TITLE IV

RESEARCH, DEVELOPMENT, TEST AND EVALUATION

The fiscal year 2012 Department of Defense Research, Development, Test and Evaluation budget request totals $75,325,082,000. The accompanying bill recommends $73,009,469,000. The table below summarizes the budget estimate and the Committee's recommendations.

(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
RECAPITULATION			
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY.....	9,683,980	9,381,166	-302,814
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, NAVY.....	17,956,431	17,798,950	-157,481
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, AIR FORCE.	27,737,701	26,313,196	-1,424,505
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, DEFENSE-WIDE.....	19,755,678	19,324,865	-430,813
OPERATIONAL TEST AND EVALUATION, DEFENSE.....	191,292	191,292	---
GRAND TOTAL, RDT&E.....	75,325,082	73,009,469	-2,315,613

MEDIUM EXTENDED AIR DEFENSE SYSTEM

The budget request proposes $406,605,000 for the Medium Extended Air Defense System (MEADS) program. The Committee recommends funding of $257,105,000, which represents a reduction of $149,500,000. The Committee is aware that MEADS is a tri-national co-development program with Germany and Italy. MEADS was designed to provide joint and coalition forces, critical assets, and defended area protection against multiple and simultaneous attacks by short to medium range ballistic missiles, cruise missiles, unmanned aerial vehicles, and tactical air-to-surface missiles. The Committee is aware that in February 2011 the Secretary of Defense decided not to procure the MEADS system citing cost, schedule, and execution issues. The Committee understands that efforts are ongoing to determine the various program options including continued development, unilateral termination, and mutual termination. The Committee supports these efforts. The Committee recommendation is based on the Army implementation of a well organized plan with close cooperation between the tri-national members and a spending plan that avoids worst case funding situations.

HISTORICALLY BLACK COLLEGES AND UNIVERSITIES AND MINORITY INSTITUTIONS

The Committee is concerned that the planned transfer of the Historically Black Colleges and Universities and Minority Institutions (HBCU/MI) program from the Office of the Secretary of Defense to the Department of the Army will dramatically diminish the effectiveness and scope of the program. The Committee encourages the Secretary of Defense to maintain the HBCU/MI program within the Office of the Secretary of Defense in future budget submissions. Further, the Secretary of Defense is directed to submit a plan of action to the congressional defense committees, not later than 120 days after enactment of this Act, detailing renewed efforts to strengthen and expand defense related research activities with the Historically Black Colleges and Universities and Minority Institutions.

LIGHT TACTICAL WHEELED VEHICLES

The Army began fielding High Mobility Multi-Purpose Wheeled Vehicles (HMMWV) in the mid 1980s. The vehicle was a significant improvement over the Quarter Ton Truck. The HMMWV featured increased ground clearance, greater maneuverability, and more load carrying capacity. The Committee is aware that the HMMWV fleet was used for base operations support and for rear area support in combat zones. HMMWVs were not armored until the beginning of Operation Iraqi Freedom. As the tactics in Iraq evolved to include extensive combat patrolling, often in congested urban areas, HMMWVs were employed as patrol vehicles or scout vehicles, and a series of progressively better, heavier armor kits were installed on HMMWVs. Generally, the kits were shipped to the combat theater and installed there. Eventually, the assembly line began to produce armored HMMWVs. These armored patrol vehicles provided greatly improved force protection as compared to unarmored HMMWVs. However, the increase in protection afforded

by the additional armor was limited and the additional weight reduced vehicle performance and displaced critical payloads.

The Committee notes that the Army operates a fleet of approximately 150,000 HMMWVs. The Marine Corps has 24,000 HMMWVs. The Navy and Air Force have smaller numbers. Based on the expected service life of the vehicles, the Services will continue to operate significant numbers of HMMWVs for at least another 20 years. The Army and Marine Corps perform a maintenance reset on their HMMWVs when the vehicles return from deployment, restoring the HMMWVs to a fully operational capability. In addition to post-deployment reset, 46,000 of the Army's older, unarmored HMMWVs have been recapitalized through a program of rebuilds, repairs, and upgrades that restored those vehicles to a zero hours, zero miles status. The Army continues the recapitalization program with attention focused on the armored HMMWVs. Additionally, the Army is researching the feasibility and affordability of modernizing armored HMMWVs to achieve an increased level of crew protection, through an effort known as the Competitive Recapitalization program.

As combat continued in Iraq, the numbers of Soldiers and Marines wounded and maimed by Improvised Explosive Devices (IEDs) increased. Based on urgent needs statements from Marine Corps and Army commanders in Iraq, a joint program office was established to qualify and field armored transports that were larger and more survivable than the armored HMMWVs. Designated as Mine Resistant Ambush Protected (MRAP) vehicles, nearly 27,000 have been produced, including over 8,000 MRAP All Terrain Vehicles (MATV). The all terrain variants are designed to provide better off-road performance in Afghanistan, while providing excellent survivability and significant ground clearance. The MATVs provide a level of armor protection that is approximately equivalent to the protection found in the smaller of the original MRAPs, which is a significant increase in protection above that of an armored HMMWV. The Committee commends the Department for continuing to improve, test, and field survivability enhancements for all of the HMMWVs, MRAPs, and MATVs.

The Committee is aware that in a separate effort, the Army, Marine Corps, and Special Operations Command began a program to produce a Joint Light Tactical Vehicle (JLTV) to eventually replace the HMMWV. The JLTV has been designed and developed as an armored vehicle from the inception of the program. The JLTV is expected to provide MRAP-like armor protection, good off-road maneuverability, and substantial payload capability.

The Committee notes that the JLTV program is intended to begin fielding in 2016. The Committee is aware that while the JLTV program continues development, the Services operate thousands of HMMWVs and MRAPs. Any calculation regarding how many, when, and at what price the Services would purchase JLTVs should consider the worth of the battle-tested vehicles that have been bought and paid for and on which the Soldiers and Marines have trained and fought. Additionally, the military Services and manufacturers continue to improve the survivability of the MRAPs, MATVs, and HMMWVs. The Committee understands that HMMWVs have been made more survivable, but have grown in

weight, and efforts continue to make MATVs lighter and more maneuverable while sustaining survivability. The Committee notes that the operational niche to be filled by the JLTV appears to be shrinking.

The Committee believes that the Department of Defense should continue to develop, test, and field survivability upgrades to the HMMWV, MRAP, and MATV fleets to counter the challenges presented by small arms, improvised explosive devices, and other weapons. The Committee recommends that the Department of Defense continue to evaluate the roles and requirements of the JLTV in the tactical wheeled vehicle fleet, seeking advances in technology for armor, propulsion, off-road maneuverability, and other areas, until such time as it becomes clear that there is a threat to be countered for which the JLTV is better suited than HMMWVs, MRAPs, or MATVs, or the current fleets of HMMWVs and MRAPs are judged to be not economically repairable.

The fiscal year 2012 budget request for Research, Development, Test and Evaluation, Army includes $172,093,000 for development of the JLTV. The Committee recommendation is $147,093,000, a reduction of $25,000,000. For the Marine Corps, the budget request in Research, Development, Test and Evaluation, Navy includes $39,954,000 for JLTV development. The Committee recommendation is $14,954,000, a reduction of $25,000,000.

Additionally, the Committee recommendation includes an increase of $50,000,000 in Research, Development, Test and Evaluation, Army, to support continued development and testing for HMMWV survivability enhancements. The Committee is aware that significant improvements in survivability appear to be feasible by the application of blast venting technology, such as the so-called blast chimney. These improvements could lead to a HMMWV with survivability equal to or better than the MRAP, weight considerably less than predicted for the JLTV, and at a cost significantly less than either.

The Committee expects that future requests for funding for the HMMWV and JLTV programs, and the accompanying budget justification material, will describe the capabilities to be provided by the various light tactical vehicles.

DEPARTMENT OF DEFENSE AND SERVICE CYBER ACTIVITIES AND VIRTUAL MAJOR FORCE PROGRAM

The threat to and from the cyber realm has been well documented; however, the resources being expended against the threat have not. In order to better evaluate the planning and resourcing for Department of Defense cyber activities, the Committee directs the Commander, United States Cyber Command, in coordination with the Secretary of Defense and each of the Service Secretaries, to provide to the congressional defense committees a report that details the following: the goals of the cyber initiative, including cyberspace operations, computer network operations, information assurance, and full spectrum cyber operations for the Department of Defense and the Services; the organizational structure and responsibilities for each of the participants; the various programs and initiatives in the Department of Defense and the Services that are supporting the cyber goals outlined with descriptions of how they

achieve the goals; and the year-to-year funding over the future years defense program, cost to complete, and the schedules for each of the various programs and initiatives detailed above. Finally, of the funds appropriated for the Information Systems Security Program no more than twenty-five percent shall be obligated until this report is delivered to the congressional defense committees and the committees have acknowledged in writing to the Department of Defense the receipt of the report.

The Committee also suggests that the Department establish a virtual Major Force Program (MFP) to better coordinate and track the budgets related to cyber activities. Further, the Committee believes this virtual MFP will provide greater transparency and clarity to achieve the goals of a more secure cyber realm for the national security apparatus.

INFORMATION SECURITY

The Committee is concerned that the Department of Defense is not doing enough to support secure communication and collaboration among businesses throughout the entire Defense Industrial Base that face potential threats to operations and supply chains. The Committee understands that a large portion of companies in the Defense Industrial Base that lack security clearances are not being served by current Department of Defense efforts to provide threat information, and this could affect their abilities to deliver to the warfighter. The Defense Industrial Base is vulnerable to natural and man-made events that can adversely affect their ability to conduct business, develop products, and support the warfighter. The Committee is aware of existing, secure, commercial services that currently provide the capability to distribute sensitive but unclassified threat information to all companies in the Defense Industrial Base, including companies without security clearances. Therefore, the Committee directs the Secretary of Defense to provide a report not later than 60 days after enactment of this Act on the collaboration and sharing of sensitive but unclassified threat information across the entire Defense Industrial Base, including any plans to leverage commercially available services that meet federally mandated security requirements.

CORROSION PREVENTION AND CONTROL

The Committee remains concerned that the Department of Defense continues to underfund its corrosion mitigation and prevention requirements. Corrosion can reduce mission readiness by limiting asset availability and can also impact the safety of the Nation's servicemembers. The Committee believes the Department should invest more in corrosion prevention and mitigation projects in order to better protect the Nation's investment in its military assets and to control maintenance and replacement costs of weapon systems and infrastructure. This investment requires a better understanding of how to prevent, reduce, and treat corrosion by applying the latest research and best practices to the military. The Committee urges the Department to utilize the best available data and expertise for researching, understanding, controlling, preventing, predicting, and solving corrosion-related problems to minimize the impact that corrosion has on its platforms and assets.

This data and expertise should be available to all Services and agencies within the Department of Defense.

INTEGRATED WEAPONS AND ARMAMENT SPECIALTY SITE FOR GUNS AND AMMUNITION

The Committee is aware that the Base Realignment and Closure (BRAC) Act, 2005, directed the realignment and consolidation of those guns and ammunition facilities that work in weapons and armaments research, development, and acquisition. The Committee understands that the realignment established an Integrated Weapons and Armaments Specialty Site for Guns and Ammunition that is a joint center of excellence for guns and ammunition research, development, and acquisition. Furthermore, BRAC 2005 directed the movement of the Services' guns and ammunition work to the center of excellence in weapons and armaments research, development, and acquisition. This consolidation action regarding guns and ammunition research, development, and acquisition activities in the Army and Navy promotes jointness and leverages technical synergy. The Committee is aware of the complex challenges that must be overcome in order to accomplish the realignments, consolidations, and closures that are directed in the BRAC process. However, the Committee expects the Department of Defense to proceed aggressively to accomplish the directed realignments, consolidations, and closures. The Committee directs that not later than 90 days after enactment of this Act, the Secretary of the Army shall submit to the congressional defense committees a report on the status of implementing the provisions of the BRAC 2005 law regarding the consolidation of guns and ammunition facilities that work in weapons and armament research, development, and acquisition. The report shall include the following: staffing requirements and status, facilities requirements and status, cross service integration achieved, and plans for future integration. Further, the Secretary of the Army shall, not fewer than 120 days prior to moving any mission from the Integrated Weapons and Armament Specialty Site for Guns and Ammunition, notify the congressional defense committees in writing of the details for such a move, and an assessment of the impact of any such move on the Integrated Weapons and Armament Specialty Site for Guns and Ammunition.

TEST FACILITIES

The Committee recognizes the critical importance of state of the art research and development testing facilities within the Department of Defense, including hypersonic wind tunnel facilities. The Committee encourages the Department to continue the use and support of these facilities, including improvements to infrastructure and capacity as needed.

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 special interest items for the purpose of the Base for Reprogramming (DD Form 1414). Each of these items must be carried on the DD Form 1414 at the

stated amount, specifically addressed in the committee report. These items remain special interest items whether or not they are repeated in a subsequent conference report.

REPROGRAMMING GUIDANCE FOR ACQUISITION ACCOUNTS

It is the intent of the Congress that the program baseline for reprogramming funds reflects all approved adjustment actions: the initial appropriation as well as any rescissions, supplemental appropriations, and approved Department of Defense Form 1415 reprogrammings. The Secretary of Defense is directed to ensure that financial management regulations incorporate approved reprogramming actions as an adjustment to the base for reprogramming value.

The Committee directs the Department of Defense to continue to follow the reprogramming guidance specified in the report accompanying the House version of the fiscal year 2006 Department of Defense Appropriations Act (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 twenty percent of the procurement or research, development, test and evaluation line, whichever is less. The percentage change limitation applies to both program increases and decreases. Additionally, this percentage change applies to the program base value at the time the below threshold movement of funds is executed. These thresholds are cumulative from the base for reprogramming value as modified by any adjustment action. 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.

REPROGRAMMING REPORTING REQUIREMENTS

The Committee directs the Under Secretary of Defense (Comptroller) to continue to provide the congressional defense committees quarterly, spreadsheet-based DD Form 1416 reports for Service and defense-wide accounts in titles III and IV of this Act as required in the statement of the managers accompanying the Department of Defense Appropriations Act, 2006.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY

Fiscal year 2011 appropriation	$9,710,998,000
Fiscal year 2012 budget request	9,683,980,000
Committee recommendation	9,381,166,000
Change from budget request	−302,814,000

This appropriation finances the research, development, test and evaluation activities of the Department of the Army. The total amount recommended in the bill will provide the following program in fiscal year 2012:

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
	RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY			
	BASIC RESEARCH			
1	IN-HOUSE LABORATORY INDEPENDENT RESEARCH	21,064	21,064	---
2	DEFENSE RESEARCH SCIENCES	213,942	213,942	---
3	UNIVERSITY RESEARCH INITIATIVES	80,977	80,977	---
4	UNIVERSITY AND INDUSTRY RESEARCH CENTERS	120,937	140,937	+20,000
	TOTAL, BASIC RESEARCH	436,920	456,920	+20,000
	APPLIED RESEARCH			
5	MATERIALS TECHNOLOGY	30,258	30,258	---
6	SENSORS AND ELECTRONIC SURVIVABILITY	43,521	43,521	---
7	TRACTOR HIP	14,230	14,230	---
8	AVIATION TECHNOLOGY	44,610	44,610	---
9	ELECTRONIC WARFARE TECHNOLOGY	15,790	15,790	---
10	MISSILE TECHNOLOGY	50,685	50,685	---
11	ADVANCED WEAPONS TECHNOLOGY	20,034	20,034	---
12	ADVANCED CONCEPTS AND SIMULATION	20,933	20,933	---
13	COMBAT VEHICLE AND AUTOMOTIVE TECHNOLOGY	64,306	64,306	---
14	BALLISTICS TECHNOLOGY	59,214	59,214	---
15	CHEMICAL, SMOKE AND EQUIPMENT DEFEATING TECHNOLOGY	4,877	4,877	---
16	JOINT SERVICE SMALL ARMS PROGRAM	8,244	8,244	---
17	WEAPONS AND MUNITIONS TECHNOLOGY	39,813	54,813	+15,000
18	ELECTRONICS AND ELECTRONIC DEVICES	62,962	62,962	---
19	NIGHT VISION TECHNOLOGY	57,203	49,203	-8,000
20	COUNTERMINE SYSTEMS	20,280	20,280	---
21	HUMAN FACTORS ENGINEERING TECHNOLOGY	21,801	21,801	---
22	ENVIRONMENTAL QUALITY TECHNOLOGY	20,837	20,837	---
23	COMMAND, CONTROL, COMMUNICATIONS TECHNOLOGY	26,116	26,116	---
24	COMPUTER AND SOFTWARE TECHNOLOGY	8,591	8,591	---
25	MILITARY ENGINEERING TECHNOLOGY	80,317	80,317	---
26	MANPOWER/PERSONNEL/TRAINING TECHNOLOGY	18,946	18,946	---
27	WARFIGHTER TECHNOLOGY	29,835	29,835	---
28	MEDICAL TECHNOLOGY	105,929	105,929	---
	TOTAL, APPLIED RESEARCH	869,332	876,332	+7,000

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
	ADVANCED TECHNOLOGY DEVELOPMENT			
29	WARFIGHTER ADVANCED TECHNOLOGY	52,979	52,979	---
30	MEDICAL ADVANCED TECHNOLOGY	68,171	96,971	+28,800
31	AVIATION ADVANCED TECHNOLOGY	62,193	62,193	---
32	WEAPONS AND MUNITIONS ADVANCED TECHNOLOGY	77,077	77,077	---
33	COMBAT VEHICLE AND AUTOMOTIVE ADVANCED TECHNOLOGY	106,145	95,145	-11,000
34	COMMAND, CONTROL, COMMUNICATIONS ADVANCED TECHNOLOGY	5,312	5,312	---
35	MANPOWER, PERSONNEL AND TRAINING ADVANCED TECHNOLOGY	10,298	10,298	---
36	ELECTRONIC WARFARE ADVANCED TECHNOLOGY	57,963	53,963	-4,000
37	TRACTOR HIKE	8,155	8,155	---
38	NEXT GENERATION TRAINING & SIMULATION SYSTEMS	17,936	17,936	---
39	TRACTOR ROSE	12,597	12,597	---
40	MILITARY HIV RESEARCH	6,796	22,796	+16,000
41	COMBATING TERRORISM, TECHNOLOGY DEVELOPMENT	12,191	12,191	---
42	TRACTOR NAIL	4,278	4,278	---
43	TRACTOR EGGS	2,261	2,261	---
44	ELECTRONIC WARFARE TECHNOLOGY	23,677	23,677	---
45	MISSILE AND ROCKET ADVANCED TECHNOLOGY	90,602	90,602	---
46	TRACTOR CAGE	10,315	5,315	-5,000
47	HIGH PERFORMANCE COMPUTING MODERNIZATION PROGRAM	183,150	183,150	---
48	LANDMINE WARFARE AND BARRIER ADVANCED TECHNOLOGY	31,541	31,541	---
49	JOINT SERVICE SMALL ARMS PROGRAM	7,686	7,686	---
50	NIGHT VISION ADVANCED TECHNOLOGY	42,414	42,414	---
51	ENVIRONMENTAL QUALITY TECHNOLOGY DEMONSTRATIONS	15,959	15,959	---
52	MILITARY ENGINEERING ADVANCED TECHNOLOGY	36,516	28,516	-8,000
53	ADVANCED TACTICAL COMPUTER SCIENCE & SENSOR TECHNOLOGY	30,600	30,600	---
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT	976,812	993,612	+16,800

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
	DEMONSTRATION & VALIDATION			
55	ARMY MISSILE DEFENSE SYSTEMS INTEGRATION	36,009	24,455	-11,554
56	ARMY MISSILE DEFENSE SYSTEMS INTEGRATION (SPACE)	9,612	9,612	---
58	LANDMINE WARFARE AND BARRIER - ADV DEV	35,383	35,383	---
59	SMOKE, OBSCURANT AND TARGET DEFEATING SYS-ADV DEV	9,501	4,501	-5,000
60	TANK AND MEDIUM CALIBER AMMUNITION	39,693	39,693	---
61	ADVANCED TANK ARMAMENT SYSTEM (ATAS)	101,408	64,408	-37,000
62	SOLDIER SUPPORT AND SURVIVABILITY	9,747	9,747	---
63	TACTICAL ELECTRONIC SURVEILLANCE SYSTEM - AD	5,766	5,766	---
65	ENVIRONMENTAL QUALITY TECHNOLOGY	4,946	4,946	---
66	WARFIGHTER INFORMATION NETWORK-TACTICAL	297,955	297,955	---
67	NATO RESEARCH AND DEVELOPMENT	4,765	4,765	---
68	AVIATION - ADV DEV	7,107	7,107	---
69	LOGISTICS AND ENGINEER EQUIPMENT - ADV DEV	19,509	19,509	---
70	COMBAT SERVICE SUPPORT CONTROL SYSTEM EVALUATION	5,258	5,258	---
71	MEDICAL SYSTEMS - ADV DEV	34,997	34,997	---
72	SOLDIER SYSTEMS - ADVANCED DEVELOPMENT	19,598	19,598	---
73	INTEGRATED BROADCAST SERVICE	1,496	1,496	---
74	TECHNOLOGY MATURATION INITIATIVES	10,181	10,181	---
75	TRACTOR JUTE	15,609	15,609	---
76	JOINT COOPERATIVE TARGET IDENTIFICATION - GROUND (JCTI	41,652	41,652	---
77	ENDURANCE UAVS	42,892	42,892	---
	TOTAL, DEMONSTRATION & VALIDATION	753,084	699,530	-53,554

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
	ENGINEERING & MANUFACTURING DEVELOPMENT			
78	AIRCRAFT AVIONICS	144,687	144,687	---
79	ARMED, DEPLOYABLE OH-58D	166,132	131,132	-35,000
80	ELECTRONIC WARFARE DEVELOPMENT	101,265	101,265	---
82	ALL SOURCE ANALYSIS SYSTEM	17,412	17,412	---
83	TRACTOR CAGE	26,577	26,577	---
84	INFANTRY SUPPORT WEAPONS	73,728	91,474	+17,746
85	MEDIUM TACTICAL VEHICLES	3,961	3,961	---
87	JAVELIN	17,340	17,340	---
88	FAMILY OF HEAVY TACTICAL VEHICLES	5,478	5,478	---
89	AIR TRAFFIC CONTROL	22,922	22,922	---
90	LIGHT TACTICAL WHEELED VEHICLES	---	50,000	+50,000
93	FCS SYSTEMS OF SYSTEMS ENGR & PROGRAM MGMT	383,872	311,872	-72,000
95	FCS UNMANNED GROUND VEHICLES	143,840	143,840	---
96	FCS UNATTENDED GROUND SENSORS	499	499	---
97	FCS SUSTAINMENT & TRAINING R&D	---	52,693	+52,693
98	NIGHT VISION SYSTEMS - SDD	59,265	59,265	---
99	COMBAT FEEDING, CLOTHING, AND EQUIPMENT	2,075	2,075	---
100	NON-SYSTEM TRAINING DEVICES - SDD	30,021	30,021	---
101	TERRAIN INFORMATION - SDD	1,596	1,596	---
102	AIR DEFENSE COMMAND, CONTROL AND INTELLIGENCE -SDD	83,010	83,010	---
103	CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT	28,305	28,305	---
104	AUTOMATIC TEST EQUIPMENT DEVELOPMENT	14,375	14,375	---
105	DISTRIBUTIVE INTERACTIVE SIMULATIONS (DIS) - SDD	15,803	15,803	---
107	COMBINED ARMS TACTICAL TRAINER (CATT) CORE	22,226	22,226	---
108	WEAPONS AND MUNITIONS - SDD	13,828	13,828	---
109	LOGISTICS AND ENGINEER EQUIPMENT - SDD	251,104	226,104	-25,000

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
110	COMMAND, CONTROL, COMMUNICATIONS SYSTEMS - SDD	137,811	137,811	---
111	MEDICAL MATERIEL/MEDICAL BIOLOGICAL DEFENSE EQUIPMENT	27,160	27,160	---
112	LANDMINE WARFARE/BARRIER - SDD	87,426	87,426	---
113	ARTILLERY MUNITIONS	42,627	35,627	-7,000
115	ARMY TACTICAL COMMAND & CONTROL HARDWARE & SOFTWARE	123,935	123,935	---
116	RADAR DEVELOPMENT	2,890	2,890	---
117	GENERAL FUND ENTERPRISE BUSINESS SYSTEM (GFEBS)	794	794	---
118	FIREFINDER	10,358	10,358	---
119	SOLDIER SYSTEMS - WARRIOR DEM/VAL	48,309	40,709	-7,600
120	ARTILLERY SYSTEMS	120,146	70,146	-50,000
121	PATRIOT/MEADS COMBINED AGGREGATE PROGRAM (CAP)	406,605	257,105	-149,500
122	NUCLEAR ARMS CONTROL MONITORING SENSOR NETWORK	7,398	7,398	---
123	INFORMATION TECHNOLOGY DEVELOPMENT	37,098	37,098	---
124	ARMY INTEGRATED MILITARY HUMAN RESOURCES SYSTEM (A-IMH	68,693	68,693	---
125	JOINT AIR-TO-GROUND MISSILE (JAGM)	127,095	127,095	---
126	SLAMRAAM	19,931	19,931	---
127	PAC-2/MSE MISSILE	88,993	88,993	---
128	ARMY INTEGRATED AIR AND MISSILE DEFENSE (AIAMD)	270,607	270,607	---
129	MANNED GROUND VEHICLE	884,387	768,053	-116,334
130	AERIAL COMMON SENSOR	31,465	31,465	---
131	TROJAN - RH12	3,920	3,920	---
132	ELECTRONIC WARFARE DEVELOPMENT	13,819	13,819	---
	TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT	4,190,788	3,848,793	-341,995

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
	RDT&E MANAGEMENT SUPPORT			
133	THREAT SIMULATOR DEVELOPMENT	16,992	16,992	---
134	TARGET SYSTEMS DEVELOPMENT	11,247	11,247	---
135	MAJOR T&E INVESTMENT	49,437	49,437	---
136	RAND ARROYO CENTER	20,384	20,384	---
137	ARMY KWAJALEIN ATOLL	145,606	145,606	---
138	CONCEPTS EXPERIMENTATION PROGRAM	28,800	28,800	---
140	ARMY TEST RANGES AND FACILITIES	262,456	262,456	---
141	ARMY TECHNICAL TEST INSTRUMENTATION AND TARGETS	70,227	70,227	---
142	SURVIVABILITY/LETHALITY ANALYSIS	43,483	43,483	---
143	DOD HIGH ENERGY LASER TEST FACILITY	18	18	---
144	AIRCRAFT CERTIFICATION	5,630	5,630	---
145	METEOROLOGICAL SUPPORT TO RDT&E ACTIVITIES	7,182	7,182	---
146	MATERIEL SYSTEMS ANALYSIS	19,669	19,669	---
147	EXPLOITATION OF FOREIGN ITEMS	5,445	5,445	---
148	SUPPORT OF OPERATIONAL TESTING	68,786	68,786	---
149	ARMY EVALUATION CENTER	63,302	63,302	---
150	SIMULATION & MODELING FOR ACQ, RQTS, & TNG (SMART)	3,420	3,420	---
151	PROGRAMWIDE ACTIVITIES	83,054	83,054	---
152	TECHNICAL INFORMATION ACTIVITIES	63,872	54,872	-9,000
153	MUNITIONS STANDARDIZATION, EFFECTIVENESS AND SAFETY	57,142	57,142	---
154	ENVIRONMENTAL QUALITY TECHNOLOGY MGMT SUPPORT	4,961	4,961	---
155	MANAGEMENT HEADQUARTERS (RESEARCH AND DEVELOPMENT)	17,558	17,558	---
	TOTAL, RDT&E MANAGEMENT SUPPORT	1,048,671	1,039,671	-9,000

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
	OPERATIONAL SYSTEMS DEVELOPMENT			
158	MLRS PRODUCT IMPROVEMENT PROGRAM	66,641	66,641	---
159	WEAPONS CAPABILITY MODIFICATIONS UAV	24,142	24,142	---
160	AEROSTAT JOINT PROJECT OFFICE	344,655	327,855	-16,800
162	ADV FIELD ARTILLERY TACTICAL DATA SYSTEM	29,546	29,546	---
163	COMBAT VEHICLE IMPROVEMENT PROGRAMS	53,307	53,307	---
164	MANEUVER CONTROL SYSTEM	65,002	65,002	---
165	AIRCRAFT MODIFICATIONS/PRODUCT IMPROVEMENT PROGRAMS	163,205	163,205	---
166	AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM	823	823	---
167	DIGITIZATION	8,029	8,029	---
169	MISSILE/AIR DEFENSE PRODUCT IMPROVEMENT PROGRAM	44,560	59,055	+14,495
171	TRACTOR CARD	42,554	42,554	---
172	JOINT TACTICAL GROUND SYSTEM	27,630	27,630	---
173	JOINT HIGH SPEED VESSEL (JHSV)	3,044	3,044	---
175	SECURITY AND INTELLIGENCE ACTIVITIES	2,854	2,854	---
176	INFORMATION SYSTEMS SECURITY PROGRAM	61,220	61,220	---
177	GLOBAL COMBAT SUPPORT SYSTEM	100,505	160,745	+60,240
178	SATCOM GROUND ENVIRONMENT (SPACE)	12,104	12,104	---
179	WWMCCS/GLOBAL COMMAND AND CONTROL SYSTEM	23,937	23,937	---
181	TACTICAL UNMANNED AERIAL VEHICLES	40,650	40,650	---
182	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	44,198	44,198	---
183	MQ-1 SKY WARRIOR A UAV	137,038	137,038	---
184	RQ-11 UAV	1,938	1,938	---
185	RQ-7 UAV	31,940	31,940	---
187	BIOMETRICS ENABLED INTELLIGENCE	15,018	15,018	---
188	END ITEM INDUSTRIAL PREPAREDNESS ACTIVITIES	59,297	59,297	---
	TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT	1,403,837	1,461,772	+57,935
999	CLASSIFIED PROGRAMS	4,536	4,536	---
	TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY	9,683,980	9,381,166	-302,814

EXPLANATION OF PROJECT LEVEL TABLES

[In thousands of dollars]

R-1		Budget Request	Committee Recommended	Change from Request
4	**UNIVERSITY AND INDUSTRY RESEARCH CENTERS**	**120,937**	**140,937**	**20,000**
	Historically Black Colleges and Universities		20,000	
17	**WEAPONS AND MUNITIONS TECHNOLOGY**	**39,813**	**54,813**	**15,000**
	Program increase		15,000	
19	**NIGHT VISION TECHNOLOGY**	**57,203**	**49,203**	**-8,000**
	Program growth adjustment		-8,000	
30	**MEDICAL ADVANCED TECHNOLOGY**	**68,171**	**96,971**	**28,800**
	Peer-Reviewed Neurotoxin Exposure Treatment Parkinsons Research Program		16,000	
	Neurofibramatosis Research Program		12,800	
33	**COMBAT VEHICLE AND AUTOMOTIVE ADVANCED TECHNOLOGY**	**106,145**	**95,145**	**-11,000**
	Program growth adjustment		-11,000	
36	**ELECTRONIC WARFARE ADVANCED TECHNOLOGY**	**57,963**	**53,963**	**-4,000**
	Program growth adjustment		-4,000	
40	**MILITARY HIV RESEARCH**	**6,796**	**22,796**	**16,000**
	Program increase		16,000	
46	**TRACTOR CAGE**	**10,315**	**5,315**	**-5,000**
	Classified adjustment		-5,000	
52	**MILITARY ENGINEERING ADVANCED TECHNOLOGY**	**36,516**	**28,516**	**-8,000**
	Program growth adjustment		-8,000	
55	**ARMY MISSILE DEFENSE SYSTEMS INTEGRATION**	**36,009**	**24,455**	**-11,554**
	Program growth adjustment		-11,554	
59	**SMOKE, OBSCURANT AND TARGET DEFEATING SYSTEM-ADVANCE DEVELOPMENT**	**9,501**	**4,501**	**-5,000**
	Program growth adjustment		-5,000	
61	**ADVANCED TANK ARMAMENT SYSTEM (ATAS)**	**101,408**	**64,408**	**-37,000**
	Program growth adjustment		-37,000	
79	**ARMED, DEPLOYABLE OH-58D**	**166,132**	**131,132**	**-35,000**
	OH-58D support for continued service		-20,000	
	New armed reconnaissance helicopter analysis		-15,000	
84	**INFANTRY SUPPORT WEAPONS**	**73,728**	**91,474**	**17,746**
	Army requested transfer for Engineering and Manufacturing Development testing from WTCV line 17		16,046	
	Army requested transfer for re-testing following a parts failure from WTCV line 20		1,700	
90	**LIGHT TACTICAL WHEELED VEHICLES**	**0**	**50,000**	**50,000**
	Armored HMMWV survivability enhancements		50,000	

R-1		Budget Request	Committee Recommended	Change from Request
93	**FCS SYSTEMS OF SYSTEMS ENGR AND PROGRAM MANAGEMENT**	**383,872**	**311,872**	**-72,000**
	Unjustified requirement		-72,000	
97	**FCS SUSTAINMENT AND TRAINING Research and Develc**	**0**	**52,693**	**52,693**
	Army requested adjustment for Special Termination Liability		102,693	
	Program adjustment		-50,000	
109	**LOGISTICS AND ENGINEER EQUIPMENT - SDD**	**251,104**	**226,104**	**-25,000**
	Joint Light Tactical Vehicle program delay		-25,000	
113	**ARTILLERY MUNITIONS**	**42,627**	**35,627**	**-7,000**
	Program growth adjustment		-7,000	
119	**SOLDIER SYSTEMS - WARRIOR DEM/VAL**	**48,309**	**40,709**	**-7,600**
	Schedule delays		-7,600	
120	**ARTILLERY SYSTEMS**	**120,146**	**70,146**	**-50,000**
	Funding excess to need		-50,000	
121	**PATRIOT/MEADS COMBINED AGGREGATE PROGRAM**	**406,605**	**257,105**	**-149,500**
	Program decrease		-149,500	
129	**MANNED GROUND VEHICLE**	**884,387**	**768,053**	**-116,334**
	Program delay		-116,334	
152	**TECHNICAL INFORMATION ACTIVITIES**	**63,872**	**54,872**	**-9,000**
	Program growth adjustment		-9,000	
160	**AEROSTAT JOINT PROJECT OFFICE**	**344,655**	**327,855**	**-16,800**
	Program growth adjustment - Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System		-16,800	
169	**MISSILE/AIR DEFENSE PRODUCT IMPROVEMENT PROGRAM**	**44,560**	**59,055**	**14,495**
	Army requested transfer from Missile Procurement, Army line 13		14,495	
177	**GLOBAL COMBAT SUPPORT SYSTEM**	**100,505**	**160,745**	**60,240**
	Army requested transfer for GCSSA from Other Procurement, Army line 116		47,240	
	Army requested transfer for Army Enterprise System Integration from Other Procurement, Army Line 116		13,000	

GROUND COMBAT VEHICLE

The fiscal year 2012 budget request proposes $884,387,000 for the Ground Combat Vehicle program. The Committee is aware that uncertainty regarding program requirements caused the Army to recall, revise, and reissue the request for proposals. The Committee believes that the action taken to recall and reissue the request for proposals was prudent and will strengthen the program going forward. The Committee notes that various program activities have been delayed by approximately eight months, and it is anticipated that contract awards originally planned for the fourth quarter of fiscal year 2012 will be delayed into fiscal year 2013. The Committee's recommendation provides $768,053,000, which is a reduction of $116,334,000. The Committee continues its strong support for the Ground Combat Vehicle program.

SUSTAINABLE MANUFACTURING

The Committee encourages acceleration of the development of innovative sustainable manufacturing technologies to enable the Army and its industrial suppliers to meet the regulatory and policy requirements for energy consumption and avoidance of hazardous materials in the manufacture and maintenance of its weapon systems.

ENVIRONMENTAL QUALITY TECHNOLOGY

The Committee is advised that the Army's Environmental Quality Technology program demonstrates and validates technologies in energy, environment, and sustainability, for adoption by users across the Department of Defense. Technology must be validated before potential users will consider adoption, and the Army must carefully manage resources in this and other critical mission areas, including implementing sustainability plans for military installations in the continental United States. Such plans must meet the requirements established for federal agencies to reduce energy consumption, and address priority Department of Defense energy security challenges and net zero energy/water/waste initiatives. The Committee appreciates the aggressive approach the Army has demonstrated in addressing environmental quality matters and encourages the Army to allocate the necessary resources to ensure continued progress.

HELICOPTER SITUATIONAL AWARENESS

The Committee is aware of the high percentage of Army helicopter combat theater losses that are not related to enemy action. Instead, the accidents occur due to loss of situational awareness during takeoff and landing or other operations in dusty or brownout conditions near the ground. In the Department of Defense Appropriations Act, 2011, the President's budget request included $39,912,000 for Night Vision Advanced Technology. An additional amount of $23,100,000 was provided in fiscal year 2011 in order to support advances in technology to assist aircrews with improved situational awareness. However, progress remains slow and therefore the Committee's concerns regarding the loss of aircraft, aircrew members, and passengers are undiminished. The Committee

recommends full funding for the President's fiscal year 2012 request of $42,414,000. The Committee strongly encourages the Secretary of the Army to seek advanced technology for improved situational awareness for aircrews through full and open competition.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, NAVY

Fiscal year 2011 appropriation	$17,736,303,000
Fiscal year 2012 budget request	17,956,431,000
Committee recommendation	17,798,950,000
Change from budget request	−157,481,000

This appropriation provides funds for the research, development, test and evaluation activities of the Department of the Navy, which includes the Marine Corps. The total amount recommended in the bill will provide the following program in fiscal year 2012:

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
	RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY			
	BASIC RESEARCH			
1	UNIVERSITY RESEARCH INITIATIVES	113,157	133,157	+20,000
2	IN-HOUSE LABORATORY INDEPENDENT RESEARCH	18,092	18,092	---
3	DEFENSE RESEARCH SCIENCES	446,123	446,123	---
	TOTAL, BASIC RESEARCH	577,372	597,372	+20,000
	APPLIED RESEARCH			
4	POWER PROJECTION APPLIED RESEARCH	104,804	104,804	---
5	FORCE PROTECTION APPLIED RESEARCH	156,901	156,901	---
6	MARINE CORPS LANDING FORCE TECHNOLOGY	44,845	44,845	---
8	COMMON PICTURE APPLIED RESEARCH	65,448	65,448	---
9	WARFIGHTER SUSTAINMENT APPLIED RESEARCH	101,205	101,205	---
10	RF SYSTEMS APPLIED RESEARCH	108,329	108,329	---
11	OCEAN WARFIGHTING ENVIRONMENT APPLIED RESEARCH	50,076	50,076	---
12	JOINT NON-LETHAL WEAPONS APPLIED RESEARCH	5,937	5,937	---
13	UNDERSEA WARFARE APPLIED RESEARCH	108,666	108,666	---
14	MINE AND EXPEDITIONARY WARFARE APPLIED RESEARCH	37,583	37,583	---
	TOTAL, APPLIED RESEARCH	783,794	783,794	---
	ADVANCED TECHNOLOGY DEVELOPMENT			
15	POWER PROJECTION ADVANCED TECHNOLOGY	114,270	114,270	---
16	FORCE PROTECTION ADVANCED TECHNOLOGY	64,057	45,234	-18,823
17	COMMON PICTURE ADVANCED TECHNOLOGY	49,068	49,068	---
18	WARFIGHTER SUSTAINMENT ADVANCED TECHNOLOGY	71,232	71,232	---
19	ELECTROMAGNETIC SYSTEMS ADVANCED TECHNOLOGY	102,535	102,535	---
20	MARINE CORPS ADVANCED TECHNOLOGY DEMONSTRATION (ATD)	124,324	124,324	---
21	JOINT NON-LETHAL WEAPONS TECHNOLOGY DEVELOPMENT	11,286	11,286	---
22	WARFIGHTER PROTECTION ADVANCED TECHNOLOGY	18,119	56,819	+38,700
23	UNDERSEA WARFARE ADVANCED TECHNOLOGY	37,121	42,121	+5,000
24	NAVY WARFIGHTING EXPERIMENTS AND DEMONSTRATIONS	50,157	50,157	---
25	MINE AND EXPEDITIONARY WARFARE ADVANCED TECHNOLOGY	6,048	6,048	---
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT	648,217	673,094	+24,877

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
	DEMONSTRATION & VALIDATION			
26	AIR/OCEAN TACTICAL APPLICATIONS	94,972	84,972	-10,000
27	AVIATION SURVIVABILITY	10,893	10,893	---
28	DEPLOYABLE JOINT COMMAND AND CONTROL	3,702	3,702	---
29	AIRCRAFT SYSTEMS	10,497	10,497	---
30	ASW SYSTEMS DEVELOPMENT	7,915	7,915	---
31	TACTICAL AIRBORNE RECONNAISSANCE	5,978	5,978	---
32	ADVANCED COMBAT SYSTEMS TECHNOLOGY	1,418	1,418	---
33	SURFACE AND SHALLOW WATER MINE COUNTERMEASURES	142,657	121,657	-21,000
34	SURFACE SHIP TORPEDO DEFENSE	118,764	118,764	---
35	CARRIER SYSTEMS DEVELOPMENT	54,072	54,072	---
37	PILOT FISH	96,012	96,012	---
38	RETRACT LARCH	73,421	73,421	---
39	RETRACT JUNIPER	130,267	130,267	---
40	RADIOLOGICAL CONTROL	1,338	1,338	---
41	SURFACE ASW	29,797	29,797	---
42	ADVANCED SUBMARINE SYSTEM DEVELOPMENT	856,326	856,326	---
43	SUBMARINE TACTICAL WARFARE SYSTEMS	9,253	9,253	---
44	SHIP CONCEPT ADVANCED DESIGN	14,308	14,308	---
45	SHIP PRELIMINARY DESIGN & FEASIBILITY STUDIES	22,213	22,213	---
46	ADVANCED NUCLEAR POWER SYSTEMS	463,683	463,683	---
47	ADVANCED SURFACE MACHINERY SYSTEMS	18,249	18,249	---
48	CHALK EAGLE	584,159	584,159	---
49	LITTORAL COMBAT SHIP (LCS)	286,784	296,784	+10,000
50	COMBAT SYSTEM INTEGRATION	34,157	34,157	---
51	CONVENTIONAL MUNITIONS	4,753	4,753	---
52	MARINE CORPS ASSAULT VEHICLES	12,000	12,000	---
53	MARINE CORPS GROUND COMBAT/SUPPORT SYSTEM	79,858	79,858	---

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
54	JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT	33,654	33,654	---
55	COOPERATIVE ENGAGEMENT	54,783	54,783	---
56	OCEAN ENGINEERING TECHNOLOGY DEVELOPMENT	9,996	9,996	---
57	ENVIRONMENTAL PROTECTION	21,714	21,714	---
58	NAVY ENERGY PROGRAM	70,538	70,538	---
59	FACILITIES IMPROVEMENT	3,754	3,754	---
60	CHALK CORAL	79,415	79,415	---
61	NAVY LOGISTIC PRODUCTIVITY	4,137	4,137	---
62	RETRACT MAPLE	276,383	276,383	---
63	LINK PLUMERIA	52,721	52,721	---
64	RETRACT ELM	160,964	160,964	---
66	LINK EVERGREEN	144,985	144,985	---
67	SPECIAL PROCESSES	43,704	43,704	---
68	NATO RESEARCH AND DEVELOPMENT	9,140	9,140	---
69	LAND ATTACK TECHNOLOGY	421	421	---
70	NONLETHAL WEAPONS	40,992	40,992	---
71	JOINT PRECISION APPROACH AND LANDING SYSTEMS	121,455	118,255	-3,200
75	TACTICAL AIR DIRECTIONAL INFRARED COUNTERMEASURES	64,107	64,107	---
76	ASE SELF-PROTECTION OPTIMIZATION	711	711	---
77	JOINT COUNTER RADIO CONTROLLED IED ELECTRONIC WARFARE	62,044	62,044	---
78	PRECISION STRIKE WEAPONS DEVELOPMENT PROGRAM	22,665	3,450	-19,215
79	SPACE & ELECTRONIC WARFARE (SEW) ARCHITECTURE/ENGINE	33,621	33,621	---
80	ASW SYSTEMS DEVELOPMENT - MIP	1,078	1,078	---
82	ELECTRONIC WARFARE DEVELOPMENT - MIP	625	625	---
	TOTAL, DEMONSTRATION & VALIDATION	4,481,053	4,437,638	-43,415

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
	ENGINEERING & MANUFACTURING DEVELOPMENT			
83	OTHER HELO DEVELOPMENT	35,651	35,651	---
84	AV-8B AIRCRAFT - ENG DEV	30,676	30,676	---
85	STANDARDS DEVELOPMENT	51,191	49,491	-1,700
86	MULTI-MISSION HELICOPTER UPGRADE DEVELOPMENT	17,673	17,673	---
87	AIR/OCEAN EQUIPMENT ENGINEERING	5,922	5,922	---
88	P-3 MODERNIZATION PROGRAM	3,417	3,417	---
89	WARFARE SUPPORT SYSTEM	9,944	9,944	---
90	TACTICAL COMMAND SYSTEM	81,257	81,257	---
91	ADVANCED HAWKEYE	110,994	110,994	---
92	H-1 UPGRADES	72,569	67,569	-5,000
93	ACOUSTIC SEARCH SENSORS	56,509	48,898	-7,611
94	V-22A	84,477	84,477	---
95	AIR CREW SYSTEMS DEVELOPMENT	3,249	3,249	---
96	EA-18	17,100	17,100	---
97	ELECTRONIC WARFARE DEVELOPMENT	89,418	89,418	---
98	VH-71A EXECUTIVE HELO DEVELOPMENT	180,070	160,070	-20,000
99	NEXT GENERATION JAMMER (NGJ)	189,919	189,919	---
100	JOINT TACTICAL RADIO SYSTEM - NAVY (JTRS-NAVY)	688,146	635,146	-53,000
101	SURFACE COMBATANT COMBAT SYSTEM ENGINEERING	223,283	223,283	---
102	LPD-17 CLASS SYSTEMS INTEGRATION	884	884	---
103	SMALL DIAMETER BOMB (SDB)	47,635	47,635	---
104	STANDARD MISSILE IMPROVEMENTS	46,705	46,705	---
105	AIRBORNE MCM	41,142	41,142	---
106	NAVAL INTEGRATED FIRE CONTROL-COUNTER AIR SYSTEMS ENG.	24,898	24,898	---
107	FUTURE UNMANNED CARRIER-BASED STRIKE SYSTEM	121,150	81,150	-40,000
108	ADVANCED ABOVE WATER SENSORS	227,358	227,358	---
109	SSN-688 AND TRIDENT MODERNIZATION	100,591	100,591	---
110	AIR CONTROL	5,521	5,521	---
111	SHIPBOARD AVIATION SYSTEMS	45,445	45,445	---

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
112	COMBAT INFORMATION CENTER CONVERSION	3,400	3,400	---
113	NEW DESIGN SSN	97,235	112,235	+15,000
114	SUBMARINE TACTICAL WARFARE SYSTEM	48,466	48,466	---
115	SHIP CONTRACT DESIGN/LIVE FIRE T&E	161,099	121,099	-40,000
116	NAVY TACTICAL COMPUTER RESOURCES	3,848	3,848	---
117	MINE DEVELOPMENT	3,933	3,933	---
118	LIGHTWEIGHT TORPEDO DEVELOPMENT	32,592	32,592	---
119	JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT	9,960	9,960	---
120	PERSONNEL, TRAINING, SIMULATION, AND HUMAN FACTORS	12,992	12,992	---
121	JOINT STANDOFF WEAPON SYSTEMS	7,506	7,506	---
122	SHIP SELF DEFENSE (DETECT & CONTROL)	71,222	71,222	---
123	SHIP SELF DEFENSE (ENGAGE: HARD KILL)	6,631	6,631	---
124	SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)	184,095	184,095	---
125	INTELLIGENCE ENGINEERING	2,217	2,217	---
126	MEDICAL DEVELOPMENT	12,984	31,084	+18,100
127	NAVIGATION/ID SYSTEM	50,178	35,178	-15,000
128	JOINT STRIKE FIGHTER (JSF) - EMD	670,723	651,786	-18,937
129	JOINT STRIKE FIGHTER (JSF)	677,486	658,549	-18,937
130	INFORMATION TECHNOLOGY DEVELOPMENT	27,461	27,461	---
131	INFORMATION TECHNOLOGY DEVELOPMENT	58,764	58,764	---
132	NAVY INTEGRATED MILITARY HUMAN RESOURCES SYSTEM	55,050	55,050	---
133	CH-53K	629,461	624,461	-5,000
135	JOINT AIR-TO-GROUND MISSILE (JAGM)	118,395	108,395	-10,000
136	MULTI-MISSION MARITIME AIRCRAFT (MMA)	622,713	632,713	+10,000
138	DDG-1000	261,604	257,604	-4,000
139	TACTICAL COMMAND SYSTEM - MIP	979	979	---
141	TACTICAL CRYPTOLOGIC SYSTEMS	31,740	31,740	---
	TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT	6,475,528	6,279,443	-196,085

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
	RDT&E MANAGEMENT SUPPORT			
142	THREAT SIMULATOR DEVELOPMENT	28,318	28,318	---
143	TARGET SYSTEMS DEVELOPMENT	44,700	44,700	---
144	MAJOR T&E INVESTMENT	37,957	37,957	---
145	JOINT THEATER AIR AND MISSILE DEFENSE ORGANIZATION	2,970	2,970	---
146	STUDIES AND ANALYSIS SUPPORT - NAVY	23,454	23,454	---
147	CENTER FOR NAVAL ANALYSES	47,127	47,127	---
148	SMALL BUSINESS INNOVATIVE RESEARCH	10	10	---
149	TECHNICAL INFORMATION SERVICES	571	571	---
150	MANAGEMENT, TECHNICAL & INTERNATIONAL SUPPORT	68,301	68,301	---
151	STRATEGIC TECHNICAL SUPPORT	3,277	3,277	---
152	RDT&E SCIENCE AND TECHNOLOGY MANAGEMENT	73,917	73,917	---
153	RDT&E SHIP AND AIRCRAFT SUPPORT	136,531	136,531	---
154	TEST AND EVALUATION SUPPORT	335,367	335,367	---
155	OPERATIONAL TEST AND EVALUATION CAPABILITY	16,634	16,634	---
156	NAVY SPACE AND ELECTRONIC WARFARE (SEW) SUPPORT	4,228	4,228	---
157	SEW SURVEILLANCE/RECONNAISSANCE SUPPORT	7,642	7,642	---
158	MARINE CORPS PROGRAM WIDE SUPPORT	25,655	25,655	---
159	TACTICAL CRYPTOLOGIC ACTIVITIES	2,764	2,764	---
	TOTAL, RDT&E MANAGEMENT SUPPORT	859,423	859,423	---
	OPERATIONAL SYSTEMS DEVELOPMENT			
164	UNMANNED COMBAT AIR VEHICLE (UCAV) ADVANCED COMPONENT	198,298	198,298	---
165	MARINE CORPS COMBAT SERVICES SUPPORT	400	400	---
166	MARINE CORPS DATA SYSTEMS	1,650	1,650	---
167	STRATEGIC SUB & WEAPONS SYSTEM SUPPORT	88,873	88,873	---
168	SSBN SECURITY TECHNOLOGY PROGRAM	33,553	33,553	---
169	SUBMARINE ACOUSTIC WARFARE DEVELOPMENT	6,360	6,360	---
170	NAVY STRATEGIC COMMUNICATIONS	23,208	23,208	---
171	RAPID TECHNOLOGY TRANSITION (RTT)	30,021	30,021	---
172	F/A-18 SQUADRONS	151,030	145,161	-5,869
173	E-2 SQUADRONS	6,696	6,696	---
174	FLEET TELECOMMUNICATIONS (TACTICAL)	1,739	1,739	---
175	SURFACE SUPPORT	3,377	3,377	---

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
176	TOMAHAWK AND TOMAHAWK MISSION PLANNING CENTER (TMPC)	8,819	8,819	---
177	INTEGRATED SURVEILLANCE SYSTEM	21,259	21,259	---
178	AMPHIBIOUS TACTICAL SUPPORT UNITS	5,214	5,214	---
179	CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT	42,244	42,244	---
180	CRYPTOLOGIC DIRECT SUPPORT	1,447	1,447	---
181	ELECTRONIC WARFARE (EW) READINESS SUPPORT	18,142	18,142	---
182	HARM IMPROVEMENT	11,147	11,147	---
183	TACTICAL DATA LINKS	69,224	69,224	---
184	SURFACE ASW COMBAT SYSTEM INTEGRATION	22,010	29,510	+7,500
185	MK-48 ADCAP	39,288	46,788	+7,500
186	AVIATION IMPROVEMENTS	123,012	100,423	-22,589
187	NAVY SCIENCE ASSISTANCE PROGRAM	1,957	1,957	---
188	OPERATIONAL NUCLEAR POWER SYSTEMS	82,705	82,705	---
189	MARINE CORPS COMMUNICATIONS SYSTEMS	320,864	320,864	---
190	MARINE CORPS GROUND COMBAT/SUPPORTING ARMS SYSTEMS	209,396	184,396	-25,000
191	MARINE CORPS COMBAT SERVICES SUPPORT	45,172	27,072	-18,100
192	USMC INTELLIGENCE/ELECTRONIC WARFARE SYSTEMS (MIP)	14,101	14,101	---
193	TACTICAL AIM MISSILES	8,765	8,765	---
194	ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM)	2,913	2,913	---
195	JOINT HIGH SPEED VESSEL (JHSV)	4,108	4,108	---
200	SATELLITE COMMUNICATIONS (SPACE)	263,712	263,712	---
201	CONSOLIDATED AFLOAT NETWORK ENTERPRISE SERVICES	12,906	12,906	---
202	INFORMATION SYSTEMS SECURITY PROGRAM	25,229	25,229	---
203	WWMCCS/Global Command and Control System	1,250	1,250	---
204	CONSOLIDATED AFLOAT NETWORK ENTERPRISE SERVICES (MIP)	6,602	6,602	---
206	COBRA JUDY	40,605	40,605	---
207	NAVY METEOROLOGICAL AND OCEAN SENSORS-SPACE (METOC)	904	904	---
208	JOINT MILITARY INTELLIGENCE PROGRAMS	4,099	4,099	---
209	TACTICAL UNMANNED AERIAL VEHICLES	9,353	9,353	---

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
212	DISTRIBUTED COMMON GROUND SYSTEMS/SURFACE SYSTEMS.....	23,785	23,785	---
213	DISTRIBUTED COMMON GROUND SYSTEMS/SURFACE SYSTEMS.....	25,487	25,487	---
214	RQ-4 UAV.....	548,482	548,482	---
215	MQ-8 UAV.....	108,248	108,248	---
216	RQ-11 UAV.....	979	979	---
217	RQ-7 UAV.....	872	872	---
219	SMALL (LEVEL 0) TACTICAL UAS (STUASLO).....	22,698	21,398	-1,300
220	MEDIUM RANGE MARITIME UAS.....	15,000	15,000	---
221	RQ-21A.....	26,301	21,301	-5,000
223	MODELING AND SIMULATION SUPPORT.....	8,292	8,292	---
224	DEPOT MAINTENANCE (NON-IF).....	21,609	21,609	---
226	INDUSTRIAL PREPAREDNESS.....	54,031	54,031	---
227	MARITIME TECHNOLOGY (MARITECH).....	5,000	5,000	---
	TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT.....	2,822,436	2,759,578	-62,858
999	CLASSIFIED PROGRAMS.....	1,308,608	1,408,608	+100,000
	TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY.....	17,956,431	17,798,950	-157,481

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1		Budget Request	Committee Recommended	Change from Request
1	UNIVERSITY RESEARCH INITIATIVES	113,157	133,157	20,000
	Program increase - competitive based university research program		20,000	
16	FORCE PROTECTION ADVANCED TECHNOLOGY	64,057	45,234	-18,823
	Excess MRMUAS funding		-18,823	
22	WARFIGHTER PROTECTION ADVANCED TECHNOLOGY	18,119	56,819	38,700
	Program increase - Bone Marrow Registry Program		31,500	
	Program increase - tactical athlete program		7,200	
23	UNDERSEA WARFARE ADVANCED TECHNOLOGY	37,121	42,121	5,000
	Program increase - ASW research		5,000	
26	AIR/OCEAN TACTICAL APPLICATIONS	94,972	84,972	-10,000
	JMAPS program delay		-10,000	
33	SURFACE AND SHALLOW WATER MINE COUNTERMEAS	142,657	121,657	-21,000
	UUV program delay		-6,000	
	Program execution		-15,000	
49	LITTORAL COMBAT SHIP (LCS)	286,784	296,784	10,000
	Program increase - Small business technology insertion (mission modules)		10,000	
71	JOINT PRECISION APPROACH AND LANDING SYSTEMS	121,455	118,255	-3,200
	Excess management services funding		-3,200	
78	PRECISION STRIKE WEAPONS DEVELOPMENT PROGRA	22,665	3,450	-19,215
	Excess support funding		-1,000	
	FMU-164 fuze program termination		-18,215	
85	STANDARDS DEVELOPMENT	51,191	49,491	-1,700
	Collision avoidance safety program delay		-1,700	
92	H-1 UPGRADES	72,569	67,569	-5,000
	Development support funding growth		-5,000	
93	ACOUSTIC SEARCH SENSORS	56,509	48,898	-7,611
	Management services funding growth		-6,000	
	High Altitude ASW program delay		-1,611	
98	VH-71A EXECUTIVE HELO DEVELOPMENT	180,070	160,070	-20,000
	Program delay		-20,000	
100	JOINT TACTICAL RADIO SYSTEM - NAVY (JTRS-NAVY)	688,146	635,146	-53,000
	Management services funding growth		-3,000	
	Army deferred requirements		-50,000	
107	FUTURE UNMANNED CARRIER-BASED STRIKE SYSTEM	121,150	81,150	-40,000
	Program growth		-40,000	
113	NEW DESIGN SSN	97,235	112,235	15,000
	Program increase - Small business technology insertion		15,000	

R-1	Budget Request	Committee Recommended	Change from Request
115 SHIP CONTRACT DESIGN/LIVE FIRE T&E	**161,099**	**121,099**	**-40,000**
Ship to shore connector program delay		-40,000	
126 MEDICAL DEVELOPMENT	**12,984**	**31,084**	**18,100**
Program increase - wound care research		13,000	
Program increase - military dental research		5,100	
127 NAVIGATION/ID SYSTEM	**50,178**	**35,178**	**-15,000**
Mode 5 program delay		-15,000	
128 JOINT STRIKE FIGHTER (JSF) - EMD	**670,723**	**651,786**	**-18,937**
Block IV development ahead of need		-18,937	
129 JOINT STRIKE FIGHTER (JSF)	**677,486**	**658,549**	**-18,937**
Block IV development ahead of need		-18,937	
133 CH-53K	**629,461**	**624,461**	**-5,000**
Management services funding growth		-5,000	
135 JOINT AIR-TO-GROUND MISSILE (JAGM)	**118,395**	**108,395**	**-10,000**
Program delay		-10,000	
136 MULTI-MISSION MARITIME AIRCRAFT (MMA)	**622,713**	**632,713**	**10,000**
Program increase - Small business technology insertion		10,000	
138 DDG-1000	**261,604**	**257,604**	**-4,000**
Government technical services growth		-4,000	
172 F/A-18 SQUADRONS	**151,030**	**145,161**	**-5,869**
Radar upgrade program delay		-5,869	
184 SURFACE ASW COMBAT SYSTEM INTEGRATION	**22,010**	**29,510**	**7,500**
Program increase - Small business technology insertion		7,500	
185 MK-48 ADCAP	**39,288**	**46,788**	**7,500**
Program increase - Small business technology insertion		7,500	
186 AVIATION IMPROVEMENTS	**123,012**	**100,423**	**-22,589**
Multi purpose bomb rack program termination		-22,589	
190 MARINE CORPS GROUND COMBAT/SUPPORTING ARMS	**209,396**	**184,396**	**-25,000**
Joint Light Tactical Vehicle program delay		-25,000	
191 MARINE CORPS COMBAT SERVICES SUPPORT	**45,172**	**27,072**	**-18,100**
Program execution		-18,100	
219 SMALL (LEVEL 0) TACTICAL UAS (STUASL0)	**22,698**	**21,398**	**-1,300**
Excess support funding		-1,300	
221 RQ-21A	**26,301**	**21,301**	**-5,000**
Program delays		-5,000	
999 CLASSIFIED PROGRAMS	**1,308,608**	**1,408,608**	**100,000**
Classified adjustment		100,000	

SURFACE COMBATANT TOPSIDE SUPERSTRUCTURE CRACKING

The aluminum superstructures in the Navy's surface combatant ships have experienced cracking, resulting in damage and degraded platform readiness. The USS Gravely recently experienced structural damage to a mast mounted antenna due to a failed weld on the stub mast foundation while the ship was at sea. The Secretary of the Navy is directed to submit a report to the congressional defense committees on the severity and impact of aluminum superstructure cracking not later than March 2, 2012. This report should include steps the Navy is taking to prevent or mitigate topside structure cracking, the practicality of using composite materials that will not fatigue or crack, the estimated cost to pursue the use of composite topside structures, the benefits and drawbacks (such as weight, cost, strength, etc.) of using composite materials as a replacement for topside structures, and a rough order of magnitude schedule the Navy believes is possible to incorporate the use of composite materials for topside structures on the majority of the surface combatant fleet.

BONE MARROW REGISTRY

The Committee provides $31,500,000 for the Department of the Navy, to be administered by the Bone Marrow Registry, also known as and referred to within the Naval Medical Research Center as the C.W. Bill Young Marrow Donor Recruitment and Research Program. Funds appropriated for the Bone Marrow Registry shall remain available only for the purposes for which they were appropriated and may only be obligated for the Bone Marrow Registry. This Department of Defense donor center has recruited more than 650,000 Department of Defense volunteers and provides more marrow donors per week than any other donor center in the Nation. More than 4,100 servicemembers and other Department volunteers from this donor center have provided marrow to save the lives of patients. The success of this national and international life-saving program for military and civilian patients, which now includes more than 9,200,000 potential volunteer donors, is admirable. Further, the agencies involved in contingency planning are encouraged to continue to include the Bone Marrow Registry in the development and testing of their contingency plans. The Department of Defense Form 1414 Base for Reprogramming Actions (DD Form 1414) shall show this as a congressional special interest item. The Department is further directed to release all funds appropriated for this purpose to the Bone Marrow Registry not later than 60 days after enactment of this Act.

CRITICAL ARCHIVED DATA

The Committee understands that the Department of the Navy's critical archived data may not comply with the recommended security controls for federal systems established by the National Institute of Standards and Technology (NIST). The Committee directs the Secretary of the Navy to review the state of the Navy's critical archived data and ensure the data meets the NIST security standards. Further, the Secretary of the Navy is directed to report the

results of this review to the congressional defense committees not later than 180 days after enactment of this Act.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, AIR FORCE

Fiscal year 2011 appropriation	$26,517,405,000
Fiscal year 2012 budget request	27,737,701,000
Committee recommendation	26,313,196,000
Change from budget request	−1,424,505,000

This appropriation finances the research, development, test and evaluation activities of the Department of the Air Force. The total amount recommended in the bill will provide the following program in fiscal year 2012:

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
	RESEARCH, DEVELOPMENT, TEST & EVAL, AIR FORCE			
	BASIC RESEARCH			
1	DEFENSE RESEARCH SCIENCES	364,328	364,328	---
2	UNIVERSITY RESEARCH INITIATIVES	140,273	140,273	---
3	HIGH ENERGY LASER RESEARCH INITIATIVES	14,258	14,258	---
	TOTAL, BASIC RESEARCH	518,859	518,859	---
	APPLIED RESEARCH			
4	MATERIALS	136,230	136,230	---
5	AEROSPACE VEHICLE TECHNOLOGIES	147,628	147,628	---
6	HUMAN EFFECTIVENESS APPLIED RESEARCH	86,663	86,663	---
7	AEROSPACE PROPULSION	207,508	207,508	---
8	AEROSPACE SENSORS	134,787	134,787	---
9	SPACE TECHNOLOGY	115,285	70,785	-44,500
10	CONVENTIONAL MUNITIONS	60,692	60,692	---
11	DIRECTED ENERGY TECHNOLOGY	111,156	111,156	---
12	DOMINANT INFORMATION SCIENCES AND METHODS	127,866	127,866	---
13	HIGH ENERGY LASER RESEARCH	54,059	54,059	---
	TOTAL, APPLIED RESEARCH	1,181,874	1,137,374	-44,500
	ADVANCED TECHNOLOGY DEVELOPMENT			
14	ADVANCED MATERIALS FOR WEAPON SYSTEMS	39,738	39,738	---
15	SUSTAINMENT SCIENCE AND TECHNOLOGY (S&T)	5,780	5,780	---
16	ADVANCED AEROSPACE SENSORS	53,075	63,075	+10,000
17	AEROSPACE TECHNOLOGY DEV/DEMO	67,474	67,474	---
18	AEROSPACE PROPULSION AND POWER TECHNOLOGY	120,953	120,953	---
19	ELECTRONIC COMBAT TECHNOLOGY	22,268	22,268	---
20	ADVANCED SPACECRAFT TECHNOLOGY	74,636	39,236	-35,400
21	MAUI SPACE SURVEILLANCE SYSTEM (MSSS)	13,555	13,555	---
22	HUMAN EFFECTIVENESS ADVANCED TECHNOLOGY DEVELOPMENT	25,319	25,319	---
23	CONVENTIONAL WEAPONS TECHNOLOGY	54,042	54,042	---
24	ADVANCED WEAPONS TECHNOLOGY	28,683	28,683	---
25	MANUFACTURING TECHNOLOGY PROGRAM	40,103	40,103	---
26	BATTLESPACE KNOWLEDGE DEVELOPMENT & DEMONSTRATION	38,656	38,656	---
27	HIGH ENERGY LASER ADVANCED TECHNOLOGY PROGRAM	1,122	1,122	---
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT	585,404	560,004	-25,400

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
	ADVANCED COMPONENT DEVELOPMENT			
28	INTELLIGENCE ADVANCED DEVELOPMENT	4,013	4,013	---
29	PHYSICAL SECURITY EQUIPMENT	3,586	3,586	---
31	ADVANCED EHF MILSATCOM (SPACE)	421,687	354,487	-67,200
32	POLAR MILSATCOM (SPACE)	122,991	122,991	---
33	SPACE CONTROL TECHNOLOGY	45,755	45,755	---
34	COMBAT IDENTIFICATION TECHNOLOGY	38,496	28,496	-10,000
35	NATO RESEARCH AND DEVELOPMENT	4,424	4,424	---
36	INTERNATIONAL SPACE COOPERATIVE R&D	642	642	---
37	SPACE PROTECTION PROGRAM (SPP)	9,819	4,819	-5,000
38	INTEGRATED BROADCAST SERVICE	20,046	20,046	---
39	INTERCONTINENTAL BALLISTIC MISSILE	67,202	67,202	---
40	WIDEBAND GAPFILLER SYSTEM RDT&E (SPACE)	12,804	12,804	---
41	POLLUTION PREVENTION (DEM/VAL)	2,075	2,075	---
42	JOINT PRECISION APPROACH AND LANDING SYSTEMS	20,112	20,112	---
43	NEXT GENERATION BOMBER	197,023	297,023	+100,000
44	BATTLE MGMT COM & CTRL SENSOR DEVELOPMENT	60,250	60,250	---
45	TECHNOLOGY TRANSFER	2,553	2,553	---
46	HARD AND DEEPLY BURIED TARGET DEFEAT SYSTEM	38,248	28,248	-10,000
47	JOINT DUAL ROLE AIR DOMINANCE MISSILE	29,759	29,759	---
48	REQUIREMENTS ANALYSIS AND MATURATION	24,217	24,217	---
50	GROUND ATTACK WEAPONS FUZE DEVELOPMENT	24,467	24,467	---
53	OPERATIONALLY RESPONSIVE SPACE	86,543	29,543	-57,000
54	TECH TRANSITION PROGRAM	2,773	2,773	---
55	NATIONAL POLAR-ORBITING OPERATIONAL ENVIRONMENTAL SAT.	444,900	225,000	-219,900
	TOTAL, ADVANCED COMPONENT DEVELOPMENT	1,684,385	1,415,285	-269,100

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
	ENGINEERING & MANUFACTURING DEVELOPMENT			
56	GLOBAL BROADCAST SERVICE (GBS)	5,680	5,680	---
57	NUCLEAR WEAPONS SUPPORT	18,538	18,538	---
58	SPECIALIZED UNDERGRADUATE FLIGHT TRAINING	21,780	21,780	---
59	ELECTRONIC WARFARE DEVELOPMENT	26,880	26,880	---
61	TACTICAL DATA NETWORKS ENTERPRISE	52,355	51,355	-1,000
62	PHYSICAL SECURITY EQUIPMENT	51	51	---
63	SMALL DIAMETER BOMB (SDB)	132,891	132,891	---
64	COUNTERSPACE SYSTEMS	31,913	31,913	---
65	SPACE SITUATION AWARENESS SYSTEMS	273,689	221,089	-52,600
66	AIRBORNE ELECTRONIC ATTACK	47,100	47,100	---
67	SPACE BASED INFRARED SYSTEM (SBIRS) HIGH EMD	621,629	621,629	---
69	ARMAMENT/ORDNANCE DEVELOPMENT	10,055	10,055	---
70	SUBMUNITIONS	2,427	2,427	---
71	AGILE COMBAT SUPPORT	11,878	11,878	---
73	LIFE SUPPORT SYSTEMS	11,280	11,280	---
74	COMBAT TRAINING RANGES	28,106	28,106	---
75	INTEGRATED COMMAND & CONTROL APPLICATIONS (IC2A)	10	10	---
76	INTELLIGENCE EQUIPMENT	995	995	---
77	JOINT STRIKE FIGHTER (JSF)	1,387,926	1,387,926	---
78	INTERCONTINENTAL BALLISTIC MISSILE	158,477	158,477	---
79	EVOLVED EXPENDABLE LAUNCH VEHICLE PROGRAM (SPACE)	20,028	20,028	---
80	NEXT GENERATION AERIAL REFUELING AIRCRAFT	877,084	877,084	---
81	CSAR HH-60 RECAPITALIZATION	94,113	11,113	-83,000
83	HC/MC-130 RECAP RDT&E	27,071	27,071	---
85	NUCLEAR WEAPONS MODERNIZATION	93,867	93,867	---
86	LIGHT ATTACK ARMED RECONNAISSANCE (LAAR) SQUADRONS	23,721	23,721	---
88	FULL COMBAT MISSION TRAINING	39,826	39,826	---
89	JOINT CARGO AIRCRAFT (JCA)	27,089	27,089	---
90	CV-22	20,723	15,723	-5,000
91	AIRBORNE SENIOR LEADER C3 (SLC3S)	12,535	34,435	+21,900
	TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT	4,079,717	3,960,017	-119,700

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
	RDT&E MANAGEMENT SUPPORT			
92	THREAT SIMULATOR DEVELOPMENT	22,420	22,420	---
93	MAJOR T&E INVESTMENT	62,206	62,206	---
94	RAND PROJECT AIR FORCE	27,579	27,579	---
96	INITIAL OPERATIONAL TEST & EVALUATION	17,767	17,767	---
97	TEST AND EVALUATION SUPPORT	654,475	654,475	---
98	ROCKET SYSTEMS LAUNCH PROGRAM (SPACE)	158,096	33,596	-124,500
99	SPACE TEST PROGRAM (STP)	47,926	47,926	---
100	FACILITIES RESTORATION & MODERNIZATION - TEST & EVAL	44,547	44,547	---
101	FACILITIES SUSTAINMENT - TEST AND EVALUATION SUPPORT	27,953	27,953	---
102	MULTI-SERVICE SYSTEMS ENGINEERING INITIATIVE	13,953	13,953	---
103	ACQUISITION AND MANAGEMENT SUPPORT	31,966	31,966	---
104	GENERAL SKILL TRAINING	1,510	1,510	---
106	INTERNATIONAL ACTIVITIES	3,798	3,798	---
	TOTAL, RDT&E MANAGEMENT SUPPORT	1,114,196	989,696	-124,500
	OPERATIONAL SYSTEMS DEVELOPMENT			
107	GPS III - OPERATIONAL CONTROL SEGMENT	390,889	342,889	-48,000
108	COMMON VERTICAL LIFT SUPPORT PLATFORM	5,365	5,365	---
109	AIR FORCE INTEGRATED MILITARY HUMAN RESOURCES SYSTEM	91,866	91,866	---
110	ANTI-TAMPER TECHNOLOGY EXECUTIVE AGENCY	35,467	35,467	---
112	B-52 SQUADRONS	133,261	133,261	---
113	AIR-LAUNCHED CRUISE MISSILE (ALCM)	803	803	---
114	B-1B SQUADRONS	33,011	33,011	---
115	B-2 SQUADRONS	340,819	362,819	+22,000
116	STRAT WAR PLANNING SYSTEM - USSTRATCOM	23,072	23,072	---
117	NIGHT FIST - USSTRATCOM	5,421	5,421	---
119	ATMOSPHERIC EARLY WARNING SYSTEM	4,485	4,485	---
120	REGION/SECTOR OPERATION CONTROL CENTER MODERNIZATION	12,672	12,672	---
121	STRATEGIC AEROSPACE INTELLIGENCE SYSTEM ACTIVITIES	14	14	---
122	WARFIGHTER RAPID ACQUISITION PROCESS (WRAP) RAPID TRAN	19,934	19,934	---
123	MQ-9 UAV	146,824	146,824	---
125	A-10 SQUADRONS	11,051	11,051	---
126	F-16 SQUADRONS	143,869	143,869	---
127	F-15E SQUADRONS	207,531	207,531	---
128	MANNED DESTRUCTIVE SUPPRESSION	13,253	13,253	---

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
129	F-22 SQUADRONS	718,432	658,432	-60,000
130	F-35 SQUADRONS	47,841	9,967	-37,874
131	TACTICAL AIM MISSILES	8,023	8,023	---
132	ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM)	77,830	77,830	---
133	JOINT HELMET MOUNTED CUEING SYSTEM (JHMCS)	1,436	1,436	---
134	COMBAT RESCUE AND RECOVERY	2,292	2,292	---
135	COMBAT RESCUE - PARARESCUE	927	927	---
136	AF TENCAP	20,727	20,727	---
137	PRECISION ATTACK SYSTEMS PROCUREMENT	3,128	3,128	---
138	COMPASS CALL	18,509	18,509	---
139	AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM	182,967	164,878	-18,089
141	JOINT AIR-TO-SURFACE STANDOFF MISSILE (JASSM)	5,796	5,796	---
142	AIR AND SPACE OPERATIONS CENTER (AOC)	121,880	121,880	---
143	CONTROL AND REPORTING CENTER (CRC)	3,954	3,954	---
144	AIRBORNE WARNING AND CONTROL SYSTEM (AWACS)	135,961	135,961	---
145	TACTICAL AIRBORNE CONTROL SYSTEMS	8,309	8,309	---
146	ADVANCED COMMUNICATIONS SYSTEMS	90,083	90,083	---
148	COMBAT AIR INTELLIGENCE SYSTEM ACTIVITIES	5,428	5,428	---
149	THEATER BATTLE MANAGEMENT (TBM) C4I	15,528	15,528	---
150	TACTICAL AIR CONTROL PARTY--MOD	15,978	15,978	---
152	C2ISR TACTICAL DATA LINK	1,536	1,536	---
153	COMMAND AND CONTROL (C2) CONSTELLATION	18,102	18,102	---
154	JOINT SURVEILLANCE AND TARGET ATTACK RADAR SYSTEM	121,610	121,610	---
155	SEEK EAGLE	18,599	18,599	---
156	USAF MODELING AND SIMULATION	23,091	23,091	---
157	WARGAMING AND SIMULATION CENTERS	5,779	5,779	---
158	DISTRIBUTED TRAINING AND EXERCISES	5,264	5,264	---
159	MISSION PLANNING SYSTEMS	69,918	69,918	---
160	INFORMATION WARFARE SUPPORT	2,322	2,322	---
161	CYBER COMMAND ACTIVITIES	702	702	---
168	SPACE SUPERIORITY INTELLIGENCE	11,866	11,866	---
169	E-4B NATIONAL AIRBORNE OPERATIONS CENTER (NAOC)	5,845	5,845	---
170	MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK	43,811	43,811	---
171	INFORMATION SYSTEMS SECURITY PROGRAM	101,788	101,788	---

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
172	GLOBAL COMBAT SUPPORT SYSTEM	449	449	---
173	GLOBAL COMMAND AND CONTROL SYSTEM	3,854	3,854	---
175	MILSATCOM TERMINALS	238,729	138,729	-100,000
175A	FAB-T ALTERNATIVE	---	50,000	+50,000
177	AIRBORNE SIGINT ENTERPRISE	121,748	121,748	---
180	GLOBAL AIR TRAFFIC MANAGEMENT (GATM)	4,604	4,604	---
181	CYBER SECURITY INITIATIVE	2,026	2,026	---
182	DOD CYBER CRIME CENTER	282	282	---
183	SATELLITE CONTROL NETWORK (SPACE)	18,337	18,337	---
184	WEATHER SERVICE	31,084	31,084	---
185	AIR TRAFFIC CONTROL, APPROACH, & LANDING SYSTEM (ATC)	63,367	21,367	-42,000
186	AERIAL TARGETS	50,620	50,620	---
189	SECURITY AND INVESTIGATIVE ACTIVITIES	366	366	---
190	DEFENSE JOINT COUNTERINTELLIGENCE ACTIVITIES	39	39	---
192	NAVSTAR GLOBAL POSITIONING SYSTEM (USER EQUIPMENT)	133,601	133,601	---
193	NAVSTAR GLOBAL POSITIONING SYSTEM (SPACE AND CONTROL)	17,893	17,893	---
195	SPACE AND MISSILE TEST AND EVALUATION CENTER	196,254	171,254	-25,000
196	SPACE WARFARE CENTER	2,961	2,961	---
197	SPACELIFT RANGE SYSTEM (SPACE)	9,940	9,940	---
198	INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS	1,271	1,271	---
200	ENDURANCE UNMANNED AERIAL VEHICLES	52,425	52,425	---
201	AIRBORNE RECONNAISSANCE SYSTEMS	106,877	90,830	-16,047
202	MANNED RECONNAISSANCE SYSTEMS	13,049	13,049	---
203	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	90,724	90,724	---
204	PREDATOR UAV (JMIP)	14,112	14,112	---
205	RQ-4 UAV	423,462	423,462	---
206	NETWORK-CENTRIC COLLABORATIVE TARGET (TIARA)	7,348	7,348	---
207	GPS III SPACE SEGMENT	463,081	413,081	-50,000
208	JSPOC MISSION SYSTEM	118,950	78,950	-40,000
209	INTELLIGENCE SUPPORT TO INFORMATION WARFARE	14,736	14,736	---
210	NUDET DETECTION SYSTEM (SPACE)	81,989	81,989	---
212	SPACE SITUATION AWARENESS OPERATIONS	31,956	31,956	---

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
213	INFORMATION OPS TECHNOLOGY INTEGRATION & TOOL DEVELOP.	23,931	23,931	---
214	SHARED EARLY WARNING (SEW)	1,663	1,663	---
215	C-130 AIRLIFT SQUADRON	24,509	24,509	---
216	C-5 AIRLIFT SQUADRONS	24,941	24,941	---
217	C-17 AIRCRAFT	128,169	128,169	---
218	C-130J PROGRAM	39,537	39,537	---
219	LARGE AIRCRAFT IR COUNTERMEASURES (LAIRCM)	7,438	7,438	---
220	LIGHT MOBILITY AIRCRAFT (LiMA)	1,308	1,308	---
221	KC-135S	6,161	6,161	---
222	KC-10S	30,868	30,868	---
223	OPERATIONAL SUPPORT AIRLIFT	82,591	82,591	---
225	SPECIAL TACTICS / COMBAT CONTROL	7,118	7,118	---
226	DEPOT MAINTENANCE (NON-IF)	1,531	1,531	---
228	LOGISTICS SUPPORT ACTIVITIES	944	944	---
229	LOGISTICS INFORMATION TECHNOLOGY (LOGIT)	140,284	140,284	---
230	SUPPORT SYSTEMS DEVELOPMENT	10,990	10,990	---
232	OTHER FLIGHT TRAINING	322	322	---
233	JOINT NATIONAL TRAINING CENTER	11	11	---
235	OTHER PERSONNEL ACTIVITIES	113	113	---
236	JOINT PERSONNEL RECOVERY AGENCY	2,483	2,483	---
237	CIVILIAN COMPENSATION PROGRAM	1,508	1,508	---
238	PERSONNEL ADMINISTRATION	8,041	8,041	---
239	AIR FORCE STUDIES AND ANALYSIS AGENCY	928	928	---
240	FACILITIES OPERATION--ADMINISTRATION	12,118	12,118	---
241	FINANCIAL MANAGEMENT INFORMATION SYSTEMS DEVELOPMENT	101,317	101,317	---
242	MANAGEMENT HQ--ADP SUPPORT (AF)	299	299	---
	TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT	6,510,126	6,145,116	-365,010
	CLASSIFIED PROGRAMS	12,063,140	11,586,845	-476,295
	TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, AIR FORCE	27,737,701	26,313,196	-1,424,505

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[in thousands of dollars]

R-1		Budget Request	Committee Recommended	Change from Request
9	**SPACE TECHNOLOGY**	115,285	70,785	-44,500
	Excess to need - duplicative efforts		-44,500	
16	**ADVANCED AEROSPACE SENSORS**	53,075	63,075	10,000
	Program increase		10,000	
20	**ADVANCED SPACECRAFT TECHNOLOGY**	74,636	39,236	-35,400
	Excess to need - duplicative efforts		-35,400	
31	**ADVANCED EHF MILSATCOM (SPACE)**	421,687	354,487	-67,200
	Excess to need - poor justification		-67,200	
34	**COMBAT IDENTIFICATION TECHNOLOGY**	38,496	28,496	-10,000
	ADS-B integration into APX-119 - excess funds		-10,000	
37	**SPACE PROTECTION PROGRAM (SPP)**	9,819	4,819	-5,000
	Excess to need		-5,000	
43	**NEXT GENERATION BOMBER**	197,023	297,023	100,000
	Program increase		100,000	
46	**HARD & DEEPLY BURIED TARGET DEFEAT SYSTEM**	38,248	28,248	-10,000
	MOP development		-10,000	
53	**OPERATIONALLY RESPONSIVE SPACE**	86,543	29,543	-57,000
	Excess to need - duplicative efforts		-57,000	
55	**NATIONAL POLAR-ORBITING OP ENV SATELLITE**	444,900	225,000	-219,900
	Excess to need - poor justification		-219,900	
61	**TACTICAL DATA NETWORKS ENTERPRISE**	52,355	51,355	-1,000
	Carryover from Network Enabled Weapons termination		-1,000	
65	**SPACE SITUATION AWARENESS SYSTEMS**	273,689	221,089	-52,600
	Space Fence - poor justification		-40,000	
	Space Based Space Surveillance - excess to need		-12,600	
81	**CSAR HH-60 RECAPITALIZATION**	94,113	11,113	-83,000
	Excess to need		-83,000	
90	**CV-22**	20,723	15,723	-5,000
	Slow execution		-5,000	
91	**AIRBORNE SENIOR LEADER C3 (SLC3S)**	12,535	34,435	21,900
	Air Force requested transfer from Aircraft Procurement, Air Force		21,900	
98	**ROCKET SYSTEMS LAUNCH PROGRAM (SPACE)**	158,096	33,596	-124,500
	Excess to need		-124,500	
107	**GPS III - OPERATIONAL CONTROL SEGMENT**	390,889	342,889	-48,000
	Slow execution		-48,000	

R-1		Budget Request	Committee Recommended	Change from Request
115	**B-2 SQUADRONS**	**340,819**	**362,819**	**22,000**
	Mixed loads capability		22,000	
129	**F-22 SQUADRONS**	**718,432**	**658,432**	**-60,000**
	Advanced Technology Development		-20,000	
	Projected fiscal year 2011 carryover (MADL)		-35,000	
	Laboratory Test and Operations - efficiencies		-5,000	
130	**F-35 SQUADRONS**	**47,841**	**9,967**	**-37,874**
	Block 4 development early to need		-37,874	
139	**AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM (CIP)**	**182,967**	**164,878**	**-18,089**
	F-135 Engine testing early to need		-18,089	
175	**MILSATCOM TERMINALS**	**238,729**	**138,729**	**-100,000**
	FAB-T program execution		-100,000	
175a	**FAB-T ALTERNATIVE**	**0**	**50,000**	**50,000**
	FAB-T alternative		50,000	
185	**AIR TRAFFIC CONTROL/APPROACH/LANDING SYSTEM (ATCALS)**	**63,367**	**21,367**	**-42,000**
	D-RAPCON test articles early to need		-42,000	
195	**SPACE AND MISSILE T&E CENTER**	**196,254**	**171,254**	**-25,000**
	Excess to need		-25,000	
201	**AIRBORNE RECONNAISSANCE SYSTEMS**	**106,877**	**90,830**	**-16,047**
	Gorgon Stare Increment 3 early to need		-16,047	
207	**GPS III SPACE SEGMENT**	**463,081**	**413,081**	**-50,000**
	GPS IIIB development - excess to need		-50,000	
208	**JSPOC MISSION SYSTEM**	**118,950**	**78,950**	**-40,000**
	Excess to need		-40,000	
999	**CLASSIFIED PROGRAMS**	**12,063,140**	**11,586,845**	**-476,295**
	Classified adjustment		-476,295	

KC–46A CHANGE REPORTING

The award for the Air Force's KC–46A aerial refueling tanker was announced on February 24, 2011. The Committee's recommendation fully funds the request for this vital program. Air Force leadership testified before the Committee that efforts would be made to ensure that the new tanker will be delivered within cost and on schedule. In order to further this approach, the Committee directs the Secretary of the Air Force to report any authorized contract modifications with a cost greater than or equal to $5,000,000 to the congressional defense committees not later than 30 days following the authorization of such change.

RAPID ATTACK, IDENTIFICATION, DETECTION, AND REPORTING SYSTEM

The Committee recognizes the current and emerging threats from jammers to critical satellite communication systems. The Rapid Attack, Identification, Detection, and Reporting System (RAIDRS) is an integral part of the counterspace capabilities being developed by the Air Force for identification and responding to satellite communication interference. The Committee urges the Department of Defense to continue investment in this capability and directs the Secretary of Defense to provide a report to the congressional defense committees not later than 180 days after enactment of this Act on the evolutionary upgrades planned for future blocks of this capability.

SMALL AND DISADVANTAGED BUSINESSES

The Committee notes the efforts of the Air Force's Small and Disadvantaged Business Utilization program to reach out to the small and disadvantaged business community and broaden the base of available suppliers, increasing government access to innovative solutions and technologies. The Committee encourages the Air Force to continue to strengthen its small and disadvantaged business outreach efforts.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, DEFENSE-WIDE

Fiscal year 2011 appropriation	$20,797,412,000
Fiscal year 2012 budget request	19,755,678,000
Committee recommendation	19,324,865,000
Change from budget request	−430,813,000

This appropriation provides funds for the research, development, test and evaluation activities of the Department of Defense for defense-wide activities. The total amount recommended in the bill will provide the following program in fiscal year 2012:

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
	RESEARCH, DEVELOPMENT, TEST & EVAL, DEFENSE-WIDE			
	BASIC RESEARCH			
1	DTRA UNIVERSITY STRATEGIC PARTNERSHIP BASIC RESEARCH..	47,737	47,737	---
2	DEFENSE RESEARCH SCIENCES.....	290,773	290,773	---
3	BASIC RESEARCH INITIATIVES.....	14,731	9,731	-5,000
5	BASIC OPERATIONAL MEDICAL RESEARCH SCIENCE.....	37,870	37,870	---
6	NATIONAL DEFENSE EDUCATION PROGRAM.....	101,591	86,591	-15,000
7	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.....	52,617	52,617	---
	TOTAL, BASIC RESEARCH.....	545,319	525,319	-20,000
	APPLIED RESEARCH			
8	JOINT MUNITIONS TECHNOLOGY.....	21,592	21,592	---
9	BIOMEDICAL TECHNOLOGY.....	110,000	110,000	---
11	LINCOLN LABORATORY RESEARCH PROGRAM.....	37,916	37,916	---
12	SYSTEMS 2020 APPLIED RESEARCH.....	4,381	4,381	---
13	INFORMATION AND COMMUNICATIONS TECHNOLOGY.....	400,499	400,499	---
14	COGNITIVE COMPUTING SYSTEMS.....	49,365	49,365	---
15	MACHINE INTELLIGENCE.....	61,351	61,351	---
16	BIOLOGICAL WARFARE DEFENSE.....	30,421	30,421	---
17	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.....	219,873	219,873	---
18	JOINT DATA MANAGEMENT ADVANCED DEVELOPMENT.....	9,235	5,235	-4,000
19	CYBER SECURITY RESEARCH.....	9,735	9,735	---
20	HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) APP	14,923	10,923	-4,000
21	TACTICAL TECHNOLOGY.....	206,422	206,422	---
22	MATERIALS AND BIOLOGICAL TECHNOLOGY.....	237,837	237,837	---
23	ELECTRONICS TECHNOLOGY.....	215,178	215,178	---
24	WEAPONS OF MASS DESTRUCTION DEFEAT TECHNOLOGIES.....	196,954	196,954	---
25	SPECIAL OPERATIONS TECHNOLOGY DEVELOPMENT.....	26,591	41,591	+15,000
	TOTAL, APPLIED RESEARCH.....	1,852,273	1,859,273	+7,000

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
	ADVANCED TECHNOLOGY DEVELOPMENT			
27	JOINT MUNITIONS ADVANCED TECH INSENSITIVE MUNITIONS AD	24,771	24,771	---
28	SO/LIC ADVANCED DEVELOPMENT	45,028	45,028	---
29	COMBATING TERRORISM TECHNOLOGY SUPPORT	77,019	77,019	---
30	COUNTERPROLIFERATION INITIATIVES--PROLIF PREV & DEFEAT	283,073	283,073	---
31	BALLISTIC MISSILE DEFENSE TECHNOLOGY	75,003	75,003	---
32	JOINT ADVANCED CONCEPTS	7,903	7,903	---
33	JOINT DOD-DOE MUNITIONS TECHNOLOGY DEVELOPMENT	20,372	20,372	---
34	SYSTEMS 202 ADVANCED TECHNOLOGY DEVELOPMENT	4,381	4,381	---
35	AGILE TRANSPO FOR THE 21ST CENTURY (AT21) - THEATER CA	998	998	---
36	SPECIAL PROGRAM--MDA TECHNOLOGY	61,458	61,458	---
37	ADVANCED AEROSPACE SYSTEMS	98,878	98,878	---
38	SPACE PROGRAMS AND TECHNOLOGY	97,541	97,541	---
39	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM - ADVANCED DEV	229,235	229,235	---
40	JOINT ELECTRONIC ADVANCED TECHNOLOGY	7,287	7,287	---
41	JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS	187,707	175,707	-12,000
42	NETWORKED COMMUNICATIONS CAPABILITIES	23,890	23,890	---
43	JOINT DATA MANAGEMENT RESEARCH	9,235	5,235	-4,000
44	BIOMETRICS SCIENCE AND TECHNOLOGY	10,762	10,762	---
45	CYBER SECURITY ADVANCED RESEARCH	10,709	10,709	---
46	HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) ADV	18,179	14,179	-4,000
47	DEFENSE-WIDE MANUFACTURING SCIENCE AND TECHNOLOGY PROG	17,888	17,888	---
48	EMERGING CAPABILITIES TECHNOLOGY DEVELOPMENT	26,972	26,972	---
49	JOINT ROBOTICS PROGRAM/AUTONOMOUS SYSTEMS	9,756	9,756	---
50	GENERIC LOGISTICS R&D TECHNOLOGY DEMONSTRATIONS	23,887	23,887	---
51	DEPLOYMENT AND DISTRIBUTION ENTERPRISE TECHNOLOGY	41,976	41,976	---
52	STRATEGIC ENVIRONMENTAL RESEARCH PROGRAM	66,409	56,409	-10,000
53	MICROELECTRONIC TECHNOLOGY DEVELOPMENT AND SUPPORT	91,132	69,132	-22,000
54	JOINT WARFIGHTING PROGRAM	10,547	10,547	---
55	ADVANCED ELECTRONICS TECHNOLOGIES	160,286	160,286	---
58	COMMAND, CONTROL AND COMMUNICATIONS SYSTEMS	296,537	296,537	---
59	CLASSIFIED DARPA PROGRAMS	107,226	107,226	---
60	NETWORK-CENTRIC WARFARE TECHNOLOGY	235,245	235,245	---
61	SENSOR TECHNOLOGY	271,802	271,802	---
63	DISTRIBUTED LEARNING ADVANCED TECHNOLOGY DEVELOPMENT	13,579	13,579	---

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
64	SOFTWARE ENGINEERING INSTITUTE	30,424	30,424	---
65	QUICK REACTION SPECIAL PROJECTS	89,925	89,925	---
66	JOINT EXPERIMENTATION	58,130	48,130	-10,000
67	MODELING AND SIMULATION MANAGEMENT OFFICE	37,029	31,029	-6,000
68	DIRECTED ENERGY RESEARCH	96,329	96,329	---
69	NEXT GENERATION AEGIS MISSILE	123,456	123,456	---
70	TEST & EVALUATION SCIENCE & TECHNOLOGY	99,593	99,593	---
72	OPERATIONAL ENERGY CAPABILITY IMPROVEMENT	20,444	20,444	---
73	CWMD SYSTEMS	7,788	7,788	---
74	SPECIAL OPERATIONS ADVANCED TECHNOLOGY DEVELOPMENT	35,242	30,242	-5,000
75	AVIATION ENGINEERING ANALYSIS	837	837	---
76	SOF INFORMATION AND BROADCAST SYSTEMS ADVANCED TECH	4,924	4,924	---
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT	3,270,792	3,197,792	-73,000
	DEMONSTRATION & VALIDATION			
77	NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT	36,798	36,798	---
78	RETRACT LARCH	21,040	21,040	---
79	WALKOFF	112,142	112,142	---
80	JOINT ROBOTICS PROGRAM	11,129	11,129	---
81	ADVANCE SENSOR APPLICATIONS PROGRAM	18,408	18,408	---
82	ENVIRONMENTAL SECURITY TECHNICAL CERTIFICATION PROGRAM	63,606	63,606	---
83	BALLISTIC MISSILE DEFENSE TERMINAL DEFENSE SEGMENT	290,452	290,452	---
84	BALLISTIC MISSILE DEFENSE MIDCOURSE DEFENSE SEGMENT	1,161,001	1,161,001	---
86	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	261,143	261,143	---
87	BALLISTIC MISSILE DEFENSE SENSORS	222,374	222,374	---
88	BALLISTIC MISSILE DEFENSE TEST & TARGETS	1,071,039	1,071,039	---
89	BALLISTIC MISSILE DEFENSE ENABLING PROGRAMS	373,563	373,563	---
90	SPECIAL PROGRAMS - MDA	296,554	296,554	---
91	AEGIS BMD	960,267	960,267	---
92	SPACE SURVEILLANCE & TRACKING SYSTEM	96,353	96,353	---
93	BALLISTIC MISSILE DEFENSE SYSTEM SPACE PROGRAMS	7,951	7,951	---
94	BALLISTIC MISSILE DEFENSE C2BMC	364,103	364,103	---
96	BALLISTIC MISSILE DEFENSE JOINT WARFIGHTER SUPPORT	41,225	41,225	---
91 97	BALLISTIC MISSILE DEFENSE INTERGRATION AND OPERATIONS CENTER (MDIOC)	69,325	69,325	---
98	REGARDING TRENCH	15,797	15,797	---

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
99	SEA BASED X-BAND RADAR (SBX)	177,058	177,058	---
101	ISRAELI COOPERATIVE PROGRAMS	106,100	235,700	+129,600
102	HUMANITARIAN DEMINING	14,996	14,996	---
103	COALITION WARFARE	12,743	12,743	---
104	DEPARTMENT OF DEFENSE CORROSION PROGRAM	3,221	3,221	---
105	DOD UNMANNED AIRCRAFT SYSTEM (UAS) COMMON DEVELOPMENT	25,120	25,120	---
107	HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) RES	10,309	10,309	---
108	JOINT SYSTEMS INTEGRATION COMMAND (JSIC)	13,024	5,024	-8,000
109	JOINT FIRES INTEGRATION & INTEROPERABILITY TEAM	9,290	9,290	---
110	LAND-BASED SM-3 (LBSM3)	306,595	306,595	---
111	AEGIS SM-3 BLOCK IIA CO-DEVELOPMENT	424,454	424,454	---
112	PRECISION TRACKING SPACE SYSTEM RDT&E	160,818	---	-160,818
113	AIRBORNE INFRARED (ABIR)	46,877	46,877	---
115	JOINT ELECTROMAGNETIC TECHNOLOGY (JET) PROGRAM	3,358	3,358	---
117	NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT	7,220	7,220	---
118	PROMPT GLOBAL STRIKE CAPABILITY DEVELOPMENT	204,824	104,824	-100,000
	TOTAL, DEMONSTRATION & VALIDATION	7,020,277	6,881,059	-139,218
	ENGINEERING & MANUFACTURING DEVELOPMENT			
119	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	400,608	400,608	---
120	JOINT ROBOTICS PROGRAM	2,782	2,782	---
121	ADVANCED IT SERVICES JOINT PROGRAM OFFICE (AITS-JPO)	49,198	24,198	-25,000
122	JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM (JTIDS)	17,395	17,395	---
123	WEAPONS OF MASS DESTRUCTION DEFEAT CAPABILITIES	5,888	5,888	---
124	INFORMATION TECHNOLOGY DEVELOPMENT	12,228	12,228	---
127	HOMELAND PERSONNEL SECURITY INITIATIVE	389	389	---
128	DEFENSE EXPORTABILITY PROGRAM	1,929	1,929	---
129	OUSD(C) IT DEVELOPMENT INITIATIVES	4,993	4,993	---
130	DOD ENTERPRISE SYSTEMS DEVELOPMENT AND DEMONSTRATION	134,285	134,285	---
131	DCMO POLICY AND INTEGRATION	41,808	41,808	---
133	DEFENSE-WIDE ELECTRONIC PROCUREMENT CAPABILITY	14,950	14,950	---
135	GLOBAL COMBAT SUPPORT SYSTEM	19,837	19,837	---
	TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT	706,290	681,290	-25,000
	RDT&E MANAGEMENT SUPPORT			
137	DEFENSE READINESS REPORTING SYSTEM (DRRS)	6,658	6,658	---
138	JOINT SYSTEMS ARCHITECTURE DEVELOPMENT	4,731	4,731	---

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
139	CENTRAL TEST AND EVALUATION INVESTMENT DEVELOPMENT....	140,231	140,231	---
140	ASSESSMENTS AND EVALUATIONS.....	2,757	2,757	---
141	THERMAL VICAR.....	7,827	7,827	---
142	JOINT MISSION ENVIRONMENT TEST CAPABILITY (JMETC).....	10,479	10,479	---
143	TECHNICAL STUDIES, SUPPORT AND ANALYSIS.....	34,213	34,213	---
144	USD(A&T)--CRITICAL TECHNOLOGY SUPPORT.....	1,486	---	-1,486
145	FOREIGN MATERIAL ACQUISITION AND EXPLOITATION.....	64,524	64,524	---
146	JOINT THEATER AIR AND MISSILE DEFENSE ORGANIZATION....	79,859	79,859	---
147	CLASSIFIED PROGRAM USD(P).....	---	106,000	+106,000
148	FOREIGN COMPARATIVE TESTING.....	19,080	19,080	---
149	SYSTEMS ENGINEERING.....	41,884	41,884	---
150	NUCLEAR MATTERS - PHYSICAL SECURITY.....	4,261	4,261	---
151	SUPPORT TO NETWORKS AND INFORMATION INTEGRATION.....	9,437	9,437	---
152	GENERAL SUPPORT TO USD (INTELLIGENCE).....	6,549	6,549	---
153	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.....	92,806	92,806	---
160	SMALL BUSINESS INNOVATION RESEARCH/CHALLENGE ADMINISTR	1,924	1,924	---
161	DEFENSE TECHNOLOGY ANALYSIS.....	16,135	16,135	---
163	DEFENSE TECHNICAL INFORMATION CENTER (DTIC).....	56,269	56,269	---
164	R&D IN SUPPORT OF DOD ENLISTMENT, TESTING & EVALUATION	49,810	49,810	---
165	DEVELOPMENT TEST AND EVALUATION.....	15,805	15,805	---
166	DARPA AGENCY RELOCATION.....	1,000	1,000	---
167	MANAGEMENT HEADQUARTERS (RESEARCH & DEVELOPMENT).....	66,689	66,689	---
168	BUDGET AND PROGRAM ASSESSMENTS.....	4,528	4,528	---
169	AVIATION SAFETY TECHNOLOGIES.....	6,925	6,925	---
170	OPERATIONS SECURITY (OPSEC).....	1,777	1,777	---
171	JOINT STAFF ANALYTICAL SUPPORT.....	18	18	---
174	SUPPORT TO INFORMATION OPERATIONS (IO) CAPABILITIES...	12,209	12,209	---
175	INFORMATION TECHNOLOGY RAPID ACQUISITION.....	4,288	4,288	---
176	CYBER SECURITY INITIATIVE.....	10,000	10,000	---
177	INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS (IO)...	15,002	15,002	---
179	WARFIGHTING AND INTELLIGENCE-RELATED SUPPORT.....	861	861	---
180	COCOM EXERCISE ENGAGEMENT AND TRAINING TRANSFORMATION.	59,958	59,958	---
182	MANAGEMENT HEADQUARTERS - MDA.....	28,908	28,908	---
183	IT SOFTWARE DEV INITIATIVES.....	167	167	---

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
999	CLASSIFIED PROGRAMS	82,627	82,627	---
	TOTAL, RDT&E MANAGEMENT SUPPORT	961,682	1,066,196	+104,514
	OPERATIONAL SYSTEMS DEVELOPMENT			
185	DEFENSE INFORMATION SYSTEM FOR SECURITY (DISS)	8,706	8,706	---
186	REGIONAL INTERNATIONAL OUTREACH & PARTNERSHIP FOR PEAC	2,165	2,165	---
187	OVERSEAS HUMANITARIAN ASSISTANCE SHARED INFORMATION SY	288	288	---
188	CHEMICAL AND BIOLOGICAL DEFENSE (OPERATIONAL SYSTEMS D	15,956	15,956	---
189	JOINT INTEGRATION AND INTEROPERABILITY	29,880	29,880	---
190	CLASSIFIED PROGRAMS	2,402	2,402	---
191	C4I INTEROPERABILITY	72,403	72,403	---
193	JOINT/ALLIED COALITION INFORMATION SHARING	7,093	7,093	---
200	NATIONAL MILITARY COMMAND SYSTEM-WIDE SUPPORT	481	481	---
201	DEFENSE INFO INFRASTRUCTURE ENGINEERING & INTEGRATION	8,366	8,366	---
202	LONG HAUL COMMUNICATIONS (DCS)	11,324	11,324	---
203	MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK	12,514	12,514	---
204	PUBLIC KEY INFRASTRUCTURE (PKI)	6,548	6,548	---
205	KEY MANAGEMENT INFRASTRUCTURE (KMI)	33,751	33,751	---
206	INFORMATION SYSTEMS SECURITY PROGRAM	11,753	11,753	---
207	INFORMATION SYSTEMS SECURITY PROGRAM	348,593	348,593	---
208	INFORMATION SYSTEMS SECURITY PROGRAM	5,500	5,500	---
211	GLOBAL COMMAND AND CONTROL SYSTEM	54,739	54,739	---
212	JOINT SPECTRUM CENTER	29,154	29,154	---
213	NET-CENTRIC ENTERPRISE SERVICES (NCES)	1,830	1,830	---
214	JOINT MILITARY DECEPTION INITIATIVE	1,241	1,241	---
215	TELEPORT PROGRAM	6,418	6,418	---
217	SPECIAL APPLICATIONS FOR CONTINGENCIES	5,045	5,045	---
220	CYBER SECURITY INITIATIVE	411	411	---
222	CYBER SECURITY INITIATIVE	4,341	4,341	---
223	CRITICAL INFRASTRUCTURE PROTECTION (CIP)	13,008	13,008	---
227	POLICY R&D PROGRAMS	6,603	6,603	---
229	NET CENTRICITY	14,926	14,926	---
232	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	4,303	4,303	---
235	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	3,154	3,154	---
237	MQ-1 PREDATOR A UAV	2,499	2,499	---
239	HOMELAND DEFENSE TECHNOLOGY TRANSFER PROGRAM	2,660	2,660	---

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
240	INT'L INTELLIGENCE TECHNOLOGY ASSESSMENT, ADVANCEMENT.	1,444	1,444	---
248	INDUSTRIAL PREPAREDNESS	23,103	23,103	---
249	LOGISTICS SUPPORT ACTIVITIES	2,466	2,466	---
250	MANAGEMENT HEADQUARTERS (JCS)	2,730	2,730	---
252	MQ-9 UAV	2,499	2,499	---
253	RQ-11 UAV	3,000	3,000	---
254	RQ-7 UAV	450	450	---
256	SPECIAL OPERATIONS AVIATION SYSTEMS ADVANCED DEV	89,382	89,382	---
257	SPECIAL OPERATIONS TACTICAL SYSTEMS DEVELOPMENT	799	799	---
258	SPECIAL OPERATIONS INTELLIGENCE SYSTEMS DEVELOPMENT	27,916	27,916	---
259	SOF OPERATIONAL ENHANCEMENTS	60,915	65,415	+4,500
260	SPECIAL OPERATIONS CV-22 DEVELOPMENT	10,775	10,775	---
263	MISSION TRAINING AND PREPARATION SYSTEMS (MTPS)	4,617	4,617	---
265	MC130J SOF TANKER RECAPITALIZATION	18,571	18,571	---
266	SOF COMMUNICATIONS EQUIPMENT AND ELECTRONICS SYSTEMS	1,392	1,392	---
268	SOF WEAPONS SYSTEMS	2,610	2,610	---
269	SOF SOLDIER PROTECTION AND SURVIVAL SYSTEMS	2,971	2,971	---
270	SOF VISUAL AUGMENTATION, LASERS & SENSOR SYSTEMS	3,000	3,000	---
271	SOF TACTICAL VEHICLES	3,522	3,522	---
272	SOF MUNITIONS	1,500	1,500	---
273	SOF ROTARY WING AVIATION	51,123	51,123	---
274	SOF UNDERWATER SYSTEMS	92,424	92,424	---
275	SOF SURFACE CRAFT	14,475	14,475	---
276	SOF PSYOP	2,990	2,990	---
277	SOF GLOBAL VIDEO SURVEILLANCE ACTIVITIES	8,923	8,923	---
278	SOF OPERATIONAL ENHANCEMENTS INTELLIGENCE	9,473	9,473	---
	TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT	1,171,125	1,175,625	+4,500
	DARPA UNDISTRIBUTED REDUCTION	---	-100,000	-100,000
999	CLASSIFIED PROGRAMS	4,227,920	4,038,311	-189,609
	TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, DEF-WIDE	19,755,678	19,324,865	-430,813

EXPLANATION OF PROJECT LEVEL ADJUSTMENTS
[In thousands of dollars]

R-1		Budget Request	Committee Recommended	Change from Request
3	BASIC RESEARCH INITIATIVES	14,731	9,731	-5,000
	Excessive growth		-5,000	
6	NATIONAL DEFENSE EDUCATION PROGRAM	101,591	86,591	-15,000
	Excessive growth		-15,000	
18	JOINT DATA MANAGEMENT ADVANCED DEVELOPMENT	9,235	5,235	-4,000
	Excessive growth		-4,000	
20	HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) APPLIED RESEARCH	14,923	10,923	-4,000
	Excessive growth		-4,000	
25	SPECIAL OPERATIONS TECHNOLOGY DEVELOPMENT	26,591	41,591	15,000
	Program Increase - unfunded requirement		15,000	
41	JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS	187,707	175,707	-12,000
	Excessive growth		-12,000	
43	JOINT DATA MANAGEMENT RESEARCH	9,235	5,235	-4,000
	Excessive growth		-4,000	
46	HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) ADVANCED TECHNOLOGY	18,179	14,179	-4,000
	Excessive growth		-4,000	
52	STRATEGIC ENVIRONMENTAL RESEARCH PROGRAM	66,409	56,409	-10,000
	Excessive growth		-10,000	
53	MICROELECTRONIC TECHNOLOGY DEVELOPMENT AND SUPPORT	91,132	69,132	-22,000
	Excessive growth		-22,000	
66	JOINT EXPERIMENTATION	58,130	48,130	-10,000
	Excessive growth		-10,000	
67	MODELING AND SIMULATION MANAGEMENT OFFICE	37,029	31,029	-6,000
	Excessive growth		-6,000	
74	SPECIAL OPERATIONS ADVANCED TECHNOLOGY DEVELOPMENT	35,242	30,242	-5,000
	Excess to need		-5,000	
101	ISRAELI COOPERATIVE PROGRAMS	106,100	235,700	129,600
	Arrow 3		60,200	
	David's Sling		69,400	
108	JOINT SYSTEMS INTEGRATION COMMAND (JSIC)	13,024	5,024	-8,000
	Excessive growth		-8,000	

R-1		Budget Request	Committee Recommended	Change from Request
112	**PRECISION TRACKING SPACE SYSTEM RDT&E**	**160,818**	**0**	**-160,818**
	Unjustified program		-160,818	
118	**PROMPT GLOBAL STRIKE CAPABILITY DEVELOPMENT**	**204,824**	**104,824**	**-100,000**
	Program adjustment		-100,000	
121	**ADVANCED IT SERVICES JOINT PROGRAM OFFICE (AITS-JPO)**	**49,198**	**24,198**	**-25,000**
	Excessive growth		-25,000	
144	**USD(A&T)--CRITICAL TECHNOLOGY SUPPORT**	**1,486**	**0**	**-1,486**
	Unjustified program		-1,486	
147	**CLASSIFIED PROGRAM USD(P)**	**0**	**106,000**	**106,000**
	Classified program USD(P)		106,000	
259	**SOF OPERATIONAL ENHANCEMENTS**	**60,915**	**65,415**	**4,500**
	Program Increase - Electronic Warfare unfunded requirements		4,500	
	CLASSIFIED PROGRAMS	**4,227,920**	**4,038,311**	**-189,609**
	Classified adjustment		-189,609	
	DARPA UNDISTRIBUTED REDUCTION		**-100,000**	
	DARPA Undistributed Reduction		-100,000	

DEFENSE ADVANCED RESEARCH PROJECTS AGENCY

The Committee supports the leadership initiatives at the Defense Advanced Research Projects Agency (DARPA) to better manage the execution of funds. DARPA's mission is to maintain the technological superiority of the U.S. military and prevent technological surprise from harming our national security by sponsoring revolutionary, high-payoff research bridging the gap between fundamental discoveries and their military use. DARPA's ability to research and develop innovative and generation advancing capabilities for the Department of Defense helps the United States maintain technical superiority. Corporate strategies have greatly improved the efficiency of DARPA's financial execution and ability to obligate funds. The Committee has determined that these efficiencies will result in cost reductions of $100,000,000 in fiscal year 2012.

Therefore, the Director of DARPA shall provide to the congressional defense committees, not later than 60 days after enactment of this Act, a report detailing by program element and project the application of each detailed reduction.

U.S.-ISRAELI SHORT-RANGE BALLISTIC MISSILE DEFENSE

The fiscal year 2012 budget request includes $106,100,000 for United States and Israel cooperative ballistic missile defense programs. The United States is co-managing the development of the programs to ensure compatibility with U.S. missile defense systems. The Committee recognizes that the threat to Israel from such short-range missiles and rockets continues to increase. Therefore, the Committee recommends an additional $129,600,000 to accelerate the development of the Israeli Cooperative Program.

EMERGING CAPABILITIES TECHNOLOGY DEVELOPMENT

The Committee strongly supports the development of emerging capabilities through innovative research and development activities, often involving other agencies outside the Department of Defense. Accordingly, the Committee supports the budget request to advance technical capabilities in mutual areas of interest through partnerships with other federal departments and agencies. Specifically, the Committee supports the use of funds included in the fiscal year 2012 request to address mid-term irregular warfare needs that are aligned with the needs of the interagency partners.

OPERATIONAL TEST AND EVALUATION, DEFENSE

Fiscal year 2011 appropriation	$194,910,000
Fiscal year 2012 budget request	191,292,000
Committee recommendation	191,292,000
Change from budget request	––

This appropriation provides funds for the operational test and evaluation activities of the Department of the Defense. The total amount recommended in the bill will provide the following program in fiscal year 2012:

(DOLLARS IN THOUSANDS)

		BUDGET REQUEST	COMMITTEE RECOMMENDED	CHANGE FROM REQUEST
	OPERATIONAL TEST & EVAL, DEFENSE			
	RDT&E MANAGEMENT SUPPORT			
1	OPERATIONAL TEST AND EVALUATION	60,444	60,444	---
2	LIVE FIRE TESTING	12,126	12,126	---
3	OPERATIONAL TEST ACTIVITIES AND ANALYSES	118,722	118,722	---
	TOTAL, RDT&E MANAGEMENT SUPPORT	191,292	191,292	---
	TOTAL, OPERATIONAL TEST & EVAL, DEFENSE	191,292	191,292	---