

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
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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

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 WMCSS/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	
Neurofibromatosis 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 HMMVV survivability enhancements		50,000	

R-1	Budget Request	Committee Recommended	Change from Request
FCS SYSTEMS OF SYSTEMS ENGR AND PROGRAM			
93 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	
MISSILE/AIR DEFENSE PRODUCT IMPROVEMENT			
169 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 brown-out 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 WMMCCS/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 MRMJAS 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 Ship to shore connector program delay	161,099	121,099 -40,000	-40,000
126 MEDICAL DEVELOPMENT Program increase - wound care research Program increase - military dental research	12,984	31,084 13,000 5,100	18,100
127 NAVIGATION/ID SYSTEM Mode 5 program delay	50,178	35,178 -15,000	-15,000
128 JOINT STRIKE FIGHTER (JSF) - EMD Block IV development ahead of need	670,723	651,786 -18,937	-18,937
129 JOINT STRIKE FIGHTER (JSF) Block IV development ahead of need	677,486	658,549 -18,937	-18,937
133 CH-53K Management services funding growth	629,461	624,461 -5,000	-5,000
135 JOINT AIR-TO-GROUND MISSILE (JAGM) Program delay	118,395	108,395 -10,000	-10,000
136 MULTI-MISSION MARITIME AIRCRAFT (MMA) Program increase - Small business technology insertion	622,713	632,713 10,000	10,000
138 DDG-1000 Government technical services growth	261,604	257,604 -4,000	-4,000
172 F/A-18 SQUADRONS Radar upgrade program delay	151,030	145,161 -5,869	-5,869
184 SURFACE ASW COMBAT SYSTEM INTEGRATION Program increase - Small business technology insertion	22,010	29,510 7,500	7,500
185 MK-48 ADCAP Program increase - Small business technology insertion	39,288	46,788 7,500	7,500
186 AVIATION IMPROVEMENTS Multi purpose bomb rack program termination	123,012	100,423 -22,589	-22,589
190 MARINE CORPS GROUND COMBAT/SUPPORTING ARMS Joint Light Tactical Vehicle program delay	209,396	184,396 -25,000	-25,000
191 MARINE CORPS COMBAT SERVICES SUPPORT Program execution	45,172	27,072 -18,100	-18,100
219 SMALL (LEVEL 0) TACTICAL UAS (STUASL0) Excess support funding	22,698	21,398 -1,300	-1,300
221 RQ-21A Program delays	26,301	21,301 -5,000	-5,000
999 CLASSIFIED PROGRAMS Classified adjustment	1,308,608	1,408,608 100,000	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 Gravelly 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 Excess to need - duplicative efforts	115,285	70,785 -44,500	-44,500
16 ADVANCED AEROSPACE SENSORS Program increase	53,075	63,075 10,000	10,000
20 ADVANCED SPACECRAFT TECHNOLOGY Excess to need - duplicative efforts	74,636	39,236 -35,400	-35,400
31 ADVANCED EHF MILSATCOM (SPACE) Excess to need - poor justification	421,687	354,487 -67,200	-67,200
34 COMBAT IDENTIFICATION TECHNOLOGY ADS-B integration into APX-119 - excess funds	38,496	28,496 -10,000	-10,000
37 SPACE PROTECTION PROGRAM (SPP) Excess to need	9,819	4,819 -5,000	-5,000
43 NEXT GENERATION BOMBER Program increase	197,023	297,023 100,000	100,000
46 HARD & DEEPLY BURIED TARGET DEFEAT SYSTEM MOP development	38,248	28,248 -10,000	-10,000
53 OPERATIONALLY RESPONSIVE SPACE Excess to need - duplicative efforts	86,543	29,543 -57,000	-57,000
55 NATIONAL POLAR-ORBITING OP ENV SATELLITE Excess to need - poor justification	444,900	225,000 -219,900	-219,900
61 TACTICAL DATA NETWORKS ENTERPRISE Carryover from Network Enabled Weapons termination	52,355	51,355 -1,000	-1,000
65 SPACE SITUATION AWARENESS SYSTEMS Space Fence - poor justification Space Based Space Surveillance - excess to need	273,689	221,089 -40,000 -12,600	-52,600
81 CSAR HH-60 RECAPITALIZATION Excess to need	94,113	11,113 -83,000	-83,000
90 CV-22 Slow execution	20,723	15,723 -5,000	-5,000
91 AIRBORNE SENIOR LEADER C3 (SLC3S) Air Force requested transfer from Aircraft Procurement, Air Force	12,535	34,435 21,900	21,900
98 ROCKET SYSTEMS LAUNCH PROGRAM (SPACE) Excess to need	158,096	33,596 -124,500	-124,500
107 GPS III - OPERATIONAL CONTROL SEGMENT Slow execution	390,889	342,889 -48,000	-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	
AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM (CIP)			
139 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	
AIR TRAFFIC CONTROL/APPROACH/LANDING SYSTEM (ATCALs)			
185 (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	
27	ADVANCED TECHNOLOGY DEVELOPMENT 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 BALLISTIC MISSILE DEFENSE INTERGRATION AND OPERATIONS 97 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 Excessive growth	14,731	9,731 -5,000	-5,000
6 NATIONAL DEFENSE EDUCATION PROGRAM Excessive growth	101,591	86,591 -15,000	-15,000
18 JOINT DATA MANAGEMENT ADVANCED DEVELOPMENT Excessive growth	9,235	5,235 -4,000	-4,000
20 HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) APPLIED RESEARCH Excessive growth	14,923	10,923 -4,000	-4,000
25 SPECIAL OPERATIONS TECHNOLOGY DEVELOPMENT Program Increase - unfunded requirement	26,591	41,591 15,000	15,000
41 JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS Excessive growth	187,707	175,707 -12,000	-12,000
43 JOINT DATA MANAGEMENT RESEARCH Excessive growth	9,235	5,235 -4,000	-4,000
46 HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) ADVANCED TECHNOLOGY Excessive growth	18,179	14,179 -4,000	-4,000
52 STRATEGIC ENVIRONMENTAL RESEARCH PROGRAM Excessive growth	66,409	56,409 -10,000	-10,000
53 MICROELECTRONIC TECHNOLOGY DEVELOPMENT AND SUPPORT Excessive growth	91,132	69,132 -22,000	-22,000
66 JOINT EXPERIMENTATION Excessive growth	58,130	48,130 -10,000	-10,000
67 MODELING AND SIMULATION MANAGEMENT OFFICE Excessive growth	37,029	31,029 -6,000	-6,000
74 SPECIAL OPERATIONS ADVANCED TECHNOLOGY DEVELOPMENT Excess to need	35,242	30,242 -5,000	-5,000
101 ISRAELI COOPERATIVE PROGRAMS Arrow 3 David's Sling	106,100	235,700 60,200 69,400	129,600
108 JOINT SYSTEMS INTEGRATION COMMAND (JSIC) Excessive growth	13,024	5,024 -8,000	-8,000

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