DEFENSE TECHNOLOGY.....	206,676	189,076	195,825	194,125
28	JOINT DOD-DOE MUNITIONS TECHNOLOGY DEVELOPMENT.....	16,862	16,862	16,862	16,862
29	ADVANCED AEROSPACE SYSTEMS.....	115,829	115,829	46,200	80,779
30	SPACE PROGRAMS AND TECHNOLOGY.....	254,913	254,913	225,651	254,913
31	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM - ADVANCED DEV	207,114	238,714	195,008	236,654
33	JOINT ELECTRONIC ADVANCED TECHNOLOGY.....	9,400	11,400	9,400	10,400
34	JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS.....	35,553	38,053	35,553	36,678
35	JOINT ROBOTICS PROGRAM/AUTONOMOUS SYSTEMS.....	7,700	7,700	10,200	8,825
36	GENERIC LOGISTICS R&D TECHNOLOGY DEMONSTRATIONS.....	23,437	63,737	114,287	105,297
37	DISTRIBUTION PROCESS OWNER TECH. DEV. & IMPLEMENTATION	15,215	15,215	10,215	15,215
38	STRATEGIC ENVIRONMENTAL RESEARCH PROGRAM.....	67,149	68,149	64,749	64,049
39	MICROELECTRONIC TECHNOLOGY DEVELOPMENT AND SUPPORT....	---	46,600	21,200	46,900
40	JOINT WARFIGHTING PROGRAM.....	10,641	10,641	10,641	10,641
41	ADVANCED ELECTRONICS TECHNOLOGIES.....	248,627	250,627	231,627	244,652
42	ADVANCED CONCEPT TECHNOLOGY DEMONSTRATIONS.....	158,334	162,834	156,334	163,134
43	HIGH PERFORMANCE COMPUTING MODERNIZATION PROGRAM.....	175,313	189,313	207,213	209,663
44	COMMAND, CONTROL AND COMMUNICATIONS SYSTEMS.....	232,489	232,489	222,920	228,489
45	LAND WARFARE TECHNOLOGY.....	48,975	48,975	37,925	44,975
46	CLASSIFIED DARPA PROGRAMS.....	151,598	151,598	151,598	151,598
47	NETWORK-CENTRIC WARFARE TECHNOLOGY.....	174,276	174,276	151,042	164,376
48	SENSOR TECHNOLOGY.....	205,519	205,519	186,466	195,519
49	GUIDANCE TECHNOLOGY.....	157,367	157,367	133,867	143,367
50	DISTRIBUTED LEARNING ADVANCED TECHNOLOGY DEVELOPMENT..	14,918	18,518	14,918	17,818
51	SOFTWARE ENGINEERING INSTITUTE.....	26,594	26,594	29,594	28,544
53	QUICK REACTION SPECIAL PROJECTS.....	107,782	107,782	108,782	108,782
54	JOINT EXPERIMENTATION.....	115,684	115,684	108,284	104,084

	Budget	(In thousands of dollars)		Conference
		House	Senate	
55 JOINT WARGAMING SIMULATION MANAGEMENT OFFICE.....	36,179	36,179	36,179	36,179
56 TEST & EVALUATION SCIENCE & TECHNOLOGY.....	39,939	39,939	44,939	39,939
57 TECHNOLOGY LINK.....	6,822	9,622	11,422	12,272
59 SPECIAL OPERATIONS ADVANCED TECHNOLOGY DEVELOPMENT....	80,402	152,352	50,421	137,351
TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT.....	3,152,232	3,433,832	3,056,947	3,380,415
DEMONSTRATION & VALIDATION				
60 NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT R	33,890	36,890	37,890	39,090
61 PHYSICAL SECURITY EQUIPMENT.....	---	---	2,000	---
62 RETRACT LARCH.....	22,383	22,383	22,383	22,383
63 JOINT ROBOTICS PROGRAM.....	12,210	22,010	14,210	23,110
64 ADVANCED SENSOR APPLICATIONS PROGRAM.....	18,820	20,320	19,820	24,270
65 ENVIRONMENTAL SECURITY TECHNICAL CERTIFICATION PROGRAM	28,841	35,841	28,841	32,441
67 BALLISTIC MISSILE DEFENSE TERMINAL DEFENSE SEGMENT....	1,038,310	1,008,310	1,111,310	1,096,710
68 BALLISTIC MISSILE DEFENSE MIDCOURSE DEFENSE SEGMENT...	2,876,972	2,758,072	3,103,972	3,055,972
69 BALLISTIC MISSILE DEFENSE BOOST DEFENSE SEGMENT.....	631,616	631,616	631,616	631,616
70 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.....	73,111	87,111	76,111	80,711
71 BALLISTIC MISSILE DEFENSE SENSORS.....	514,510	460,010	518,510	516,310
72 BALLISTIC MISSILE DEFENSE SYSTEM INTERCEPTOR.....	405,508	405,508	205,508	357,508
73 BALLISTIC MISSILE DEFENSE TEST & TARGETS.....	591,911	591,911	597,911	596,711
74 BALLISTIC MISSILE DEFENSE PRODUCTS.....	506,840	---	500,840	---
BALLISTIC MISSILE DEFENSE C2BMC.....	---	242,789	---	247,896
BALLISTIC MISSILE DEFENSE HERCULES.....	---	52,264	---	49,884
BALLISTIC MISSILE DEFENSE JOINT WARFIGHTER SUPPORT....	---	55,146	---	55,167
BALLISTIC MISSILE DEFENSE JOINT NATIONAL INTERGRATION.	---	102,809	---	111,099
BALLISTIC MISSILE DEFENSE CONCURRENT TEST AND OPERATIO	---	23,257	---	23,257
75 BALLISTIC MISSILE DEFENSE SYSTEMS CORE.....	473,077	476,777	428,077	431,237
76 SPECIAL PROGRAMS - MDA.....	374,532	374,532	354,532	354,532
77 AEGIS BMD.....	1,031,874	1,056,874	1,140,074	1,127,434
78 SPACE TRACKING & SURVEILLANCE SYSTEM.....	390,585	323,585	315,585	323,585
79 MULTIPLE KILL VEHICLES.....	164,975	99,975	164,975	144,975

		(In thousands of dollars)			
		Budget	House	Senate	Conference
80	HUMANITARIAN DEMINING.....	14,489	14,489	14,489	14,489
81	COALITION WARFARE.....	5,878	5,878	5,878	5,878
82	DEPARTMENT OF DEFENSE CORROSION PROGRAM.....	4,966	7,666	4,966	7,166
84	JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS.....	3,047	3,047	3,047	3,047
85	JOINT SYSTEMS INTEGRATION COMMAND (JSIC).....	20,755	20,755	20,755	20,755
86	JOINT FIRES INTEGRATION & INTEROPERABILITY TEAM.....	16,782	16,782	16,782	16,782
87	REDUCTION OF TOTAL OWNERSHIP COST.....	25,289	25,289	25,289	25,289
88	JOINT ELECTROMAGNETIC TECHNOLOGY (JET) PROGRAM.....	3,672	4,672	7,672	7,872
TOTAL, DEMONSTRATION & VALIDATION.....		9,284,843	8,986,568	9,373,043	9,447,176
ENGINEERING & MANUFACTURING DEVELOPMENT					
89	DEFENSE ACQUISITION CHALLENGE PROGRAM (DACP).....	29,500	29,500	29,500	29,500
90	NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT R	9,277	9,277	12,777	12,077
91	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.....	212,072	219,072	210,374	213,174
93	JOINT ROBOTICS PROGRAM.....	6,004	11,004	6,004	10,004
94	ADVANCED IT SERVICES JOINT PROGRAM OFFICE (AITS-JPO)..	9,392	9,392	9,392	9,392
95	JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM (JTIDS)	8,177	8,177	8,177	8,177
96	INFORMATION TECHNOLOGY DEVELOPMENT.....	11,005	11,005	11,005	11,005
101	BUSINESS TRANSFORMATION AGENCY R&D ACTIVITIES.....	140,245	142,245	160,245	145,745
102	TRUSTED FOUNDRY.....	42,522	42,522	42,522	42,522
103	DEFENSE ACQUISITION EXECUTIVE (DAE) PILOT PROGRAM.....	6,015	6,015	1,000	6,015
104	DEFENSE MESSAGE SYSTEM.....	11,202	11,202	11,202	11,202
105	INFORMATION SYSTEMS SECURITY PROGRAM.....	---	---	2,000	---
106	GLOBAL COMBAT SUPPORT SYSTEM.....	18,556	18,556	18,556	18,556
107	JOINT COMMAND AND CONTROL PROGRAM (JC2).....	47,031	50,031	24,031	35,031
TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT.....		550,998	567,998	546,785	552,400
RDT&E MANAGEMENT SUPPORT					
112	TRAINING TRANSFORMATION (T2).....	72,897	78,197	72,897	71,232
115	DEFENSE READINESS REPORTING SYSTEM (DRRS).....	10,322	13,922	10,322	13,222
116	JOINT SYSTEMS ARCHITECTURE DEVELOPMENT.....	9,390	9,390	9,390	9,390

	(In thousands of dollars)			
	Budget	House	Senate	Conference
117 CENTRAL TEST AND EVALUATION INVESTMENT DEVELOPMENT....	130,290	132,290	138,290	138,440
118 THERMAL VICAR.....	7,492	7,492	7,492	7,492
119 JOINT MISSION ENVIRONMENT TEST CAPABILITY (JMETC).....	10,600	10,600	10,600	10,600
120 TECHNICAL STUDIES, SUPPORT AND ANALYSIS.....	30,339	31,339	35,339	36,339
122 USD(A&T)--CRITICAL TECHNOLOGY SUPPORT.....	2,029	2,029	4,029	4,029
124 FOREIGN MATERIAL ACQUISITION AND EXPLOITATION.....	38,253	38,253	38,253	38,253
127 JOINT THEATER AIR AND MISSILE DEFENSE ORGANIZATION....	52,486	52,486	52,486	52,486
128 CLASSIFIED PROGRAM USD(P).....	---	90,000	98,000	94,000
129 FOREIGN COMPARATIVE TESTING.....	31,995	31,995	31,995	31,995
130 NUCLEAR MATTERS - PHYSICAL SECURITY.....	4,285	4,285	4,285	4,285
131 SUPPORT TO NETWORKS AND INFORMATION INTEGRATION.....	10,990	10,990	16,990	16,740
132 GENERAL SUPPORT TO USD (INTELLIGENCE).....	5,637	5,637	5,637	5,637
133 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.....	80,134	82,834	84,134	82,834
138 SMALL BUSINESS INNOVATION RESEARCH/CHALLENGE ADMINISTR	2,073	6,373	2,073	4,448
139 DEFENSE TECHNOLOGY ANALYSIS.....	5,577	5,577	8,577	7,977
140 FORCE TRANSFORMATION DIRECTORATE.....	20,404	50,404	23,904	49,229
141 DEFENSE TECHNICAL INFORMATION CENTER (DTIC).....	51,929	51,929	51,929	51,929
142 R&D IN SUPPORT OF DOD ENLISTMENT, TESTING & EVALUATION	9,348	9,348	9,348	9,348
143 DEVELOPMENT TEST AND EVALUATION.....	9,203	9,203	9,203	9,203
144 MANAGEMENT HEADQUARTERS (RESEARCH & DEVELOPMENT).....	50,951	50,951	45,951	48,951
147 INFORMATION TECHNOLOGY RAPID ACQUISITION.....	5,090	5,090	5,090	5,090
148 INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS (IO)...	14,128	14,128	14,128	14,128
150 PENTAGON RESERVATION.....	15,586	15,586	15,586	15,586
151 MANAGEMENT HEADQUARTERS - MDA.....	87,389	87,389	87,389	87,389
152 IT SOFTWARE DEV INITIATIVES.....	1,412	1,412	1,412	1,412
TOTAL, RDT&E MANAGEMENT SUPPORT.....	770,229	909,129	894,729	921,664
OPERATIONAL SYSTEMS DEVELOPMENT				
153 DEFENSE INFORMATION SYSTEM FOR SECURITY (DISS).....	35,439	35,439	35,439	35,439
154 PARTNERSHIP FOR PEACE (PPP) INFORMATION MANAGEMENT SYS	1,521	1,521	---	---
155 CHEMICAL AND BIOLOGICAL DEFENSE (OPERATIONAL SYSTEMS D	7,035	7,035	7,035	7,035

	(In thousands of dollars)			Conference
	Budget	House	Senate	
156 JOINT INTEGRATION AND INTEROPERABILITY.....	66,906	66,906	51,906	51,906
157 JOINT STAFF ANALYTICAL SUPPORT.....	7,686	7,686	7,686	7,686
158 ISLAND SUN.....	1,662	1,662	1,662	1,662
159 C4I INTEROPERABILITY.....	84,313	84,313	84,313	84,313
167 NATIONAL MILITARY COMMAND SYSTEM-WIDE SUPPORT.....	721	721	721	721
168 DEFENSE INFO INFRASTRUCTURE ENGINEERING AND INTEGRATIO	34,007	34,007	34,007	34,007
169 LONG HAUL COMMUNICATIONS (DCS).....	1,523	1,523	10,023	5,373
170 MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK....	7,691	7,691	7,691	7,691
171 PUBLIC KEY INFRASTRUCTURE (PKI).....	14,240	14,240	14,240	14,240
172 KEY MANAGEMENT INFRASTRUCTURE (KMI).....	38,257	38,257	38,257	38,257
173 INFORMATION SYSTEMS SECURITY PROGRAM.....	14,856	18,456	14,856	17,756
174 INFORMATION SYSTEMS SECURITY PROGRAM.....	404,337	405,337	404,337	405,337
175 DISA MISSION SUPPORT OPERATIONS.....	1,224	1,224	1,224	1,224
176 C4I FOR THE WARRIOR.....	3,556	3,556	3,556	3,556
177 C4I FOR THE WARRIOR.....	6,551	6,551	6,551	6,551
178 GLOBAL COMMAND AND CONTROL SYSTEM.....	59,681	63,681	59,681	62,881
179 JOINT SPECTRUM CENTER.....	12,448	12,448	12,448	12,448
181 NET-CENTRIC ENTERPRISE SERVICES (NCES).....	28,630	28,630	28,630	28,630
182 TELEPORT PROGRAM.....	14,424	14,424	14,424	14,424
183 SPECIAL APPLICATIONS FOR CONTINGENCIES.....	---	---	6,302	9,302
186 CRITICAL INFRASTRUCTURE PROTECTION (CIP).....	12,422	14,422	12,422	13,722
188 DEFENSE JOINT COUNTERINTELLIGENCE ACTIVITIES.....	20,791	20,791	20,791	20,791
191 NET CENTRICITY.....	8,746	8,746	8,746	8,746
197 DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS.....	7,451	7,451	7,451	7,451
207 INDUSTRIAL PREPAREDNESS.....	18,748	33,848	32,348	33,698
208 LOGISTICS SUPPORT ACTIVITIES.....	2,912	2,912	2,912	2,912
209 MANAGEMENT HEADQUARTERS (JCS).....	3,090	3,090	3,090	3,090
210 NATO JOINT STARS.....	41,670	41,670	41,670	41,670
212 SPECIAL OPERATIONS AVIATION SYSTEMS ADVANCED DEV.....	83,704	83,704	73,704	78,704

	(In thousands of dollars)			
	Budget	House	Senate	Conference
213 SPECIAL OPERATIONS TACTICAL SYSTEMS DEVELOPMENT.....	45,241	88,241	51,713	84,313
214 SPECIAL OPERATIONS INTELLIGENCE SYSTEMS DEVELOPMENT...	29,011	96,711	49,611	65,031
215 SOF OPERATIONAL ENHANCEMENTS.....	99,010	104,510	108,810	107,460
217 SPECIAL OPERATIONS AIRCRAFT DEFENSIVE SYSTEMS.....	7,850	7,850	4,850	4,850
218 OPS ADVANCED SEAL DELIVERY SYSTEM (ASDS) DEVELOPMENT..	32,452	32,452	32,452	32,452
219 MISSION TRAINING AND PREPARATION SYSTEMS (MTPS).....	1,782	1,782	1,782	1,782
220 UNMANNED VEHICLES (UV).....	1,521	3,521	1,521	3,121

TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT.....	1,263,109	1,407,009	1,298,862	1,360,232
999 CLASSIFIED PROGRAMS.....	3,323,792	3,382,992	3,142,066	3,211,033
JOINT FORCES COMMAND.....	---	-30,000	---	---

TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, DW.....	20,809,939	21,208,264	20,543,393	21,291,056

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[in thousands of dollars]

R-1	Budget Request	House	Senate	Conference
1 DTRA UNIVERSITY STRATEGIC PARTNERSHIP BASIC RESEARCH PROGRAM	5,000	12,300	6,500	10,000
WMD Technologies for Defense		4,500		2,000
Dual Use Technologies Project for Defense		1,500		1,000
Biomedical Engineering Initiative for Defense Use (Note: for continuation only)		1,300		1,000
University Strategic Partnership			1,500	1,000
2 DEFENSE RESEARCH SCIENCES	150,690	173,190	139,715	145,790
Alternative Futures at the Range-Complex Level for the Southwest US		1,000	1,000	1,000
Focus Center Defense Research Program (Transferred to RDTE,DW Line 3)		10,000		
Institute of Comparative Genomics: Advanced Research to Further National Security Goals		3,000		1,650
John H. Hopps Defense Research Scholars Program		2,000		1,000
India/Industry Collaborative Effort for Defense Research		5,000		0
Drug Discovery and Development Initiative for National Security		1,500		1,200
Bio Interfaces			-3,500	-3,500
Computer Science Study Group			-3,573	-2,000
Carbon Nanotube RF Devices			-1,000	-1,000
MEMS Science and Focus Centers			-2,452	0
Nanoscale/Biomolecular and MetaMaterials			-3,450	-3,450
Spin Dependent Materials and Devices			-3,000	-3,000
Advanced Materials Research Institute			4,000	2,200
Next Generation Protective Gear Research			1,000	1,000
3 GOVERNMENT/INDUSTRY COSPONSORSHIP OF UNIVERSITY RESEARCH	0	2,700	0	9,200
Bio/Nano Electronic Defense Devices and Sensors		2,700		1,200
Focus Center Defense Research Program (Transferred from RDTE,DW Line 2)				8,000
5 NATIONAL DEFENSE EDUCATION PROGRAM	19,532	19,532	15,332	19,532
Unauthorized program expansion			-4,200	0
6 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	99,182	117,782	84,082	104,652
CB Initiative Program		5,000		5,000
Detection of Biological Agents in Water for National Security		1,500	1,500	1,500
Anthrax Vaccine Research		500		500
New York Structural Biology Center for Chem-Bio Defense (Note: only for Department of Defense military activities)		2,600		1,170
High Speed, High Volume Laboratory Network for Infectious Disease (Note: only for Department of Defense military activities) (Includes High-Throughput Laboratory Initiative)		6,000	8,000	6,000
Northeast Biodefense Center for National Security (Note: only for Department of Defense military activities)		1,000		1,000
Mismatch Repair Derived Medicines to Treat Clostridium, Staphylococcus and Bacillus Bioweapons		2,000		2,000
TMTI - unexecutable growth			-28,600	-15,000

R-1	Budget Request	House	Senate	Conference
Fluorescence Activated Sensing Technology Integrated Threat Management System			1,000	1,000
Next Generation Protective Gear Research			1,000	1,000
Organic Light Emitting Receptor Based Nanosensors			2,000	1,300
7 INSENSITIVE MUNITIONS--EXPLORATORY DEVELOPMENT	10,447	10,447	11,197	11,197
Non-lethal Stunning/Immobilizing Weapons			750	750
8 MEDICAL FREE ELECTRON LASER	10,255	10,255	18,955	15,905
Additional funding			8,700	5,650
9 HISTORICALLY BLACK COLLEGES & UNIVERSITY (HBCU) SCIENCES	14,423	17,923	17,423	19,073
Center for Human and Material Science Performance for National Security (Note: only for Department of Defense military activities)		1,000		1,000
Nanoscience and Biotechnology Laboratory Research Program (Note: only for Department of Defense military activities)		1,500		1,000
The Defense Leadership and Technology Initiative		1,000		1,000
Instrumentation Program for Tribal Programs			3,000	1,650
11 INFORMATION AND COMMUNICATIONS TECHNOLOGY	242,852	242,852	229,452	234,952
Responsive Computing Architectures			-3,900	-3,900
Security-Aware Systems			-3,000	-1,000
Automated Speech and Text Exploitation in Multiple Languages			-6,500	-3,000
12 COGNITIVE COMPUTING SYSTEMS	220,085	222,085	149,274	180,685
SOSI -- Secure Open Systems Institute for Defense		2,000		1,100
Integrated Cognitive Systems			-60,000	-30,000
Learning Locomotion and Navigation			-3,811	-3,500
Improved Warfighter Information Processing			-7,000	-7,000
13 BIOLOGICAL WARFARE DEFENSE	112,242	112,242	113,342	113,242
Detecting Emerging Classes of Explosives			1,100	1,000
14 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	280,422	284,822	236,522	259,872
TMTI - unexecutable growth		-30,000	-60,400	-55,000
CB Initiative Program		10,000		10,000
Asymmetrical Protocols for Biological Defense Enhancement		2,400		1,000
Alternative Delivery Methods for Recombinant Protein Vaccines		1,500	3,500	1,900
Chemical Warfare Agent Fate Model Verification and Validation Phase II		2,000		1,000
Fault Protected Drives for Laser Diodes for Defense Use		1,000		1,000
Low-cost Protective Chem-bio Shelter		4,000		2,600
Multipurpose Biodefense Immunoarray		2,000		1,100
National Center for Integrated Civilian-Military Medical Response and Homeland Defense (Note: only for Department of Defense military activities)		1,500		1,000
ND Center for Environmental Networked Embedded Sensor Technology (CENEST) (Note: only for Department of Defense military activities)		3,000		2,450
Theater-Level Modeling of Chemical and Biological Operational Effects		1,000		1,000

R-1	Budget Request	House	Senate	Conference
Zumwalt National Program for Countermeasures to Biological and Chemical Threats		2,000		1,300
Botulinum Neurotoxin Research		3,000		2,400
Specific Gas Detector		1,000		1,000
Chemical/Biological Infrared Detection System			2,500	1,100
Escape Hood			4,000	1,800
Mustard Gas Antidote Research Consortium (STIMAL)			1,000	1,000
Nanowire Mesh Fabrics for Chemical and Biological Agent Defense			1,500	1,000
Personal Protection Against Infectious Agents			4,000	1,800
15 TACTICAL TECHNOLOGY	383,680	388,280	315,622	363,460
NASEC Representing Enriched Context (RECON) & Robust, Responsive, Reconfigurable Invisible (r3I)				
Antenna Systems		1,800		1,440
Extreme Light Sources for Defense Applications		1,800		1,440
Optinet Sensor System		1,000		1,000
HyFly			-6,376	0
HEDLight			-2,000	-1,000
Super-Fast Submerged Transport			-1,500	-1,500
MAHEM			-2,135	-2,000
Sweeper			-2,000	-2,000
Maneuver & Control on the Urban Battlefield			-2,000	-1,000
HELLADS			-5,000	0
Flare Aero Structures			-2,500	0
Distributed Embedded Propulsion			-4,000	-2,000
Laminar Flow Flight Demonstration			-2,200	-1,000
Long Endurance Autonomous Powerfoil			-1,500	-500
TETURAN			-2,000	-1,000
Automated Battle Management			-7,400	-3,000
Home Field			-3,200	-1,500
Pre-Conflict Anticipation and Shaping			-6,247	-500
TOPVU			-6,000	0
Execution adjustment			-20,000	-15,700
CEROS			7,000	5,600
Research on a Molecular Approach to Hazardous Materials Decontamination			1,000	1,000
Army Hypersonics Advanced Technology (Transferred from RDTE,A Line 47)				2,000
16 MATERIALS AND BIOLOGICAL TECHNOLOGY	297,277	297,277	296,277	299,277
Neurotechnology for Intelligence Analysts			-5,000	-2,000
Strategic Materials			4,000	4,000
17 WMD DEFEAT TECHNOLOGY	213,152	215,552	219,152	219,902
Center for Nonproliferation Studies, Monterey Institute for International Affairs		2,000		1,000
MMI Nanotechnology		400		400
Project Ancile			6,000	3,900
IED Electronic Signature Detection (Transferred from RDTE,A Line 41)				1,450
18 ELECTRONICS TECHNOLOGY	246,978	248,978	215,597	240,278
Secure Advanced Electronics Fabrication "SAEF" (Note: only for Department of Defense military activities)		2,000		2,000
Advanced Digital Receiver Technology			-2,000	-1,000
AFPA			-5,039	-2,000
Bio-Electronics and Photonics			-3,000	-2,000

R-1	Budget Request	House	Senate	Conference
Clockless Logic			-2,500	-1,000
Linear Photonic RF Front End Technology			-3,594	-2,000
Metaphoric Computing			-3,000	-1,000
Multiple Optical Non-Redundant Aperture Generalized Sensors			-2,248	-1,000
TEAM			-3,000	-1,500
Terahertz Imaging Focal-Plane Technology			-5,000	-2,000
TFAST			-10,000	0
3-D Technology for Advanced Sensor Systems			4,000	2,200
Innovative Processing Instrumentation for Fabrication of Three-Dimensional Microdevices			4,000	2,600
19 WMD DEFENSE TECHNOLOGIES	105,021	111,021	105,021	111,021
Comprehensive National Incident Characterization and Management Systems (Note: only for Department of Defense military activities)		4,000		4,000
Center for Blast Mitigation and Protection		1,000		1,000
Real-time Bio Detection System (RTBDS)		1,000		1,000
21 SPECIAL OPERATIONS TECHNOLOGY DEVELOPMENT	12,698	22,698	14,698	18,198
Close-in Layered Shield		5,000		2,250
Global Observer Hydrogen Fueled Unmanned Aircraft System		5,000		2,250
Wearable Hyperspectral Imaging System			2,000	1,000
23 MEDICAL ADVANCED TECHNOLOGY			2,000	1,100
Military Nutrition Research			2,000	1,100
24 SO/LIC ADVANCED DEVELOPMENT	30,575	41,575	30,575	35,875
Day/Night Wide Area Surveillance Systems (DNWASS)		2,000		0
Day/Night Wide Area Surveillance System		2,000		1,000
Multiband BIGFOOT Tag		3,000		1,650
Explosive Ordnance Disposal/Low Conflict (EOD/LIC)				
Advanced Robotic Vehicle Development		3,000		1,650
Aerial Canopy Sensor Delivery System		1,000		1,000
25 COMBATING TERRORISM TECHNOLOGY SUPPORT	65,768	121,018	73,268	115,388
Asymmetric Warfare		3,600		1,620
Autonomous Re-Supply UAS		1,800		1,500
Bioterrorism Operations Policy for Public Emergency Response (BOPPER) (Note: only for Department of Defense military activities)		2,000	2,000	2,000
Civil Support Teams - Tactical Support Surveys for Alaska National Guard		1,000		1,000
Comprehensive Port and Maritime Domain Awareness		7,300		7,300
Counter Terrorism Quality Assurance Science (CT-QAS) Program		2,000		1,000
Defense Against Explosive Effects Explosive Loading Laboratory		5,000	2,000	4,000
Distributed Intrinsic Chemical Agent Sensing and Transmission		1,000		2,000
DoD Portable Armor Wall System		1,800		1,500
Early Responders Distance Learning Center (Note: only for Department of Defense military activities)		1,750		1,000
Facility Security (Note: only for Department of Defense military activities)		10,000		8,000
Language Learning Center (LLC) (Note: only for Department of Defense military activities)		700		700

R-1	Budget Request	House	Senate	Conference
National Terrorism Preparedness Institute/WMD Military and Emergency Responder Training		4,000		4,000
Port and Hull Security 3D, Real Time Sonar System - Echoscope		4,000		3,200
Roll-On, Roll-Off Reconnaissance Pallet Improvements		3,600		2,900
TSWG Information Sharing Pilot Project (Note: for continuation only)		2,700		2,700
U.S. and Iraqi Force Protection Program		3,000		2,400
Autonomous Border and Intrusion Surveillance Sensor Networks			2,000	1,300
Asymmetric Warfare Initiative			500	500
Unmanned Aerial Vehicle Avionics Upgrade (UAVAU)			1,000	1,000
26 COUNTERPROLIFERATION INITIATIVES-- PROLIFERATION PREVENTION & DEFEAT	104,582	114,682	113,782	117,072
Near Infrared Imaging Experiment		2,000		1,000
Open Source Intelligence Center		3,000		1,350
New Technology for Detecting Nuclear Weapons Materials		1,000		1,000
National Nuclear Security Agency (NNSA) Metals Declassification for reuse by DoD in Armament		1,600		1,040
Connectory Expansion for Rapid Identification of Technology Sources for DoD		500		500
Continuation of Advanced Materials (Mercuric Iodide) research for Nuclear Detection, Counter-proliferation and Imaging for CBRNE Special Operations		2,000		1,600
DETECTIVE (HPGe Based) Radiation Portal Monitors			2,000	1,300
Guardian Glass Scintillation Fiber Radiation Detectors			7,200	4,700
27 BALLISTIC MISSILE DEFENSE TECHNOLOGY	206,676	189,076	195,825	194,125
High Altitude Airship		-20,000	-25,000	-22,500
Advanced Processing Architecture		2,400		1,080
General Reduction			-15,651	-15,651
Advanced RF Technology Development			1,000	1,000
Center for Optical Logic Devices			1,000	1,000
Conformal Embedded Antennas for Aerial Platforms			2,000	1,000
MPOI for Micro Satellite Datacom Amplifier			2,800	2,320
Multiple-Target-Tracking Optical Sensor-Array Technology			4,000	3,200
NetCentric Airborne Defense Element			15,000	12,000
Photoconductor on Active Pixel Sensor (POAP)			1,000	1,000
SiC Thick Film Mirror Coatings			3,000	3,000
29 ADVANCED AEROSPACE SYSTEMS	115,829	115,829	46,200	80,779
A160			-10,500	-3,500
Advanced Aeronautics Demonstration			-5,000	-5,000
Cormorant UAV			-14,600	-9,500
Heavy Fuel Engine for A160			-10,729	-4,000
Critical Munition Capability			-4,000	-2,000
Global Range Transatmospheric Vehicle			-5,300	-5,300
Dual Mode Small Gunship			-6,000	0
Seaplane Unmanned Air Vehicle			-5,500	-2,750
Heavy Lift			-3,000	-1,500
CASTLE			-5,000	-2,500
Heavy Fuel Engine Development (Transfer from Senate Section 8167)				1,000

R-1	Budget Request	House	Senate	Conference
30 SPACE PROGRAMS AND TECHNOLOGY	254,913	254,913	225,651	254,913
Orbital Express			-10,000	0
ISIS			-16,262	0
Radiation Hardening by Design			-3,000	0
31 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM - ADVANCED DEVELOPMENT	207,114	238,714	195,008	236,654
TMTI - unexecutable growth		-20,000	-36,106	-20,000
CB Initiative Program		10,000		10,000
Anthrax and A. Baumannii Research		1,000		1,000
Anthrax Monoclonal Antibody Therapeutic and Prophylaxis Program		2,000		1,000
Antioxidant Micronutrient Therapeutic Countermeasures for Chemical Agents		3,000		1,350
Bioterrorism Preparedness		2,600		1,170
Carbon Nanotube Bio-Chem Detector		2,000		1,100
Chem-bio Preparedness Center (Note: only for DoD military activities) (Includes transfers from RDTE, DW Line 31 Chemical and Biological Defense Initiative)		2,000		2,000
Chemical/Biological Defense Program - Advanced Development		2,300		1,850
Hand-Held Biosensor and Continuous Monitor for Biodetection		1,800		1,450
Immunological Biological/Chemical Agent Detection System		1,000		1,000
Liquid Crystal Sensor Technology Research and Development for Force Protection		1,000		1,000
Modular Chemical and Biological Detection System		1,000		1,000
Next Generation Threat Detection		2,600		1,170
Novel Viral Biowarfare Agent ID and Treatment		4,000		3,000
Portable Rapid Bacterial Warfare Detection Unit		1,500	1,500	1,500
Protective Self-Decontaminating Surfaces		2,800		1,500
Rapid Response Database Systems Initiative (Note: only for Department of Defense military activities)		2,000	1,000	1,100
Rapid Response Sensor Networking for Multiple DoD Applications Phase 3		1,000		1,000
Rapid Response Therapeutic Platform for Biodefense		2,000		1,100
Removal of NBC Agents in Drinking Water		2,000		1,300
Small Accelerators and Detection Systems for Defense Applications		2,000	2,000	2,000
Unmanned Vehicle CBRNE Unitary Sensor Suite Development and Demonstration		2,000		1,600
Chemical and Biological Defense Initiative (Transfer to RDTE, DW Line 31, Chem-bio Preparedness Center)			1,000	0
Engineered Biological Detectors for Biological Warfare			1,000	1,000
Low Cost Chemical Agent (CA) Detection System for Mission Critical Facilities			1,000	1,000
NIDS Handheld Biological Agent Detectors			6,500	2,900
Plant Vaccine Development			7,000	3,150
Reactive Coatings Enhanced to Resist Chemical/Biological Contamination			1,000	1,000
Self-Detoxifying Materials in CB Protective Clothing			2,000	1,300
33 JOINT ELECTRONIC ADVANCED TECHNOLOGY	9,400	11,400	9,400	10,400
Counter-Man Portal Air Defense System (MANPADS)				
Airspace Protection (CMAPS)		2,000		1,000

R-1	Budget Request	House	Senate	Conference
34 JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS	35,553	38,053	35,553	36,678
Computer Assisted Threat Exploitation System		2,500		1,125
35 JOINT ROBOTICS PROGRAM/AUTONOMOUS	7,700	7,700	10,200	8,825
Improved Robot Combat Integration			2,500	1,125
36 GENERIC LOGISTICS R&D TECHNOLOGY DEMONSTRATIONS	23,437	63,737	114,287	105,297
Defense Technology Showcase Initiative		3,000		1,650
Distributed Inventory Management System (DIMS) (Note: only for Department of Defense military activities)		1,000		1,000
Emerging Critical Interconnection Technology Program - Embedded Passives Test Bed (Note: only for Department of Defense military activities)		4,300		1,935
Locust MAV Enhancement Program (LME) Extended Warfighter Capability (Transferred to Line 39)		2,000		0
Networked Micro-Sensors Technology Testbed at UTD (Note: only for Department of Defense military activities)		2,500		1,100
Secure Digital Coherent Optical Communication		3,000		2,400
Spintronics Memory Storage Technology		10,000		8,000
California Center for Nanoscience Innovations for Defense (CALCNID)		12,000		9,600
Florida Defense Manufacturing Initiative		2,500		2,000
Advanced Mobile Gas-to-Liquid Fueler			4,500	2,900
Chameleon Miniaturized Wireless System			12,000	9,000
Defense Fuel Cell Locomotive			3,000	1,950
DOD Vehicle Fuel Cell Program			7,000	4,550
High Energy Battery Development for Aerial Vehicles			7,500	3,375
Hydrogen Logistics Fuel Initiative			3,000	1,950
New England Manufacturing Supply Chain Initiative			3,000	1,950
Next Generation Manufacturing Technologies Initiative			6,000	2,700
Silicon-28 Deposition Methodology Project			1,000	1,000
Solid Hydrogen Storage and Fuel Cell Systems			4,000	2,200
Solid Hydrogen Storage Initiative			8,000	5,200
Spray Technique Analysis and Research for Defense			2,000	1,300
Ultra-Low Power Battlefield Sensor System			29,850	15,000
Emergency Power Source for National Guardsmen (Transferred from Line 39)				1,100
37 DISTRIBUTION PROCESS OWNER TECH. DEVELOPMENT & IMPLEMENTATION	15,215	15,215	10,215	15,215
Project 2 - lack of transition plan			-5,000	0
38 STRATEGIC ENVIRONMENTAL RESEARCH PROGRAM	67,149	68,149	64,749	64,049
CMU Research Corporation Dendrimer Enhanced Water Remediation		1,000	2,000	1,300
Funding ahead of need			-4,400	-4,400
39 MICROELECTRONIC TECHNOLOGY DEVELOPMENT AND SUPPORT	0	46,600	21,200	46,900
DoD Advanced Filter Program		1,000		1,000
Mode 5 / Mode S Identification Friend or Foe (IFF) System Technology		2,000		1,000
Regional Defense Command Integration Center at Forbes Field (ANG) (Note: only for Department of Defense military activities)		4,500		2,000
DoD Advanced Dynamic Technology Optics Program		1,000		1,000
SuperLattice Nanotechnology		4,000	2,000	2,000

R-1	Budget Request	House	Senate	Conference
Ultra-High Energy Micro Fuel Cell		4,000		2,600
University Materials Characterization and Metrology Center		1,000		1,000
Semiconductor Photomask Technology Defense Initiative		4,500		3,600
DMEA Core Research Funding		20,000		16,000
DoD Advanced Beam Steering Program		1,000		1,000
Foliage-Penetrating Acoustically Cued Imagery Sensor (FACIS)		3,600		3,600
Advanced Surface Radar Technologies			8,500	5,550
Emergency Power Source for National Guardsmen (Transferred to RDTE,DW Line 36)			1,700	
Feature Size Migration at DMEA ARMS Foundry			7,000	4,550
Locust MAV Enhancement Program (Includes transfer from RDTE,DW Line 36)			2,000	2,000
41 ADVANCED ELECTRONICS TECHNOLOGIES	248,627	250,627	231,627	244,652
Center for Advanced Microelectronics Manufacturing		2,000		1,100
Digital Control of Analog Circuits RF Front Ends			-5,000	-2,500
Analog Spectral Processors			-2,500	-1,000
ADNERF			-2,500	-1,000
High Gain Optical Transceiver on a Chip			-2,000	-1,500
Stand-off Detection and Identification			-3,000	0
Deep Ultraviolet Avalanche Photon Detectors			-3,000	-1,500
WIFI-EYEPOD			-6,000	-3,000
Electronic Miniaturization			3,500	2,800
Enabling Ubiquitous Computing through Nanoscale Ultra-Low Power Electronics			1,000	1,000
Mil-Tech Extension Technology Transition			2,500	1,625
42 ADVANCED CONCEPT TECHNOLOGY DEMONSTRATIONS	158,334	162,834	156,334	163,134
Processing Fuel Cell Components for Light Weight, Low Cost Transportation System using a 3+ Ring Extruder (Note: only for Department of Defense military activities)		3,000		3,000
Special Operations Command Target Tracking and Knowledge Discovery System		1,500		1,000
Reduction to new starts			-10,000	-5,000
Crossed-Field Radiation Technology (CFRT)			4,000	3,200
Masking Shunt			2,000	1,300
Spartan Advanced Composite Technology			2,000	1,300
43 HIGH PERFORMANCE COMPUTING MODERNIZATION PROGRAM	175,313	189,313	207,213	209,663
Data Intensive, High Performance Computing, Phase 3		4,000		2,600
High Performance Computational Design of Novel Materials (Note: only for Department of Defense military activities)		1,000	3,400	2,700
High Performance Computer Prototype - Naval Research Lab		5,000		4,000
High Performance Computing for Modeling and Simulation Research (Note: only for Department of Defense military activities)		2,000		1,000

R-1	Budget Request	House	Senate	Conference
W-P HPC Modernization		2,000		1,300
Arctic Regional Supercomputer			5,500	4,400
MHPCC			5,000	5,000
Next Generation Networking Electronic Medical Records Project			9,000	7,200
Northern Tier Network			5,000	3,250
Secure Skies Project			2,000	1,600
Simulation Center HPC Upgrade			2,000	1,300
44 COMMAND, CONTROL AND COMMUNICATIONS SYSTEMS	232,489	232,489	222,920	228,489
PANDA			-5,000	-2,000
XG			-2,869	-1,000
WNaN			-1,700	-1,000
45 LAND WARFARE TECHNOLOGY	48,975	48,975	37,925	44,975
HYFORM			-6,000	-2,000
FCS Supporting Technologies			-5,050	-2,000
47 NETWORK-CENTRIC WARFARE TECHNOLOGY	174,276	174,276	151,042	164,376
Network Command			-5,216	-2,000
PUCS			-2,665	-2,500
Confirmatory Hunter Killer System			-4,981	0
Network Centric Logistics			-6,972	-2,000
FOX			-3,400	-3,400
48 SENSOR TECHNOLOGY	205,519	205,519	186,466	195,519
SEER			-3,000	-2,000
Super-Resolution Vision System			-4,053	-1,000
Augmented Aerial Sentry			-7,000	-3,000
Bipedal Detection			-5,000	-4,000
49 GUIDANCE TECHNOLOGY	157,367	157,367	133,867	143,367
Execution adjustment			-23,500	-14,000
50 DISTRIBUTED LEARNING ADVANCED TECHNOLOGY DEVELOPMENT	14,918	18,518	14,918	17,818
Immersive Learning Environments (ILES)		3,600		2,900
51 SOFTWARE ENGINEERING INSTITUTE	26,594	26,594	29,594	28,544
Advanced Lithography - Thin Film Masks for Lithography			3,000	1,950
53 QUICK REACTION SPECIAL PROJECTS	107,782	107,782	108,782	108,782
Unmanned Aerial Vehicles			1,000	1,000
54 JOINT EXPERIMENTATION	115,684	115,684	108,284	104,084
Duplicative efforts			-15,400	-15,400
Modeling and Simulation			8,000	3,800
56 TEST & EVALUATION SCIENCE & TECHNOLOGY	39,939	39,939	44,939	39,939
National Unmanned Systems Experimentation Environment (Transferred to RDTE,DW Line 63)			5,000	0
57 TECHNOLOGY LINK	6,822	9,622	11,422	12,272
Techlink Southeast		1,000		1,000
IEE Technology Transfer Project		1,800		1,450
P343 - non DOD mission			-3,400	-3,400
DOD Springboard			8,000	6,400

R-1	Budget Request	House	Senate	Conference
59 SPECIAL OPERATIONS ADVANCED TECHNOLOGY DEVELOPMENT	80,402	152,352	50,421	137,351
Advanced Multi-Purpose Microdisplay System		1,800		1,000
Fuel Cell Power Systems for SOCOM Applications		2,400	2,400	2,400
Field Experimentation Program for Special Operations		1,500		1,000
High Altitude Long Endurance Airship (note only for the development of a fully-automated synthesis device for producing electronically and optically active nanostructures)		1,500		1,000
Satellite Synthetic Aperture Radar (SATSAR) Phase II		4,500		3,600
Special Operations Portable Power Source		2,000	5,000	3,250
Transliteration and Genealogical Search Tools		1,500		1,000
USSOCOM Tele-training System (SOFTS) for Foreign Language Training		2,000		1,100
Partnership for Defense Innovations WI-FI Test Laboratory		2,400		1,080
Remote Video Weapons Sight		4,000		1,800
Field-Deployable Digital Holographic Imager (FDDHI)		3,000		2,000
Improved Materials for Fireproof Protective Clothing		1,800		1,500
Improved Special Operations Fast Rope (Soft Rope) Kit		1,800		1,500
Airborne Psychological Operations Modernization Program		1,800		1,500
Waterfront Perimeter Intrusion Detection		1,800		1,500
Short Wave Infrared Technologies		1,350		1,100
Autonomous Navigation Sensor Suites		1,800		1,500
Counter Sniper & Surveillance Detection System (CSS)		2,500		2,000
Life Cycle Support for Unmanned Systems		2,700		2,200
Army DRAMA/Composer Integration & Development		1,800		1,500
Target Location, Identification, and Engagement with Unmanned Systems		2,000		1,600
Improved Information Transfer for Special Forces		7,000		7,000
Multimode Radar with Low Probability of Intercept/ Low Probability of Detection Capability		3,000		2,400
A-160 UAV Program		8,000		6,400
Improvised Rapid Install Aircraft Self Defense EW Mounting System for USSOCOM/USMC		6,000		4,800
UAV Situational Awareness System		2,000		1,000
Advanced Tactical Laser			-40,000	0
PSYOP Mod - unjustified program			-5,981	-5,981
Mobile Electrical Power Utilizing Energy Harvesting			1,000	1,000
Shock Mitigating Suspended Seat for NSW 11m RIB			2,000	1,300
Snapshot Synthetic Aperture Radar			3,600	2,900
Tagging, Tracking, and Locating System for High Value Targets			2,000	1,000
60 NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT	33,890	36,890	37,890	39,090
Integrated High Activity Response System (INHARS)		2,000	4,000	2,600
Digital Network Centric Remotely Operated Weapons System		1,000		1,000
Intelligent Decision Exploration (Transferred from Line 61)				1,600

R-1	Budget Request	House	Senate	Conference
61 PHYSICAL SECURITY EQUIPMENT	0	0	2,000	0
Intelligent Decision Exploration (Transferred to Line 60)			2,000	
63 JOINT ROBOTICS PROGRAM	12,210	22,010	14,210	23,110
Joint Robotics Program		5,000		4,000
Autonomous Machine Vision for Mapping and Investigation		1,000		1,000
National Robotics Training Center of Excellence		2,000		1,100
Robotics Workforce Curriculum Partnership		1,800		1,450
Robotic Assisted Convoy Operations			2,000	1,100
National Unmanned Systems Experimentation Environment (Transferred from RDTE,DW Line 55)				2,250
64 ADVANCED SENSOR APPLICATIONS PROGRAM	18,820	20,320	19,820	24,270
Subterranean Defense Communications System		1,500		1,200
Total Force Education Initiative			1,000	1,000
Secure Airborne Freespace Optical Comm (Transfer from Line 70)				3,250
65 ENVIRONMENTAL SECURITY TECHNICAL CERTIFICATION PROGRAM	28,841	35,841	28,841	32,441
Inland Empire Wellhead Treatment of Perchlorate Contaminated Wells		2,500		1,100
UXO Innovative Technology Transfer		2,500		1,500
Pilot project for integrated multi-sensor UXO detection and recovery system		2,000		1,000
67 BALLISTIC MISSILE DEFENSE TERMINAL DEFENSE SEGMENT	1,038,310	1,008,310	1,111,310	1,096,710
Unexecutable Test Program (1 test)		-30,000		0
Arrow Co-production			50,000	40,000
Arrow SRBMD			23,000	18,400
68 BALLISTIC MISSILE DEFENSE MIDCOURSE DEFENSE SEGMENT	2,876,972	2,758,072	3,103,972	3,055,972
Block 2010		-55,800		-23,000
Long Lead Interceptors 41-50		-63,100		0
Concurrent Test		{20,000}		0
Test Program Enhancement and Operations Support			225,000	200,000
Kauai Test Facility			[4,000]	[4,000]
Range Mission Tool			1,000	1,000
Sensor Data Fusion and Communications			1,000	1,000
70 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	73,111	87,111	76,111	80,711
Naval Postgraduate School Coalition and Operating Area Surveillance and Targeting System (COASTS) Field Experimentation Program and Special Operations				
Advanced Technology Development		1,600		1,000
Photovoltaic Power Supply for Autonomous Sensors		2,000		1,000
Secure Airborne Freespace Optical Comm (Transfer to Line 64)		5,000		0
Chemical/Biological Defense (ACDandP) MR4		1,400		1,000

R-1	Budget Request	House	Senate	Conference
Radiation Countermeasure - Adult-derived Hematopoietic Progenitor Cells to Treat Acute Radiation Syndrome		1,000		1,000
Wide-Spectrum Bio-ID		3,000		2,000
CBNEWS execution delays			-2,000	-2,000
Next Generation M291			1,000	1,000
Oral Anthrax/Plague Vaccine			4,000	2,600
71 BALLISTIC MISSILE DEFENSE SENSORS	514,510	460,010	518,510	516,310
FBX-T #4		-54,500		0
Airborne Infrared Surveillance System (AIRS)			4,000	1,800
72 BALLISTIC MISSILE DEFENSE SYSTEM INTERCEPTOR	405,508	405,508	205,508	357,508
General Reduction				-48,000
KEI Interceptor Development			-120,000	
KEI Launcher Development			-7,000	
KEI System Integration and Test			-22,000	
KEI Support			-20,000	
KEI Engineering			-28,000	
Program Wide Support			-3,000	
73 BALLISTIC MISSILE DEFENSE TEST & TARGETS	591,911	591,911	597,911	596,711
Optical Sensors for PMRF (SHOTS)			4,000	3,200
Real-Time Multi Frame Blind Deconvolution			2,000	1,600
74 BALLISTIC MISSILE DEFENSE PRODUCTS	506,840	0	500,840	0
C2BMC (Transferred to RDTE,DW Line 70A)		-263,906		-263,906
Hercules (Transferred to RDTE,DW Line 70B)		-50,562		-50,562
Joint Warfighter Support (Transferred to RDTE,DW Line 70C)		-53,350		-53,350
Joint National Integration Center (JNIC) (Transferred to RDTE,DW Line 70D)		-99,461		-99,461
Concurrent Test and Operations (Transferred to RDTE,DW Line 70AE)		-22,500		-22,500
Program Wide Support (Transferred to RDTE,DW Line 70A thru 74E)		-17,061		-17,061
Hercules			-5,000	0
Ballistic Missile Defense C2BMC			-20,000	0
Ground Based Studies of Rocket Plume Chemistry (Transferred to RDTE,DW Line 74B)			4,000	0
High Fidelity Missile Defense Modeling and Simulation (JNIC) (Transferred to RDTE,DW Line 74D)			15,000	0
74A BALLISTIC MISSILE DEFENSE COMMAND AND CONTROL, BATTLE MANAGEMENT AND COMMUNICATIONS (C2BMC)		242,789	0	247,896
Program (Transferred to RDTE,DW Line 70)		263,906		263,906
Program Wide Support (Transferred to RDTE,DW Line 70)		8,883		8,990
Program Reduction		-30,000		-25,000
74B BALLISTIC MISSILE DEFENSE HERCULES		52,264	0	49,884
Program (Transferred to RDTE,DW Line 70)		50,562		50,562
Program Wide Support (Transferred to RDTE,DW Line 70)		1,702		1,722
Program Reduction				-5,000
Ground Based Studies of Rocket Plume Chemistry (Transferred from RDTE,DW Line 74)				2,600

R-1	Budget Request	House	Senate	Conference
74C BALLISTIC MISSILE DEFENSE JOINT WARFIGHTER SUPPORT		55,146	0	55,167
Program (Transferred to RDTE,DW Line 70)		53,350		53,350
Program Wide Support (Transferred to RDTE,DW Line 70)		1,796		1,817
74D BALLISTIC MISSILE DEFENSE JOINT NATIONAL INTEGRATION CENTER (JNIC)		102,809	0	111,099
Program (Transferred to RDTE,DW Line 70)		99,461		99,461
Program Wide Support (Transferred to RDTE,DW Line 70)		3,348		3,388
High Fidelity Missile Defense Modeling and Simulation (JNIC) (Transferred from RDTE,DW Line 74)				8,250
74E BALLISTIC MISSILE DEFENSE CONCURRENT TEST AND OPERATIONS		23,257	0	23,257
Program (Transferred to RDTE,DW Line 70)		22,500		22,500
Program Wide Support (Transferred to RDTE,DW Line 70)		757		757
75 BALLISTIC MISSILE DEFENSE SYSTEMS CORE	473,077	476,777	428,077	431,237
Lean Applications through Distance Learning		1,000		1,000
Sensor Reliability		2,700		2,160
Program growth			-45,000	-45,000
76 SPECIAL PROGRAMS - MDA	374,532	374,532	354,532	354,532
Program growth			-20,000	-20,000
77 AEGIS BMD	1,031,874	1,056,874	1,140,074	1,127,434
Aegis BMD Spiral Processor and Migration of Aegis BMD into OA		20,000	20,000	20,000
Asymmetric Missile Defense		5,000		4,000
AEGIS Improvements			80,000	65,000
PMRF Upgrades			8,200	6,560
78 SPACE TRACKING & SURVEILLANCE SYSTEM	390,585	323,585	315,585	323,585
Block 2012		-67,000	-75,000	-67,000
79 MULTIPLE KILL VEHICLES	164,975	99,975	164,975	144,975
Excessive Program Growth		-65,000		-20,000
82 DEPARTMENT OF DEFENSE CORROSION PROGRAM	4,966	7,666	4,966	7,166
DoD Technology Demonstration for Prevention of Material Degradation (TDPMD)		2,700		2,200
88 JOINT ELECTROMAGNETIC TECHNOLOGY (JET) PROGRAM	3,672	4,672	7,672	7,872
Wireless Power Platform RF Energy Harvesting Technology		1,000		1,000
Delta Mine Training Center (JET)			4,000	3,200
90 NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT R	9,277	9,277	12,777	12,077
Transportable Under Vehicle Inspection System (TUVIS)			3,500	2,800

R-1	Budget Request	House	Senate	Conference
91 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	212,072	219,072	210,374	213,174
Joint Warning and Reporting Network (JWARN)		2,000		1,300
Countermeasures to Biological and Chemical Control, Rapid Response		5,000		4,000
JBAIDS Increment II deferral			-7,198	-7,198
ParallaVax Rapid Vaccine Testing Technology			2,500	1,650
Rapid Identification of Biological Warfare Agents			3,000	1,350
93 JOINT ROBOTICS PROGRAM	6,004	11,004	6,004	10,004
Joint Robotics Program		5,000		4,000
101 BUSINESS TRANSFORMATION AGENCY R&D ACTIVITIES	140,245	142,245	160,245	145,745
DIMHRS (Note: Realigned from OM,DW BTA)		52,000	30,000	30,000
Program Adjustment/Unjustified Request		-50,000		-30,000
DBSE AoA delays			-20,000	0
DIMHRS			10,000	5,500
103 DEFENSE ACQUISITION EXECUTIVE (DAE) PILOT PROGRAM	6,015	6,015	1,000	6,015
Duplicative efforts			-5,015	0
105 INFORMATION SECURITY SYSTEMS PROGRAM			2,000	0
Research on Secure Telecommunications Networks (Transfer to RDTE,DW Line 107)			2,000	
107 JOINT COMMAND AND CONTROL PROGRAM (JC2)	47,031	50,031	24,031	35,031
Research on Secure Telecommunication Networks (FAU) (Includes transfer from RDTE,DW Line 105)		2,000		1,000
Operations Security (OPSEC) Training Improvement Programs		1,000		1,000
MS B delays			-25,000	-15,000
Net-Centric Capabilities Pilot (NCCP) Program			2,000	1,000
112 TRAINING TRANSFORMATION (T2)	72,897	78,197	72,897	71,232
Agile Software Capability Interventions (ASCI)		2,000		1,600
JWARS: A Joint Simulation for Linking Campaign Analysis to Warfighter Mission Rehearsal		3,300		1,485
Unexecutable growth			-8,000	-8,000
Playas Command and Control Network			5,000	3,250
Training Transformation in the Pacific (Transfer to RDTE,N Line 19)			3,000	0
115 DEFENSE READINESS REPORTING SYSTEM (DRRS)	10,322	13,922	10,322	13,222
DRRS National Readiness Prototype		3,600		2,900
117 CENTRAL TEST AND EVALUATION INVESTMENT DEVELOPMENT	130,290	132,290	138,290	138,440
Joint Gulf Range Complex Upgrade		1,000		1,000
Range Tactical Data Link and Relay		1,000		1,000
Pacific Region Interoperability Test and Evaluation Capability			4,000	3,200
UAV Systems and Operations Validation Program			3,000	1,950
Unmanned Systems Testbed Project/Pathfinder Demo			1,000	1,000

R-1	Budget Request	House	Senate	Conference
120 TECHNICAL STUDIES, SUPPORT AND ANALYSIS	30,339	31,339	35,339	36,339
Capabilities Study for Improvised Explosive Devices Detection		1,000		1,000
Transfer to OSD/ATL from RDN, 0604327N only for GS Study			5,000	5,000
122 USD(A&T)--CRITICAL TECHNOLOGY SUPPORT	2,029	2,029	4,029	4,029
Military Critical Technologies Program - Transfer from OMDW, line 260			2,000	2,000
128 CLASSIFIED PROGRAM USD(P)	0	90,000	98,000	94,000
131 SUPPORT TO NETWORKS AND INFORMATION INTEGRATION	10,990	10,990	16,990	16,740
Pacific Disaster Center			6,000	5,750
133 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	80,134	82,834	84,134	82,834
Vacuum Sampling Pathogen Collection and Concentration		2,700	4,000	2,700
138 SMALL BUSINESS INNOVATION RESEARCH/CHALLENGE ADMINISTRATION	2,073	6,373	2,073	4,448
Center for Pulsed Power and Power Electronics (Note: only for Department of Defense military activities)		1,800		1,000
Electro-Magnetic Flak Impulse Systems Technology		2,500		1,375
139 DEFENSE TECHNOLOGY ANALYSIS	5,577	5,577	8,577	7,977
Commodity Management Systems Consolidation Program			3,000	2,400
140 FORCE TRANSFORMATION DIRECTORATE	20,404	50,404	23,904	49,229
Operationally Responsive Satellite (Note: \$5M for Modular Bus; \$5M for Bus Technology Development; and \$15M for completion of Phase 3 Common Bus Effort)		25,000		25,000
Project Sheriff/Full Spectrum Effects Platform		5,000		2,250
Reconnaissance Payloads for Operationally Responsive Spacecraft			3,500	1,575
144 MANAGEMENT HEADQUARTERS (RESEARCH & DEVELOPMENT)	50,951	50,951	45,951	48,951
Management Headquarters			-5,000	-2,000
154 PARTNERSHIP FOR PEACE (PFP) INFORMATION MANAGEMENT SYS	1,521	1,521	0	0
Execution delays			-1,521	-1,521
156 JOINT INTEGRATION AND INTEROPERABILITY	66,906	66,906	51,906	51,906
Unjustified growth			-15,000	-15,000
169 LONG HAUL COMMUNICATIONS (DCS)	1,523	1,523	10,023	5,373
DISN Core Enhancements at STRATCOM			8,500	3,850
173 INFORMATION SYSTEMS SECURITY PROGRAM	14,856	18,456	14,856	17,756
Code Assessment & Methodology Project (CAMP) (Note: only for Department of Defense military activities)		3,600		2,900
174 INFORMATION SYSTEMS SECURITY PROGRAM	404,337	405,337	404,337	405,337
B-Secure Multi Media Digital Terminals		1,000		1,000

R-1	Budget Request	House	Senate	Conference
178 GLOBAL COMMAND AND CONTROL SYSTEM	59,681	63,681	59,681	62,881
Global Command & Control System - Joint		4,000		3,200
183 SPECIAL APPLICATIONS FOR CONTINGENCIES	0	0	6,302	9,302
Execution Delays			-5,000	-2,000
186 CRITICAL INFRASTRUCTURE PROTECTION (CIP)	12,422	14,422	12,422	13,722
Cyber Threat Validation Center		2,000		1,300
207 INDUSTRIAL PREPAREDNESS	18,748	33,848	32,348	33,698
Copper Based Casting Technology		2,000	2,000	2,000
Advanced Microcircuit Emulation (AME) Program		3,000		1,350
Lithium Battery Systems for Asset Tracking		1,800	3,000	1,800
Next Generation Manufacturing Technology Initiative (Note: only for Department of Defense military activities)		1,000	6,000	3,900
Northwest Manufacturing Initiative (Note: only for Department of Defense military activities)		2,500	2,600	2,500
4 Ship Network Training Center (Note: only for Department of Defense military activities)		3,000		1,950
Joint Diminishing Manufacturing Sources and Material Shortages (DMSMS) Mitigation Capabilities (JDMC)		1,800		1,450
212 SPECIAL OPERATIONS AVIATION SYSTEMS				
ADVANCED DEVELOPMENT	83,704	83,704	73,704	78,704
CAAP program restructure			-5,000	-5,000
Sof K-Band TF/TA Radar program delays			-5,000	0
213 SPECIAL OPERATIONS TACTICAL SYSTEMS				
DEVELOPMENT	45,241	88,241	51,713	84,313
Arctic Warfare Mountaineering Boot		1,000	1,000	1,000
Full Range Oxygen Gas System Closed-Circuit Oxygen Rebreather		2,000		1,000
Integrated Bridge System		1,000		1,000
Nickel Boron Metal Coating Technology for USSOCOM Weapons		2,000		1,000
Special Operations Forces Combat Assault Rifle (SCAR)		4,000	2,400	1,800
Warrior Reach Project		1,500		1,000
Covert WPM Waveform Modules		4,400	1,000	2,000
Development, Production and Testing of a Prototype Advanced Design of Mark V Craft		5,000		4,000
Advanced Combat Boot-Manufacturing Enhancements using Polyurethane Direct Injection		1,000		1,000
Gunfire Detection System for Special Operations Combatant Craft		1,500		1,200
U. S. Special Operations Command STAR-TEC Partnership Program		3,000		2,400
Command and Control Mission Manager (C2MM) Spiral 4		1,000		1,000
Integrated Warfighter Information System (IWIS) II		2,100	2,100	2,100
Next Generation Navigation Computer System		1,000		1,000
SOCOM Imagery Dissemination System (SIDS)		1,800		1,500
Strategic Communications Support Initiative		3,500		2,800
Tactical Communication Systems Testbed Initiative		1,800		1,500
Small Boat Family Integrated Combat System		2,700		2,200
MARSOC BRITE M22 Imagery Dissemination Systems		2,700		2,200
MBMMR program cancellation			-5,928	-5,928
Holographic Close Combat Optic			1,000	1,000

R-1	Budget Request	House	Senate	Conference
Over the Horizon Augmented Reconnaissance (ROAR)			2,000	1,300
Special Operations Tactical Boot Suite Development			1,500	1,000
Weapons Shot Counter			1,400	1,000
MBITR (Transfer from P,DW Line 50)				9,000
214 SPECIAL OPERATIONS INTELLIGENCE SYSTEMS				
DEVELOPMENT	29,011	96,711	49,611	65,031
Optimal Placement of Unattended Sensors		2,500		1,650
University Multi-Spectral Laboratory and Analytical Services Center		1,500	3,000	1,500
Tactical Miniature Software Definable Receiver		2,000		1,600
MEMS and Nanotechnology Defense Lab		2,300		2,300
SOF Nanotechnology Integration Team		2,400		1,920
SOCOM Power Sources Integration Team		2,500		2,000
SOF Long Endurance Demonstrator (SLED)		5,000		5,000
Special Ops Classified Activities Initiative		38,000		0
Payload Interface Master Module		1,000		1,000
SOF Tactical Interface (Note: only to continue development initiated on SBIR SOCOM 01-0006)		10,500		8,400
Advanced, Long Endurance Unattended Ground Sensor Technology			2,100	1,700
Biometric Signatures Research			3,000	2,000
Joint METOC-SOCM Airdropped Sensors			2,500	1,400
JTWS Variants for Network-Centric Advanced Platforms			5,000	2,250
Special Operations-Application Specific Integrated Circuit Development			5,000	3,300
215 SOF OPERATIONAL ENHANCEMENTS	99,010	104,510	108,810	107,460
Miniaturized Target Tracking and Locating Devices		3,000		1,350
STOL Herk I continuation (Transferred to RDTE,AF Line 215)		2,500		0
3-D Stabilized Facial Recognition Imaging Technology			2,000	1,300
Advanced Tactical Electronic Countermeasures			1,500	1,000
B-Band Covert Night Vision System LRIP			2,000	1,300
Operational Enhancements to Low Profile NVGs (AN/PVS-21 LP/NVG)			1,000	1,000
Special Operations Tactical Mobility Simulator			1,000	1,000
SOCOM Counterterrorism Operational Enhancements in C4ISR			2,300	1,500
217 SPECIAL OPERATIONS AIRCRAFT DEFENSIVE SYSTEMS	7,850	7,850	4,850	4,850
LBJ - funding excess to need			-3,000	-3,000
220 UNMANNED VEHICLES (UV)	1,521	3,521	1,521	3,121
Unmanned Logistics Support Vehicles for SOF Initiative		2,000		1,600
999 CLASSIFIED PROGRAMS	3,323,792	3,382,992	3,142,066	3,211,033
Classified Adjustment		59,200		-112,759
JOINT FORCES COMMAND EXPERIMENTATION AND T2 - Unjustified Program		-30,000	0	0

CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM

The conference agreement provides an increase of \$25,000,000 for the Chemical and Biological Defense Initiative. The Secretary of Defense is directed to allocate these funds among the programs that yield the greatest gain in our chem-bio defensive posture. The conferees further direct that such funds may not be obligated until 15 days after a report, including a description of projects to be funded, is provided to the congressional defense committees.

MDA—SPACE TRACKING AND SURVEILLANCE SYSTEM (STSS)

The budget request includes \$390,585,000 for STSS, including \$97,000,000 for the Block 2012 space system. The conference agreement includes \$323,585,000, a reduction of \$67,000,000 for Block 2012. The conferees note that two demonstration satellites will be launched in fiscal year 2007 and that exploitation of data from these satellites will allow the Missile Defense Agency to develop sensor requirements and a concept of operations that will drive the Block 2012 space system. As a result, the conferees believe it is premature to award a full Block 2012 space system acquisition contract and direct the Missile Defense Agency to use the appropriated STSS Block 2012 funds to initiate a contract to: (1) pursue sensor technology development and risk reduction; (2) complete the definition of the Block 2012 system through analysis and trades; and, (3) develop corresponding system requirements leveraging the demonstration satellites.

MDA—AVOIDANCE OF CONGRESSIONAL REDUCTIONS

The conferees remain concerned that the Missile Defense Agency is moving funds between various elements and programs and/or moving contract scope across elements and programs in order to avoid reductions made by the congressional defense committees. This practice is unacceptable and MDA is directed to use prior approval reprogramming procedures specified in the report accompanying the House version of the fiscal year 2007 Department of Defense Appropriations bill (H.R. 109-504) for any movement of funds or contract scope beyond the \$10,000,000 threshold in research, development, test and evaluation. The MDA shall follow the limitation that prior approval reprogramming is set at either the specified dollar threshold or 20% of the line, whichever is less. The conferees agree that: Ballistic Missile Defense—AEGIS, PE 0603892C; Ballistic Missile Defense Terminal Defense Segment, PE 0603881

C; Ballistic Missile Defense Midcourse Defense Segment, PE 0603882C; and Multiple Kill Vehicle, PE 0603894C are designated as congressional special interest items subject to prior approval reprogramming procedures. MDA—OTHER TRANSACTION AUTHORITY (OTA)

The conferees are concerned with the continued use of OTA contracts by the Missile Defense Agency. These OTA contracts lack the customary safeguards found under FAR-based contracts for organizational conflict of interest, truth in negotiations and submission of cost and pricing data. The conferees strongly encourage the Missile Defense Agency to convert large development and procurement contracts using OTA to FAR-based contracts. Accordingly, the conferees direct the Missile Defense Agency to submit a report on the use of Other Transaction Authority contracts by the Missile Defense Agency. This report should include the number, value, and justification for the use of Other Transaction Authority. The report should be delivered to the congressional defense committees 90 days after the enactment of this Act.

MILTECH EXTENSION PROGRAM

The conferees support the ‘‘MilTech Extension’’ program and encourage the Department of Defense to fund this program in the fiscal year 2008 budget request. MilTech has been highly successful at helping to transition technologies from innovative small companies to Department of Defense operational use.

MDA—AEGIS IMPROVEMENTS

The conferees have provided \$65,000,000 for AEGIS Improvements. Of that amount \$15,000,000 is available for the Sea-Based Terminal Capability, and \$50,000,000 is available for development and procurement of SM-3 Interceptors.

The conferees are aware that there is an additional requirement of \$20,000,000 in fiscal year 2007 for Sea-Based Terminal Defense, and direct the Missile Defense Agency to submit a prior approval reprogramming to fully fund this requirement.

AIRBORNE LASER (ABL)

The conferees are encouraged by the recent technical progress that the Airborne Laser (ABL) program has made over the last two years with the accomplishment of the firing of the high energy laser and the flight testing of the associated beam control/fire control system. The conferees also note that these technical challenges were accomplished while the program stayed within the government determined schedule and budget.

As the acknowledged Primary Boost Phase Defense, the conferees are concerned by the recent decision of the Missile Defense Agency (MDA) to slip the planning for the development of an operational ABL by two years later than proposed in the fiscal year 2006 budget submittal. The conferees believe that if the ABL succeeds in the next two years of testing and accomplishes its main test objectives leading towards a lethal shoot down demonstration in late 2008, MDA should move the program into development of an operational ABL configuration at the earliest date.

Therefore, the conferees encourage MDA to re-evaluate funding in the Future Years Defense Plan to ensure that funding levels for ABL are consistent with its status as the Primary Boost Phase Defense. Further, the conferees recommend MDA develop a plan that would allow for the development of an advanced ABL configuration in the shortest time after a successful lethal shoot down demonstration. This plan should be delivered to the congressional defense committees 90 days after the enactment of this Act.

DEFENSE INTEGRATED MILITARY HUMAN RESOURCES SYSTEM (DIMHRS)

The conferees direct the Secretary of Defense and the currently participating individual services to maintain DIMHRS application development and implementation and DIMHRS performance development and emergent requirement efforts at the Space and Naval Warfare (SPAWAR) Systems Center (SSC) in New Orleans.

DEFENSE ADVANCED RESEARCH PROJECTS AGENCY (DARPA)

The conferees provide \$3,135,303,000 for DARPA, a reduction of \$159,045,000 from the request. The conferees direct the Director of DARPA to submit to the congressional defense committees no later than sixty days after enactment of this Act a report in writing that details by program the application of undistributed reductions made in this Act.

The conferees commend DARPA for its responsiveness and assistance in delineating its sizeable programmatic and budgetary information. However, given the magnitude of DARPA's budget and the significant quantity of programs managed by DARPA, the conferees believe that future budget justification materials should provide more individual programmatic detail, to include budget information, programmatic achievements and goals by fiscal year, as well as transition plans.

OPERATIONAL TEST AND EVALUATION, DEFENSE

The conference agreement on items addressed by either the House or the Senate is as follows:

(In thousands of dollars)					
	Budget	House	Senate	Conference	

OPERATIONAL TEST & EVAL, DEFENSE					
RDT&E MANAGEMENT SUPPORT					
4	OPERATIONAL TEST AND EVALUATION.....	50,161	50,161	56,161	54,061
6	LIVE FIRE TESTING.....	11,245	11,245	11,245	11,245
8	OPERATIONAL TEST ACTIVITIES AND ANALYSES.....	120,114	120,114	120,114	120,114

	TOTAL, RDT&E MANAGEMENT SUPPORT.....	181,520	181,520	187,520	185,420

	TOTAL, OPERATIONAL TEST & EVAL, DEFENSE.....	181,520	181,520	187,520	185,420

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[in thousands of dollars]

	Budget Request	House	Senate	Conference
3 OPERATIONAL TEST AND EVALUATION	0	0	0	0
4 OPERATIONAL TEST AND EVALUATION Holloman High Speed Test Track	50,161	50,161	56,161 6,000	54,061 3,900
5 LIVE FIRE TESTING	0	0	0	0
6 LIVE FIRE TESTING	11,245	11,245	11,245	11,245
7 DEVELOPMENT TEST AND EVALUATION	0	0	0	0
8 OPERATIONAL TEST ACTIVITIES AND ANALYSES	120,114	120,114	120,114	120,114