



Defense: FY2011 Authorization and Appropriations

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May 25, 2010

Congressional Research Service

7-5700

www.crs.gov

R41254

Summary

The President's FY2011 budget request, released February 1, 2010, included \$733.3 billion in new budget authority for national defense. In addition to \$548.9 billion for the regular (non-war) operations of the Department of Defense (DOD), the request included \$159.3 billion for ongoing military operations, primarily funding the campaigns in Afghanistan and Iraq, bringing the total DOD request for FY2011 to \$708.3 billion. The balance of the request is \$25.1 billion for defense-related activities by agencies other than DOD, the largest component of which was \$17.8 billion for Energy Department programs related to either nuclear weapons or nuclear power plants for Navy ships.

The President also requested supplemental appropriations for FY2010 totaling \$33.6 billion. This included \$33.0 billion for war costs and \$655 million to pay DOD's share of the cost of humanitarian relief operations in Haiti, which was struck on January 12, 2010 by a devastating earthquake.

The \$548.9 billion requested for DOD's so-called "base budget" – that is, all activities other than those associated with ongoing combat operations – is \$18.2 billion higher than the amount appropriated for DOD non-war costs in FY2010. By DOD's estimate, this 3.4% increase would amount to a "real" increase of 1.8% in "purchasing power, after taking into account the cost of inflation.

The budget request would continue the Administration's policy of expanding the proportion of DOD's budget invested in capabilities oriented toward counterinsurgency and other unconventional types of combat, including helicopters, special operations forces, and unmanned vehicles. The budget includes no funding to continue production of the C-17 cargo plane or to continue development of the F-136 alternate engine for the F-35 Joint Strike Fighter, two programs Congress has funded in recent years over the objections of the Bush and Obama Administrations.

The House Armed Services Committee began formal legislative action on the FY2011 defense budget request, approving on May 19, 2010 H.R. 5136, the National Defense Authorization Act for FY2011. As reported by the committee (H.Rept. 111-491), the bill would authorize \$725.9 billion for DOD and other defense-related activities, a reduction of \$2.7 million from the Administration's request for programs covered by that legislation.

The bill would add to the budget \$485 million to continue development of the alternate engine for the Joint Strike Fighter, despite warnings by Defense Secretary Robert H. Gates that he would recommend a veto of any bill that would continue that project. The committee bill included no funds for the procurement of additional C-17s.

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Most Recent Developments

The House Armed Services Committee approved on May 19, 2010 H.R. 5136, a bill that would authorize \$725.9 billion in FY2011 discretionary budget authority for national defense programs within the jurisdiction of that panel, which is \$2.7 million less than President Obama requested for those programs. The House is scheduled to take up the defense authorization bill on May 28.

Of the total authorized by the bill, \$566.6 billion—\$2.2 million less than requested—was for the so-called “base budget” of the Department of Defense (DOD), that is, the regular annual operating costs excluding costs associated with ongoing military operations in Iraq and Afghanistan. The bill also would authorize \$159.3 billion for war costs (labeled “overseas contingency operations”) cutting a total of \$432,000 from the President’s request. In addition, the bill would authorize \$17.7 billion, as requested, for defense-related nuclear energy programs conducted by the Department of Energy. The bill also would authorize \$33.7 billion, as requested, in supplemental FY2010 appropriations for war costs.

As reported by the House Armed Services Committee on May 24, 2010 (H.Rept. 111-491), the defense authorization bill generally supports the Administration’s budget request. However, the committee challenged the Administration’s position on several major issues:

- It approved a 1.9% military pay raise, instead of the 1.4% increase requested.
- It authorized \$485 million to continue developing an alternate jet engine for the F-35 Joint Strike Fighter, a project the Bush and Obama Administrations both have tried to terminate.
- It barred the use of any funds authorized by the bill to plan and design structures at the Naval Station in Mayport, Florida,—near Jacksonville – that would allow the Navy to homeport at that site a nuclear-powered aircraft carrier currently based in Norfolk, Virginia.
- It included a provision that would prohibit the transfer to U.S. territory of any detainee currently held at the U.S. naval base at Guantanamo Bay, Cuba.

The House committee concurred with the Administration on one other contentious issue: It did not add to the bill authorization for funds to continue procurement of C-17 long-range cargo jets, as Congress has done in prior years over the objections of the Bush and Obama Administrations. The House committee bill authorized \$10.9 billion to continue development of the F-35 and procure 42 of the planes. It did not authorize one additional plane (\$205 million) which the Administration requested as part of the FY2011 war costs on grounds that the plane would replace a fighter that had been lost during combat operations.

The House is scheduled to take up on May 28, 2010 the defense authorization bill approved May 19 by the Armed Services committee For highlights of the bill, see “National Defense Authorization Act,” below.

The Senate Armed Services Committee is scheduled to mark up its version of the FY2011 defense authorization bill during the week of May 24, 2010.

FY2011 Defense Budget Overview

The President's FY2011 budget request, released February 1, 2010, included \$733.3 billion in new budget authority for national defense. In addition to \$548.9 billion for the regular (non-war) operations of the Department of Defense (DOD), the request included \$159.3 billion for ongoing military operations, primarily funding the campaigns in Afghanistan and Iraq, bringing the total DOD request for FY2011 to \$708.3 billion (**Table 1**). The request included an additional \$25.1 billion for defense-related activities by agencies other than DOD, the largest component of which was \$17.8 billion for Energy Department programs related to either nuclear weapons or nuclear powerplants for Navy ships.

The FY2011 budget for DOD also includes \$5 billion in mandatory spending for those military retirees who are authorized to receive "concurrent receipt" of their full military pension and a disability pension from the Department of Veterans Affairs. The cost of this and other mandatory spending is partly offset by various receipts and income from trust funds, which reduce to \$3.9 billion the net budgetary impact of mandatory spending by DOD in FY2011. Including both discretionary and mandatory spending, the Administration's total DOD budget request for FY2011 is \$552.8 billion.

The Administration also requested \$33 billion in supplemental DOD appropriations for FY2010 war costs, in order to cover the cost of the President's decision, announced on November 30, 2009, to deploy an additional 30,000 troops to Afghanistan. This "surge" would bring to 98,000 the total number of U.S. troops in that country at the end of FY2011. Added to the funds previously appropriated for war costs in the FY2010 DOD appropriations bill enacted December 19, 2009 (H.R. 3326/P.L. 111-118), the requested supplemental funds would bring the total amount appropriated for FY2010 war costs to \$162.6 billion.

Table 1. FY2009-11 DOD Discretionary Appropriations
(amounts in billions of dollars)

	FY2009 Enacted	FY2010 Enacted	FY2010 Supplemental Request	FY2011 Requested
Base Budget	513.1	530.7	n/a	548.9
"Economic Stimulus" package	7.4	n/a	n/a	n/a
War Costs/Overseas Contingency Operations	145.8	129.6	33.0	159.3
Haiti Relief Operations	n/a	n/a	.6	n/a
Total	666.3	660.3	33.6	708.3

Sources: CRS calculations based on *National Defense Budget Estimates for FY2011* ("The Green Book"). Office of the Undersecretary of Defense (Comptroller), March 2010, Table I-9, "National Defense Budget Authority-Function 050," pp. 14-15 and CRS Report R40531, *FY2009 Spring Supplemental Appropriations for Overseas Contingency Operations*, coordinated by Stephen Daggett and Susan B. Epstein, Table F-1, pp. 62-72. Totals may not add due to rounding.

Note: Base budget amounts include accrual payments to support medical care for military retirees under the so-called Tricare-for-Life program, which is funded pursuant to a permanent appropriation.

The FY2011 base budget request would support roughly the same size active-duty force as the FY2010 budget: an end-strength of 1.4 million active duty personnel plus 79,000 reserve component and National Guard members serving on active duty.

The FY2011 war cost budget request would support an additional 26,000 personnel constituting what DOD treats as a temporary expansion of the force to fill billets associated with operations in Iraq and Afghanistan. So the total number of military personnel the budget request would support on active duty by the end of FY2011 is 1.5 million.

The request also would continue the Administration's policy of expanding the share of the DOD budget invested in capabilities oriented toward counterinsurgency and other unconventional types of combat, including helicopters, special operations forces, and unmanned vehicles. The budget includes no funding to continue production of the C-17 cargo plane, or to continue development of the F-136 alternate engine for the F-35 joint strike fighter, two programs Congress has funded in recent years over the objections of the Bush and Obama Administrations.

Real Growth and 'Security Agencies'

Compared with the amount appropriated for the DOD base budget in FY2010, the requested FY2011 base budget would be an increase of 3.4%, amounting to a 1.8% "real growth" in purchasing power (that is, taking account of the cost of inflation).

DOD is one of the federal agencies the Administration has defined as "security agencies" that are exempt from the budget freeze on discretionary spending by non-security agencies. The budget request also would provide real growth in spending for other "security agencies" – a category that it defined as including the Department of State and "other international programs," the Departments of Veterans Affairs and Homeland Security and the National Nuclear Security Agency (NNSA) of the Department of Energy.¹ (**Table 2**)

¹ For the Energy Department's Nuclear National Security Agency (NNSA), which was designated as a "security agency" and, thus, exempt from its budget freeze, the Administration requested \$11.2 billion in FY2011, 13.5% more than was appropriated for the agency in FY2010. However, the administration also requested \$6.5 billion for other defense-related Energy Department activities which OMB designates as part of the "National Security" function of the budget (Function 050) and which are covered by the annual National Defense Authorization Act, but which the Administration did not designate as "security agencies" that were exempt from the budget freeze. Office of Management and Budget, *Historical Tables, Budget of the U.S. Government, Fiscal Year 2011*, Table 5.1, "Budget Authority by Function and Subfunction, 1976-2015," p. 94, and Department of Energy, "Summary Table: Budget by Appropriation," accessed at <http://www.mbe.doe.gov/budget/11budget/Content/Apprsum.pdf>.

Table 2. Security Agency and Non-security Agency Discretionary Budget Authority Enacted and Requested, FY2009-FY2011

amounts are in billions of dollars

	FY2009 enacted		FY2010 enacted	FY2011 requested
	regular appropriations	American Recovery and Reinvestment Act (“Stimulus Package”)		
Security Agencies				
DOD	513.2	7.4	530.8	548.9
National Nuclear Security Administration (Department of Energy)	9.1	--	9.9	11.2
Department of Homeland Security	42.1	2.8	39.4	43.6
Department of Veterans Affairs	47.6	1.4	53.1	57.0
State and other International Programs	38.1	0.4	50.6	58.5
Subtotal, Security Agencies	650.1	12.0	683.7	719.2
Subtotal, Nonsecurity Agencies	354.1	253.1	392.1	386.4

Source: Office of Management and Budget, *The Budget for Fiscal Year 2011*, Table S-7, “Funding Levels for Appropriated (“Discretionary”) Programs by Agency,” pp. 130-31.

Note: Nonsecurity Agencies are all federal agencies not listed as “Security Agencies.”

In sum, the Administration requested \$719.2 billion for discretionary programs of the security agencies (excluding war costs), which is 5.2% more than was appropriated for those programs in FY2010. For non-security agencies – that is, all other discretionary programs – the Administration requested \$386.4 billion, a 1.5% decrease from their FY2010 appropriations.

War Costs, FY2011 and FY2010

The Administration’s \$159.3 billion request for war costs in FY2011 is roughly \$3 billion lower than the FY2010 war budget (including the pending supplemental request that would increase the FY2010 amount by \$33 billion). For the third year in a row, the budget request reflects a shift in emphasis from operations in Iraq to those in Afghanistan. (**Table 3**)

Table 3. DOD War Funding, FY2001-FY2011 Request

In billions of dollars and shares of total

	Total: FY2001- FY2008	FY2009	FY2010 Enacted	FY2010 Supplemental Request	FY2010 Total with Request	FY2011 Request
IRAQ						
Funding	\$553.5	\$92.0	\$59.6	\$1.0	\$60.6	\$45.8
Share of Total	78%	62%	46%	3%	38%	29%
AFGHANISTAN						
Funding	\$159.2	\$56.1	\$69.1	\$30.0	\$99.1	\$113.5
Share of Total	22%	38%	54%	97%	62%	71%
TOTAL						
Funding	\$712.7	\$148.2	\$128.7	\$31.0	\$159.7	\$159.3
Share of Total	100%	100%	100%	100%	100%	100%

Source: CRS Report R41232, *FY2010 Supplemental for Wars, Disaster Assistance, Haiti Relief, and Court Cases*, coordinated by Amy Belasco, based on Table 8-5 in DOD, *FY2011 Budget Request Overview*, February 1, 2010; http://comptroller.defense.gov/defbudget/fy2011/FY2011_Budget_Request_Overview_Book.pdf.

Notes: CRS calculations exclude non-war funding in supplementals, and include funds from DOD's regular budget used for war needs.

Haiti Operations Supplemental

On March 24, 2010, the Administration amended its FY2010 DOD supplemental funding request to include an additional \$655 million to pay for humanitarian relief operations in Haiti, which was struck on January 12, 2010 by a devastating earthquake. The DOD relief effort included the deployment of 18 Navy ships, 830 cargo flights and nearly 21,000 military personnel.

National Defense Budget Function (Function 050)

In addition to the total of \$708 billion requested to cover DOD base budget and war costs in FY2011, the Administration requested a total of \$25.1 billion in discretionary funding for other defense-related activities which, together with DOD, comprise the “national defense function” of the federal budget (designated as “function 050”).²

More than 70% of the additional funds (\$17.8 billion) are for Energy Department programs dealing either with nuclear weapons or with nuclear powerplants for warships. Of the remaining defense-related funds (\$7.3 billion), the lion's share (\$4.7 billion) is for national security-related activities of the FBI. The Administration's total FY2011 discretionary funding request for budget function 050 is \$738.7 billion.

² The Administration has not explained why the set of agencies and activities encompassed by the 050 budget function is slightly different from the set of agencies and activities encompassed by the Administration's definition of “security agencies.”

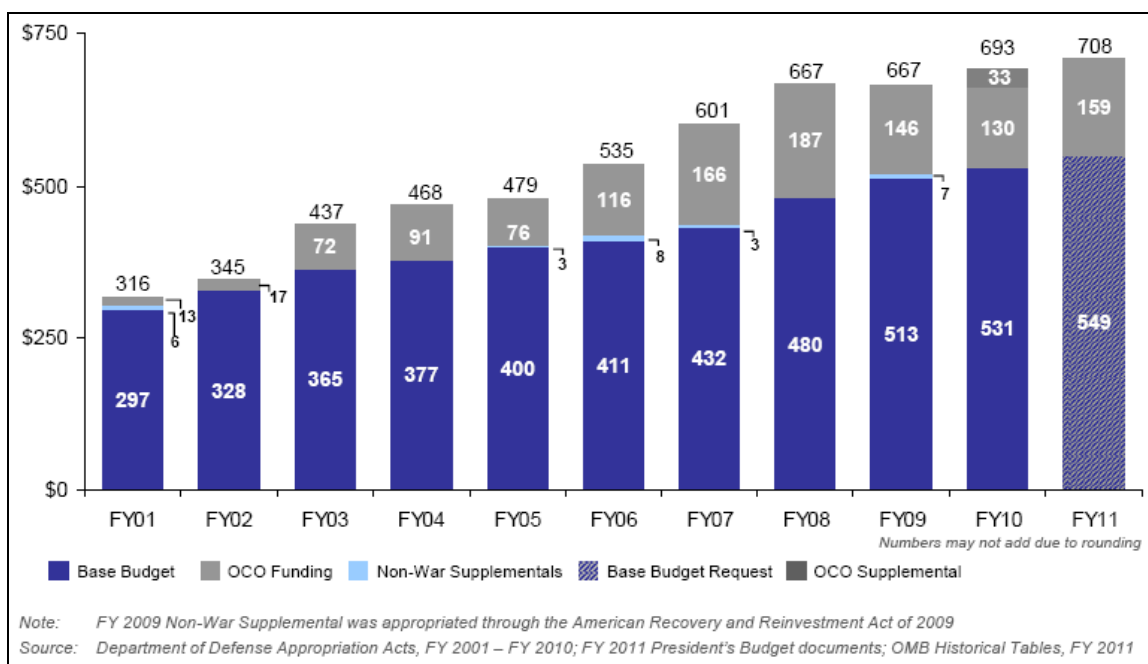
War Funding

For an analysis of some issues raised by the Administration's funding request for military operations in Iraq and Afghanistan and for congressional action on the FY2010 supplemental appropriations request for war costs, see CRS Report R41232, *FY2010 Supplemental for Wars, Disaster Assistance, Haiti Relief, and Court Cases*, coordinated by Amy Belasco. For further information on war costs, see CRS Report RL33110, *The Cost of Iraq, Afghanistan, and Other Global War on Terror Operations Since 9/11*, by Amy Belasco.

FY2011 DOD Base Budget

The President's \$708.2 billion DOD budget request for FY2011 is \$14.9 billion higher than the department's total FY2010 budget, if Congress approves the \$33.0 billion supplemental funding request for FY2010 (**Figure 1**).

Figure 1. Total DOD Appropriations, FY2001-FY2011
(dollars in billions)



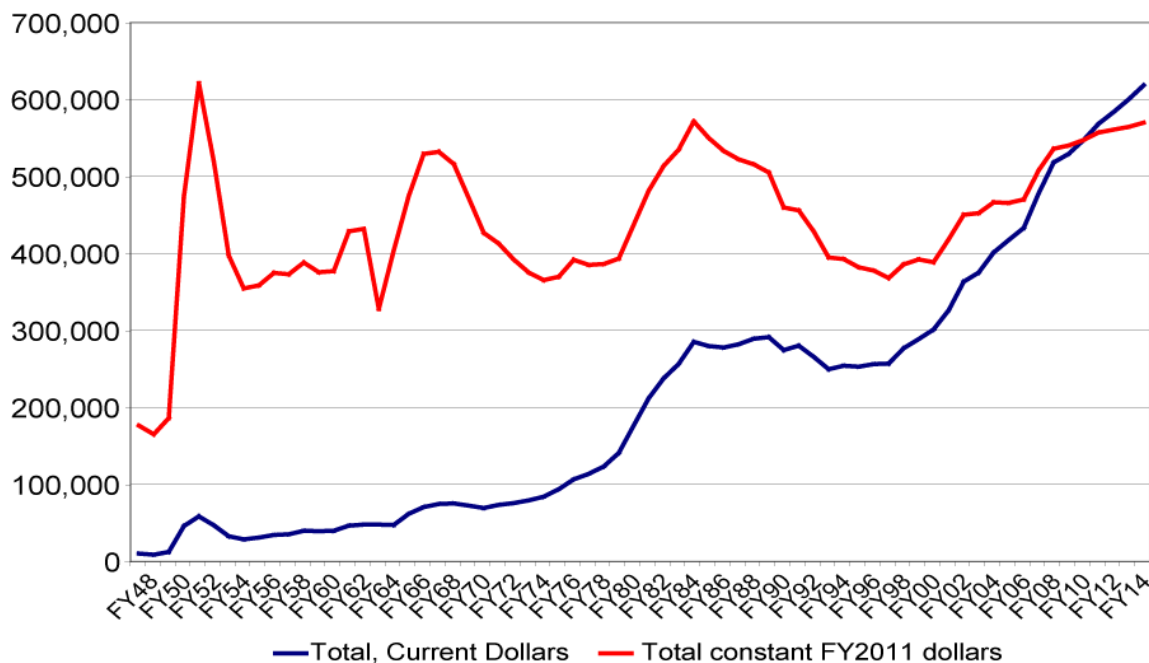
Source: DOD; Briefing on the FY2011 Budget Request, February 2010, accessed at: http://comptroller.defense.gov/defbudget/fy2011/fy2011_BudgetBriefing.pdf

The \$548.9 billion requested for the DOD base budget is \$18.2 billion higher than the \$531.0 billion appropriated for DOD non-war costs in FY2010. By DOD's estimate, this 3.4% increase would provide a 1.8% increase in real purchasing power, after taking into account the cost of inflation. The request would continue the relatively steady upward trend in DOD base budgets since FY1998, which was the low-water mark of the post-Cold War retrenchment in defense funding.

Adjusted for inflation (using DOD deflators), the requested FY2011 base budget would be DOD's third largest since the end of the Korean War, after the amounts appropriated for FY1985 and FY1986, at the peak of the Reagan Administration's defense buildup (**Figure 2**).

Figure 2. DOD Budget (Excluding Post-9/11 War Costs), FY1948-FY2011

amounts in millions of dollars



Source: Office of the Undersecretary of Defense (Comptroller), *National Defense Budget Estimates for FY2011* ("The Green Book"), Table 6-8, "Department of Defense BA by Title," pp. 109-114. Data for FY2001-FY2011 from CRS analysis based on distinction between base budget and war costs for those years in DOD; Briefing on the FY2011 Budget Request, February 2010 (see **Figure 1**, above).

Notes: Data for FY2010 and FY2011 based on Administration's February 2010 budget request. Data for the FY1976 transition quarter are omitted.

Projected Real Growth

For the four years following FY2011 (FY2012-FY2015), the Administration projects annual increases in the DOD base budget that would exceed inflation, on average, by 0.8%. This falls short of the 2% real growth rate that Defense Secretary Robert Gates said, in congressional testimony on May 14, 2009, would be needed to pay for the investments the Department planned to make through FY2015³ (**Table 4**).

On February 1, 2010, in response to a reporter's question about the difference between Secretary Gates's earlier statement and the real growth in the FY2011 request, DOD Comptroller Robert

³Transcript, Senate Armed Services Committee hearing on the FY2010 DOD budget request, May 14, 2009. Accessed at <http://www.cq.com/display.do?dockey=/cqonline/prod/data/docs/html/transcripts/congressional/111/congressionaltranscripts111-000003117540.html@committees&metapub=CQ-CONGTRANSCRIPTS&searchIndex=1&seqNum=1>.

Hale said that DOD could live with a lower growth rate for the time being as one element of the Administration’s deficit reduction effort. But Hale intimated that,

We can accommodate 1% annual growth in the short-term and still maintain the current forces, and we’re doing it, frankly, to try to be mindful of a serious economic problem and make our contribution to that by holding down our growth....In the longer run, I think we’ll have to look at it again.⁴

Table 4. Projected and Alternative DOD Base Budgets, FY2011-FY2015
(total budget authority, including mandatory. in billions of dollars)

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2011- FY2015, total
Administration Plan (current dollars)	552.8	570.1	585.7	601.8	620.2	2,930.6
Administration Plan (constant FY2011 dollars)	552.8	558.8	562.7	566.3	571.5	2,812.1
percent real growth	1.8%	1.1%	0.7%	0.6%	0.9%	n/a
Amount that would provide 2% real growth, compounded (current dollars)	553.9	576.4	600.0	624.6	650.7	3,005.6
Amount by which 2% real growth budget would exceed Administration Plan (current dollars)	1.1	6.3	14.3	22.8	30.5	75.0

Source: Office of the Undersecretary of Defense (Comptroller), *National Defense Budget Estimates for FY2011* (“The Green Book”), Table 6-8, “Department of Defense BA by Title,” p. 114. Data concerning 2% real growth rate are CRS calculations based on data in Table 6-8. Figures may not add due to rounding.

Some members of Congress contend that the Administration’s projected real budget increases, even if realized, would be inadequate, given the steadily rising cost of personnel and operations. For example, Rep. Howard P. “Buck” McKeon, the ranking minority member of the House Armed Services Committee, warned in a Feb. 4, 2010, Heritage Foundation lecture that the planned budgets would force DOD to scale back some planned acquisition programs:

One percent real growth in the defense budget over the next five years is a net cut for investment and procurement accounts.⁵

On the other hand, some members object to exempting DOD (and other “security agencies”) from the Administration-imposed budget freeze on discretionary spending (**Figure 3**). For example, Rep. Barney Frank has called for reductions in the DOD budget based on the termination of unnecessary weapons programs and a retrenchment from some of the overseas military commitments that DOD cites as justifying its current budget level:

[President Obama’s] announcement that he is going to begin deficit reduction, while exempting the ever-increasing military budget from the same scrutiny that goes to other

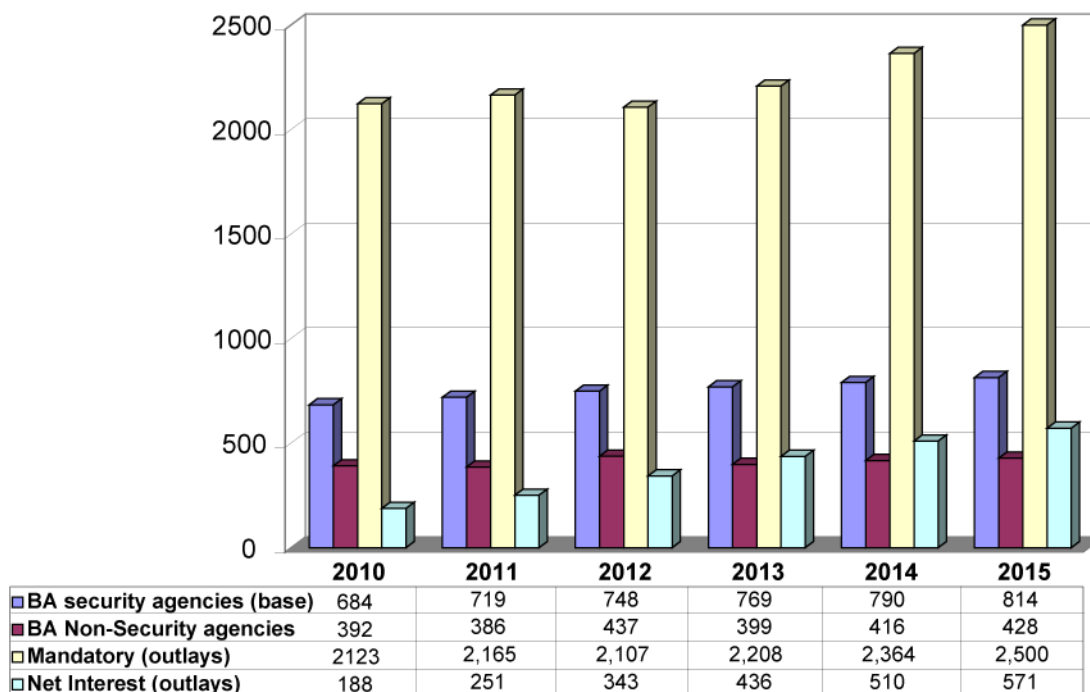
⁴ Office of the Assistant Secretary of Defense (Public Affairs), NewsTranscript, “DoD News Briefing with Undersecretary Hale and Vice Admiral Stanley,” February 1, 2010, accessed at: <http://www.defense.gov/transcripts/transcript.aspx?transcriptid=4551>.

⁵ Hon. Howard P. “Buck” McKeon, “Building a Robust National Defense,” accessed at <http://www.heritage.org/Research/Lecture/Building-a-Robust-National-Defense>.

federal expenditures means either that deficit reduction in both the near and long term is doomed to failure, or that devastating cuts will occur in virtually every federal program that aims at improving the quality of our lives.⁶

Figure 3. Proposed Spending Categories Relevant to a Budget ‘Freeze’

amounts in billions of current dollars



Amounts in billions of dollars

Source: Office of Management and Budget, *The Budget for Fiscal Year 2011*. Data for Security Agencies (excluding war costs) and Non-Security Agencies drawn from Table S-11, “Funding Levels for Appropriated (“Discretionary”) Programs by Agency,” p. 174. Data for Mandatory Spending and Net Interest drawn from Table

Notes: Besides DOD, the Obama Administration defines as “security agencies” the following: the Department of Homeland Security, the Department of Veterans Affairs, the Department of State “and other international programs,” and the National Nuclear Security Administration within the Department of Energy. *Ibid.*, Table S-11, “Funding Levels for Appropriated (“Discretionary”) Programs by Agency,” p. 174.

Defense Budget as Share of Gross Domestic Product (GDP)

The FY2011 DOD base budget request amounts to 3.6% of the GDP, by the Administration’s calculations – the same percentage as the FY2010 base budget. (Table 5)

⁶ Rep. Barney Frank, “You Can’t Succeed at Deficit Reduction Without Really Trying,” *Congressional Record*, daily edition, February 4, 2010, p. E157. <http://www.house.gov/frank/speeches/2010/02-02-10-deficit-reduction-military-speech.pdf>.

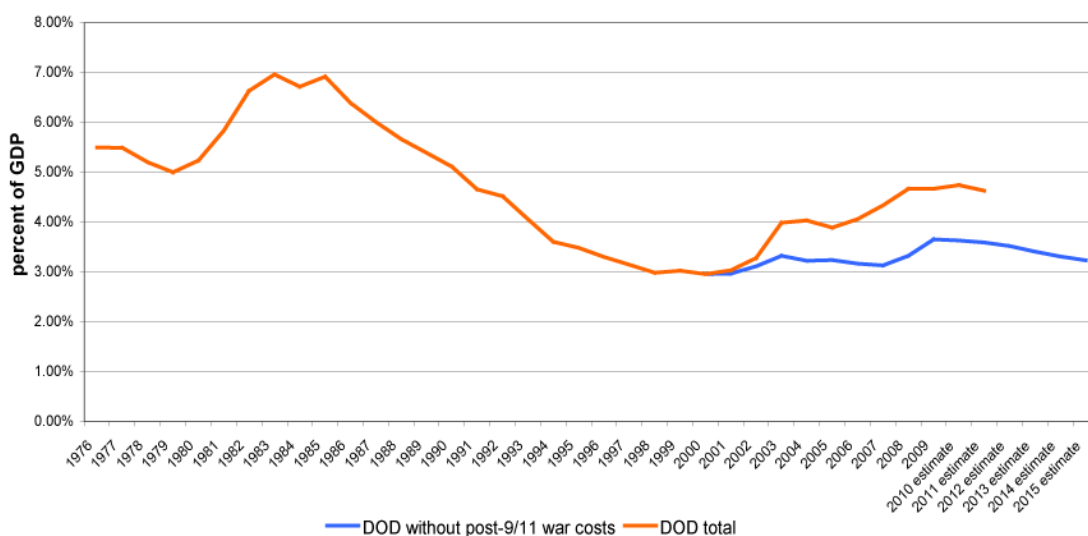
Table 5. Defense Outlays as Share of GDP, FY2008-11

	2008	2009	2010	2011
DOD Base Budget (without war costs)	3.3%	3.5%	3.6%	3.6%
DOD Total Budget	4.1%	4.5%	4.7%	4.7%

Source: Office of the Undersecretary of Defense (Comptroller), *National Defense Budget Estimates for FY2011* (“The Green Book”), Table 7-7, “Defense Shares of Economic and Budgetary Aggregates,” pp. 223-24, and Office of the Undersecretary of Defense (Comptroller), Fiscal Year 2011 Budget Request, briefing slides accessed at http://comptroller.defense.gov/defbudget/fy2011/fy2011_BudgetBriefing.pdf.

Viewed over the long haul, the FY2011 request would mark the leveling off of a relatively steady upward trend in the DOD share of GDP since the attacks of September 11, 2001 (Error! Reference source not found.).

Figure 4. DOD Appropriations as Share of GDP, FY1976-2015



Source: CRS calculations based on Office of the Undersecretary of Defense (Comptroller), *National Defense Budget Estimates for FY2011* (“The Green Book”), Table 7-7, “Defense Shares of Economic and Budgetary Aggregates,” pp. 223-24.

Notes: Discussions of the DOD share of the GDP typically use data based on DOD outlays for each fiscal year, as in Table 5, above. This chart is based on annual levels of DOD budget authority, because available outlay data do not separate war costs from base budget expenditures. Year to year changes in outlays lag corresponding movements in budget authority, but over a long period, trends in the ratio of DOD budget authority to GDP should closely track trends in the ratio of DOD outlays to GDP.

Long-term Planning: Strategies and Budgets

The Administration did not propose in its FY2011 DOD budget request as many dramatic changes to major weapons programs as had been incorporated into its FY2010 request. But the FY2011 budget sustains the initiatives launched in the previous budget. Moreover, the budget request supports the strategy and force planning assumptions that are embodied in DOD's Quadrennial Defense Review (QDR), a legislatively mandated assessment of defense strategy and priorities, the most recent of which was released on February 1, 2010 to accompany the FY2011 budget request.

Strategic Direction

The four QDRs produced in 1997, 2001, 2005, and 2010 document an ongoing evolution of DOD strategic thinking that has seen a shift away from emphasizing the readiness of U.S. forces to wage smaller versions of Cold War-era conventional wars, such as the 1991 Persian Gulf War. Increasingly, U.S. planners have focused on the need for U.S. forces to be ready for a diverse array of missions.⁷ Two themes running through the 2010 QDR are particularly relevant to the Administration's budgetary priorities.

A key premise of the report is that DOD's top priority is fighting and winning the ongoing campaigns in Iraq and Afghanistan. Accordingly, the report says, the department must rebalance its priorities to put more emphasis on support for forces engaged in current operations, and institutionalize capabilities for counterinsurgency, stability, and counter-terrorism operations, such as those currently being conducted by U.S. forces in Iraq and Afghanistan.

Among the near-term initiatives recommended by the QDR toward this end are increased funding to acquire helicopters, UAVs, improved intelligence and analysis capabilities, counter IED technologies, and AC-130 aircraft gunships.⁸ The report also recommends some longer-term initiatives, including the conversion of one heavy Army brigade combat team (BCT) into a Stryker brigade – such brigades use wheeled Stryker armored vehicles for mobility. The report says that “several more BCTs” may be converted “as resources become available and future global demands become clearer.”

A second basic assumption asserted by the 2010 QDR is that no future adversary is likely to directly confront U.S. conventional, military capabilities as embodied in armored brigades, aircraft carrier task forces, and squadrons of advanced jet fighters. Instead, the argument goes, any foe—whether a violent, radical non-state terrorist group or a technologically advanced near-peer competitor—will try to challenge U.S. forces “asymmetrically” that is, by using unconventional tactics and technologies to exploit U.S. limitations. The report challenges the widely-held notion that there is a spectrum of conflict, ranging from unsophisticated insurgents or terrorists at the low end to sophisticated national armies at the high end. Instead, the QDR says, “low-end” terrorist groups may use advanced technologies such as precision-guided missiles and

⁷ Department of Defense, *Quadrennial Defense Review Report, 2010*, at http://www.defense.gov/qdr/images/QDR_as_of_12Feb10_1000.pdf.

⁸ “UAVs” refers to unmanned or unpowered aerial vehicles, particularly used for intelligence, surveillance, and reconnaissance (ISR) missions. IEDs are improvised explosive devices, including roadside, car, and truck bombs.

near-peer competitors may use guerrilla-like “indirect means” of attack, such as a cyber-war campaign to degrade the computer networks on which U.S. forces rely heavily.

The 2010 QDR does not abandon the long-standing policy that U.S. forces should be able to win two major regional wars that occur nearly simultaneously in widely separated theaters of action. However, the report assigns equal importance to ensuring that U.S. forces can respond flexibly and effectively when required to conduct concurrently, at various points around the globe, several missions of different types. For example, one scenario the QDR said U.S. forces should be able to handle combined a major operation to stabilize another country, sustaining deterrence of a potential aggressor in another region, conducting a medium-sized counter-insurgency mission in yet another country, and providing support to U.S. civil authorities in the wake of some major disaster or terrorist attack.

The 2010 QDR emphasizes the importance of preparing U.S. forces to deal with one particular type of asymmetric threat that has potentially significant implications for conventional U.S. forces: a so-called “anti-access, area-denial” capability, which China and other potential adversaries appear to be developing. The argument is that China or Iran could use a variety of both simple and sophisticated technologies to target U.S. forward bases in nearby nations and naval forces operating relatively close to shore, which are the basis of the U.S. ability to project power in regions far from the U.S. homeland. Such power projection capabilities are the bedrock of U.S. alliances in Europe and Asia, and the key to U.S. efforts to bolster stability in other important regions as well. Such capabilities are also expensive. The cost of power projection capabilities is one reason why U.S. defense spending dramatically exceeds that of any other nation.

Those sinews of U.S. power projections may be increasingly vulnerable to attack. Overseas ground bases may be increasingly vulnerable to ballistic missile, cruise missile, and bomber attacks. Naval forces, particularly aircraft carriers and other service combatants, may be increasingly vulnerable to anti-ship cruise missiles; modern, quiet diesel electric submarines; smart mines that can be activated on command and maneuvered into place; small, fast boats laden with explosives; or, at the high end of the technological spectrum, ballistic missiles with maneuverable warheads that can be redirected in flight to strike moving ships.

The QDR makes a number of recommendations for countering anti-access strategies, including increased reliance on long-range strike weapons and submarines that would be less vulnerable to such methods. For instance, long-range strike forces might include a new manned or unmanned bomber, perhaps armed with long-range cruise missiles for stand-off attacks. Measures to defeat enemy sensors and engagement systems include development of offensive “electronic attack” capabilities, which remain highly classified. Missile defense may be a major and expensive part of measures to protect forward deployed forces.

Impending Budget Crunch

While promoting a reshaping of U.S. forces and strategy through the QDR, Secretary Gates also has warned his subordinates that the DOD budget also faces far-reaching changes. In a May 8, 2010 speech,⁹ Secretary Gates said that DOD would have to permanently reduce its overhead

⁹ Secretary Gates delivered this address at the Eisenhower Library in Abilene, Kansas. Office of the Assistant Secretary of Defense (Public Affairs), “Remarks as Delivered by Secretary of Defense Robert M. Gates, Abilene, KAS, May 8, (continued...) ”

costs by \$10 billion annually in order to sustain its current forces with the budgets he expected in the future, given the country's current difficult economic circumstances. Sustaining the current force, Secretary Gates said, would require, "real growth in the defense budget ranging from two to 3% above inflation....But, realistically, it is highly unlikely that we will achieve the real growth rates necessary to sustain the current force structure."

The solution Secretary Gates proposed is to shift funds within the budget, providing the necessary real growth in those accounts that directly support combat forces, but offsetting the additional cost by an equivalent reduction in spending for administrative and support activities such as personnel management, acquisition oversight, and DOD's medical program. Phrased in terms of military jargon, Secretary Gates proposed increasing the amount spent on DOD's fighting force – the "tooth"—by decreasing the amount spent on administrative and support functions – the "tail".

The goal is to cut our overhead costs and to transfer those savings to force structure and modernization within the programmed budget: In other words, to convert sufficient "tail" to "tooth" to provide the equivalent of roughly two to three percent real growth....Simply taking a few percent off the top of everything on a one-time basis will not do. These savings must stem from root-and-branch changes that can be sustained and added to over time.¹⁰

Citing an estimate by the Defense Business Board that DOD's tail absorbs roughly 40% of the department's annual budget,¹¹ Gates told reporters that a shift of about \$10 billion from those support functions to the part of the budget that directly supports combat units would provide a total real increase of about 3% in the "tooth"-related part of the FY2012 DOD budget request.¹²

Gates proposed no specific reductions in overhead expenses but listed, as possible targets for spending reductions, the number of generals and admirals, and the number of intermediate layers of management in DOD and in each of the services. As an incentive for the services to find such savings, Gates said, each service would be allowed to retain, for support of its own combat forces, any savings it achieved by reducing the cost of its support and administrative functions.

FY2011 Base Budget Highlights and Potential Issues

The FY2011 base budget request reflects some major initiatives of long standing, and others – particularly in acquisition – that were launched by the Obama Administration in its FY2010 budget. (**Table 6**) Following are some highlights:

(...continued)

2010", accessed at: <http://www.defense.gov/Speeches/Speech.aspx?SpeechID=1467>.

¹⁰ Ibid.

¹¹ Defense Business Board, *Report to the Secretary of Defense: Task Group Report on Tooth-to-Tail Analysis*, April 2008, accessed at http://dbb.defense.gov/pdf/Tooth_to_Tail_Final_Report.pdf.

¹² Office of the Assistant Secretary of Defense (Public Affairs), "Media Availability with Secretary Gates en route to Kansas City, MO, May 7, 2010, accessed at <http://www.defense.gov/transcripts/transcript.aspx?transcriptid=4621>.

Table 6. DOD Base Budget Discretionary Funding Request by Title. FY2010-FY2011
current dollar amounts in billions

	FY2010	FY2011	Change, FY210- FY211
Military Personnel	\$135.0	\$138.5	+2.6%
Operations and Maintenance	184.5	200.2	+8.5%
Procurement	104.8	112.9	+7.7%
Research and Development	80.1	76.1	-5.0%
Military Construction and Family Housing	23.3	18.7	-19.6%
Revolving and Management Funds	3.1	2.4	-23.7%
Total	\$530.7	\$548.9	+3.4%

Source: DOD; Briefing on the FY2011 Budget Request, February 2010, accessed at: http://comptroller.defense.gov/defbudget/fy2011/fy2011_BudgetBriefing.pdf

Military Personnel¹³

The FY2011 budget request would fund 1.43 million active duty personnel in the regular components.¹⁴ This amounts to a 4.7% increase over the end-strength of 1.38 million in FY2000, which was the low point in a reduction in active-duty manpower that began in FY 1987 and accelerated during the 1990s, after the collapse of the Soviet Union.

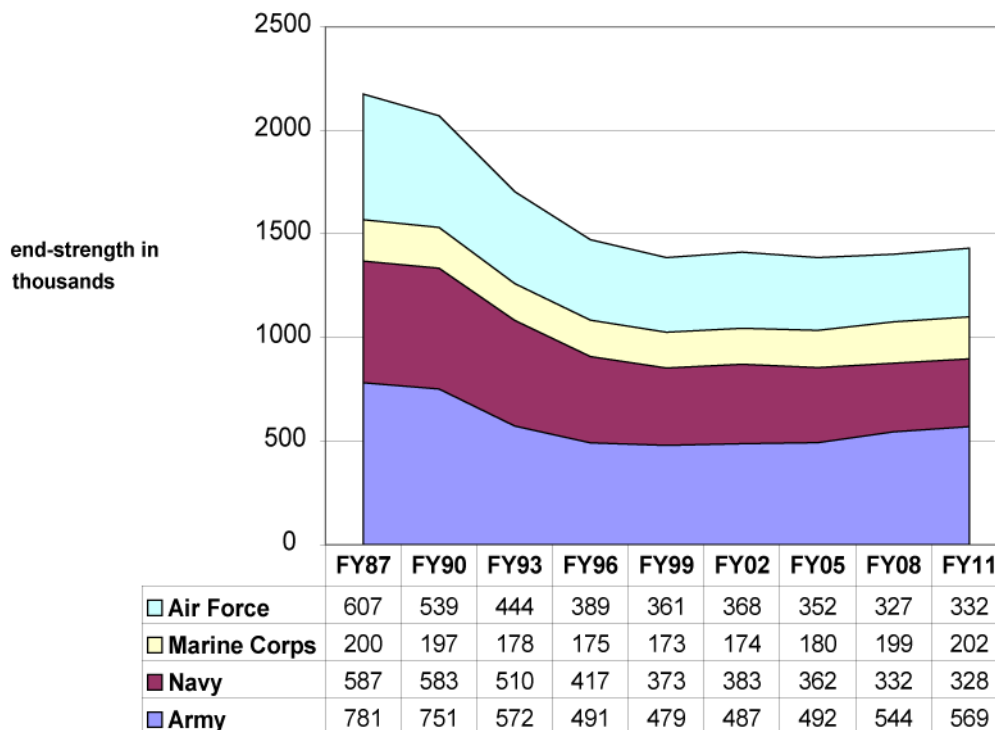
From an active-duty end-strength of 2.18 million in FY1987, the high-water mark of the Reagan defense buildup, active duty end-strength has been reduced by about one-third across each of the services during the drawdown of the early 1990s. Since the start of combat operations in Afghanistan and Iraq, the end strength of the Army and Marine Corps rebounded to 562,400 and 27,000, respectively. Both goals have been met, three years earlier than had been planned (**Figure 5**).

In 2010, Congress authorized an additional, temporary increase in the Army's active duty strength, which is reflected in the FY2011 request for an Army end-strength of 569,400.

¹³ Prepared in collaboration with Charles A. Henning, Specialist in Military Manpower Policy.

¹⁴ This total includes 26,000 personnel who comprise what DOD regards as a temporary expansion to fill billets associated with ongoing operations in Iraq and Afghanistan. It does not include 79,000 members of the reserve components (including the National Guard) who are serving full-time, nor does it include the much larger number of reserve component personnel who have been temporarily called to active duty in connection with ongoing combat operations in Iraq and Afghanistan.

Figure 5. Active Duty End-strength, FY1987-FY2011



Source: Office of the Undersecretary of Defense (Comptroller), *National Defense Budget Estimates for FY2011* (“The Green Book”), Table 7-5, “Department of Defense Manpower,” pp. 216-18.

Notes: Totals exclude reserve component members serving on active duty. The FY2011 totals, which are estimates based on the FY2011 budget request, include 22,000 Army personnel and 4,000 Navy personnel who are funded in the FY2011 war cost budget request.

Military Pay Raise

The budget includes nearly \$1 billion to give military personnel a 1.4 % raise in basic pay effective January 1, 2011. This increase would equal the average increase in private-sector pay and benefits as measured by the Labor Department’s Employment Cost Index (ECI), as required by law.¹⁵ In addition, the Basic Allowance for Housing, a non-taxable cash payment to service members who do not live in government-provided housing (which can amount to about 20% of a service members basic pay), is scheduled to increase by 4.2% in FY2011.

In each year but one since FY2004, Congress has approved raises in military basic pay that were 0.5% higher than the ECI increase, on the grounds that military pay increases had lagged behind civilian pay hikes during the 1980s.¹⁶

DOD officials contend that service members currently are better paid than 70% of private sector workers with comparable experience and responsibility, and that the \$340 million it would cost to provide the higher 1.9% raise across-the-board would provide more benefit to the department if it

¹⁵ Title 37 U.S.C. 1009.

¹⁶ Congress did not increase the proposed pay raise in FY2007.

were spent, instead, on reenlistment bonuses and special pays for military personnel in critical specialties. Military advocacy groups insist, however, that service members need the higher increase to close a “pay gap” between military personnel and their civilian peers.¹⁷

Don’t Ask, Don’t Tell

The FY2011 DOD funding bills may provide a vehicle for legislative initiatives by supporters and opponents of President Obama’s decision to revise a 1993 law¹⁸ and DOD regulations that, in effect, bar from military service those who are openly homosexual. Under a compromise policy reached in 1993, colloquially referred to as “don’t ask, don’t tell,” service members are not to be asked about nor allowed to discuss their same-sex orientation.

In his January 27, 2010, State of the Union Address, President Obama called for repealing the 1993 legislation and adopting a policy of nondiscrimination against persons with a same-sex orientation. DOD has begun a study, due for completion by the end of 2010, on how such a change in law and policy would be implemented. Secretary Gates has opposed repeal of the 1993 law pending completion of that study. On March 25, 2010, he announced changes in the department’s procedures for enforcement of the current law, providing that only a general or flag officer would have the authority to separate someone who had engaged in homosexual conduct, and that third party information alleging homosexual conduct by a service member must be given under oath.

Some Members of Congress contend that the presence in combat units of openly homosexual personnel would undermine the units’ cohesion and combat effectiveness. Some critics oppose changing the current policy while the tempo of deployments in Iraq and Afghanistan is imposing stress on the services. Other legislators have called for immediate repeal of the 1993 law or, at least, a moratorium in the discharge of service members for violating the don’t ask, don’t tell policy.¹⁹

In a May 24, 2010 letter to President Obama, Senators Carl Levin and Joseph I. Lieberman and Representative Patrick J. Murphy proposed an amendment to the FY2011 Defense Authorization Act that would repeal the 1993 legislation barring openly homosexual persons from military service after (1) the current DOD review has been completed and (2) the President, the Secretary of Defense and the Chairman of the Joint Chiefs of Staff have certified to Congress that policies and regulations have been prepared that would allow the repeal of the ban to be implemented in a way that is, “consistent with the standards of military readiness, military effectiveness, unit cohesion, and recruiting and retention of the armed forces.”²⁰

¹⁷ See CRS Report RL33446, *Military Pay and Benefits: Key Questions and Answers*, by Charles A. Henning and CRS Report R40711, *FY2010 National Defense Authorization Act: Selected Military Personnel Policy Issues*, coordinated by Don J. Jansen.

¹⁸ Title 10 U.S.C. 654.

¹⁹ CRS Report R40782, “*Don’t Ask, Don’t Tell: The Law and Military Policy on Same-Sex Behavior*,” by David F. Burrelli and CRS Report R40795, “*Don’t Ask, Don’t Tell: A Legal Analysis*,” by Jody Feder. Two bills introduced in the 111th Congress would repeal the law and replace it with a policy of nondiscrimination on the basis of sexual orientation—H.R. 1283 and S. 3065.

²⁰ Draft legislative amendment accessed on the White House Press Office website at http://www.whitehouse.gov/sites/default/files/Lieberman_NDAA_DADT_Amendment.pdf.

In a letter responding to the three members, Office of Management and Budget Director Peter R. Orzag said that, while the Administration would have preferred that congressional action on the issue await completion of the current DOD study, the Administration “understands that Congress has chosen to move forward with legislation now,” and that the Administration supports the draft amendment.²¹

In a statement to reporters on May 25, 2010, DOD press spokesman Geoff Morrell reportedly said:

Secretary Gates continues to believe that ideally, the [Defense Department] review should be completed before there is any legislation to repeal the ‘don’t ask, don’t tell,’ law. With Congress having indicated that is not possible, the secretary can accept the language in the proposed amendment.²²

Military Health Care Costs²³

The FY2011 budget request includes \$50.7 billion for the DOD health care system that employs 85,000 military personnel and 53,000 civilian DOD employees. The system serves 9.5 million eligible beneficiaries through 56 hospitals, 363 out-patient medical facilities, and 275 dental clinics.

The system’s cost, which was \$19 billion in FY2001, has more than doubled in the 10 years since then. The cost of the medical program is projected by DOD to increase annually at a rate of 5-7% through FY2015, when it is projected to account for 10% of the planned DOD budget.

In addition to the cost of general inflation and new developments in medical technology, DOD officials attribute the steady increase in military health care costs to several factors, including:

- an increase in the number of retirees using DOD’s Tricare medical insurance rather than other, less generous insurance plans for which they are eligible; and
- an increase in the frequency with which eligible beneficiaries use DOD medical services.
- legislatively mandated increases in benefits, such as Tricare-for-Life for reservists.
- no increase in fees and copayments for Tricare beneficiaries since 1995, when the Tricare program was created.

The Bush Administration’s DOD budget requests for FY2007, FY2008, and FY2009 proposed to increase enrollment fees and copayment requirements for those Tricare beneficiaries who were not eligible for Medicare. Each year Tricare fee increases were proposed, Congress passed legislation to prohibit them.²⁴

²¹ Peter R. Orzag, letter to Senator Joseph I. Lieberman, accessed on the White House Press Office website at http://www.whitehouse.gov/sites/default/files/Sen_Lieberman.pdf.

²² Donna Miles, “Gates Can Accept ‘Don’t Ask, Don’t Tell’ Amendment,” Armed Forces Press Service, May 25, 2010, accessed at <http://www.defense.gov/news/newsarticle.aspx?id=59321>.

²³ Prepared in collaboration with Don J. Jansen, Analyst in Military Health Care Policy.

²⁴ CRS Report RS22402, *Increases in Tricare Costs: Background and Options for Congress*, by Don J. Jansen; and (continued...)

Although the Obama Administration's 2011 budget does not include any legislative proposals to increase TRICARE annual fees or copayments, Secretary Gates stated in a February 1, 2010, press conference, "We certainly would like to work with the Congress in figuring out a way to try and bring some modest control to this program We absolutely want to take care of our men and women in uniform and our retirees, but at some point, there has to be some reasonable tradeoff between reasonable cost increases or premium increases or co-pays or something and the cost of the program."²⁵

Procurement and R&D

The FY2011 request would increase the total amount provided for development and procurement of weapons and equipment from \$184.9 billion in FY2010 to \$189.0 billion in FY2011. The proportion of the total DOD budget dedicated to procurement would slightly increase from 56% to 60% while the proportion going to R&D would decline from 44% to 40%.

In part, that shift reflects the transition into production of some major programs that have had relatively large R&D budgets in recent years, the largest of which is the F-35 Joint Strike Fighter. For that program, a total of \$11.2 billion was appropriated in FY2010: \$4.0 billion for R&D and \$7.2 billion for procurement. For FY2011, the total budget request is only slightly higher—\$11.2 billion – however that total includes \$2.3 billion for R&D and \$9.0 billion for procurement.²⁶

The Administration has proposed few new cuts in major weapons programs beyond those it proposed in its FY2010 DOD budget.²⁷ But it has reiterated two of the proposed cuts that Congress rejected in 2009. The FY2011 budget request includes no funds either for production of additional C-17 wide-body cargo jets, or for development of an alternate jet engine for the F-35. In 2009, when the Obama Administration also requested no funding for either of those programs, Congress added \$2.5 billion to the FY2010 DOD funding bills for 10 C-17s and \$465 million to continue work on the alternate engine.

Army Combat Force Modernization Programs²⁸

Some Members of Congress may question elements of the Administration's \$3.2 billion request for the Army's BCT Modernization program, which is intended to develop a new generation of combat equipment.

(...continued)

CRS Report R40711, *FY2010 National Defense Authorization Act: Selected Military Personnel Policy Issues*, coordinated by Don J. Jansen.

²⁵ Department of Defense, "DoD News Briefing with Secretary Gates and Adm. Mullen from the Pentagon," press release, February 1, 2010, <http://www.defense.gov/transcripts/transcript.aspx?transcriptid=4549>.

²⁶ Figures do not add due to rounding.

²⁷ Opposition to additional procurement of F-22 fighters was not an initiative of the Obama Administration. The preceding Bush Administration had decided cap the number of F-22s at the 183 planes already funded. There was a strong effort to add funding for additional F-22s to the FY2010 DOD appropriations bill, but the effort was dropped after President Obama threatened to veto any bill funding additional F-22s. See CRS Report RL31673, *Air Force F-22 Fighter Program: Background and Issues for Congress*, by Jeremiah Gertler.

²⁸ Prepared in collaboration with Steve Bowman, Specialist in National Security.

This program replaces the Future Combat System (FCS) program, which had been intended to develop a new generation of combat equipment to replace current systems, such as the M-1 Abrams tank and the M-2 Bradley infantry fighting vehicle. By 2009, FCS involved efforts to develop 14 manned and unmanned systems tied together by an extensive communications and information network. On April 6, 2009, however, Secretary of Defense Gates recommended cancelling the manned ground vehicle (MGV) component of FCS, which was intended to field eight separate tracked combat vehicle variants built on a common chassis. Secretary Gates said he acted because there were significant unanswered questions in the FCS vehicle design strategy and because, despite some adjustments to the MGVs, the emerging vehicles did not adequately reflect the lessons of counterinsurgency and close-quarters combat in Iraq and Afghanistan.

In place of MGV, the Army has launched a Ground Combat Vehicle (GCV) program intended to field by 2015-17 a family of fighting vehicles based on mature technologies and designed to readily incorporate future network capabilities. One potential oversight issue for Congress is whether the Army is rushing the development of the GCV, thereby inviting undue risk that would set the stage for another unsuccessful acquisition program.²⁹

While the MGV component of FCS was terminated, other elements of the FCS program including sensors, unmanned aerial and ground vehicles, and a modified FCS network were incorporated into the Army's (BCT) Modernization program under which the service plans to "spin out" the components, as they become available, to all 73 Army BCTs by 2025. According to the Government Accountability Office (GAO), the FCS components which the Army deems ready for deployment under the "spin out" approach have not demonstrated their effectiveness in field exercises.³⁰

Navy Force Structure and Shipbuilding Plans³¹

The Navy's FY2011 budget submission retains, for the time being at least, the goal of achieving and maintaining a 313-ship fleet that the Navy first presented to Congress in February 2006. Although the 313-ship goal remains in place, some elements of Navy force planning that have emerged since 2006 appear to diverge from the original plan. The Navy's report on its FY2011 30-year (FY2011-FY2040) shipbuilding plan refers to a forthcoming force structure assessment (FSA). Such an assessment could produce a replacement for the 313-ship plan. It is not clear when the FSA might be conducted, or when a replacement for the 313-ship plan might be issued.

The Navy's proposed FY2011 budget requests funding for the procurement of nine new battle force ships (i.e., ships that count against the 313-ship goal). The nine ships include two attack submarines, two destroyers, two Littoral Combat Ships (LCSs), one amphibious assault ship, one Mobile Landing Platform (MLP) ship (i.e., a maritime prepositioning ship), and one Joint High Speed Vessel (JHSV). The Navy's five-year (FY2011-FY2015) shipbuilding plan includes a total of 50 new battle force ships, or an average of 10 per year. Of the 50 ships in the plan, half are relatively inexpensive LCSs or JHSVs.

²⁹ CRS Report RL32888, *Army Future Combat System (FCS) "Spin-Outs" and Ground Combat Vehicle (GCV): Background and Issues for Congress*, by Andrew Feickert and Nathan Jacob Lucas.

³⁰ U.S. Government Accountability Office, *Defense Acquisitions: Opportunities Exist to Position Army's Ground Force Modernization Effort for Success*, GAO-10-406, March 2010.

³¹ Prepared in collaboration with Ronald O'Rourke, Specialist in Naval Affairs.

The Navy's FY2011 30-year (FY2011-FY2040) shipbuilding plan includes 276 ships. The Navy estimates that executing the plan would require an average of \$15.9 billion per year in constant FY2010 dollars. In past years, the Congressional Budget Office's (CBO's) estimate of the cost of implementing the 30-year shipbuilding plan has been higher than the Navy's estimate, reinforcing concerns among some observers about the prospective affordability of the plan. CBO is now assessing the potential cost of the Navy's FY2011 30-year shipbuilding plan.

Specific shipbuilding issues that have been discussed at hearings this year on the Navy's proposed FY2011 budget include the following:

Next Generation Ballistic Missile Submarine SSBN(X)

The Navy is currently conducting development and design work on a planned class of 12 next-generation ballistic missile submarines, or SSBN(X)s,¹ which the service wants to procure as replacements for its current force of 14 Ohio-class ballistic missile submarines. The SSBN(X) program, also known as the Ohio-class replacement program, received \$497.4 million in research and development funding in the Navy's FY2010 budget, and the Navy's FY2011 budget requests an additional \$672.3 million in research and development funding for the program. Navy plans call for procuring the first SSBN(X) in FY2019, with advance procurement funding for the boat beginning in FY2015.

The Navy preliminarily estimates the procurement cost of each SSBN(X) at \$6 billion to \$7 billion in FY2010 dollars—a figure equivalent to roughly one-half of the Navy's budget each year for procuring new ships. Some observers are concerned that the SSBN(X) program will significantly compound the challenge the Navy faces in ensuring the affordability of its long-term shipbuilding program. These observers are concerned that procuring 12 SSBN(X)s during the 15-year period FY2019-FY2033, as called for in Navy plans, could lead to reductions in procurement rates for other types of Navy ships during those years. The Navy's report on its 30-year (FY2011-FY2040) shipbuilding plan states: "While the SSBN(X) is being procured, the Navy will be limited in its ability to procure other ship classes."²

Among the options available to Congress for dealing with the SSBN(X) funding issue are to withhold approval of, or limiting the obligation or expenditure of, SSBN(X) funds until the Navy makes available to Congress and its three technical support agencies (GAO, CBO, and CRS) its formal analysis of alternative ways to replace the current fleet of aging missile subs.³²

DDG-51 Destroyers and Ballistic Missile Defense

Because of a series of decisions announced since mid-2008, the Administration has resumed production of DDG-51 destroyers, incorporating modifications to improve their anti-missile capabilities.

- In mid-2008, the Navy announced it would end procurement of DDG-1000 destroyers after acquiring three of the ships and would resume procurement of DDG-51 class destroyers. Navy officials stated that modified DDG-51s could perform the missions it wanted to emphasize, including ballistic missile defense

³² For more on the SSBN(X) program, see CRS Report R41129, *Navy SSBN(X) Ballistic Missile Submarine Program: Background and Issues for Congress*, by Ronald O'Rourke.

(BMD), anti-aircraft defense and open-ocean anti-submarine warfare and that, while the DDG-1000 design could also be configured to provide these capabilities, the Navy could procure more DDG-51s than reconfigured DDG-1000s over the next several years for the same total amount of funding.³³

- The FY2011 budget terminated, for cost reasons, the Navy's plan to begin a class of cruisers designated CG(X) that would be designed to carry a very powerful Air and Missile Defense Radar (AMDR) for missile defense and anti-aircraft missions. Instead, the Navy now plans to begin procuring in FY2016 another version of DDG-51, designated the "Flight III" version, that would incorporate additional modifications including a smaller version of the AMDR.
- The Administration's Phased Adaptive Approach (PAA) for BMD operations, announced in September 2009, calls for operating BMD-capable Aegis ships, such as DDG-51s, in European waters to defend Europe from potential ballistic missile attacks from countries such as Iran. BMD-capable Aegis ships will also continue to operate in the Western Pacific and the Persian Gulf to provide regional defense against potential ballistic missile attacks from countries such as Iran and North Korea.

Some observers are concerned—particularly following the Administration's announcement of its intention to use Aegis-BMD ships to defend Europe against potential ballistic missile attacks—that demands from U.S. regional military commanders for BMD-capable Aegis ships are growing faster than their number. They are also concerned that demands from U.S. regional military commanders for Aegis ships for conducting BMD operations could strain the Navy's ability to provide regional military commanders with Aegis ships for performing non-BMD missions.³⁴ FY2011 options for Congress regarding the Aegis BMD program include, among other things, accelerating the modification of existing DDG-51s and other Aegis ships to BMD-capable configurations and increasing procurement of DDG-51 destroyers.

Aircraft Programs³⁵

Fighter aircraft are a major component of U.S. military capability and account for a significant portion of U.S. defense spending. In early 2009, the Air Force, Navy, and Marine Corps collectively had an inventory of about 3,500 fighters. Because fighters built in large numbers during the 1980s are nearing the end of their service life, there is a concern that the services may fall short of the number of planes needed because of budgetary limits on the rate at which replacement fighters can be procured. Air Force officials in 2008 testimony projected an Air Force fighter shortfall of up to 800 aircraft by 2024. Navy officials have projected a Navy-Marine Corps strike fighter shortfall peaking at more than 100 aircraft, and possibly more than 200 aircraft, by about 2018.

³³ CRS Report RL32109, *Navy DDG-51 and DDG-1000 Destroyer Programs: Background and Issues for Congress*, by Ronald O'Rourke.

³⁴ CRS Report RL33745, *Navy Aegis Ballistic Missile Defense (BMD) Program: Background and Issues for Congress*, by Ronald O'Rourke.

³⁵ Prepared in collaboration with Jeremiah Gertler, Specialist in Military Aviation.

A key issue for Congress regarding tactical aircraft is the overall affordability of DOD's plans for modernizing the tactical aircraft force. The issue has been a concern in Congress and elsewhere for many years, with some observers predicting that tactical aircraft modernization is heading for an eventual budget "train wreck" as tactical aircraft acquisition plans collide with insufficient amounts of funding available for tactical aircraft acquisition.³⁶

F-35

The F-35 Joint Strike Fighter (JSF), being procured in different versions for the Air Force, Marine Corps, and Navy, is the key to DOD's tactical aircraft modernization plans, which call for acquiring a total of 2,443 JSFs at an estimated total acquisition cost (as of December 31, 2009) of about \$238 billion in constant (i.e., inflation-adjusted) FY2002 dollars, or more than \$300 billion in current prices. The F-35 program is DOD's largest weapon procurement program in terms of total estimated acquisition cost. Hundreds of additional F-35s are expected to be purchased by several U.S. allies, eight of which are cost-sharing partners in the program.³⁷

The Administration's FY2011 budget requests a total of \$10.4 billion for the F-35 program, including \$2.5 billion in Air Force and Navy research and development funding and \$7.9 billion in Air Force and Navy procurement funding.³⁸

Although the F-35 was conceived as a relatively affordable strike fighter, some observers are concerned that in a situation of constrained DOD resources, F-35s might not be affordable in the annual quantities planned by DOD, at least not without reducing funding for other DOD programs. As the annual production rate of the F-35 increases, the program will require more than \$10 billion per year in acquisition funding at the same time that DOD will face other budgetary challenges. Supporters of the F-35 might argue that, as a relatively affordable aircraft that can be procured in similar, though not identical, versions for the Air Force, Marine Corps, and Navy, the F-35 represents the most economical and cost-effective strategy for avoiding or mitigating such shortfalls.

F-35 Alternate Engine

For four successive years, Congress has rejected Administration proposals to terminate the program to develop the General Electric/Rolls-Royce F136 engine as an alternative to the Pratt & Whitney F135 engine that currently powers the F-35 Joint Strike Fighter (JSF). The administration's FY2011 budget submission again proposes to terminate the program.

Through FY2009, Congress has provided approximately \$2.5 billion for the Joint Strike Fighter alternate engine program. The program is expected to need an additional \$2.9 billion through 2017 to complete the development of the F136 engine.³⁹

³⁶ CRS Report RL33543, *Tactical Aircraft Modernization: Issues for Congress*, by Jeremiah Gertler.

³⁷ CRS Report RL30563, *F-35 Joint Strike Fighter (JSF) Program: Background and Issues for Congress*, by Jeremiah Gertler.

³⁸ Development and procurement of Marine Corps aircraft are funded through the Navy's budget.

³⁹ CRS Report R41131, *F-35 Alternate Engine Program: Background and Issues for Congress*, by Jeremiah Gertler.

Critics of the proposal to terminate the F136 alternate engine argue that termination was driven more by immediate budget pressures on the department than the long-term pros and cons of the F136 program. They argue that engine competition on the F-15 and F-16 programs saved money and resulted in greater reliability. Some who applaud the proposed termination say that single-source engine production contracts have been the norm, not the exception. Long-term engine affordability, they claim, is best achieved by procuring engines through multiyear contracts from a single source.

Cancelling the F136 engine poses questions on the operational risk—particularly of fleet grounding—posed by having a single engine design and supplier. Additional issues include the potential impact this termination might have on the U.S. defense industrial base and on U.S. relations with key allied countries involved in the alternate engine program. Finally, eliminating competitive market forces for DOD business worth billions of dollars may concern those who seek efficiency from DOD's acquisition system and raises the challenge of cost control in a single-supplier environment.

Continuing F136 development raises issues of impact on the F-35 acquisition program, including possible reduction of the numbers of F-35s that could be acquired if program funds are used for the alternate engine. It also raises issues of the outyear costs and operational concerns stemming from the requirement to support two different engines in the field.

C-17

The Administration's proposed FY2011 defense budget would terminate C-17 procurement. Further, Secretary Gates, in testimony to the Defense Subcommittee of the House Appropriations Committee, stated, "Should Congress add funds to continue this program, I will strongly recommend a presidential veto."⁴⁰ The Administration argues that enough C-17s have now been procured to meet future operational needs. Supporters of procuring additional C-17s in FY2011 contend that additional C-17s will be needed to meet future operational needs. A primary issue for Congress in FY2011 is whether to procure additional C-17s.⁴¹

KC-X

The administration's proposed FY2011 defense budget requested \$863.9 million in Air Force research and development funding for its third attempt since 2003 to acquire a new fleet of mid-air refueling tankers, designated KC-X, that would replace its aging fleet of KC-135 tankers. An initial effort, that involved leasing new tankers from Boeing, was blocked by Congress. A subsequent competition pitted Boeing, which offered a tanker based on its 767 jetliner, against the team of Northrop Grumman and the European Aeronautic Defense and Space Company (EADS), which offered a tanker based on the EADS Airbus A330.

On February 24, 2010, the Department of Defense (DOD) released its Request for Proposals for a program to build 179 new KC-X aerial refueling tankers for the Air Force, a contract valued at roughly \$35 billion.

⁴⁰ Hearing of the House Defense Appropriations Subcommittee, March 24, 2010.

⁴¹ CRS Report RS22763, *Air Force C-17 Aircraft Procurement: Background and Issues for Congress*, by Jeremiah Gertler.

On March 8, 2010, the team of Northrop Grumman and the European Aeronautic Defense and Space Company (EADS) announced that it would not bid for the contract, leaving Boeing as the only expected bidder. DOD then extended the bid deadline by 60 days, to July 9, 2010. Subsequently, on April 20, 2010, EADS announced that it would submit an independent bid for the KC-X contract. Boeing will again offer a KC-X design based on its 767 airliner, to be built in Seattle, WA, and Wichita, KS. EADS is expected to again offer a KC-X design based on the Airbus A330 airliner, to be built in Mobile, AL.⁴²

The KC-X acquisition program has been a subject of intense interest because of the dollar value of the contract, the number of jobs it would create, the importance of tanker aircraft to U.S. military operations, and because DOD's attempts to acquire a new tanker over the past several years have been highly contentious. The history of those earlier attempts forms an important part of the context for DOD's proposed new KC-X competition, particularly in terms of defining the required capabilities for the KC-X, and designing and conducting a fair and transparent competition. The issues for Congress in FY2011 are whether to approve, reject, or modify DOD's new KC-X competition strategy, and whether to approve, reject, or modify the Air Force's request for FY2011 research and development funding for the new KC-X program. Congress's decision on these issues could affect DOD capabilities and funding requirements and the aircraft manufacturing industrial base.

Military Construction⁴³

The \$18.7 billion requested in the FY2011 base budget for military construction and family housing is nearly 20% lower than the corresponding appropriation for FY2010. Most of the reduction is the result of a decline from \$7.9 billion to \$2.7 billion in the amount that is being spent to build new facilities for units that are moving to new sites as a result of the 2005 Base Realignment and Closure (BRAC) Commission. Most of that BRAC-related construction was funded in earlier budgets, since the deadline for completing the moves is September 15, 2011.

In addition, the budget for military family housing would drop from \$2.3 billion in FY2010 to \$1.8 billion in the FY2011 request. According to DOD officials, this is a result of a policy, begun in the late 1990s, of privatizing military family housing. The amounts appropriated for the Basic Allowance for Housing paid to personnel who do not live in government furnished housing has increased over the past decade, partly because more service members are paying rent to private landlords and partly because of a policy decision that housing allowances (which are pegged to regional home rental costs) should cover a larger proportion of a service member's housing costs.

Aircraft Carrier Homeport

The FY2011 DOD bills might provide a vehicle for Members of Congress opposed to the Navy's plan to move to Mayport, FL one of the five nuclear powered aircraft carriers currently homeported in Norfolk, VA. The Department of Defense's (DOD's) final report on the 2010 Quadrennial Defense Review (QDR), released on February 1, 2010, endorses the Navy's desire to establish Mayport as a second Atlantic Fleet carrier home port. The report states:

⁴² CRS Report RL34398, *Air Force KC-X Tanker Aircraft Program: Background and Issues for Congress*, by Jeremiah Gertler.

⁴³ Prepared in collaboration with Daniel H. Else, Specialist in National Defense.

To mitigate the risk of a terrorist attack, accident, or natural disaster, the U.S. Navy will homeport an East Coast carrier in Mayport, Florida.

Such a move would shift from Norfolk to Mayport the local economic activity associated with homeporting an aircraft carrier, which some sources estimate as being worth hundreds of millions of dollars per year.⁴⁴

Certain Members of Congress from Florida have expressed support for the proposal to homeport an aircraft carrier at Mayport, endorsing the argument made by DOD and the Navy that the benefits in terms of mitigating risks to the Navy's Atlantic Fleet CVNs are worth the costs associated with moving a CVN to Mayport, which the Navy estimates would total \$589.7 million. That total includes \$46.3 million for dredging, which Congress approved in its action on the FY2010 DOD budget, but with the proviso that it was not prejudging the issue of the carrier homeport.

Certain Members of Congress from Virginia have expressed skepticism regarding, or opposition to the proposal, arguing that the benefits in terms of mitigating risks to the Navy's Atlantic Fleet CVNs are questionable or uncertain, and that the funding needed to implement the proposal could achieve greater benefits if it were spent on other Navy priorities.

Marine Corps Relocation to Guam

The Administration's budget includes \$139 million for facilities on the U.S. territory of Guam, in the western Pacific for use by 8,000 Marines, their families, and support personnel slated to move to that island from the Japanese island of Okinawa. The planned move is the result of extensive negotiations between the Departments of State and Defense and the Government of Japan. DOD also plans to move additional military personnel to Guam from their current stations in the United States. These relocations are expected to be completed by 2014-16.

Guam is a mountainous island with an area roughly three times that of the District of Columbia, and a population of about 178,000. Some analysts have estimated that as many as 25,000 temporary workers would be needed to build the planned facilities, a number amounting to 14% of the population. Moreover, these analysts question whether Guam's current transportation, electrical and utility grid could support such a surge in the island's population.

The FY2011 defense funding bills may provide a point of leverage for Members of Congress who have pressed DOD to submit a comprehensive master plan for development on Guam, thus far, without success.⁴⁵

⁴⁴ CRS Report R40248, *Navy Nuclear Aircraft Carrier (CVN) Homeporting at Mayport: Background and Issues for Congress*, by Ronald O'Rourke.

⁴⁵ See CRS Report RS22570, *Guam: U.S. Defense Deployments*, by Shirley A. Kan and Larry A. Niksch, and CRS Report R40731, *Military Construction, Veterans Affairs, and Related Agencies: FY2010 Appropriations*, coordinated by Daniel H. Else.

Bill-by-Bill Synopsis of Congressional Action to Date

FY2011 National Defense Authorization Act (H.R. 5136)

The version of the FY2011 National Defense Authorization Act approved May 19 by the House Armed Services Committee (H.R. 5136) would authorize \$725.9 billion in discretionary budget authority, which is \$2.7 million less than President Obama requested for programs covered by the legislation. The total authorized by the bill \$566.6 billion for the DOD base budget, \$159.3 billion for FY2011 for war costs and \$17.7 billion for defense-related nuclear energy programs administered by the Department of Energy. The Armed Services Committee approved the bill by a vote of 59-0.

The committee reported the bill to the House on May 24, 2010 (H.Rept. 111-491).

Funding levels authorized by the bill are presented in **Table 7**. Funding levels authorized for selected programs are presented in the **Appendix**.

Table 7. FY2011 National Defense Authorization Act (H.R. 5136)

amounts in millions of dollars

	Administration request	House Armed Services Committee recommendation
Division A: DOD Base Budget (except Military Construction)		
Procurement	111,377	111,246
Research and Development	76,131	76,473
Operation and Maintenance	167,879	167,620
Military Personnel	138,541	138,541
Other Authorizations	36,197	36,243
Subtotal, DOD Base Budget (except MilCon)	530,124	530,124
Division B: Military Construction (Base Budget)		
Military Construction,	14,209	14,649
Family Housing	1,823	1,823
Base Realignment and Closure (BRAC)	2,715	2,715
General Reductions	0	-441.1
Subtotal, Military Construction, Base Budget	18,747	18,745
Total, DOD Base Budget	548,871	548,869
Division C: Department of Energy Nuclear National Security Agency (NNSA) and Other Authorizations		
	17,716	17,716

	Administration request	House Armed Services Committee recommendation
Total, National Defense Budget Function (050), FY2011 Base Budget	566,587	566,585
FY2011 Overseas Contingency Operations, DOD	159,336	159,335
Grand Total, FY2011 National Defense	725,922	725,920

Source: House Armed Services Committee, Report on H.R. 5136, the National Defense Authorization Act for FY2011 HRept. 111-491, pp. 4-13.

Following are highlights of the bill as reported to the House.

Military Personnel Issues

As requested, the bill would authorize a total end-strength of 1.43 million members for the active-duty components of the four armed services, an increase of 7,400 over the end-strength authorized for FY2010.

Military Compensation

The bill would authorize a 1.9% military pay raise, rather than the 1.4% raise included in the budget, an increase the committee said would add \$380 million to the FY2011 military personnel costs (Section 601). It also would authorize an increase in the monthly allowance paid to married personnel who are separated from their families by deployment, from \$250 to \$285—a change estimated to cost \$78 million (Section 604), and an increase in the monthly payments to personnel whose assignments subject them to risk of hostile fire or imminent danger, from \$225 to \$260—a change expected to cost \$3 million (Section 618). These additional costs would be more than offset by a provision reallocating to the FY2011 personnel accounts \$501.5 million appropriated for personnel accounts in prior years but not obligated.⁴⁶

Alternative Career Track for Officers

The bill would authorize a pilot program to assess the value of allowing a certain number of officers pursue a more varied range of mid-career educational programs and assignments outside their service for the sake of broadening their experience and strategic judgment. To allow for this richer mixture of experience, participants would be given leeway to skip or delay some of the established requirements and deadlines for promotion and might be required to commit to a longer-than-usual period of service (Section 661).

⁴⁶ For background information, see Military Pay Raise, above.

Sexual Assault

Title XVI of the committee bill includes 28 provisions that would enact many of the recommendations of a congressionally chartered DOD commission studying the problem of sexual assault in the military.⁴⁷ Among these were provisions that would:

- require DOD to specifically budget for its sexual assault prevention and response program;
- create a single hotline over which DOD personnel could report a sexual assault;
- require that the director of the sexual assault prevention and response program be a flag or general officer or a civilian of the Senior Executive Service; and
- establish the right of military personnel who are sexual assault victims to (1) legal counsel, (2) consultation in the prosecution of their alleged assailants, (3) medical care and (4) the ability to make a restricted report of a sexual assault so they may receive support services without involving law enforcement.

Fort Hood Incident

The bill included three provisions intended to deal with both the underlying causes and the immediate consequences of two incidents in which service members and DOD civilian personnel were killed or wounded in terrorist attacks, one at Fort Hood, Texas in November 2009 in which an Army physician opened fire on troops preparing for deployment to Iraq and one at a recruiting stations in Little Rock, Arkansas on June 1, 2009. These provisions would:

- require the Secretary of Defense to ensure that the training programs for officers in the services' medical corps properly document their academic and military performance (Section 715). There were allegations that the perpetrator of the Fort Hood attack, an Army physician, had a record of substandard and erratic performance.
- provide special compensation to persons killed or wounded in those two incidents or in any other incident subsequent to November 6, 2009 in which service members or DOD civilians were targeted because of their affiliation with the U.S. military (Section 619). These individuals would be awarded the same compensation as DOD personnel killed or wounded in a combat zone.
- require the Secretary of Defense to earmark up to \$100 million in a fund to implement recommendations of a panel set up by DOD to analyze the Fort Hood incident.

Medical Care

Although the budget request did not include increases in Tricare fees and pharmacy copayments, which the Bush and Obama Administrations had recommended in prior years and which Congress

⁴⁷ The commission was established by Section 576 of the Ronald W. Reagan National Defense Authorization Act for FY2005 (H.R. 4200).

regularly had rejected, the committee bill contained provisions similar to those Congress had enacted in earlier years prohibiting any such increases. (Sections 701 and 705).⁴⁸

The bill would allow Tricare beneficiaries to extend coverage to their dependent children up to age 26, an option made available to beneficiaries of private health insurance programs under the Patient Protection and Affordable Care Act (P.L. 111-148), the health care reform bill enacted in April (Section 702). To streamline management of the services medical programs, the bill would authorize the Secretary of Defense to establish a unified medical command (Section 903)

Ballistic Missile Defense and Strategic Weapons

The committee bill generally supports the Administration's ballistic missile defense (BMD) program for which it would authorize \$10.6 billion, which is \$361.6 million more than was requested. Included in that total are funds for components of the Administration's so-called Phased Adaptive Approach (PAA) which is designed to defend U.S. troops and allies in Europe against ballistic missiles attacks from Iran.

In lieu of the Bush Administration's plan to deploy in Poland and the Czech Republic a modified version of the land-based BMD system currently deployed in Alaska and California, the PAA calls for deploying BMD-capable Aegis ships (and, eventually, a relocatable, land-based version of the Aegis system and associated Standard missile) to defend Europe and, eventually, the United States against potential ballistic missile attacks from Iran. The Administration has said that similar forces could be deployed to protect U.S. forces and allies in the Middle East and in the Western Pacific.

The bill would require a DOD report on the PAA plan for defending Europe and an assessment by the Government Accountability Office (GAO) of the DOD report (Section 223). It also would place restrictions on the PAA similar to those that Congress previously had applied to the Bush plan, namely:

- It limits deployment in Europe of defenses against medium-range and long-range missiles until the Secretary of Defense certifies that the proposed technology is operationally effective, based on realistic flight tests; and
- It limits the use of funds for BMD deployments in any country until the host government has ratified any necessary agreements and until 45 days after Congress has received a report on alternative BMD systems for Europe required by the FY2010 National Defense Authorization Act (P.L. 111-84).

The House committee bill would declare it to be U.S. policy to ensure that future versions of the Standard missile, when deployed to protect Europe under the PAA plan, would be able to intercept intercontinental-range missiles launched from Iran at the United States. It also would declare it to be national policy to continue developing a modified version of the ground-based BMD interceptor currently deployed in Alaska and California, which the Bush Administration had planned to deploy in Europe. The committee said this ground-based interceptor would provide a hedge in case the improved Standard BMD interceptor falls short of its performance

⁴⁸ For background see "Military Health Care Costs" above.

goals or Iran acquires an ICBM before the Standard BMD interceptor can be deployed (Section 224).

The bill would add \$50.0 million to the \$94.1 million requested for Standard BMD missiles. It also would add \$65.0 million for procurement of AN/TPY-2 relocatable missile defense radars, which are elements of both the Aegis-based PAA network and the Army's Theater High-Altitude Air Defense (THAAD) missile defense system (for which the bill would provide \$858.9 million, as requested). The committee bill also would add to the budget \$205 million to support Israel's procurement of a system called Iron Dome designed to intercept short range bombardment rockets and artillery shells.

In its report on the bill, the House committee noted that the demand for Aegis BMD ships and some other BMD assets to protect various regions would exceed the supply for some time to come. It directed DOD to report its plans for regional BMD deployments inasmuch as the demand for Aegis BMD ships is expected to exceed the supply.

The bill also would add to the budget \$50.0 million for research on directed-energy weapons, using the airborne laser (ABL), an experimental laser-equipped Boeing 747 that the Obama Administration had decided was not suitable for deployment as a BMD weapon.

The bill would express the sense of Congress that there should be no limitations on the planned PAA missile defense deployment in Europe as a result of the New Strategic Arms Reduction Treaty (New START) between the United States and the Russian Federation, signed April 8, 2010 (Section 1236). Russian officials have said the new treaty would be endangered by too ambitious a U.S. BMD plan, but U.S. officials have rejected any linkage between the treaty and U.S. plans.⁴⁹

The bill would bar the reduction of U.S. nuclear weapons below the limits set by the New START Treaty until 180 days after the Secretary of Defense and the Administrator for Nuclear Security of the Nuclear National Security Agency of the Department of Energy submit to Congress a joint report justifying the proposed cuts in detail (Section 1058). It also expresses the sense of Congress that the Administration's Nuclear Posture Review, published April 6, 2010 weakens U.S. security by forswearing the option of using nuclear weapons to retaliate for catastrophic attacks on the United States, under certain conditions.⁵⁰

Shipbuilding⁵¹

The House committee bill would authorize without significant change the President Obama's \$15.7 billion request for Navy shipbuilding in FY2011, while signaling reservations about the Administration's plans for the future.

This total includes funds for two DDG-51 Aegis destroyers (\$2.92 billion), two Virginia-class attack submarines (\$3.44 billion) two Littoral Combat Ships (\$1.23 billion), a high-speed troop

⁴⁹ For background, see CRS Report R41219, *The New START Treaty: Central Limits and Key Provisions*, by Amy F. Woolf.

⁵⁰ See Department of Defense, Nuclear Posture Review Report, April 6, 2010 at <http://www.defense.gov/npr/docs/2010%20Nuclear%20Posture%20Review%20Report.pdf>.

⁵¹ For background, see "Navy Force Structure and Shipbuilding Plans," above.

and cargo carrier designated an “intra-theater connector” (\$180.7 million) and an oceanographic research ship (\$88.6 million).⁵² The total also includes the fourth and final increment of funding for the nuclear-powered aircraft carrier *U.S.S. Gerald R. Ford* (\$1.73 billion), the first of two increments for an LHA-class helicopter carrier to support amphibious landings (\$949.9 million), and the third increment of funding for refueling and overhauling the nuclear-powered carrier *U.S.S. Theodore Roosevelt* (\$1.26 billion).

Although such incremental funding has become the norm in recent years for very expensive ships, including carriers and large amphibious assault ships, it is an anomaly in the congressional appropriations process which, with a few exceptions, requires that the full cost of a weapons system be budgeted in one year.⁵³ Existing law allows aircraft carriers to be incrementally funded (for up to four years) and the House committee’s bill includes a provision that would expand that exception to the “full funding” rule for large amphibious assault ships (Section 121).

The bill would add \$75.0 million to the \$226.3 million requested to develop the interchangeable “mission modules” – various types of sensors and weapons – that will equip the Littoral Combat Ship. The additional funds are to continue development of the Non-Line of Sight (N-LOS) missile, a precision-guided weapon being developed by the Army that was intended to give LCSs a way to strike land targets and small, fast speedboats. After spending \$1.5 billion on the program, the Army dropped out of the program in April, 2010 because of rising costs and technical problems. But, in its report, the House committee said that an additional year’s work could save the program.

While the House committee approved the Administration’s FY2011 shipbuilding request, it challenged several aspects of the Administration’s long term plans for the fleet:

- The bill includes a requirement that, in years in which DOD carries out a Quadrennial Defense Review, the annual congressionally mandated 30-year shipbuilding plan submitted to Congress must support a fleet of 11 aircraft carriers, the number of carriers currently required by law (Section 1021). Secretary Gates announced in April of 2009 that he intended to slow the rate at which construction is started on new carriers with the result that the carrier force would drop to 10 ships after 2040. The same provision of the committee bill would bar the annual 30-year shipbuilding plans prepared in the years between QDRs from recommending fewer ships than had been incorporated into the shipbuilding plan that accompanied the previous QDR.
- It would bar the Navy from retiring more than two ships for every three new vessels commissioned (except for submarines), until the size of the fleet reaches the Navy’s current goal of 313 ships (Section 1023). Another provision would specifically bar the retirement of two large helicopter carriers – *U.S.S. Nassau* and *U.S.S. Pelilieu* – until their replacements are in service (Section 1024).

⁵² For several ships that would receive the bulk of their funding in the FY2011 budget, so-called “long-lead” funding totaling as much as several hundred million dollars has been provided in earlier budgets to buy components needed in the early stages of construction. Similarly, the \$15.7 billion requested for shipbuilding in FY2011 includes more than \$3 billion in long-lead funding for ships slated to receive most of their funding in future budgets.

⁵³ See CRS Report RL31404, *Defense Procurement: Full Funding Policy—Background, Issues, and Options for Congress*, by Ronald O’Rourke and Stephen Daggett.

- Since the administration's new PAA plan for missile defense of Europe and other regions would require BMD-capable Aegis ships to remain on station for missile defense duty, the bill would require the Navy to report on its plans to accommodate those new demands at the same time it meets other requirements for major surface combatants in various theaters (Section 123).
- In its report, the Armed Services Committee questioned the Navy's decision that its 14 *Ohio*-class ballistic missile submarines should be replaced by a new class of subs which also would be large enough to carry the Trident II (or D-5) missile carried by the current class. Because of their expense, these new ships, designated SSBN(X), are expected to absorb a large share of the Navy's shipbuilding budgets after 2016, possibly crowding out the construction of other planned ships.⁵⁴ While authorizing the \$672.3 million requested for SSBN(X) development in FY2011, the committee barred the Navy from obligating more than half the money until the Secretary of Defense certifies to Congress that the replacement missile subs must be large enough to carry Trident II missiles instead of smaller weapons that might be carried by a modified version of the less expensive *Virginia*-class attack submarine.

Aircraft

As reported by the House committee, H.R. 5136 would authorize a total of \$19.5 billion for procurement of airplanes and helicopters, funding the Administration's request with few major changes.

F-35 Joint Strike Fighter⁵⁵

For development and procurement of the F-35 Joint Strike fighter, the bill would authorize a total of \$11 billion to continue development of the aircraft and purchase 42 planes. The committee rejected a request for one additional F-35 (\$205 million) that would have been authorized in the part of the bill dealing with war costs war-costs. The Administration's rationale for this plane was that it was to replace an fighter that was lost during the currently ongoing combat operations. The committee noted that the Air Force could replace the lost aircraft by continuing to operate another fighter of the same type slated for retirement.

Decrying cost overruns in the F-35 program and delays in its flight test program, the committee included in the bill a provision barring the procurement of more than 30 planes in FY2011 until DOD certifies that the program has met several cost and performance milestones. The bill also would add to the budget \$485 million to continue development of an alternate jet engine for the F-35 Joint Strike Fighter, a program the Bush and Obama administrations both have tried to terminate. The bill would bar DOD from spending more than 75% of the funds authorized for F-35 development until it obligates all the funds for the second engine.

In a May 20 Pentagon press conference, Secretary Gates reaffirmed his intention to recommend that President Obama veto any defense bill that funded the alternate F-35 engine. He also said

⁵⁴ See CRS Report R41129, *Navy SSBN(X) Ballistic Missile Submarine Program: Background and Issues for Congress*, by Ronald O'Rourke.

⁵⁵ For background, see "Aircraft Programs," above.

that the detailed requirements the committee bill placed on the F-35 test program and production schedule would make the program “unexecutable.”⁵⁶

F/A-18E/F

The House committee would add eight F/A-18E/F fighters (\$630.5 million) to the 22 requested (\$1.78 billion). The bill also includes a provision that would, in effect, pay for those additional planes with any savings the Navy is expected to realize as a result of signing a multi-year contract for F/A-18E/Fs in FY2010 (Section 122).

Ground Combat Systems⁵⁷

As requested, H.R. 5136 would authorize \$934 million for the Army’s Ground Combat Vehicle (GCV) program, intended to develop a family of vehicles that would replace the Army’s current fleet of armored vehicles. This program replaces the manned vehicle component of the Future Combat Systems (FCS) program, an effort to develop an array of digitally-linked manned and unmanned vehicles which Secretary Gates terminated in 2009 on grounds that it was too complex and too expensive.

In its report on the FY2011 authorization bill, the House Armed Services Committee urged the Army to take a less technologically ambitious approach with the new program, focusing on development of vehicles that could meet basic requirements and be upgraded later. The panel also said the Army should consider whether its current fleet of combat vehicles could be upgraded to meet the basic GCV requirements. It included in the bill a provision that would allow the Army to spend only half of the FY2011 GCV appropriation until the service provides the committee with a detailed analysis of its plans for developing the new fleet of vehicles.

The committee also cut \$779.4 million from the \$2.25 billion requested for the Army’s Early Infantry Brigade Combat Team program, an effort to field other components previously included in FCS. The committee noted that the Army had terminated one element of the program – the Non-Line of Sight (N-LOS) missile. The panel also said that other elements of this program were being rushed into production, such as a digital communication network.

The committee added to the Navy’s budget authorization for continued development of its version of the N-LOS, which is slated to arm the Littoral Combat Ship.

Military Construction: Carrier Homeport and Guam⁵⁸

The House committee included in H.R. 5136 a provision barring the use of any funds authorized by the bill to plan and design structures at the Naval Station in Mayport, Florida, to homeport nuclear-powered aircraft carrier (Section 2201 c. 4). It also directed the GAO to conduct an assessment of the direct and indirect costs of homeporting a carrier in Mayport and it directed the

⁵⁶May 20, 2010 DOD press conference accessed at <http://www.defense.gov/transcripts/transcript.aspx?transcriptid=4625>.

⁵⁷ For background, see “Army Combat Force Modernization Programs,” above.

⁵⁸ For background, see “Military Construction,” above.

Navy to report on the cost and benefits of various options for using the Mayport naval facilities, including stationing non-nuclear powered ships.

The bill would authorize the \$139 million requested for facilities on Guam associated with the planned redeployment to that island of Marine Corps units currently stationed on Okinawa and other U.S. forces. In its report, the committee directed the Navy to report on plans for providing housing and medical care for the thousands of construction workers who would be on the island temporarily while constructing the facilities needed to support the redeployments.

The committee also added to the bill provisions requiring a DOD report on the facilities needed to support the Guam redeployment (Section 2825) and a report by the Secretary of Interior, in consultation with the Secretary of Defense and the government of Guam on the improvements to the island's civilian infrastructure that would be required as a result of the additional forces to be stationed there (Section 2826). Another provision would authorize the Secretary of Defense to use existing federal programs transfer to the government of Guam up to \$500 million to increase the level of municipal services and expand facilities in order to offset the impact of the redeployment.

Guantanamo Bay Detainee Issues⁵⁹

As reported by the House Armed Services Committee, H.R. 5136 would prohibit the release in U.S. territory of any detainee currently held in the U.S. facility at Guantanamo Bay, Cuba. The bill also would prohibit through December 31, 2011 the use of DOD funds to transfer any detainees to the United States or to U.S. possessions until 120 days after the President submitted to Congress a detailed assessment of the risk such a move would involve and a plan for mitigating that risk, including a estimate of the cost (Section 1032).

The bill also includes provisions that would:

- Prohibit the use of funds authorized by the bill to modify or build any facility in the United States or in U.S. territories to house detainees currently held at Guantanamo Bay (Section 1034);
- Prohibit the transfer of any Guantanamo Bay detainee to the custody of any foreign government unless the Secretary of Defense certifies to Congress that certain conditions are met that are intended to minimize the risk that the detainee would be released (Section 1033); and
- Require the DOD Inspector General to investigate alleged illegal actions taken by defense attorney's associated with certain Guantanamo Bay detainees (Section 1037).

⁵⁹ Prepared in collaboration with Anna C. Henning, Legislative Attorney, American Law Division, Congressional Research Service.

Appendix. Selected Program Summary Tables

Table A-1. Congressional Action on Selected FY2011 Missile Defense Funding: Authorization
 (amounts in millions of dollars)

PE Number	Program Element Title	FY2011 Request	House-Armed Services Committee proposal	Senate-Passed	Conference Agreement	Comments
0603175C	BMD Technology	132.2	132.2			
0603881C	BMD Terminal Defense Segment	436.5	436.5			
0603882C	BMD Midcourse Defense Segment	1,346.2	1,346.2			
0603884C	BMD Sensors	454.9	454.9			
0603888C	BMD Test & Targets	1,113.4	1,113.4			
0603890C	BMD Enabling Programs	402.8	402.8			
0603891C	Special Programs - MDA	270.2	245.2			
0603892C	AEGIS BMD	1,467.3	1,467.3			
0603893C	Space Tracking & Surveillance System	112.7	112.7			
0603895C	BMD System Space Programs	10.9	10.9			
0603896C	BMD Command and Control, Battle Management and Communications	342.6	342.6			
0603898C	BMD Joint Warfighter Support	68.7	68.7			

PE Number	Program Element Title	FY2011 Request	House-Armed Services Committee proposal	Senate-Passed	Conference Agreement	Comments
0603904C	Missile Defense Integration & Operations Center (MDIOC)	86.2	86.2			
0603901C	Directed Energy Research	98.7	148.7			HASC added \$50 million for continued research using the Airborne Laser (ABL)
0603906C	Regarding Trench	7.5	7.5			
0603907C	Sea-Based X-Band Radar (SBX)	153.1	153.1			
0603913C	Israeli Cooperative Programs	121.7	209.7			Does not include \$205.5 million HASC added to support Israel's Iron Dome system to defend against short-range rockets and artillery shells.
0604880C	Land-based SM-3	281.4	281.4			
0604881C	Aegis SM-3 Block IIA Co-Development	318.8	318.8			
0604883C	Precision Tracking Space System	67.0	67.0			
0604884C	Airborne Infrared	111.7	111.7			
0901585C	Pentagon Reservation	20.5	20.5			
0901598C	Management HQ - MDA	29.8	29.8			
Subtotal RDT&E, Missile Defense Agency		7,454.8	7,567.8			
Base Realignment and Closure (BRAC), Missile Defense Agency		9.0	9.0			
	THAAD, Fielding	858.9	858.9			

PE Number	Program Element Title	FY2011 Request	House-Armed Services Committee proposal	Senate-Passed	Conference Agreement	Comments
	Aegis, Block 5 Fielding	94.1	144.1			Increases the number of SM-3 Standard missiles procured in FY2011 to stabilize the production rate.
	AN/TPY-2 radar	0	65.0			Funds procurement of long lead-time components for radars slated for funding in FY2012.
Subtotal Procurement, Missile Defense Agency		953.0	1,068.0			
Total, Missile Defense Agency		8,416.8	8,644.8			
0603305A	Army Missile Defense Systems Integration (non-space)	11.5	11.5			
0603308A	Army Missile Defense Systems Integration (space)	27.6	27.6			
0604869A	Patriot/MEADS Combined Aggregate Program (CAP)	467.1	467.1			
0605456A	PAC-3/MSE Missile	62.5	62.5			
0605457A	Army Integrated Air and Missile Defense	251.1	251.1			
0203801A	Missile/Air Defense Product Improvement Program	24.3	24.3			
0102419A	Aerostat Joint Program Office (JLENS)	372.5	372.5			
0605126j	Joint Theater Air and Missile Defense Organization	94.6	94.6			
Subtotal RDT&E, Army, Joint Staff		1,311.2	1,311.2			

PE Number	Program Element Title	FY2011 Request	House-Armed Services Committee proposal	Senate-Passed	Conference Agreement	Comments
C49100	Patriot/PAC-3	480.2	480.2			
C50700	Patriot modifications	57.2	190.8			
Subtotal, Procurement, Army		537.4	671.0			
Total Missile Defense R&D, MilCon, Procurement, All Agencies		10,265.4	10,627.0			

Sources: House Armed Services Committee, Report to Accompany H.R. 5136, the National Defense Authorization Act for Fiscal Year 2011, H.Rept. 111-491.

Notes: The defense authorization act generally does not determine the final amount provided for a program or project. The authorization bill authorizes the appropriation of funds, but the amount available is determined by the appropriations. An appropriations bill may provide more than or less than the amount authorized, may provide funds for a program for which no funds are authorized, and may provide funds for a “new start” for which funding has never been authorized.

Table A-2. Congressional Action on Selected FY2011 Army and Marine Corps Programs: Authorization
(amounts in millions of dollars)

	Request			HASC recommended			Senate-Passed			Final Bill			Comments
	Procurement		R&D	Procurement		R&D	Procurement		R&D	Procurement		R&D	
	#	\$	\$	#	\$	\$	#	\$	\$	#	\$	\$	
Army Aircraft													
Light Utility Helicopter	50	305.3	0.0	50	305.3	0.0							
UH-60 Blackhawk Helicopter	74	1,391.6	0.0	74	1,391.6	20.6							
CH-47 Chinook Helicopter	42	1,229.7	0.0	42	1,229.7	21.0							
AH-64 Apache Helo Mods	16	1,086.9	0.0	16	1,086.9	0.0							
Combat Vehicles													
M-2 Bradley Mods	—	215.3	97.0	—	215.3	97.0							

	Request			HASC recommended			Senate-Passed			Final Bill			Comments
	Procurement		R&D	Procurement		R&D	Procurement		R&D	Procurement		R&D	
	#	\$	\$	#	\$	\$	#	\$	\$	#	\$	\$	
M-1 Abrams tank Mods	21	413.9	107.5	21	413.9	107.5							
Stryker Armored Vehicle	83	890.9	136.3	83	890.9	136.3							
Early Infantry Brigade Combat Team	—	682.7	1,568.1	—	56.0	1,415.4							Cuts reflect termination of the N-LOS missile system and delay of other components.
Army Ground Combat Vehicle (GCV)	--	0.0	934.4	--	0.0	934.4							
USMC Expeditionary Fighting Vehicle (EFV)	—	0.0	242.8	—	0.0	242.8							
Cargo and Transport Vehicles and Communications Systems													
HMMWV, Army and USMC	12,348	1,006.8	0.0	12,348	1,006.8	0.0							
Family of Medium Tactical Vehicles and USMC Medium Trucks	4,652	1,526.7	3.7	4,652	1,526.7	3.7							
Family of Heavy Tactical Vehicle	470	981.3	3.7	470	981.3	3.7							

Source: House Armed Services Committee, press release, FY2011 National Defense Authorization Summary Tables, accessed at <http://armedservices.house.gov/pdfs/PressSummaryTablesFY11.pdf>.

Note: The defense authorization act generally does not determine the final amount provided for a program or project. The authorization bill authorizes the appropriation of funds, but the amount available is determined by the appropriations. An appropriations bill may provide more than or less than the amount authorized, may provide funds for a program for which no funds are authorized, and may provide funds for a “new start” for which funding has never been authorized.

Table A-3. Congressional Action on Selected FY2010 Shipbuilding Programs:Authorization

(amounts in millions of dollars)

	Request			HASC recommended			Senate-Passed			Final Bill			Comments
	Procurement		R&D	Procurement		R&D	Procurement		R&D	Procurement		R&D	
	#	\$	\$	#	\$	\$	#	\$	\$	#	\$	\$	
Shipbuilding and Conversion, Navy													
CVN-21 Carrier	—	2,639.6	0.0	—	2,639.6	0.0							
Carrier Refueling Overhaul	--	1,664.8	0.0	--	1,664.8	0.0							
Virginia-class submarine	2	5,132.7	0.0	2	5,132.2	0.0							
DDG-1000 Destroyer	--	0.0	549.2	--	0.0	549.2							
DDG-51 Destroyer	2	2,979.1	0.0	2	2,979.1	0.0							
LCS Littoral Combat Ship	2	1,509.3	0.0	2	1,509.3	0.0							
LHA Amphibious Ship	1	949.9	0.0	1	949.9	0.0							
Joint High-Speed Vessel	1	180.7	0.0	1	180.7	0.0							
Mobile Landing Platform	1	280.0	28.0	1	380.0	28.0							

Sources: House Armed Services Committee, press release, FY2011 National Defense Authorization Summary Tables, accessed at <http://armedservices.house.gov/pdfs/PressSummaryTablesFY11.pdf>.

Note: The defense authorization act generally does not determine the final amount provided for a program or project. The authorization bill authorizes the appropriation of funds, but the amount available is determined by the appropriations. An appropriations bill may provide more than or less than the amount authorized, may provide funds for a program for which no funds are authorized, and may provide funds for a “new start” for which funding has never been authorized.

Table A-4. Congressional Action on Selected FY2010 Navy, Marine Corps and Air Force Aircraft Programs: Authorization

(amounts in millions of dollars)

	Request			HASC recommended			Senate-Passed			Final Bill			Comments
	Procurement		R&D	Procurement		R&D	Procurement		R&D	Procurement		R&D	
	#	\$	\$	#	\$	\$	#	\$	\$	#	\$	\$	
F-35A Joint Strike Fighter, AF	23	4,191.1	1,044.7	22	3,986.2	1,044.7							Denied funds for one plane requested to replace fighter lost in current operations.
F-35C Joint Strike Fighter, Navy	13	2,576.1	667.9	13	2,576.1	667.9							
F-35B Joint Strike Fighter, Marine Corps	7	1,887.0	707.8	7	1,887.0	707.8							
F-22 Fighter Mods	--	492.2	576.3	--	492.2	576.3							
F-15 Fighter Mods	--	302.2	222.7	--	302.2	222.7							
F-16 Fighter Mods	--	161.2	129.1	--	161.2	129.1							
EA-18G Aircraft, Navy	12	1,083.9	22.0	12	1,083.9	22.0							
F/A-18E/F Fighter, Navy	22	1,787.2	148.4	30	2,287.2	148.4							Adds \$500 million for eight additional aircraft.
A-10 Attack Plane Mods	--	181.9	5.7	--	181.9	5.7							
B-1B Bomber Mods	--	215.4	33.2	--	215.4	33.2							
B-2A Bomber Mods	--	89.6	260.5	--	89.6	260.5							
B-52 Bomber Mods													
C-130 Cargo Aircraft variants, AF	17	1,398.1	26.8	17	1,398.1	26.8							
C-5 Cargo Aircraft Mods,	--	855.2	59.0	--	855.2	59.0							
C-17 Cargo Aircraft Mods.	--	576.1	177.2	--	576.1	177.2							
Joint Cargo Aircraft	8	351.2	26.4	8	351.2	26.4							
KC-X Tanker Replacement,	--	0.0	863.9	--	0.0	863.9							
MV-22 Osprey, Marine Corps	30	2,202.9	46.1	30	2,202.9	46.1							

	Request			HASC recommended			Senate-Passed			Final Bill			Comments
	Procurement		R&D	Procurement		R&D	Procurement		R&D	Procurement		R&D	
	#	\$	\$	#	\$	\$	#	\$	\$	#	\$	\$	
CV-22 Osprey, AF	5	406.7	18.3	5	406.7	18.3							
CH-53K Helicopter	--	0.0	577.4	--	0.0	577.4							
VH-71A Executive Helicopter	--	0.0	159.8	--	0.0	159.8							Funds are for development of a new helicopter, following termination of VH-71 program.
UH-1Y/AH-1Z	28	808.1	60.5	28	808.1	60.5							
MH-60R/MH-60S Helicopter, Navy	42	1,608.7	55.8	42	1,608.7	55.8							
P-8A Poseidon Multi-Mission Maritime Aircraft	7	1,990.6	929.2	7	1,990.6	929.2							
E-2D Hawkeye Aircraft, Navy	4	937.8	171.1	4	937.8	171.1							
P-3/EP-3 Aircraft Mods	--	312.3	3.6	--	312.3	3.6							
Unmanned Aerial Vehicles (UAVs)													
MQ-4 Global Hawk	4	739.8	251.3	4	739.8	251.3							
MQ-9 Reaper	48	1,348.9	125.4	48	1,348.9	125.4							
MQ-1 Warrior (Predator)	26	625.0	123.2	26	625.0	123.2							
RQ-7 Shadow	--	607.9	7.8	--	607.9	7.8							

Sources: House Armed Services Committee, press release, FY2011 National Defense Authorization Summary Tables, accessed at <http://armedservices.house.gov/pdfs/PressSummaryTablesFY11.pdf>.

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