



# Defense: FY2010 Authorization and Appropriations

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## Summary

For the Department of Defense (DOD) in FY2010, the Administration requested a total of \$663.8 billion in discretionary budget authority. This includes \$533.8 billion for the so-called “base budget”—all DOD activities other than combat operations in Iraq and Afghanistan—and \$130.0 billion for what are termed “overseas contingency operations,” including those in Iraq and Afghanistan. The Administration also requested \$75.9 billion in supplemental DOD appropriations for FY2009 to cover war costs. This amount, combined with the \$65.9 billion “bridge fund” for FY2009 emergency war funding included in the Supplemental Appropriations Act for FY2008 (P.L. 110-252), brings the total appropriated for FY2009 war costs to \$141.8 billion.

The Administration’s DOD request, made public May 7, 2009, incorporated Defense Secretary Robert Gates’s April 6 recommendations concerning funding for several major weapons programs. While DOD long had been focused primarily on preparing for conventional warfare with cutting edge weapons like the Air Force’s F-22 fighter, Gates said, U.S. forces are sufficiently superior to potential adversaries that DOD can set less technologically ambitious goals for future conventional weapons. This would allow DOD to focus more resources on equipment better suited to the type of operations underway in Iraq and Afghanistan, Gates said.

The FY2010 national defense authorization bills drafted by the House and Senate Armed Services Committees generally supported this shift in policy, which the Obama Administration’s budget request reflected. However, both committees added to their respective bills authorization to continue production of the Air Force’s F-22 fighter, and to continue development of an alternative engine for the F-35 Joint Strike Fighter. The Obama Administration—like the preceding Bush Administration—had planned to terminate both programs and had warned that a bill that continued either one would be vetoed.

On June 25, the House passed by a vote of 389-22 its version of the FY2010 national defense authorization act H.R. 2647, which would authorize a total of \$534.0 billion for the DOD base budget—\$264.8 million more than requested—and \$129.3 billion for war costs. The bill also would authorize \$16.5 billion for defense-related nuclear activities of the Energy Department, which is \$83.3 million more than requested. On July 2, the Senate Armed Services Committee reported its version of the authorization bill, S. 1390, which would authorize \$534.6 billion for the DOD base budget, \$129.3 billion for war costs, and \$16.4 billion for the Energy Department. The Senate passed the bill July 23 by a vote of 87-7 after adopting several amendments, including two that would, in effect, end production of the F-22 and terminate the F-35 alternate engine programs as the Administration had requested.

On July 30, the House passed by a vote of 400-30 its version of the FY2010 defense appropriations bill (H.R. 3326) which would appropriate \$508 billion for the DOD base budget (covering all accounts except military construction) and \$129.6 billion for FY2010 war costs. As reported July 24 by the House Appropriations Committee, the bill would have continued F-22 production and the F-35 alternate engine programs. But the House adopted a floor amendment that would have the effect of terminating F-22 production.

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## Most Recent Developments

On July 30, 2009, the House passed by a vote of 400-30 H.R. 3326 the FY2010 defense appropriations bill, providing \$508 million for all DOD base budget accounts except military construction, which is funded in another bill. The defense bill also provides \$129.6 billion for war costs. The bill's \$636.3 billion total is \$3.8 billion less than the President's request.

As reported July 24 by the House Appropriations Committee, the bill would have continued F-22 production and the F-35 alternate engine programs, although President Obama said he would veto the bill if it funded those programs. Before passing the bill, the House adopted a floor amendment that would have the effect of terminating F-22 production.

On July 23, the Senate passed its version of the FY2010 defense authorization bill, S. 1390, which would authorize \$534.6 billion for the DOD base budget, \$129.3 billion for war costs, and \$16.4 billion for the Energy Department. As reported by Senate Armed Services Committee on July 2 (S.Rept. 111-35), the bill would have authorized continued production of the F-22 fighter and continued development of an alternate engine for the F-35 Joint Strike Fighter, although the Obama Administration—like the Bush Administration that preceded it—wanted to terminate both programs. Before passing the bill, the Senate adopted amendments that would eliminate authorization for additional F-22s and would end the alternate engine project.

On June 25, the House passed by a vote of 389-22 its version of the FY2010 national defense authorization act H.R. 2647, which would authorize a total of \$534.0 billion for the DOD base budget—\$264.8 million more than requested—and \$129.3 billion for war costs. The bill also would authorize \$16.5 billion for defense-related nuclear activities of the Energy Department, which is \$83.3 million more than requested. The House Armed Services Committee had reported the bill on June 18 (H.Rept. 111-166).

For the Department of Defense (DOD) in FY2010, the Administration requested a total of \$663.8 billion in discretionary budget authority. This includes \$533.8 billion in discretionary budget authority for the so-called “base budget”—all DOD activities other than combat operations in Iraq and Afghanistan and associated activities—and \$130.0 billion for what are termed “overseas contingency operations,” including operations in Iraq and Afghanistan.

## Overview of the Administration's FY2010 Request

The President's FY2010 request of \$533.7 billion for the DOD base budget is \$20.4 billion higher than the total of \$513.3 billion the Obama Administration cites as the total appropriated for the DOD base budget in the regular FY2009 appropriations process.<sup>1</sup> In an April 6 press conference,

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<sup>1</sup> Office of Management and Budget, *A New Era of Responsibility: Renewing America's Promise*, Feb. 26, 2009, Table S-7, “Funding Levels for Appropriated (“Discretionary”) Programs by Agency,” p. 130. Based on data published by the House Appropriations Committee summarizing amounts appropriated for FY2009 (Congressional Record, September 24, 2008, Part I, pp.H291-94) the total discretionary appropriation for DOD in FY2009 was \$512.7 billion. The Obama Administration's February 26 FY2010 budget document, which provided only gross funding totals for Cabinet agencies, did not contain sufficient information to account for the fact that the Administration's total for the FY2009 DOD base budget is higher by some \$600 million.

Defense Secretary Robert M. Gates said this nominal increase of 4% would amount to an increase in real purchasing power of 2%, taking into account the cost of inflation.<sup>2</sup> (See **Table 1.**)

**Table 1. DOD Base Budget Request  
Discretionary Budget Authority, FY2009-2010**

(amounts in billions of dollars)

	<b>FY2009 Enacted (Excluding War Funds)</b>	<b>FY2010 Requested (Excluding War Funds)</b>	<b>Percentage Change</b>
Military Personnel	124.9	136.0	+8.9%
Operations and Maintenance	179.1	185.7	+3.7%
Procurement	101.7	107.4	+5.6%
Research and Development	79.5	78.6	-1.1%
Military Construction	21.9	21.0	-4.1%
Family Housing	3.2	2.0	-38.0%
Other	3.2	3.1	-1.1%
<b>Total</b>	<b>513.5</b>	<b>533.8</b>	<b>+4.0%</b>

**Source:** Department of Defense, Fiscal Year 2010 Budget Request, Budget Briefing, p. 16, [http://www.defenselink.mil/comptroller/defbudget/fy2010/fy2010\\_BudgetBriefing.pdf](http://www.defenselink.mil/comptroller/defbudget/fy2010/fy2010_BudgetBriefing.pdf)

The American Recovery and Reinvestment Act of 2009 (ARRA, H.R. 1, P.L. 111-5), also known as the “economic stimulus” package, provided an additional \$7.5 billion in DOD appropriations for FY2009, bringing the FY2009 discretionary appropriations for the Pentagon to a total of \$520.7 billion. Compared with this amount, the FY2010 request would amount to an increase of \$13.0 billion, a nominal increase of 2.5% (not adjusted for inflation).

Comparison of the FY2010 DOD base budget request with the corresponding appropriation for FY2009 is complicated by the fact that the Administration is funding in the FY2010 base budget several activities that were covered by war cost supplemental appropriations bills in FY2009 and prior years. In an April 7 conference call with Internet defense reporters, Sec. Gates said the total amount of funding shifted into the base budget was about \$13 billion, which included ongoing cost of expanding the Army and Marine Corps, increased funding for medical research and quality-of-life improvements for military personnel.<sup>3</sup> However, in testimony before the Senate Defense Appropriations Subcommittee on June 9, after the Administration’s detailed budget request had been released, Sec. Gates said the amount of funding shifted from into the base budget was \$8 billion, rather than the \$13 billion he had cited earlier.

Setting aside those funds allocated to costs that were not included in the FY2009 DOD base budget (for the sake of an apples-to-apples comparison), President Obama’s FY2010 request for the DOD base budget includes about \$520.7 billion, which is roughly \$7.4 billion more than was appropriated for DOD in the regular appropriations process. If, moreover, the \$7.4 billion

<sup>2</sup> Defense Secretary Robert M. Gates, Budget Briefing , April 6, 2009 <http://www.defenselink.mil/speeches/speech.aspx?speechid=1341>.

<sup>3</sup>Department of Defense Conference Call with Secretary of Defense Robert M. Gates and Gen. James Cartwright with Internet Security Writers, April 7, 2009, <http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=4398>.

provided to DOD in FY2009 by the economic stimulus package is added to the regular FY2009 appropriations, the FY2009 appropriation and the FY2010 request are roughly the same.

Comparison of President Obama’s FY2010 DOD base budget request with the FY2010 budget projected by the Bush Administration is uncertain because the budget outline made public on February 26 listed only an aggregate total for the DOD base budget, without specifying whether or not that sum included each of several elements of DOD funding that might or might not reasonably be included and which could affect the total by several billions of dollars. In his April 7 conference call with reporters, Secretary Gates said that the comparable Bush Administration projection of the FY2010 DOD base was \$524 billion. By that standard, President Obama’s FY2010 request is nearly \$10 billion higher. However, since the Obama request includes about \$8 billion for programs that the Bush Administration did not fund in the DOD base budget, the Obama request is about \$2 billion higher than the Bush projection, on an apples-to-apples basis.

In the fall of 2008, DOD reportedly drew up a projected FY2010 base budget request that was \$57 billion higher than the request the Bush administration had projected in February 2008.<sup>4</sup> But that larger request, details of which were not published, was not subjected to the regular budget review process within the executive branch.

## Status of Legislation

Although the Administration’s detailed budget request was not transmitted to Congress until May 7, 2009, Congress began acting on the annual defense authorization bill only about a month later than it typically does. The House Armed Services Committee reported its version of the bill (H.R. 2647) on June 18, 2009 and it was passed by the House on June 25. The Senate Armed Services Committee reported its version of the bill (S. 1390) on July 2 and the Senate passed the bill July 23.

**Table 2. Status of FY2010 Defense Authorization Bills, H.R. 2647/S. 1390**

Committee Markup							Conference Report Approval		Public Law
House	Senate	House Report	House Passage	Senate Report	Senate Passage	Conf. Report	House	Senate	
6/17/09	6/25/09	H.Rept. 111-166	6/25/09 389-22	S.Rept. 111-35	7/23/09 87-7				

The House Defense Appropriations Subcommittee reported its version of the FY2010 defense appropriations bill on July 16. The House Appropriations Committee reported the bill H.R. 3326 on July 24.

<sup>4</sup> Tony Capaccio, “Pentagon Seeks \$57 Billion More in 2010, says Jonas,” *Bloomberg.com*, October 2, 2008.



**Table 3. Status of FY2010 Defense Appropriations Bills (H.R. 3326)**

Subcommittee Markup		House Report	House Passage	Senate Report	Senate Passage	Conf. Report	Conference Report Approval		Public Law
House	Senate						House	Senate	
7/16/09		H.Rept. 111-230	7/30/09 400-30						

## War Costs<sup>5</sup>

To fund war costs in FY2010, the Administration requested \$130 billion or 11% below the enacted FY2009 level. According to DOD, its request includes \$60.8 billion for Operation Iraqi Freedom and \$65.4 billion for Afghanistan or Operation Enduring Freedom, and \$3.9 billion for non-DOD classified, a split of 48% for Iraq and 51% for Afghanistan in FY2010 compared to 65% for Iraq and 35% for Afghanistan in FY2009.<sup>6</sup>

In testimony, Secretary of Defense Gates stated that this war funding request did not include about \$8 billion for activities that are expected to persist beyond the Afghanistan and Iraq wars but which had been included in earlier war-funding bills. According to Secretary Gates, the funding shifted to the base budget included monies for increased strength levels in the Army, recruiting and retention, more funds for Intelligence, Surveillance and Reconnaissance, countering threats from Improvised Explosive Devices (IEDs), longer-term medical care such as Traumatic Brain Injury and psychological health, and “Global Train and Equip” funds for countries facing terrorist threats.<sup>7</sup>

If Gates had not transferred this \$8 billion into the base budget in FY2010, on an apples-to-apples basis, with no other changes, the FY2010 request would be \$8 billion lower than in FY2009. In addition, CRS estimates that reductions in average monthly troop strength from 186,000 in FY2009 to 152,000 in Iraq and Afghanistan could reduce war costs by an additional \$7.7 billion. Compared to the request, these adjustments could reduce DOD’s requirement by some \$13 billion.<sup>8</sup> This may raise questions about whether the Administration’s request is higher than necessary.

While military personnel funding declines between FY2009 and FY2010, reflecting decreases in overall troop strength as the drawdown in Iraq more than offsets increases in troop levels in Afghanistan, operation and maintenance (O&M) funding remains at the same level in FY2010 as

<sup>5</sup> Prepared by Amy Belasco, Specialist in U.S. Defense Policy and Budget.

<sup>6</sup> See Table 5-9 in Department of Defense, *Fiscal Year 2010 Budget Request, Summary Justification*, May 2009; [http://www.defenselink.mil/comptroller/defbudget/fy2010/fy2010\\_SJ.pdf](http://www.defenselink.mil/comptroller/defbudget/fy2010/fy2010_SJ.pdf).

<sup>7</sup> Senate Appropriations Committee, “Statement by Secretary of Defense,” Robert M. Gates, June 9, 2009, p. 2. In an earlier speech at the Army War College in Carlisle, Pennsylvania, Secretary Gates stated that \$13 billion had been transferred; see Transcript, “Remarks by Secretary of Defense Robert Gates at the Army War College, Carlisle, Pa.,” April 16, 2009, pp. 2-3; <http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=4404>.

<sup>8</sup> See CRS Report R40682, *Troop Levels in the Afghan and Iraq Wars, FY2001-FY2012: Cost and Other Potential Issues*, by Amy Belasco, Table 3 and p. 18-p. 19. Average monthly troop strength takes into account increases and decreases each month in the number of deployed troops. This figure compares the request with the adjusted amounts.

in both FY2009 and FY2008 (see **Table 4** below). While troop strength is estimated to be roughly the same in FY2008 and FY2009, troop strength in Iraq and Afghanistan is expected to fall by almost 20% in FY2010. According to recent DOD reports, O&M monthly obligations have already begun to decline from an average of 7.0 billion in FY2008 to \$6.1 billion as of May 2009 for both Iraq and Afghanistan. This suggests that O&M costs in FY2010 are unlikely to be the same as in FY2008 as troop levels continue to fall.<sup>9</sup>

Procurement spending declines in FY2010 partly because DOD is purchasing a lighter version and fewer of the Mine Resistant Ambush Protected (MRAP) vehicles that cost \$16.8 billion in FY2009. Lower procurement spending also reflects a decision by DOD to return to its traditional definition of reconstitution, repairing equipment and replacing only combat losses rather than using war funds to upgrade equipment.<sup>10</sup>

**Table 4. Congressional Action on DOD's War FY2010 Budget Request**

in billions of dollars

Title	FY2009 Enacted	FY2010 Request	House-passed Authorization H.R. 2647	Senate-passed Authorization S. 1390	House-passed Appropriations H.R. 3326
Military Personnel	19.9	13.6	13.6	13.6	16.2
Operation and Maintenance <sup>a</sup>	80.5	80.8	80.7	80.1	80.5
Procurement <sup>b</sup>	32.0	22.2	23.0	22.3	20.4
Research, Development, Test and Evaluation	1.2	0.3	0.4	0.3	0.2
Revolving and Management Funds	0.9	0.4	0.4	0.4	0.4
Other Department of Defense Programs <sup>c</sup>	2.5	1.5	1.5	1.5	1.5
Special Funds <sup>d</sup>	10.1	9.8	9.0	9.7	9.0
Military Construction	2.7	1.4	1.4	1.4	1.4
General Provisions and Rescissions	-4.0	0.0	0.0	0.0	0.0
Cap on Transfer Authority <sup>e</sup>	[6.5]	[4.0]	[4.0]	[4.5]	[3.0]
<b>Total, Department of Defense</b>	<b>145.8</b>	<b>130.0</b>	<b>130.0</b>	<b>129.3</b>	<b>129.6</b>

**Source:** CRS calculations for FY2010 based on *H.R. 2647* as passed by the House, *S. 1390* as passed by the Senate, *H.Rept. 111-166*, *S.Rept. 111-35*, *H.Rept. 111-230*, *H.R. 3326* as passed by the House, and for FY2009 from House Appropriations Committee Table, *Congressional Record*, June 16, 2009, p. H6871.

**Notes:** See **Table A-9** for account-level funding for war costs.

- a. Operation and Maintenance total excludes the Afghanistan Security Forces Fund, Iraq Security Forces Fund, and the Pakistan Counterinsurgency Capabilities Fund, which are included under Special Funds.

<sup>9</sup> CRS calculations from Defense Finance Accounting Service (DFAS), "Supplemental & Cost of War Execution Report," September 2008 and DFAS, "Status of War Reports," May 2009.

<sup>10</sup> *Ibid.*

- b. Procurement total includes Mine Resistant Ambush Protected Transfer Fund and excludes Joint Improvised Explosive Device Fund, which is included under Special Funds.
- c. Other Department of Defense programs includes Defense Health, Drug Interdiction, and the Office of the Special Inspector General.
- d. Special Funds includes Afghanistan Security Forces Fund, Iraq Security Forces Fund, Pakistan Counterinsurgency Capability Fund, Pakistan Counterinsurgency Fund, Iraq Freedom Fund and Joint Improvised Explosive Device Fund.
- e. Congress sets annual caps or ceiling on the amount of funds that DOD can transfer between accounts after enactment.

## **Authorization Action on War Funding Request**

The House and Senate authorization bills (H.R. 2647 and S. 1390) largely supported DOD's request. Action by House and Senate authorizers includes:

- reducing DOD's \$1.5 billion request for the Commanders' Emergency Response Program by \$100 million (House) to \$200 million (Senate);
- not providing \$115 million for Guantanamo Bay detainee relocation because of lack of a plan (both);
- adding funds for Special Operations Command equipment (House);
- endorsing DOD's request for an additional \$5.5 billion for new lighter-weight Mine Resistant Ambush Protected Program (MRAP) vehicles for Afghanistan;
- supporting DOD's request for \$7.6 billion to train and equip Afghan Security Forces (both);
- deleting funding requested for the Pakistan Counterinsurgency Capability Fund (see below); and
- requiring new reports on progress in Afghanistan (Sec. 1217, House); a quarterly report on the redeployment of troops from Iraq (Sec. 1218, House); building the capacity of foreign nations (Sec. 1204, House); an assessment of progress in Pakistan (Sec. 1223, House); and alternatives to U.S. reimbursement to Pakistan for logistical, military and other support (Sec. 1222, House); and U.S. engagement with Iran (Sec. 1221, Senate).

## **Multiple Authorities and Funding Sources for Train and Equip for Pakistan**

Reflecting a recent agreement between the Defense and State Department to transfer administration of the Pakistan Counterinsurgency Capability Fund from DOD to the Department of State by FY2010, both the House and Senate authorizers deleted DOD's funding request for this account, a new fund established in FY2009 to provide equipment, training, supplies and infrastructure to enhance Pakistan's counterinsurgency capability. While DOD would no longer administer this fund in FY2010, monies could still be transferred to the Defense Department after 15-day advance notification to congressional committees.<sup>11</sup>

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<sup>11</sup> *S.Rept. 111-35*, p. 191 and 210 and *H.Rept. 111-166*, p. 415ff..

At the same time, the Senate authorizers approved an Administration request to broaden the purposes of coalition support for Pakistan and other nations aiding U.S. military operations. Previously limited to DOD reimbursements for logistical support, the new language would also allow DOD to reimburse for supplies, training, equipment, and infrastructure. In the case of Pakistan, for example, coalition support funds could be used to provide helicopter spare parts.<sup>12</sup>

By broadening coalition support, this would appear to give DOD authority to continue carrying out the type of activities that are to transition to the State Department in the Pakistan Counterinsurgency Fund. The Senate version of the bill (S. 1390) would permit DOD to use coalition support funds to provide “specialized training ... procurement and provision of supplies, and procurement and loaning of specialized equipment ... to “any key cooperating nation supporting U.S. military operations,” in Afghanistan.<sup>13</sup> The House authorization bill (H.R. 2647), however, does not include this change.<sup>14</sup> The House appropriations bill (H.R. 2336) does expand the authority for use of coalition support monies.<sup>15</sup>

Congress has also provided DOD with authority to “train and equip” foreign nations who are developing their counterinsurgency capability.<sup>16</sup> House authorizers require a report from the President by March 1, 2010 on the various security cooperation authorities available to DOD and the State Department to enhance the capacity of foreign military forces.<sup>17</sup>

## **House Appropriations Markup of War Fund Request**

While the House Appropriations Committee (HAC) provided most of the monies requested by DOD, the bill (H.R. 3326) also transfers \$14.6 billion or 20% of DOD’s requested Operation and Maintenance funds to a new Overseas Contingency Operations Transfer Fund and requires that DOD inform the four congressional defense committees 15 days in advance of any transfers from the fund.<sup>18</sup>

According to the committee, this action was taken because the services “cannot accurately budget for Operations Enduring Freedom and Operations Iraqi Freedom,” in light of the fact that the nature of military operations is likely to change significantly.<sup>19</sup> Based on recent report of Operation and Maintenance obligations, operational funding could be lower than requested (see above).

Other funding changes made by the HAC included:

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<sup>12</sup> Office of Management and Budget, *Fiscal Year 2010 Budget Appendix*, p. 350; <http://www.whitehouse.gov/omb/budget/Appendix/>.

<sup>13</sup> Sec. 1205 (b) in *S. 1390* as reported.

<sup>14</sup> Sec. 1213, *H.R. 2647*.

<sup>15</sup> See “Operation and Maintenance, Defense-Wide,” in *H.R. 3326* as reported.

<sup>16</sup> See CRS Report RS22855, *Section 1206 of the National Defense Authorization Act for FY2006: A Fact Sheet on Department of Defense Authority to Train and Equip Foreign Military Forces*, by Nina M. Serafino.

<sup>17</sup> Sec. 1204, *H.R. 2647*; *H.Rept. 111-166*, p. 414.

<sup>18</sup> Overseas Contingency Operations Transfer Fund, *H.R. 3326* as reported; House Rules Committee, [http://www.rules.house.gov/111/CommJurRpt/111\\_defenseapprops\\_rpt.pdf](http://www.rules.house.gov/111/CommJurRpt/111_defenseapprops_rpt.pdf).

<sup>19</sup> *H.Rept. 111-230*, p. 327; House Rules Committee, [http://www.rules.house.gov/111/CommJurRpt/111\\_defenseapprops\\_rpt.pdf](http://www.rules.house.gov/111/CommJurRpt/111_defenseapprops_rpt.pdf).

- a \$1.9 billion cut to DOD’s MRAP request because funds have already been provided in the FY2009 Supplemental, and
- a largely undistributed transfer of \$2.6 billion from DOD’s base budget to Title IX war funding to reflect the “significant Military Personnel costs of U.S. Overseas Contingency Operations.”<sup>20</sup>

In its markup, the HAC also broadened the purposes for which coalition support funds could be used, to include specialized training, supplies and the loaning and buying of equipment.<sup>21</sup> Like the authorizers, the HAC did not provide funds for the Pakistan Counterinsurgency Capability Fund.

### War Funding

For congressional action on the Administration’s FY2009 supplemental appropriations request for war costs, see CRS Report R40531, *FY2009 Spring Supplemental Appropriations for Overseas Contingency Operations*, coordinated by Stephen Daggett and Susan B. Epstein. Congressional action on authorization of the FY2009 supplemental funds and on both authorization and appropriation of the FY2010 war cost request is covered in this report. For an analysis of the relationship between war costs and troop levels, see CRS Report R40682, *Troop Levels in the Afghan and Iraq Wars, FY2001-FY2012: Cost and Other Potential Issues*, by Amy Belasco.

## Base Budget: Comparison and Context<sup>22</sup>

In recent years, some senior military officers<sup>23</sup>, as well as research groups and advocacy organizations, have argued that defense spending needs to be substantially higher in the next few years to avoid drastic cuts in major weapons programs or in the size of the force. Many have called for a baseline defense budget, not including war-related costs, pegged to about 4% of Gross Domestic Product (GDP)—an amount that would be anywhere from \$62 to \$169 billion per year higher over the next few years than the Administration plan.

**Table 5. Actual and Projected DOD Base Budgets Compared with 4% of Gross Domestic Product (GDP)**  
(amounts in billions of dollars)

	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014
actual/projected DOD base budget	513.3	533.7	541.8	550.7	561.1	574.5
Gross Domestic Product	14,291	14,902	15,728	16,731	17,739	18,588

<sup>20</sup> *H.Rept. 111-230*, p. 328; House Rules Committee, [http://www.rules.house.gov/111/CommJurRpt/111\\_defenseappropr\\_rpt.pdf](http://www.rules.house.gov/111/CommJurRpt/111_defenseappropr_rpt.pdf).

<sup>21</sup> Title IX, Operation and Maintenance, Defense-Wide, *H.R. 3326* as reported; House Rules Committee, [http://www.rules.house.gov/111/CommJurRpt/111\\_defenseappropr\\_rpt.pdf](http://www.rules.house.gov/111/CommJurRpt/111_defenseappropr_rpt.pdf).

<sup>22</sup> Prepared by Stephen Daggett, Specialist in U.S. Defense Policy and Budget.

<sup>23</sup> During a Pentagon press briefing on November 17, 2008, Joint Chiefs of Staff Chairman Admiral Michael Mullen said he thought that spending 4% of GDP on defense was, “about right.” See DOD News Transcript, “Department of Defense News Briefing with Admirals Michael Mullen at the Pentagon, Arlington, VA,” November 17, 2008, <http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=4318>.

	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014
DOD base budget as percentage of GDP	3.59%	3.58%	3.44%	3.29%	3.16%	3.09%
4% of GDP	571.6	596.1	629.1	669.2	709.6	743.5
amount by which 4% of GDP exceeds actual/projected DOD base budget	58.3	62.4	87.3	118.5	148.5	169.0

**Source:** Actual/projected DOD base budget figures from Office of Management and Budget, A New Era of Responsibility: Renewing America’s Promise, February 26, 2009, Table S-7. “Funding Levels for Appropriated (‘Discretionary’) Programs by Agency,” p. 130; Gross Domestic Product estimates from Ibid., Table S-8, “Comparison of Economic Assumptions,” p. 132.

Senator James M. Inhofe and Representative Trent Franks—members, respectively, of the Senate and House Armed Services committees—summarized the case for such an increase in identical joint resolutions (S.J.Res. 10 and H.J.Res. 3) introduced on Feb. 12, 2009 which call for a base defense budget equal to at least 4% of GDP. The fundamental case for meeting the 4% target is that, since the end of the Cold War, DOD’s budget and force structure have declined significantly while the tempo of operations has increased—to include sustained combat operations—and the geographic scope of operations has broadened.<sup>24</sup>

These arguments for a substantial increase in the defense budget, however, come at a time when, by historical standards, military spending seems very robust. Between FY1998, when the post-Cold War decline in defense spending hit bottom, and FY2009, the baseline Department of Defense budget, not including war costs, increased by almost 40% above inflation (see **Table 5**). Adjusting for inflation, the FY2009 baseline DOD budget was more than \$100 billion, or about 20%, greater than the average during the Cold War (measured from the end of the Korean War in FY1954 through FY1990). Funding for weapons acquisition (procurement plus R&D) in FY2009 was more than \$45 billion—or about one-third—higher than the annual Cold War average.

**Table 6. DOD Discretionary Budget Authority, FY1998-FY2009**

(amounts in billions of current year and constant FY2009 dollars)

	Current Year Dollars			Constant FY2009 Dollars		
	Total DOD	Base DOD	Supplemental	Total DOD	Base DOD	Supplemental
FY1998	260	257	3	359	355	4
FY1999	275	266	9	370	358	12
FY2000	287	279	9	377	366	11
FY2001	316	297	19	403	379	24
FY2002	345	328	17	428	407	21
FY2003	437	365	72	526	439	87
FY2004	468	377	91	544	438	106
FY2005	479	400	79	535	447	88

<sup>24</sup> Senator Inhofe elaborated on this argument in a Senate floor speech on February 12, 2009. See *Congressional Record*, February 12, 2009, pp. S-2246-48.

	<b>Current Year Dollars</b>			<b>Constant FY2009 Dollars</b>		
FY2006	535	411	124	579	445	134
FY2007	601	432	169	633	455	178
FY2008	667	480	187	683	491	191
FY2009	662	510	152	662	510	152

**Source:** FY2001-FY2009 current year dollar figures from Department of Defense, *Fiscal Year 2009 Supplemental Request: Summary Justification*, April 2009, Figure 1, p. 1. FY1998-FY2000 total DOD from Office of Management, Budget Public Budget Database, supplemental amounts by CRS. Deflators from Department of Defense, *National Defense Budget Estimates Fiscal Year 2009*, March 2008; Data thru FY2007 are actual amounts. Figures for FY2009 include requested additional FY2009 supplemental appropriations and rescissions.

The apparent disconnect between the size of the budget and the appeals for more money appears even more striking when amounts that have been appropriated for war costs are added to the equation. On top of a baseline DOD budget that grew from \$255 billion in FY1998, in FY2009 prices not adjusted for inflation, to \$528 billion in FY2009, supplemental appropriations for war-related costs climbed from \$19.4 billion in FY2001, as an initial response to the 9/11 attacks, to \$63 billion in FY2003, the year of the Iraq invasion, to an estimated \$189 billion in FY2008. While large portions of the supplementals have been consumed by war-related operating costs, substantial amounts have also been devoted to buying new equipment, particularly for the Army and the Marine Corps. Although the bulk of this acquisition has been for force protection, communications, and transportation, the effect has been to modernize much of the basic equipment stock of both services, in effect augmenting their baseline budgets. The fact that so large a level of spending appears to the military services to be so inadequate has several explanations—and the policy implications are, accordingly, matters of varying interpretation.

Following are some of the contributing factors.<sup>25</sup>

- Future baseline budgets are widely expected to decline: The Administration plan to cut the deficit in half by the end of President Obama’s first term includes limits on defense as well as non-defense spending. White House budget projections accommodate an increase of about 5% above inflation in the FY2009 DOD budget, but project a cumulative decline of about 3% between FY2009 and FY2012. Many unofficial projections of the deficit situation are less sanguine than the Administration’s, so many analysts expect, at best, a flat baseline defense budget for the foreseeable future. Increased costs in part of the budget, therefore, will necessarily come at the expense of resources available in other areas.
- Supplemental appropriations are expected to decline: Although plans to withdraw from Iraq are uncertain, the military services expect that supplemental appropriations will come down within a few years. Costs for training and equipment maintenance that have been covered in supplementals will, then,

<sup>25</sup> These issues were discussed in testimony before the House Budget Committee by Stephen A. Daggett, CRS Specialist in U.S. Defense Policy and Budget, on February 4, 2009. See prepared testimony on the House Budget Committee website at [http://budget.house.gov/hearings/2009/02.04.2009\\_Daggett\\_Testimony.pdf](http://budget.house.gov/hearings/2009/02.04.2009_Daggett_Testimony.pdf) with supporting charts at [http://budget.house.gov/hearings/2009/02.04.2009\\_Daggett\\_charts.pdf](http://budget.house.gov/hearings/2009/02.04.2009_Daggett_charts.pdf). Daggett’s analysis was summarized in the April 2009 edition of *Air Force* magazine, “The Cost of the Force,” *Air Force*, April 2009, pp. 37-39, <http://www.airforce-magazine.com/MagazineArchive/Documents/2009/April%202009/0409cost.pdf>.

- migrate back into the baseline budget at the expense of other programs, and money to further upgrade ground forces will have to be found elsewhere.
- Costs of military personnel have grown dramatically in recent years: Since the end of the 1990s, Congress has approved substantial increases in military pay and benefits, including pay increases of ½ percent above civilian pay indices in seven of the past eight years, three rounds of “pay table reform” that gave larger raises to personnel in the middle grades, increased housing allowances to eliminate on base and off-base disparities, DOD-provided health insurance for Medicare-eligible military retirees (known as “TRICARE” for Life), concurrent receipt of military retired pay and veterans disability benefits that had earlier been offset, elimination of a reduction in retiree survivor benefits that had occurred at age 62, and large increases in enlistment and reenlistment bonuses and special pays. Although bonuses and some other payments may decline in the future, most of the past increases in pay and benefits have been built into the basic cost of personnel. CRS calculates that uniformed personnel now cost 40% more, per capita, after adjusting for inflation, than in FY1999.
  - Operating costs continue to grow above base inflation: Historically, military operation and maintenance budgets, which pay for everything from personnel training, to weapons repairs, to facility operations, to health care, have increased relative to the size of the force by about 2.7% per year above inflation. These increases are not as large as in some areas of the civilian economy, such as health care, but they do not reflect gains in productivity that are common in other sectors of the economy. Continued growth in operating costs, which is now widely seen as a fact of life in defense planning, erodes the availability of resources for weapons modernization and other priorities.
  - Increasing generational cost growth in major weapons programs: It is generally expected that new generations of weapons will be more expensive than the systems they replace as weapons technology advances. The rate of generational cost growth, however, is becoming a matter of increasing concern within the Defense Department. New stealthy aircraft, multi-mission ships, advanced space systems, and networked missiles, guns, and vehicles appear to be getting more expensive than their predecessors at a greater rate than in the past. Unless budgets increase more rapidly than costs, trade-offs between the costs of new weapons and the size of the force may be required.
  - Poor cost estimates: The difficulties engendered by accelerating intergenerational weapons cost growth are exacerbated by poor cost estimation. The Government Accountability Office has documented frequent, substantial increases in costs of major defense systems compared to original development estimates. A side-effect of inaccurate cost projections is an increased instability in the overall defense budget, which entails inefficient production rates for major weapons programs and increased costs due to changing production plans.<sup>26</sup>
  - New requirements based on the lessons of Iraq and Afghanistan: The wars in Iraq and Afghanistan have led to very large increases in equipment requirements for

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<sup>26</sup> For GAO’s more recent annual overview of defense acquisition cost growth, see U.S. Government Accountability Office, *Defense Acquisitions: Assessments of Selected Weapon Programs*, GAO-09-326SP, March 30, 2009.



ground forces, particularly for force protection, communications, and transportation. National Guard combat units that earlier were equipped with older systems cascaded from active units are now seen as part of the rotation base that require equally modern equipment. Full sets of current equipment are expected to be available not only for next-to-deploy units, but also for units as they begin to reset from overseas rotations. A key lesson of the war is that what used to be called “minor procurement” for ground forces was substantially undercapitalized.

- A broader range of national security challenges: A common presumption before 9/11 was that forces trained and equipped for traditional conflicts between national armies would be able to cope with what were seen as less demanding other challenges such as stability operations. Now Secretary Gates and other prominent defense leaders maintain that forces must be designed not only for traditional conflicts, but for insurgencies and other irregular wars, support of allies, threats of catastrophic attacks by non-state actors with weapons of mass destruction, and entirely new kinds of disruptive attacks on specific U.S. and allied vulnerabilities. The effect has been to broaden requirements without, necessarily, an attendant offsetting reduction in older force goals. When these factors are taken as a whole, it is not so surprising that military planners discover some shortfalls.

But, for Congress, it may not be so obvious that the principle answer to all these problems is simply to provide more money for defense. More money is one alternative. Other alternatives may include backing away from plans to add 92,000 active duty troops to the Army and Marine Corps; shifting resources among the military services to reflect new challenges rather than allocating them roughly the same proportions every year; reviewing requirements for expensive new technologies in view of the presence or absence of technologically peer or near peer competitors; and shifting resources from military responses to global threats toward non-military means of prevention.

## **Defense Priorities: Budget and Strategy**

Secretary Gates stated that the budget decisions that he announced on April 6, 2009, were intended to “reshape the priorities of America’s defense establishment.”<sup>27</sup> Those decisions focused almost exclusively on “means”, rather than on desired “ends” based on policy decisions, or “ways” designed to utilize given means to achieve desired ends. That emphasis on resources, together with the relatively broad scope of the announced programmatic decisions, raises key questions about the relative weight of strategy and budget in driving defense priorities.

### **Background: Strategic Direction**

Secretary Gates stressed that the April 6 announcement reflected a line of strategic thinking dating back 18 months, and captured in the June 2008 *National Defense Strategy*, other

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<sup>27</sup> Secretary of Defense Robert M. Gates, Defense Budget Recommendation Statement, April 6, 2009, available at <http://www.defenselink.mil/speeches/speech.aspx?speechid=1341>.

Department of Defense official documents, and speeches and statements.<sup>28</sup> This continuum of strategic thought appears to be based on several major premises:

- The “wars we’re in”—Iraq and Afghanistan—are broadly indicative of the kinds of challenges that the United States is most likely to face in the future. Those challenges include preparing for “hybrid warfare,” in which both state and non-state actors blend cutting-edge technologies (usually associated with state-based militaries) with irregular approaches and/or non-conventional approaches usually associated with guerrilla groups. Recent examples of hybrid warfare cited by DOD officials include Hezbollah’s operations against Israel in 2006 and the use of sophisticated Explosively-Formed Penetrators by insurgents in Iraq.<sup>29</sup>
- DOD should enhance and better institutionalize the capabilities required to meet these sorts of challenges by adjusting investments and by rebalancing the force accordingly.<sup>30</sup>
- While conventional challenges persist, the nation’s current and projected advantages allow room for assuming greater risk in that area. On April 6, Secretary Gates echoed the 2008 *National Defense Strategy*: “Although U.S. predominance in conventional warfare is not unchallenged, it is sustainable for the medium term given current trends.”<sup>31</sup>
- DOD is operating in a resource-constrained environment, in which “running up the score” in one area—maintaining unnecessary redundancy—requires a decision not to do something else.
- Partnerships—with other U.S. Government agencies and with international friends and allies—will play an increasingly important role in the preparation for, and execution of, future operations.

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<sup>28</sup> See for example Department of Defense Conference Call with Secretary of Defense Robert Gates and Gen. James Cartwright with Internet Security Writers, April 7, 2009, available at <http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=4398>. Key sources include Department of Defense, *National Defense Strategy*, June 2008; Department of Defense Directive 3000.07, “Irregular Warfare (IW)”, December 1, 2008; Secretary of Defense Robert M. Gates, speech at Kansas State University, “Landon Lecture”, November 26, 2007, available at <http://www.defenselink.mil/speeches/speech.aspx?speechid=1199>; Secretary of Defense Robert M. Gates, remarks to U.S. Global Leadership Campaign, July 15, 2008, available at <http://www.defenselink.mil/speeches/speech.aspx?speechid=1262>; Robert M. Gates, “A Balanced Strategy: Reprogramming the Pentagon for a New Age,” *Foreign Affairs*, January 2009, pp. 28-40.

<sup>29</sup> See for example Media Roundtable with Secretary of Defense Robert M. Gates and General James Cartwright, Vice Chairman, Joint Chiefs of Staff, April 7, 2009, available at <http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=4399>. On “hybrid warfare”, see for example Frank Hoffman, *Conflict in the 21<sup>st</sup> Century: the Rise of Hybrid Wars*, Potomac Institute for Policy Studies, December 2007.

<sup>30</sup> For example, see Secretary of Defense Robert M. Gates, Defense Budget Recommendation Statement, April 6, 2009, <http://www.defenselink.mil/speeches/speech.aspx?speechid=134>: “We must rebalance this department’s programs in order to institutionalize and enhance our capabilities to fight the wars we are in today and the scenarios we are most likely to face in the years ahead...”

<sup>31</sup> Secretary of Defense Robert M. Gates, Defense Budget Recommendation Statement, April 6, 2009, <http://www.defenselink.mil/speeches/speech.aspx?speechid=1341>; and DoD, *National Defense Strategy*, June 2008, p.21.

## Strategic Processes

The decisions Secretary Gates announced April 6, timed to inform the FY 2010 budget request, were somewhat off cycle with Congressionally-mandated defense strategic review processes. This lack of synchronization raises some questions about the extent to which the decisions were strategically informed.

In theory, national security strategy issued by the White House sets the parameters for the national defense strategy issued by DOD as part of the Quadrennial Defense Review (QDR) process, and defense strategy in turn shapes budget choices. The *Goldwater-Nichols Act of 1986* established the permanent requirement for the President to submit a national security strategy report to Congress annually. That report is ordinarily due on the date the President submits the budget for the following fiscal year, but in the first year of a new Administration, it is due 150 days after the President takes office.<sup>32</sup> The due date this year would fall on June 19, 2009. In turn, legislation requires that DOD conduct a QDR during the first year of every Administration, with a requirement to submit a report based on that review to Congress in the year following the year in which the review is conducted, but not later than the President submits the budget for the next fiscal year.<sup>33</sup> The due date for this QDR would fall in early February 2010. The QDR is intended to be a rigorous, inclusive review process that weighs assessments of the strategic environment, requirements, and gaps and overlaps in current capabilities. Further, by law, the QDR report must include “a comprehensive discussion of the national defense strategy of the United States.” That defense strategy, in turn, is required to be “consistent with the most recent national security strategy.”<sup>34</sup>

In practice, the Obama Administration appears to be broadly on track with the prescribed strategy cycle. However, that cycle may not be well-adapted for informing budget priorities in the first year of a new Administration. The most recent *National Security Strategy (NSS)* was issued by the Bush Administration in March 2006. Senior Administration officials have noted that the Obama Administration is unlikely to publish a new *NSS* in time to help shape the 2010 QDR (or in time for submission by the June deadline). However, officials have indicated that an ongoing national security review process—led by the National Security Council and intended to establish priorities and produce classified, internal guidance to departments and agencies—would likely set parameters for the QDR process.<sup>35</sup> DOD issued the most recent *National Defense Strategy* in June 2008, under the signature of Secretary Gates, as a stand-alone document, separately from a QDR process.<sup>36</sup> Secretary Gates has stressed repeatedly that the 2008 *NDS* will undergird the 2010 QDR process. On April 23, 2009, DOD announced the start of the 2010 QDR process.<sup>37</sup> Senior

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<sup>32</sup> See *Goldwater-Nichols Department of Defense Reorganization Act of 1986*, P.L. 99-433, §603.

<sup>33</sup> The permanent requirement to conduct a QDR was introduced by the *National Defense Authorization Act* for FY2000, October 5, 1999, P.L. 106-65, which amended Title 10 of U.S. Code. See Title 10, U.S. Code, Subtitle A, Part I, Chapter 2, §118. Subsequent legislation amended parts of the mandate, see the *NDAA* for FY2002, December 28, 2001, P.L. 107-107, §921; and the *Bob Stump NDAA* for FY2003, December 2, 2002, P.L. 107-314, §922 and 923.

<sup>34</sup> See Title 10, U.S. Code, Subtitle A, Part I, Chapter 2, §118 (b) (1).

<sup>35</sup> See Christopher J. Castelli, “Senior Official: QDR Will Take Cues from NSC Review,” *Inside Defense*, April 23, 2009; and Christopher J. Castelli, “NSC Crafting Classified, National Security Planning Guidance,” *Inside Defense*, March 19, 2009.

<sup>36</sup> DOD had established a precedent for such separation by issuing the previous *NDS* in 2005, at the beginning of the QDR process that yielded the February 2006 *QDR Report*.

<sup>37</sup> Department of Defense News Release, “DoD Begins QDR, NPR Processes,” April 23, 2009, available at <http://www.defenselink.mil/releases/release.aspx?releaseid=12627>

officials have indicated that the process is expected to conclude by the end of the summer, with the intent that its findings would be used to inform budget decision-making for FY2011.<sup>38</sup>

DOD officials have stated that, despite the absence of a concurrent QDR or NDS process, the budget decisions announced on April 6 were developed over the course of three months, in a rigorous, inclusive way that included “not only the chiefs and secretaries of the Services, but also the [Combatant] Commanders.”<sup>39</sup> DOD has reportedly continued the practice launched under the previous Administration, following the 2006 QDR, of holding frequent, inclusive sessions with senior DOD civilian and military leaders, chaired by the Deputy Secretary of Defense and the Vice Chairman of the Joint Chiefs of Staff, to consider strategic priorities, specific programs and initiatives, and Departmental processes.

Senior DOD leaders have also stated that the scope of the April 6 decisions was not comprehensive, and that several categories of issues were deferred to the forthcoming QDR process. Secretary Gates indicated that he had deferred consideration of some specific issues—including amphibious capabilities, a follow-on bomber, and strategic (nuclear) requirements—for which sufficient “analysis and understanding” had not yet been available. Vice Chairman of the Joint Chiefs of Staff General James Cartwright added that some broader and more fundamental issues had also been deferred to the QDR—including “how to shift and manage risk,” including, for example, how to think about potential trade-offs between very different sets of capabilities.”<sup>40</sup>

## Issues for Congress

Secretary Gates’s April 2009 announcement of defense budget decisions raises a series of fundamental strategic and process questions, with implications for both policy and resourcing.

### Assessing Challenges and Requirements: Conventional, Irregular—or Hybrid?

In multiple fora, Secretary Gates has underscored the need to “display a mastery of irregular warfare comparable to that which we possess in conventional combat.”<sup>41</sup> Experts disagree about how to define those categories of warfare, but most experts use “conventional” or “traditional” to refer to warfare between state employing organized military forces; and “irregular” to refer to warfare among state and non-state actors, with an emphasis on “asymmetric” or non-conventional approaches.<sup>42</sup>

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<sup>38</sup> Christopher J. Castelli, “Gates Poised to Sign Key Guidance for QDR, NPR,” *Inside Defense*, April 23, 2009.

<sup>39</sup> See Department of Defense Conference Call with Secretary of Defense Robert Gates and Gen. James Cartwright with Internet Security Writers, April 7, 2009, available at <http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=4398>; Media Roundtable with Secretary of Defense Robert M. Gates and General James Cartwright, Vice Chairman, Joint Chiefs of Staff, April 7, 2009, available at <http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=4399>; and Secretary of Defense Robert M. Gates, Defense Budget Recommendation Statement, April 6, 2009, available at <http://www.defenselink.mil/speeches/speech.aspx?speechid=1341>.

<sup>40</sup> See Media Roundtable with Secretary of Defense Robert M. Gates and General James Cartwright, Vice Chairman, Joint Chiefs of Staff, April 7, 2009, available at <http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=4399>.

<sup>41</sup> Department of Defense, *National Defense Strategy*, June 2008. The Department of Defense Directive 3000.07, “Irregular Warfare (IW)”, December 1, 2008, stated that IW “is as strategically important as traditional warfare.”

<sup>42</sup> The Department of Defense Directive 3000.07, “Irregular Warfare (IW)”, December 1, 2008, defined IW as: “A violent struggle among state and non-state actors for legitimacy and influence over the relevant population(s). Irregular warfare favors indirect and asymmetric approaches, though it may employ the full range of military and other (continued...)”

To date, most of the debates among defense experts, both practitioners and observers, have framed the fundamental question as a zero-sum balance between irregular and conventional capabilities.<sup>43</sup> The outcome of these debates could have significant implications for both policy direction, and for the execution of the military services' fundamental responsibilities under Title X of U.S. Code to organize, man, train and equip the force. The conventional/irregular debates have unfolded most prominently in ground forces circles, in discussions of the lessons of the wars in Iraq and Afghanistan and their applicability to future contingencies. But air, naval, and space forces also play key roles in irregular warfare—a point Secretary Gates underscored on April 6 with his announcement of increased support for manned and unmanned intelligence, surveillance and reconnaissance (ISR) capabilities, and for Littoral Combat Ships (LCS). The future course of the conventional/irregular debates is likely to have a major impact on all the military services, in terms of both the balance within each service between irregular and conventional capabilities; and possible trade-offs among the services, between ground-based “irregular” capabilities and “conventional” air and maritime capabilities.

The debates over strategic priorities and the allocation of investments among the range of potential challenges have addressed several distinct sets of questions:

- Which future scenarios are the “most likely” and which are the “most dangerous”? To date, there is greater agreement about the answers to those questions than about the policy approaches those answers imply. For example, in the field of homeland defense, many agree that the most likely threat to the homeland may be the limited use of biological agents, and that the most dangerous threat may be a nuclear strike on an American city. Yet some argue that resources should be directed primarily to the more likely threat, while others insist that the truly catastrophic nature of the most dangerous threat argues for making that the priority.
- What is the appropriate role for DOD in irregular warfare (IW), in the overlapping field of counterinsurgency (COIN), and in preventing or countering weak or failing states?<sup>44</sup> Some defense experts argue that a substantial or even the primary role in such contingencies rightfully belongs to civilian experts, rather than to those in uniform. One reason, they note, is that civilian agencies have far more appropriate expertise. Another reason, they add, is that by focusing on IW and COIN, the military risks the erosion of its dominance in conventional warfighting arenas—such as “long-range strike, global logistics, space-based capabilities and missile defense”—and, in general, its ability to respond to major conventional aggression.”<sup>45</sup> Other defense experts argue that while substantial civilian participation in irregular warfare contingencies might be preferred, U.S.

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(...continued)

capacities, in order to erode an adversary's power, influence, and will.”

<sup>43</sup> See, notably, Andrew J. Bacevich, “The Petraeus Doctrine,” *The Atlantic*, October 2008. Some civilian practitioners and observers have long expressed concerns about the term “irregular warfare”—in particular, a reluctance to use any term including the word “warfare” as an umbrella for a number of civilian activities. Some DoD senior officials have argued for tweaking the terminology in the interests of interagency cooperation. See for example Christopher J. Castelli, “Irregular Warfare Term Stirs Debate as DoD Prepares QDR,” *Inside Defense*, April 16, 2009.

<sup>44</sup> Experts disagree about the conceptual relationship between IW and COIN. Most suggest that COIN and IW overlap but are not isomorphic; some suggest that one is a subset of the other.

<sup>45</sup> Michael J. Mazarr, “The Folly of ‘Asymmetric War’,” *The Washington Quarterly*, Summer 2008, pp. 33-53.

government civilian agencies do not have the capacity to meet current requirements. Unless and until those agencies develop such capacity, they add, only military forces can provide the capabilities and capacity needed to meet the irregular challenges the nation faces.<sup>46</sup>

- How fungible are military capabilities along the spectrum of conventional-to-irregular conflict? For many analysts, the key issue is the extent to which COIN and irregular contingencies can be regarded as “lesser included” cases of major combat operations. Many proponents of focusing on conventional warfare argue that forces organized, trained and equipped to prosecute “higher-end” combat are capable of adapting to the requirements of IW, at not too high a cost.<sup>47</sup> Some proponents adjust—and strengthen—this argument by adding the provision that forces oriented toward the “higher-end” should also have some measure of training and preparation for the “lower-end”, without impinging on the development of their higher-end capabilities, in order to further reduce the risk should they be required to shift to irregular missions. Proponents of a stronger emphasis on irregular warfare argue, in turn, that irregular contingencies require a qualitatively different mindset and array of capabilities—including addressing the “human, psychological, and political dimensions of war”—for which higher-end capabilities such as advanced technologies are no substitute. Some add that in the wars in Iraq and Afghanistan, U.S. military forces well-prepared for conventional contingencies largely faltered when confronted with irregular challenges.<sup>48</sup> The Army’s Future Combat System vehicle program illustrates a third perspective on fungibility—the attempt to stretch a “mid-range” capability to meet both conventional and irregular challenges. Critics of that approach suggested that it introduced the operational risk of a loss of sufficient capability at both far ends of the spectrum.

However, some analysts have sharply questioned the bifurcation of strategic challenges into “conventional” and “irregular” categories, arguing instead that the most likely future form of warfare is “hybrid”. Defense expert Frank Hoffman writes, “Hybrid threats incorporate a range of different modes of warfare including conventional capabilities, irregular tactics and formations, terrorist acts (including indiscriminate violence and coercion), and criminal disorder.”<sup>49</sup> The term “hybrid warfare” applies both to the use of irregular approaches by state actors, and the acquisition and use of sophisticated technologies by non-state actors—and proponents of the concept argue that both scenarios are increasingly likely. What could make hybrid warfare potentially hard to counter is its simultaneous employment of a mix of conventional and irregular

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<sup>46</sup> See for example John A. Nagl and Brian M. Burton, “Dirty Windows and Burning Houses: Setting the Record Straight on Irregular Warfare,” *The Washington Quarterly*, April 2009, pp.91-101.

<sup>47</sup> See for example Gian P. Gentile, “Think Again: Counterinsurgency”, *Foreign Policy Online*, January 2009, available at [http://www.foreignpolicy.com/story/cms.php?story\\_id=4631](http://www.foreignpolicy.com/story/cms.php?story_id=4631). Gentile writes, “The Army must organize itself around the principle of fighting with the knowledge that if called on, it can easily shift to nation-building and counterinsurgency, as it has done in Iraq. But doing the opposite—building an Army that is great at building schools and negotiating with tribal sheikhs but is unprepared to fight at the higher end of the conflict spectrum—will only ensure that most of the blood and guts will be ours.”

<sup>48</sup> See H.R. McMaster, “The Human Element: When Gadgetry Becomes Strategy,” *World Affairs*, Winter 2009, pp. 31-43.

<sup>49</sup> See Frank G. Hoffman, “Hybrid Threats: Reconceptualizing the Evolving Character of Modern Conflict,” Strategic Forum, Institute for National Security Studies, National Defense University, No.240, April 2009.

approaches by the same group of actors—whether state or non-state actors—in a single battlespace.

The very qualities that make hybrid warfare hard to counter in practice may also make it hard to conceptualize in theory. In the rhetoric of some senior DOD officials, the term “hybrid” seems to be used interchangeably with “irregular”. In other cases, officials seem to characterize hybrid challenges as the arithmetic sum of conventional and irregular “parts.” In his January 2009 *Foreign Affairs* article, Secretary Gates indicated that the problem may be more complex. He wrote:

When thinking about the range of threats, it is common to divide the “high end” from the “low end,” the conventional from the irregular ... In reality ... the categories of warfare are blurring and no longer fit into neat, tidy boxes. One can expect to see more tools and tactics of destruction—from the sophisticated to the simple—being employed simultaneously in hybrid and more complex forms of warfare.<sup>50</sup>

A rigorous future analysis might pursue this insight further, examining whether hybrid warfare includes qualitatively new dimensions—with possibly very significant implications for the way U.S. military forces organize, train and equip to meet such challenges.

## **Institutionalizing New Capabilities**

Secretary Gates has repeatedly stressed the need for DOD to institutionalize the capabilities developed to date, often on the fly, to meet the kinds of challenges exemplified by “the wars we’re in.” Many of the programmatic adjustments announced on April 6 were apparently designed to better “balance” the force. From a cost perspective, traditional “high-end” capabilities including sophisticated platforms are likely to cost significantly more than some “lower-end” capabilities.<sup>51</sup>

While program changes may be necessary for such rebalancing, they are unlikely to prove sufficient. As Secretary Gates has suggested repeatedly, the greater challenge may prove to be changing mindsets, approaches, and career path choices, for example through adjustments to organization, training, doctrine, and personnel policies.<sup>52</sup> A key issue, looking ahead, is what non-

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<sup>50</sup> Robert M. Gates, “A Balanced Strategy: Reprogramming the Pentagon for a New Age,” *Foreign Affairs*, January 2009, pp. 28-40. Explaining his budget recommendations at the Air War College on April 15, Secretary Gates made a similar argument: “Another underlying theme in the budget recommendations is the need to think about future conflicts in a different way. To recognize that the black-and-white distinction between irregular war and conventional war is an outdated model. We must understand that we face a more complex future than that, a future where all conflict will range along a broad spectrum of operations and lethality. Where near-peers will use irregular or asymmetric tactics and non-state actors may have weapons of mass destruction or sophisticated missiles as well as AK-47s and RPGs. This kind of warfare will require capabilities with the maximum possible flexibility to deal with the widest possible range of conflict.” Secretary of Defense Robert M. Gates, Speech at the Air War College, Maxwell-Gunter Air Force Base, Montgomery, AL, April 15, 2009, available at <http://www.defenselink.mil/speeches/speech.aspx?speechid=1344>. Secretary Gates made similar remarks on April 16 at the Army War College, and on April 17 at the Naval War College.

<sup>51</sup> In order to make the point that “rebalanced” budget priorities do not signal a decrease in DOD’s investment in traditional warfighting capabilities, Secretary Gates has stated a number of times that about half the DOD budget supports traditional warfighting, about 40% of the budget supports “dual-purpose capabilities that work in any scenario,” and about 10% supports capabilities for “irregular or hybrid” warfare. Secretary of Defense Robert Gates, Interview with Judy Woodruff, *The News Hour with Jim Lehrer*, April 7, 2009, available at <http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=4397>.

<sup>52</sup> See for example Media Roundtable with Secretary of Defense Robert M. Gates and General James Cartwright, Vice (continued...)

programmatic changes, including their long-term cost implications, might be required to complement programmatic changes in support of further “institutionalization.”

## **Characterizing the Nature and Scope of Risk**

The 2008 *National Defense Strategy* stated that DOD would continue to focus investments on building capabilities to meet irregular challenges, while “examining areas where we can assume greater risk.”<sup>53</sup> Many observers have suggested that Secretary Gates’s April 6 announcement signaled willingness to assume some additional risk in conventional warfighting arenas.

Most experts agree that risk assessment is critical to defining requirements and making budgetary decisions, but the debates about risk are sometimes imprecise because “risk” can mean a number of different things. For example, it can indicate: readiness to accept a lesser margin of superiority, because one is confident that the mission can still be achieved; readiness to accept a higher cost, in terms of blood and treasure, in the execution of a mission; readiness to accept a greater likelihood that a particular contingency will occur; and readiness to accept a greater degree of uncertainty in general.

To assess the magnitude and prudence of the risks inherent in the April 6 decisions, Congress may wish to consider:

- How confident are U.S. defense and intelligence agencies in their assessments of how long it might take potential competitors to develop specific conventional military capabilities?
- To what extent do DOD’s risk assessments incorporate assumptions about the intent of potential adversaries regarding the use of such capabilities?
- If production of a highly sophisticated system is ended or slowed, how quickly could the defense industrial base reconstitute the capacity—both the physical infrastructure and the dedicated, skilled and trained workforce—to restart production, should the need arise?

For example, Secretary Gates announced the decision to focus on the F-35 Joint Strike Fighter as the U.S. fifth-generation fighter while ending production of the F-22 at 187 aircraft. He addressed one key assumption—the projected timelines of potential peer competitors for developing fifth-generation fighters—by noting that Russia would likely achieve initial operating capability by about 2016, and China by about 2020.<sup>54</sup> Unstated were any assumptions made about broader Russian or Chinese intent regarding the utilization of such a capability, or whether any such assumptions had any bearing on DOD decision-making. Also unstated was any characterization of the kinds of risks DOD believes it is assuming—less superiority, a smaller margin of error,

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(...continued)

Chairman, Joint Chiefs of Staff, April 7, 2009, available at <http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=4399>; and Robert M. Gates, “A Balanced Strategy: Reprogramming the Pentagon for a New Age,” *Foreign Affairs*, January 2009; and remarks by Secretary Gates at the House Armed Services Committee hearing on the priorities of the Department of Defense in the new Administration, January 27, 2009.

<sup>53</sup> See Department of Defense, *National Defense Strategy*, June 2008, pp. 21-2.

<sup>54</sup> Media Roundtable with Secretary of Defense Robert M. Gates and General James Cartwright, Vice Chairman, Joint Chiefs of Staff, April 7, 2009, available at <http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=4399>.



greater likely costs in terms of lives—through greater reliance on the F-35, rather than the more capable F-22.

### Clarifying the Concept of Deterrence for the 21<sup>st</sup> Century

In the 21<sup>st</sup> century, a broad consensus has emerged among practitioners and observers about the need to prepare to deter a wider variety of adversaries than before. The consensus generally accepts that deterrence still relies on demonstrated U.S. military capabilities, and adversaries' belief in our willingness to use them. It also recognizes that some categories of adversaries, such as terrorists, may not be readily amenable to deterrence.<sup>55</sup>

To assess the full significance of Secretary Gates's budget recommendations, it may help to consider:

- What kinds of military capabilities would be of most use in deterring non-traditional adversaries?
- What demonstrations would be necessary to ensure that, from the perspective of non-traditional adversaries, such U.S. capabilities pose credible deterrent threats?
- What decision-making calculus—perhaps including risks, costs, and benefits—are various categories of non-traditional potential adversaries likely to use? How do they think?

A more coherent concept of 21<sup>st</sup> century deterrence could allow Congress to better evaluate the extent, if any, to which the April 6 decisions might restrict the U.S. government's flexibility in deterring non-traditional potential adversaries.

### Evaluating the Impact of Growing "Partnership" on DOD Requirements

The "continuum" of strategic thinking that Secretary Gates referred to, in announcing defense budget decisions on April 6, has included a strong emphasis both on "whole-of-government" approaches that mobilize all relevant U.S. agencies for national security activities, and on international partnerships. A key issue is the extent to which assumptions about growth in interagency and/or international partner capacity have shaped DOD's own requirements, or should shape them in the future.

Secretary Gates has repeatedly called for strengthening the civilian capacity and capabilities of the U.S. government, and also for closer integration of civilian and military efforts. What is less clear is whether DOD's own "slice of the pie," in terms of resources and requirements, ought to shrink, as civilian capabilities grow. The *NDS* does suggest that, in some instances, enhanced civilian capabilities might lead to a reduction in DOD's requirements. For example, "having permanent civilian capabilities available and using them early could also make it less likely that military forces will need to be deployed in the first place."<sup>56</sup> At the same time, Secretary Gates

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<sup>55</sup> The 2008 *NDS* highlights cases in which "the value is not in the destruction of a target but the attack and the very means of attack, as in terrorism." Department of Defense, *National Defense Strategy*, June 2009, p.12.

<sup>56</sup> Department of Defense, *National Defense Strategy*, June 2008, p.17. See also Secretary of Defense Robert M. Gates, remarks to U.S. Global Leadership Campaign, July 15, 2008, available at <http://www.defenselink.mil/speeches/speech.aspx?speechid=1262>.

has consistently argued that even with a growth in civilian capacity, the U.S. military will still “need to institutionalize and retain these non-traditional capabilities.”<sup>57</sup>

In the international arena, Secretary Gates has argued that fostering the capacity and capabilities of international partners is critically important—that such efforts are “arguably as important if not more so than the fighting the United States does itself.”<sup>58</sup> What is less clear is whether concerted investment in building international partner capacity is simply intended to make combined efforts more effective, or whether it might also lead to a reduction in U.S. requirements.

## **Conducting a Comprehensive Strategic Review**

In April, DOD launched the formal Quadrennial Defense Review (QDR) process, and senior DOD officials have indicated that the QDR will be based broadly on the 2008 *National Defense Strategy*. The early issuance of the *NDS*, and the April 6 defense budget announcement, raise key questions about what the real scope of the pending QDR will be, including the extent to which major strategic priorities and approaches will be revisited and rigorously assessed.

On the model of the 2001 and 2006 QDRs, the pending review may also address DOD’s Force Planning Construct (FPC), the short-hand description of what missions the total force must be prepared to carry out simultaneously, which DOD uses to shape the force. The 2001 QDR introduced the familiar “1-4-2-1” shorthand: the force must be able to defend the homeland (1); deter aggression forward, in four regions of the world (4); swiftly defeat aggression in two overlapping major conflicts (2); and win one of them decisively (1).<sup>59</sup> The 2006 QDR introduced a “refined FPC”, which framed both “surge” and “steady state” requirements in three areas—homeland defense; IW/ war on terror; and conventional operations, together with various forms of deterrence.<sup>60</sup> One issue is the extent to which the April 6 programmatic decisions may shape a new FPC by placing constraints on what the total force might be expected to execute simultaneously.

## **Issues for Congress: Secretary Gates’s Proposals**

On April 6, 2009, roughly a month before the details of the FY2010 budget were released, Secretary Gates announced several key recommendations all of which were incorporated into the Administration’s FY2010 budget request released May 7. Gates said this “unorthodox” procedure was warranted by the scope and significance of the decisions and by his desire to publicize them as elements of his effort to change DOD’s strategic direction.

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<sup>57</sup> Secretary of Defense Robert M. Gates, speech at Kansas State University, “Landon Lecture”, November 26, 2007, available at <http://www.defenselink.mil/speeches/speech.aspx?speechid=1199>.

<sup>58</sup> Robert M. Gates, “A Balanced Strategy: Reprogramming the Pentagon for a New Age,” *Foreign Affairs*, January 2009, pp. 28-40.

<sup>59</sup> Department of Defense, *Quadrennial Defense Review Report*, September 2001, pp. 17-21.

<sup>60</sup> See Department of Defense, *Quadrennial Defense Review Report*, February 2006, pp. 35-39. Some observers charged that the “refined FPC” added nuance at the expense of crisp clarity.

## **Quality of Life Issues**

To improve the quality of life for military personnel and their families, Gates announced four recommendations which, in sum, required \$13 billion in the FY2010 base budget for activities that previously had been funded in supplemental appropriations bills.

### **End-Strength Increase<sup>61</sup>**

Secretary Gates recommended that the FY2010 budget complete the ongoing expansion of the Army and Marine Corps, halt further personnel reductions in the Air Force and Navy (possibly at end-strength levels of 330,000 and 329,000 respectively), and fund these end strength levels at a cost of \$11 billion.

Until recently, the Army had a permanent active component end strength of 482,400 while the active component Marine Corps had a permanent end strength of 175,000. As recently as the 2006 Quadrennial Defense Review (QDR), DOD maintained that these strengths were adequate. However, the reality of fighting a multi-front war for more than five years with an all volunteer force eventually compelled the administration to reexamine its end strength position. Having resisted previous congressional calls to permanently increase the end strength for the Army and the Marine Corps, on January 19, 2007 DOD announced that it would seek approval to increase the permanent end strength of both services.

As reflected in both the FY2008 President's budget request and the FY2008 National Defense Authorization Act (NDAA), the Army's revised authorization cap is 547,400 by 2012, an increase of 65,000 over the previous baseline of 482,400. The Marine Corps' revised authorization cap is 202,000 by 2011, an increase of 27,000 over the previous baseline of 175,000.

In reality, both services should easily achieve their authorization levels by the end of FY2009, three years earlier than required for the Army and two years earlier than required for the Marine Corps. Through intense recruiting and retention efforts, the Army ended FY2008 at a strength of 543,645 while the Marine Corps ended the year at a strength of 198,505.

The Air Force has been drawing down personnel for the past several years to fund equipment modernization programs. At the end of FY2004, the Air Force had a personnel strength of 376,600 with a plan to reduce by 60,000 personnel and achieve an end strength of 316,600 by the end of FY2009. However, on June 8, 2008, the Secretary of Defense announced the end of the Air Force drawdown. While the FY2009 NDAA authorized and funding the Air Force at 317,050, DOD is committed to stabilizing the Service at a strength of approximately 330,000. This represents only a slight increase from the Air Force's strength on September 30, 2008 of 327,379.

The Navy, on the other hand, has been downsizing by 8,000 to 10,000 personnel a year for the past 6 to 7 years, attempting to reach a goal of 329,000, the number required to sustain 313 ships and approximately 3,800 aircraft. The Navy ended FY2008 with a personnel strength of 332, 228 and projected a FY2009 end strength of 326,323.

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<sup>61</sup> Prepared by Charles A. Henning, Specialist in Military Manpower Policy

## **Health Care and Family Support<sup>62</sup>**

Secretary Gates stated his intention to provide increased funding for troops and their families by requesting increases of:

- \$400 million above the FY2009 level for medical research and development;
- \$300 million above the FY2009 level for programs addressing the wounded, ill and injured, traumatic brain injury, and psychological health; and
- \$200 million above the FY2009 level for improvements in child care, spousal support, lodging, and education.

Existing programs that previously had been funded through supplementals would be funded in the base defense budget in FY2010. Secretary Gates stated that the department would spend over \$47 billion on healthcare in FY2010.

In his April 6 statement, Secretary Gates did not mention any proposals to include cost saving proposals in the FY10 budget submission. The earlier pre-decisional budget document released by the White House on March 6, 2009 did not reference any such proposal either. However, in an April 7 press conference, Secretary Gates stated that the Defense Health Program request would be fully funded in the FY2010 budget request, unlike previous years in which legislative proposals for cost savings had been included in the budget as offsets to budgetary needs. Secretary Gates further stated his intention to work with Congress to enact legislation to better control health care spending.

In its FY2007, FY2008, and FY2009 budget submissions, the DOD proposed increases in Tricare enrollment fees, deductibles, and pharmacy co-payments for retired beneficiaries not yet eligible for Medicare. These actions were justified by DOD as necessary to constrain the growth of health care spending as an increasing proportion of the overall defense budget in the next decade. Congress has passed legislation each year to prohibit the proposed fee increases.<sup>63</sup>

## ***Study Groups Recommend Various Benefit Reforms***

Congress sought advice on how to constrain military health care cost growth in crafting the FY 2007 National Defense Authorization Act. The FY2007 national defense authorization<sup>64</sup> required the establishment of a DOD Task Force on the Future of Military Health Care, composed of military and civilian officials with experience in health-care budget issues, to examine and report on efforts to improve and sustain defense health care over the long term including the “beneficiary and Government cost sharing structure required to sustain military health benefits.” Another provision of the same act (section 713) required the Government Accountability Office (GAO) in cooperation with the Congressional Budget Office (CBO) to prepare an audit of the costs of health care to both DOD and beneficiaries between 1995 and 2005.

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<sup>62</sup> Prepared by Don J. Jansen, Analyst in Military Health Care Policy.

<sup>63</sup> For additional information, see CRS Report RS 22402, *Increases in Tricare Costs: Background and Options for Congress*, by Don J. Jansen.

<sup>64</sup> Section 711 of P.L. 109-364.

The Task Force on the Future of Military Health Care submitted its final report in December 2007.<sup>65</sup> It found that existing cost-sharing provisions jeopardize long-term taxpayer support and recommended phased-in changes in enrollment fees and deductibles that would restore cost-sharing relationships that existed when Tricare was created. For instance, this would mean that average enrollment fees for the average under-65 retiree family would gradually rise from \$460 per year to \$1,100 per year.

In July, 2008, the Presidentially directed Tenth Quadrennial Review of Military Compensation (QRMC) issued its report on deferred and noncash compensation for members of the uniformed services. The QRMC recommended that Tricare Prime<sup>66</sup> premiums for single retirees under age 65 be set at 40% of Medicare Part B premiums (which vary by the enrollee's adjusted gross income). Tricare Standard/Extra<sup>67</sup> premiums for single retirees would be set at 15% of Part B premiums. Family rates would be set at twice the single rate regardless of family size. Tricare deductibles would be linked to Medicare rates with copayments waived for preventative care and prescription drug payments limited to no more than two thirds of the average copayment faced by civilians at retail pharmacies. In addition, the QRMC recommended that health care for retirees under age 65 be financed through accrual accounting in order to illuminate how current manning decisions will affect future costs.

In January, 2009, DOD's Military Health System Senior Oversight Committee (SOC) issued a report responding to the recommendations of the Task Force on the Future of Military Health Care. The SOC response rejected some of the Task Force's specific cost-sharing recommendations, but did state that "DOD will continue to ask for congressional authority to charge fees and copays in an effort to maintain both a generous health care benefit and a fair and reasonable cost-sharing arrangement between beneficiaries and DOD."<sup>68</sup> If the Obama Administration decides to pursue this option, details might be included in the official budget submission expected in May or in the DOD's national defense authorization legislative package.

## **Preparing for "The Wars We're In"**

Asserting that DOD is culturally conditioned to focus on preparation for conventional combat against forces similar to our own, Secretary Gates said a second set of his recommendations were intended to institutionalize within the defense establishment capabilities that are vital to waging irregular warfare, as U.S. forces currently are doing in Iraq and Afghanistan.

## **Intelligence, Reconnaissance, and Surveillance (ISR)<sup>69</sup>**

Secretary Gates, himself a former Director of Central Intelligence, has indicated his intention to increase intelligence, surveillance, and reconnaissance (ISR) support to the warfighter by some \$2

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<sup>65</sup> Task Force on the Future of Military Health Care Final Report, December 2007 (available at [http://www.dodfuturehealthcare.net/images/103-06-2-Home-Task\\_Force\\_FINAL\\_REPORT\\_122007.pdf](http://www.dodfuturehealthcare.net/images/103-06-2-Home-Task_Force_FINAL_REPORT_122007.pdf)).

<sup>66</sup> Tricare Prime is DOD's HMO-like health plan option.

<sup>67</sup> Tricare Standard and Tricare Extra are DOD's fee-for-service and preferred provider type health plan options.

<sup>68</sup> Department of Defense Military Health System Senior Oversight Committee, "Response to the Recommendations of the Task Force on the Future of Military Health Care," January 2009, p. 103.

<sup>69</sup> Prepared by Richard A. Best Jr., Specialist in National Defense, Christopher Bolcom, Specialist in Military Aviation, and Allan Hess, National Defense Fellow.

billion within the base budget. This initiative reflects the expanding use of ISR systems, especially unmanned aerial vehicles (UAVs), in Iraq and Afghanistan to locate targets that can be attacked with minimal damage to innocent civilians or property. DOD notes that “the number of deployed UAS [unmanned aerial systems] has increased from approximately 167 aircraft in 2002 to over 6,000 in 2008, while defense investment in UAS capabilities has dramatically grown from \$284 million in Fiscal Year 2000 to \$2.5 billion in Fiscal Year 2008.”<sup>70</sup>

Gates recommended funding to field and sustain 50 continuous orbits of *Predator*-class and the more capable *Reaper*-class UAVs, along with manned ISR platforms, such as the turbo-prop aircraft used by Army brigade-level commanders in Iraq (as part of Task Force Odin), to provide situational awareness—locating adversaries and even IEDs. The Gates initiative is designed to include the acquisition of key tactical ISR systems in the base budget rather than in supplementals. Reliance on supplemental funding is seen as resulting in insufficient ISR resources to meet ongoing operational demands in Iraq and Afghanistan and elsewhere.

Gates also announced plans for more extensive R&D on ISR systems, with emphasis on systems that provide links between warfighters and national systems. No details were provided.

The day after Gates set forth his ISR recommendations, the Director of National Intelligence (DNI), Dennis Blair, announced that his office and DOD have agreed on a plan to deploy new imagery satellites whose design will evolve from current satellites and increase the use of commercially available imagery. Current satellites are approaching the end of their operational lifespan; a previous replacement approach (known as Future Imagery Architecture) was cancelled in 2005 as a result of technical difficulties and cost-overruns and thus new systems are required. Media reports indicate, however, that some Members favor an alternative approach to the one approved by the DNI, one based on new systems that the Administration currently judges to be technologically immature. Although Blair’s announcement did not mention the cost of the satellite program (which will be funded in the classified National Intelligence Program (NIP)), some media accounts suggest that costs of the new systems will approach \$10 billion.<sup>71</sup>

### **Developing Partner Capacity (Section 1206)<sup>72</sup>**

In his April 6 statement, Secretary Gates said he was recommending an increase of \$500 million “to boost global capacity efforts.... training and equipping foreign militaries to undertake counter terrorism and stability operations.” Such an increase in funding for building global partnership capacity under “Section 1206” of the FY2006 National Defense Authorization Act (NDAA), P.L. 109-163, as amended, would require Congress to once again raise the authorized limit. The current authorized amount is \$350 million. Some expect that DOD may also propose extending Section 1206 authority to allow support of a wider array of partner nation security forces than currently is permitted.

Both the proposed increase in the Section 1206 authorized funding level and an expansion of the types of foreign security personnel eligible for Section 1206 assistance would be consistent with

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<sup>70</sup>Department of Defense, *Quadrennial Roles and Missions Review Report*, January 2009, p. 25.

<sup>71</sup> Andy Pasztor and Siobhan Gorman, “Satellite Proposals Gain Traction After North Korea’s Launch,” *Wall Street Journal*, April 5, 2009.

<sup>72</sup> Prepared by Nina Serafino, Specialist in International Security Affairs.

DOD's original proposal for building global partnership capacity legislation in 2005. At that time, DOD requested authority, beginning in FY2006, to spend up to \$750 million per fiscal year to assist foreign military and security forces, including armies, guard, border security, civil defense, infrastructure protection, and police forces.

From the start, Section 1206 authority has been highly controversial, with some policymakers judging that the Secretary of State should retain authority over foreign military and security force training. As a result of disagreements over bestowing a new, global "train and equip" authority on DOD, Congress substantially scaled back DOD's request in 2005 action. As originally enacted in P.L. 109-163, Section 1206 spending authority was limited to \$200 million per year and only foreign military forces were eligible for assistance. The new Section 1206 authority also contained several restrictions, making it subject to existing human rights and other restrictions elsewhere in law.

Congress has amended Section 1206 authority twice. In the FY2007 NDAA (P.L. 109-364), Congress raised the authorized spending limit to \$300 million. P.L. 109-364 also amended Section 1206 to require the concurrence of the Secretary of State for all expenditures.<sup>73</sup> In action on the FY2009 National Defense Authorization Act (P.L. 110-417), Congress extended Section 1206 authority through FY2011, raised the spending limit to \$350 million, and made those funds available across fiscal years, and included maritime security forces among those eligible to receive assistance. It rejected the Bush Administration's proposal to make Section 1206 authority permanent, to extend eligibility to broad array of foreign police and other security forces, and to increase the funding cap to \$750 million.<sup>74</sup>

### **Army Brigade Combat Teams<sup>75</sup>**

Secretary Gates proposed reducing from 48 to 45 the number of active duty Brigade Combat Teams the Army will create as it reorganizes its combat force from 10 divisions (each numbering between 10,000 and 18,000 soldiers) to a larger number of brigades, each comprising between 3,000 and 5,000 troops. Unlike older brigades, which typically have to borrow various specialists from other units in order to deploy overseas, the new Brigade Combat Teams are intended to be organizationally independent, including on their rosters all the personnel they would need for deployment. By reorganizing its force into a larger number of smaller units, the Army hoped to give soldiers more time at their home bases between deployments (called "dwell time"). Moreover, since the new units are self-sufficient, the Army also hoped to eliminate the use of Stop Loss orders, which require personnel to remain on active duty after the end of their enlistment when their particular skills are needed.

The Army began restructuring from a division-centric organization to brigade-centric units shortly after September 11, 2001. The original concept, as outlined in the FY2006 Quadrennial

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<sup>73</sup>The original legislation called only for the Secretaries of Defense and State to jointly formulate any Section 1206 program and for the Secretary of Defense to coordinate program implementation with the Secretary of State. This provision remains in current law.

<sup>74</sup> For further information, see CRS Report RS22855, *Section 1206 of the National Defense Authorization Act for FY2006: A Fact Sheet on Department of Defense Authority to Train and Equip Foreign Military Forces*, by Nina M. Serafino.

<sup>75</sup> Prepared by Charles A. Henning, Specialist in Military Manpower Policy.

Defense Review (QDR) was to transform the active Army into 42 Brigade Combat Teams and 75 Modular Support Brigades. In 2007, when a decision was made to add 65,000 soldiers to the Army's force structure (increasing active duty end strength from 482,400 to 547,400), six Brigade Combat Teams and eight Modular Support Brigades were added to the planned brigade-centric reorganization. At that point, the plan was to create 48 Brigade Combat Teams and 83 Modular Support Brigades by 2013.

The Army currently has 43 Brigade Combat Teams, with the 44<sup>th</sup> scheduled for activation in August, 2009.

### **Special Operations Forces<sup>76</sup>**

Secretary Gates recommended increasing by 2,800 or 5% the number of personnel assigned to Special Operations Forces, which are units trained to perform small-scale, often clandestine military operations. How the proposed personnel increase will be spread among the Services and a target date for completing the expansion were not announced. Gates also recommended unspecified increases in the purchase of transport and aerial refueling aircraft that are adapted to special operations missions.<sup>77</sup>

The FY2006 Quadrennial Defense Review (QDR) increased the number of active duty Special Forces Battalions by one-third and established a 2,600-strong Marine Corps Special Operations Command, a capability that did not previously exist in the Marine Corps. Today, there are approximately 55,000 special operations personnel in the four military services.

The qualification and training requirements for special operations personnel are lengthy and have a high failure rate. As a result, manning an enlarged force structure for special operations personnel takes more time than manning conventional combat units.

### **Helicopter Crew Training**

Secretary Gates recommended adding to the base budget \$500 million to increase the number of helicopters that could be deployed, with most of the funds intended to increase the number of Army helicopter pilots recruited and trained.

Gen. Martin Dempsey, USA, chief of the Army's Training and Doctrine Command (TRADOC) is reported to have said the additional funds would address the complaints of U.S. commanders in Afghanistan, who say they have the helicopters they need but not enough trained personnel to fly and maintain them. Currently, the Army trains about 1,200 helicopter pilots annually, but it needs nearly 1,500, Dempsey reportedly said, adding that an additional \$500 million would allow him to close the gap in two years.<sup>78</sup>

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<sup>76</sup> Prepared by Charles A. Henning, Specialist in Military Manpower Policy.

<sup>77</sup> For additional information, see CRS Report RS21048, *U.S. Special Operations Forces (SOF): Background and Issues for Congress*, by Andrew Feickert

<sup>78</sup> Amy Butler, "Army Shifts Focus to Helo Pilot Training," *Aviation Week and Space Technology*, April 20, 2009.



## **Shipbuilding<sup>79</sup>**

Navy shipbuilding plans have emerged in recent years as a matter of particular congressional concern. The ship-procurement rate for the last 17 years has been well below the average annual rate that would be needed over the long term to achieve and maintain the Navy's planned 313-ship fleet. Many observers believe the Navy's long-term shipbuilding plan is unaffordable. Certain Navy shipbuilding programs in recent years have experienced significant cost growth, construction delays, and construction deficiencies. Members of Congress who track Navy shipbuilding have expressed growing concern and frustration about the situation.

Secretary Gates linked various shipbuilding proposals to different aspects of his overall strategic vision, justifying some of them in terms of conventional force modernization requirements, others in terms of acquisition reform, and still others in terms of his effort to institutionalize within DOD thinking a higher priority for irregular warfare. His proposed actions concerning Navy ships did not go as far as some observers had expected or speculated in terms of proposed reductions or cutbacks. In particular, Secretary Gates did not propose a near-term and permanent reduction in the size of the Navy's aircraft carrier force from 11 ships to 10, and he did not propose the cancellation of second and third Zumwalt (DDG-1000) class destroyers. Some of Gates's proposed actions simply confirmed existing Navy plans for certain shipbuilding programs, or were consistent with recent press reports about emerging Navy plans for those programs.

The following section discuss in more detail Secretary Gates's recommendations concerning various classes of vessels under development or under construction.

## **Aircraft Carriers**

Instead of proposing a near-term and permanent reduction in the size of the carrier force from 11 ships to 10, Gates proposed that the schedule for procuring new carriers be stretched out somewhat, to a rate of one carrier every five years. The previous schedule called for procuring one carrier approximately every 4.5 years (a combination of four- and five-year intervals). The stretching out of the carrier procurement schedule, Gates said, would place carrier procurement "on a more fiscally sustainable path." Gates stated that his proposed schedule would permit the Navy to maintain an 11-carrier force through about 2040, after which the force would decrease to 10 ships.<sup>80</sup>

In announcing the proposal to stretch out the carrier procurement schedule (and his proposals regarding the CG(X) cruiser, the 11<sup>th</sup> LPD-17 amphibious ship, and the Mobile Landing Platform ship), Gates stated, "The healthy margin of dominance at sea provided by America's existing battle fleet makes it possible and prudent to slow production of several major surface combatants and other maritime programs."

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<sup>79</sup> Prepared by Ronald O'Rourke, Specialist in Naval Affairs.

<sup>80</sup> Reducing the carrier force in the near term and permanently from 11 ships to 10 could have involved cancelling the mid-life nuclear refueling overhaul scheduled in FY2013 for the aircraft carrier Abraham Lincoln (CVN-72), and retiring the Lincoln in 2015, at about age 26, instead of keeping the ship in operation to about age 50.

Although the Navy under Gates's proposed carrier-procurement schedule is generally to maintain an 11-carrier force through 2040, the force is projected to temporarily drop to ten ships for a 33-month period in 2012-2015. This temporary drop has been projected for years and is not a result of Gates's proposed carrier-procurement schedule. The drop will occur because the aircraft carrier *Enterprise* (CVN-65) is scheduled to retire in 2012 at age 51, and its replacement, the *Gerald R. Ford* (CVN-78), is not scheduled to enter service until 2015.

Current law (10 U.S.C. 5062(b)) requires the Navy to maintain a force of not less than 11 operational aircraft carriers, so the Navy needs a legislative waiver from Congress to permit the carrier force to drop temporarily to ten ships during the scheduled 33-month period in 2012-2015. The Navy asked for this waiver in FY2008 and FY2009; Congress did not grant it. The Navy plans to ask for it again in FY2010. The Navy argues that keeping the *Enterprise* in service for an additional three years would require more than \$2 billion in ship maintenance costs and ship operating and support costs and will result in only one additional six- or seven-month deployment by the ship. The Navy also argues that it will maximize the operational availability of its ten operational carriers during the 33-month period by rescheduling certain maintenance actions planned for those ships. Those who question whether the legislative waiver should be granted argue that potential delays in completing the construction of CVN-78 could extend the 33-month gap to perhaps 45 months, or longer, making it potentially more necessary and more cost effective to spend the money needed to keep *Enterprise* in operation to 2015. If Congress does not grant the legislative waiver, the Navy would need to begin scheduling the maintenance funding needed to keep the ship in operation. Some portion of that funding might be needed in FY2010.

Secretary Gates's proposal for shifting carrier procurement to one ship every five years will defer the procurement of the next aircraft carrier, CVN-79, by one year, from FY2012 to FY2013. Such a one-year deferral could increase the cost of both CVN-79 and Virginia-class submarines under construction at that shipyard. A one-year deferral in the procurement date of CVN-79 could also reduce the amount of advance procurement funding that is to be requested for the ship in FY2010.<sup>81</sup>

### **DDG-1000 and DDG-51 Destroyers**

Secretary Gates stated that the proposed FY2010 budget "will include funds to complete the buy of two navy destroyers in FY10. These plans depend on being able to work out contracts to allow the Navy to efficiently build all three DDG-1000 class ships at Bath Iron Works in Maine and to smoothly restart the DDG-51 Aegis Destroyer program at Northrop Grumman's Ingalls shipyard in Mississippi. Even if these arrangements work out, the DDG-1000 program would end with the third ship and the DDG-51 would continue to be built in both yards." He added that "If our efforts with industry are unsuccessful, the department will likely build only a single prototype DDG-1000 at Bath and then review our options for restarting production of the DDG-51. If the department is left to pursue this alternative, it would unfortunately reduce our overall procurement of ships and cut workload in both shipyards."

Gates's proposal regarding destroyer procurement was one of several program actions that he cited after saying, of DOD's acquisition and contracting processes: "The perennial procurement

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<sup>81</sup> Aircraft carrier procurement is discussed further in CRS Report RS20643, *Navy Ford (CVN-78) Class Aircraft Carrier Program: Background and Issues for Congress*, by Ronald O'Rourke.

and contracting cycle—going back many decades—of adding layer upon layer of cost and complexity onto fewer and fewer platforms that take longer and longer to build must come to an end,” he told reporters April 6. “There is broad agreement on the need for acquisition and contracting reform in the Department of Defense. There have been enough studies. Enough hand-wringing. Enough rhetoric. Now is the time for action.”

Soon after Gates’s news conference, it was reported that the Navy had reached an agreement with Bath Iron Works and Northrop to have Bath build all three DDG-1000s. Under the agreement, Northrop will build the first two DDG-51s to be procured under the DDG-51 restart, and Bath would build the third DDG-51.

The Navy’s proposed FY2010 budget will request about \$1 billion in funding to complete the cost of the third DDG-1000, which was authorized but only partially funded in FY2009, and additional funding for the procurement of the first DDG-51. (This is what Gates meant when he stated that the proposed FY2010 budget “will include funds to complete the buy of two navy destroyers in FY10.”) The FY2011 budget is to include funding for the procurement of two more DDG-51s.

Secretary Gates’s proposal on destroyers appears to endorse, to some degree at least, the proposal announced by the Navy in July 2008 to halt DDG-1000 procurement and restart DDG-51 procurement. This proposal was the subject of considerable debate in Congress last year, with supporters of the DDG-51 and DDG-1000 making arguments in favor of their own ships.

Gates’s April 6 news conference left unclear the status of a January 2009 proposal made by the then-DOD acquisition executive, John Young, to begin procuring in FY2012 a ship called the Future Surface Combatant (FSC) that could be based on either the DDG-51 design or the DDG-1000 design. Gates stated that under his proposal, “the DDG-1000 program would end with the third ship,” but depending on how the term “DDG-1000 program” is defined, that statement might or might not preclude an FSC based on the DDG-1000 design. The status of the FSC proposal following Gates’s April 6 news conference is a potentially important issue for Congress to learn more about.<sup>82</sup>

## **CG(X) Cruiser**

Gates proposed a delay in the start of the CG(X) cruiser program “to revisit both the requirements and acquisition strategy” for the program. The Navy wants to procure CG(X)s to replace its 22 Ticonderoga-class Aegis cruisers, which are projected to reach their retirement age of 35 years between 2021 and 2029.

In announcing this proposal (and his proposals on the aircraft carrier procurement schedule and on delaying procurement of the 11<sup>th</sup> LPD-17 amphibious ship and the Mobile Landing Platform ship), Gates said, “The healthy margin of dominance at sea provided by America’s existing battle fleet makes it possible and prudent to slow production of several major surface combatants and other maritime programs.” Gates’s proposed delay is broadly consistent with press reports since

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<sup>82</sup> Procurement of DDG-1000 and DDG-51 destroyers is discussed further in CRS Report RL32109, *Navy DDG-51 and DDG-1000 Destroyer Programs: Background and Issues for Congress*, by Ronald O’Rourke.

late-2008 that the Navy plans to defer the procurement of the first CG(X) from FY2011 to about FY2017.<sup>83</sup>

### **Littoral Combat Ship (LCS)**

Secretary Gates recommended continuation of the planned procurement of Littoral Combat Ships (LCSs) which he described as, “a key capability for presence, stability, and counterinsurgency operations in coastal regions.” This was one of several recommendations he made after stating: “Our contemporary wartime needs must receive steady long-term funding and a bureaucratic constituency similar to conventional modernization programs. I intend to use the FY10 budget to begin this process.”

Gates said the FY2010 budget would request funding for three more LCSs, and that a total of 55 LCSs are planned. Both elements of this statement are consistent with prior Navy planning and represent no change to the program: The LCS program was scheduled to increase from two ships in FY2009 to three ships in FY2010 as part of a plan to ramp up the annual LCS procurement rate to an eventual level of five or more ships per year, and the Navy has planned a total of 55 LCSs since 2006.

The LCS program was restructured in 2007 following revelations of significant cost growth and construction problems. The program continues to be a program of particular oversight focus for Congress. The Seapower and Expeditionary Forces subcommittee of the House Armed Services Committee, for example, held a hearing on March 10, 2009, to review the status of the program.<sup>84</sup>

### **LPD-17, Mobile Landing Platform (MLP), and Joint High Speed Vessel (JHSV)**

Laying the groundwork for a potentially dramatic change in DOD planning, Gates proposed deferring from FY2010 to FY2011 the procurement of two ships intended to support amphibious landings, saying he wanted to, “assess costs and analyze the amount of these capabilities the nation needs.”

Gates drew the point more sharply during a speech to the Naval War College on April 17, citing amphibious landings as one example of areas in which he wanted the QDR to be “realistic about the scenarios where direct U.S. military action would be needed.” As recently as 1991, he acknowledged, the threat of a large-scale amphibious assault by U.S. Marines on the coast of Kuwait played a useful role in tying down Iraqi forces while the actual U.S.-led attack came overland from Saudi Arabia. But Gates added: “We have to take a hard look at where it would be necessary or sensible to launch another major amphibious action again. In the 21<sup>st</sup> century, how much amphibious capability do we need?”<sup>85</sup>

Pending analysis of that issue by the QDR, Gates recommended deferring the planned funding in FY2010 of an 11<sup>th</sup> San Antonio (LPD-17) class amphibious ship and the first Mobile Landing

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<sup>83</sup> The CG(X) program is discussed further in CRS Report RL34179, *Navy CG(X) Cruiser Program: Background, Oversight Issues, and Options for Congress*, by Ronald O'Rourke.

<sup>84</sup> The LCS program is discussed further in CRS Report RL33741, *Navy Littoral Combat Ship (LCS) Program: Background, Oversight Issues, and Options for Congress*, by Ronald O'Rourke.

<sup>85</sup> DOD News transcript: “Remarks by Secretary of Defense Robert Gates at the Naval War College, Newport, Rhode Island,” April 17, 2009 accessed at <http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=4405>.

Platform—a ship intended to function as a pier on which cargo ships could transfer their loads to amphibious landing craft.

Procurement of LPD-17s has been a topic of congressional interest in recent years. Gates's proposal could increase the cost of the 11<sup>th</sup> LPD-17 and the MLP in then-year dollars, if not also in real (inflation-adjusted) dollars. The FY2010 budget will request roughly \$770 million in funding needed to complete the cost of the 10<sup>th</sup> LPD-17, which was authorized but only partially funded in FY2009.<sup>86</sup>

Secretary Gates did not recommend any change in planned procurement of Joint High Speed Vessels (JHSVs), high-speed sealift ships the production of which is just beginning. He announced that, “to improve our inter-theater lift capability,” pending delivery of the first JHSV, DOD would charter two existing ships of this kind, in addition to two it currently has under charter. The chartered ships of this type all have been foreign-built.

## Aircraft<sup>87</sup>

As with his shipbuilding recommendations, Secretary Gates cited different rationales for his various recommendations about aircraft programs, justifying some of them in terms of the need to affordably modernize U.S. conventional forces and citing others as necessary steps toward acquisition reform.

### Tactical Combat Aircraft (F-35, F-22, F/A-18)

Secretary Gates basically reaffirmed the existing plan for fighter procurement, except for a slight reduction in the number of F/A-18-type planes for the Navy to be funded in FY2010. He thus rejected a vigorous campaign by proponents of the Air Force's F-22 to continue production of that aircraft which supporters maintain has a uniquely potent blend of speed and stealthiness. Instead, Gates and Joint Chiefs of Staff Vice Chairman Gen. James E. Cartwright, called for a force made up of the planned 187 F-22s, plus thousands of the cheaper and less stealthy F-35s, and several hundred missile-armed *Reaper* and *Predator* UAVs. The UAVs would replace many of the 250 older fighters, mostly F-16s, that Gates plans to retire.<sup>88</sup> This marks the first time that senior DOD officials have identified UAVs as major components of the U.S. combat force rather than as support equipment.

### F-35 Joint Strike Fighter

Secretary Gates recommended buying 30 F-35s in FY2010, an increase from the 14 funded in FY2009, with an increase in funding from \$6.9 billion to \$11.2 billion. He called for buying 523 F-35s in FY2010-14 and a total of 2,443 of the aircraft over the program's life. This procurement profile matches the current F-35 program of record for FY09 and FY10, although \$11.2 billion is

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<sup>86</sup> LPD-17 procurement is discussed further in CRS Report RL34476, *Navy LPD-17 Amphibious Ship Procurement: Background, Issues, and Options for Congress*, by Ronald O'Rourke.

<sup>87</sup> Prepared by Christopher Bolckom, Specialist in Military Aviation and Allan Hess, National Defense Fellow.

<sup>88</sup> DOD News Transcript, “Media Roundtable of Secretary of Defense Robert Gates and General James Cartwright, Vice Chairman, Joint Chiefs of Staff and Selected Reporters, April 7, 2009, accessed at <http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=4399>.

higher than the \$8.4 billion originally planned for FY2010. Purchasing 513 aircraft over the five year defense plan is a slight increase (28 aircraft) over the current program, but the projected total purchase of 2,443 remains the same as previously planned.<sup>89</sup>

The Government Accountability Office (GAO) reported in March that DOD sought to increase the five-year purchase plan by 169, and criticized the \$33 billion effort as creating “very significant financial risk” in part due to a lack of flight testing prior to procuring large numbers of the aircraft.<sup>90</sup> Congress has waged an ongoing debate with DOD over funding a second engine type as an alternative power plant for the JSF, which Congress has supported.<sup>91</sup>

## F-22 Raptor

Secretary Gates recommended no further procurement of F-22s, thus ending the program at 187 planes—the 183 funded thus far plus four planes requested in the FY2009 supplemental appropriation.

Ending production at 183 matches the program of record for the F-22 *Raptor*; the four additional aircraft requested are intended to replace combat aircraft losses. In follow-on comments, Gates stated that advice from Combatant Commanders and the Air Force indicated “no military requirement for F-22s beyond... 187.” Air Force Chief of Staff, General Norton Schwartz, stated during his confirmation hearings in 2008, that his personal position was that the right number of F-22 aircraft was greater than 183 but less than the 381 that the Air Force had been arguing for. However, he has since avoided any public statements on the matter.<sup>92</sup> Chairman of the Joint Chiefs of Staff, Admiral Mike Mullen, said in December 2008 that the Air Force had discussed with him a plan to purchase 60 additional aircraft, but deferred further discussions to the new Presidential administration.<sup>93</sup>

On April 13, 2009 the Air Force’s civilian and military leadership, acknowledging the difficult budget environment and new risk assessments by DOD, formally endorsed Secretary Gates’s proposal to complete F-22 procurement at 187 aircraft.<sup>94</sup> Congress has generally supported the F-22 in the past. In FY2009, Congress added to the budget request \$523 million that could be used for advanced procurement of an additional lot of F-22s should the administration choose to do so.<sup>95</sup>

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<sup>89</sup> For further analysis on the F-35, see CRS Report RL30563, *F-35 Joint Strike Fighter (JSF) Program: Background and Issues for Congress*, by Ronald O'Rourke.

<sup>90</sup> U.S. Government Accountability Office, *Joint Strike Fighter: Accelerating Procurement before Completing Development Increases the Government's Financial Risk*, GAO-09-303, March 12, 2009, <http://www.gao.gov/new.items/d09303.pdf>.

<sup>91</sup> See CRS Report RL33390, *Proposed Termination of Joint Strike Fighter (JSF) F136 Alternate Engine*, by Christopher Bolkcom.

<sup>92</sup> U.S. Congress, Senate Committee on Armed Services, *Nomination Hearing*, US Air Force Chief of Staff, 110<sup>th</sup> Cong., 2<sup>nd</sup> sess., July 22, 2008.

<sup>93</sup> U.S. Department of Defense, “DOD News Briefing with Adm. Mullen From the Pentagon,” press release, December 10, 2008, <http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=4330>.

<sup>94</sup> Michael Donley and Norton Schwartz. “Moving Beyond the F-22.” *Washington Post*. April 13, 2009.

<sup>95</sup> For further analysis on the F-22, see CRS Report RL31673, *Air Force F-22 Fighter Program: Background and Issues for Congress*, by Ronald O'Rourke, and CRS Report RS22684, *Potential F-22 Raptor Export to Japan*, by Christopher Bolkcom and Emma Chanlett-Avery.

## F/A-18s

Secretary Gates recommended buying 31 F/A-18 *Super Hornets* for the Navy in FY2010, without specifying the mix of models. FY2009 Navy budget documents indicate a planned FY2010 request for 18 F/A-18E/F *Super Hornets* and 22 EA-18G *Growlers*—a version of the plane modified for electronic warfare—in all, a total of 40 aircraft. If, as most observers believe, Secretary Gates includes EA-18Gs in his recommendation for a revised FY-10 purchase, then 31 aircraft represent a reduction of nine *Super Hornets* and *Growlers* from the previous DOD budget.<sup>96</sup>

Congress has generally funded the F/A-18 as requested, with some modification to the mix of “E,” “F,” and “G” models to be procured.

## Air Mobility (KC-X, C-17)

Secretary Gates recommended that the Air Force remain on its current schedule to develop a new aerial refueling tanker (KC-X) to replace the KC-135, which is the Air Force’s top acquisition priority. A contract to develop and build the KC-X was awarded to Northrop Grumman in February 2008, but after the GAO upheld a formal protest by competitor Boeing, Secretary Gates cancelled the competition and called for a “cooling off” period, deferring all program decisions to a new presidential administration.<sup>97</sup> Before Gates’s April 6<sup>th</sup> announcement, it was unclear when the competition would restart, with some sources claiming it might be delayed up to five years.<sup>98</sup> While some in Congress support a “split” buy, i.e., having both companies build new tankers, Secretary Gates remains opposed, citing high costs and potential problems the Air Force might encounter by maintaining two separate training programs and logistics operations for the tanker fleet.<sup>99</sup>

Congress has expressed strong support for replacing the aging KC-135 fleet, but has disagreed with DOD on how this might best be accomplished. Over the past three legislative sessions, Congress urged DOD to increase the proposed rate of KC-X production and has created a *Tanker Replacement Transfer Fund* to give DOD flexibility in using procurement, O&M, and R&D funds to support KC-X acquisition.<sup>100</sup>

Secretary Gates recommended ending procurement of the C-17 Globemaster III long-range cargo jet after production of the 205 planes already in service or funded. Ending production at 205 aircraft matches the program of record for the C-17 *Globemaster III*. Potential questions may arise over what analysis was used for this conclusion. In 2008, the incoming commander of United States Transportation Command, General Duncan McNabb, stated that the strategic airlift requirement (33.95 million ton miles/day (MTM/D)) set by mobility studies in 2005 could be met

<sup>96</sup> For further analysis on these aircraft, see CRS Report RL30624, *Navy F/A-18E/F and EA-18G Aircraft Procurement and Strike Fighter Shortfall: Background and Issues for Congress*, by Ronald O'Rourke.

<sup>97</sup> U.S. Department of Defense, “DOD Announces Termination of KC-X Tanker Solicitation,” press release, September 10, 2008, <http://www.defenselink.mil/releases/release.aspx?releaseid=12195>.

<sup>98</sup> Josh Rogin, “Obama Seeks to Delay Tanker, Cancel Bomber,” *CQ Today*, March 9, 2009.

<sup>99</sup> U.S. Department of Defense, “DOD News Briefing with Secretary Gates From the Pentagon,” press release, March 18, 2009, <http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=4381>.

<sup>100</sup> For further analysis of this issue see CRS Report RL34398, *Air Force KC-X Tanker Aircraft Program: Background and Issues for Congress*, by Ronald O'Rourke.

with 205 C-17s, 52 modernized C-5Bs, and 59 C-5As.<sup>101</sup> The Mobility Capability Requirements Study (MCRS), a study due to be delivered to DOD in May 2009, was intended to analyze strategic airlift requirements based on several scenarios, and to inform airlift procurement decisions. With the C-17 program completed at 205, the results of this newest study may put more focus on the planned number of C-5 aircraft to be modernized.

FY2007 was the last year C-17s were procured in the annual budget, and congress funded the 12 aircraft requested. DOD has requested, and Congress has provided 25 C-17s in subsequent war-time supplemental appropriations.<sup>102</sup>

### **Acquisition Reform (VH-71, CSAR-X)**

Two high-profile helicopter programs would be terminated under Secretary Gates's recommendations who justified both proposals as part of his effort to reform DOD's acquisition process.

He recommended terminating the VH-71 helicopter, intended to transport the President and other senior officials, on the basis of its troubled acquisition history and large cost overruns. While post-9/11 security concerns gave the program a certain "urgency," the long timelines for delivery of fully capable helicopters (slated for initial deployment in 2017) work against that argument.<sup>103</sup>

President Obama recently added to the discussion by declaring the VH-71 " ... an example of the procurement process gone amuck" and stated that he was satisfied with the current helicopter fleet.<sup>104</sup> Gates also decided against purchasing the first lot of less capable "Increment 1" aircraft, stating they would only last five to ten years, although it is unclear why their useful life would be so much less than other models of helicopters.

Over the past three legislative sessions, Congress has expressed concern over noteworthy cost increases, schedule delays, and foreign influence on the program. Over this time period, Congress cut approximately \$300 million of the \$2 billion from the Navy's R&D accounts for the VH-71.

Secretary Gates also recommended terminating the Air Force Combat Search and Rescue helicopter (CSAR-X) and called for reviewing the requirement the aircraft was designed to meet. His rationale for terminating the CSAR-X helicopter program jibes with a commonly held belief that the process by which DOD defines the requirements a new weapon is supposed to meet does not adequately force the military services to make hard decisions or trade off capabilities among themselves. The debate over whether search and rescue (SAR) missions require a specialized aircraft has been in progress for several years and was most recently raised by former Pentagon

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<sup>101</sup> "Modernized" C-5s are those modified under the Reliability Enhancement Re-engining Program (RERP). For a discussion of the RERP, see U.S. Congress, Senate Committee on Armed Services, *Advance Questions for General McNabb*, US Transportation Command, 110<sup>th</sup> Cong., 2<sup>nd</sup> sess., July 22, 2008.

<sup>102</sup> For further analysis of this program see CRS Report RS22763, *Air Force C-17 Aircraft Procurement: Background and Issues for Congress*, by Ronald O'Rourke, and CRS Report RL34264, *Strategic Airlift Modernization: Analysis of C-5 Modernization and C-17 Acquisition Issues*, by Christopher Bolcom.

<sup>103</sup> CRS Report RS22103, *VH-71 Presidential Helicopter Program: Background and Issues for Congress*, by Ronald O'Rourke.

<sup>104</sup> The White House, "Remarks by the President in question and answer session at the closing of the Fiscal Responsibility Summit," press release, February 23, 2009, [http://www.whitehouse.gov/the\\_press\\_office/Remarks-by-the-President-in-question-and-answer-session-at-the-closing-of-the-Fisc/](http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-in-question-and-answer-session-at-the-closing-of-the-Fisc/)



Acquisition Chief John Young.<sup>105</sup> In an interview in November 2008, Mr. Young stated that DOD “... [has] a lot of assets that can be used in rescue missions with planning, so I don’t necessarily just automatically rubber-stamp the CSAR-X requirement.” The Air Force countered that it has twice won approval for a dedicated CSAR aircraft from the Joint Requirements Oversight Council (JROC), the high-level DOD panel that approves the requirements a new weapons program is supposed to meet. The service argued that CSAR was a critical shortfall at the beginning of combat operations in Afghanistan in 2001, that specially-trained CSAR forces were used far more often than recognized, and that using non-specialized forces for CSAR missions would result in increased U.S. casualties. Further statements by Secretary Gates indicate that DOD might also consider making CSAR a joint capability, thereby changing the organization and acquisition process for any dedicated assets.

Over the past three legislative sessions, Congress cut \$309 million from the \$849 million requested in Air Force R&D for the CSAR-X. Congress also used \$185 million of these funds to support the HH-60 helicopter, which the Air Force currently uses for CSAR mission.

## **Missile Defense<sup>106</sup>**

Secretary Gates recommended that DOD restructure the ballistic missile defense (BMD) program to focus more on rogue-state and theater ballistic missile threats and maintain and improve existing long-range BMD capabilities. Overall, the Missile Defense Agency (MDA) budget would be reduced by about \$1.4 billion.<sup>107</sup>

These recommendations seem to align with Gates’s broader strategic thinking about the types of foreign threats the United States is most likely to face (e.g., “hybrid warfare”, where U.S. troops could be threatened by state and non-state actors armed with short-range ballistic missiles). Additionally, Gates’s stated objective is to adjust DOD investments and rebalance the overall force, especially in the resource constrained era he acknowledges. This seems to reflect his argument that the United States should focus more attention on shorter range BMD investments. Gates also wants to improve our existing U.S. long-range BMD system without necessarily acquiring more of that same capability pending DOD review of the need for additional interceptors and whether more future-oriented programs could better supplement the overall BMD capability.

## **Theater Defenses (THAAD, SM-3, Aegis)**

To accelerate deployment of defenses against theater ballistic missiles—those without intercontinental range—Secretary Gates recommended adding to the FY2010 budget \$700 million to field more SM-3 (Standard Missile 3) and THAAD (Terminal High Altitude Area Defense) BMD interceptors, and about \$200 million more to convert six additional Aegis ships to

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<sup>105</sup> All references in this paragraph come from an investigation by the reporting staff of *Aviation Week and Space Technology*, an aerospace trade journal. See Michael Fabey, “Young Opinion on CSAR Questioned,” *Aerospace Daily & Defense Report*, January 28-30, 2009.

<sup>106</sup> Prepared by Stephen A. Hildreth, Specialist in Missile Defense.

<sup>107</sup> For additional analysis of the missile defense issue see CRS Report RS22120, *Ballistic Missile Defense: Historical Overview*, by Steven A. Hildreth and CRS Report RL33240, *Kinetic Energy Kill for Ballistic Missile Defense: A Status Overview*, by Steven A. Hildreth.

provide BMD capabilities. He added that this would basically fund the maximum production capacity of the production lines for the SM-3 and THAAD, which are coming out of the testing phase and moving into full-rate production.

## **Ground-Based National Missile Defense**

Secretary Gates recommended not increasing the current number of long-range ground-based interceptors deployed in Alaska, as had been planned. Currently, there are slightly more than two dozen of these interceptors deployed in Alaska and California in the event of missile attacks against the United States from North Korea or Iran. Gates said it was important “to robustly fund continued research and development to improve the capability we already have to defend against long-range missile threats.”

In response to questions about plans to construct a third missile defense site in Europe, Joint Chiefs of Staff Vice Chairman Gen. James Cartwright, USMC, said there are “sufficient funds in ’09 that can be carried forward to do all of the work that we need to do at a pace that we’ll determine as we go through the program review, the quadrennial defense review, and negotiations with those countries.”<sup>108</sup> Further details were not offered.<sup>109</sup>

Gates also recommended cancelling the Multiple Kill Vehicle (MKV) program<sup>110</sup> because of its significant technical challenges and the fresh need to look at the requirements for that system. The MKV is seen by some as enhancing the capability of long-range interceptors for mid-course BMD in the future.

## **Boost-Phase Defenses (Airborne Laser and KEI)**

Secretary Gates recommended various program changes regarding boost-phase defense (i.e., efforts aimed at destroying attacking ballistic missiles shortly after they launch). He said the United States has good mid-course and terminal BMD capabilities, but that we need to first figure out what the United States requires concerning boost-phase BMD research and development before proceeding further. In this regard, Gates recommended cancelling the second ABL (Airborne Laser) prototype aircraft and shifting the focus of that program to further research and development. He said the ABL program is not ready for production, that it has “significant affordability and technology problems, and the program’s proposed operational role is highly questionable.” Also, in response to a question about whether there might be changes in the BMD acquisition process, Gen. Cartwright, said that “what will change is we’re going to start to shift and understand in that first phase what the leverage and potential opportunities are in the boost-phase, focus on the threats.... and start to reassess what it is and what we can do in the boost-phase for long-range.”

The status of the KEI (Kinetic Energy Interceptor) was left somewhat unclear by Gates announcement.<sup>111</sup> The KEI program is designed to provide a boost-phase BMD capability. At the

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<sup>108</sup> DOD transcript, “News Briefing With Secretary of Defense Robert Gates, April 6, 2009, <http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=4396>

<sup>109</sup> For further analysis of this issue, see CRS Report RL 34051 *Long-Range Ballistic Missile Defense in Europe*, by Steven A. Hildreth and Carl Ek.

<sup>110</sup> The MKV program is an effort to equip a single interceptor missile to destroy several incoming warheads.

<sup>111</sup> Like ABL, the KEI is intended to destroy attacking missiles in the first few minutes after they are launched; but the (continued...)

briefing with Secretary Gates, Gen. Cartwright only offered to place the KEI program in the context of reiterating the need to find the right balance between mid-course and terminal BMD systems and the need to review more precisely the requirements for boost-phase R&D in general.

### **Congressional Perspectives**

In response to Gates's recommendations, several senators wrote to the Secretary expressing their approval of the increases to THAAD and SM-3, but voicing concern about the overall cut to MDA funding, stating that it could "undermine our emerging missile defense capabilities to protect the United States against a growing threat."<sup>112</sup> At a media roundtable on April 7, 2009, Secretary Gates said "perhaps we can persuade them that all is not as bad as they seem to think" if he could show them the proposed changes to THAAD and SM-3, the sustained work on long-range systems for mid-course BMD, and the continued work on R&D for the boost-phase.

Congress has long been strongly supportive of BMD programs directed at defending U.S. forces deployed overseas, such as THAAD and SM-3. Gates's recommendations in this year's budget seem to align with those interests, as well as some congressional interest in using those same terminal BMD systems to address existing current Iranian missile capabilities that could reach as far as NATO's southern flank. Some view such an approach as complementing the proposed European missile defense site, or even serving as an alternative.

Although Congress has provided most of the funds requested for boost-phase BMD programs in recent years, some criticism has been leveled by various congressional defense committees and in some bill language. The ABL program has been particularly controversial. Similarly, although Congress has continued to fund deployment of long-range interceptors in Alaska, many in Congress have registered on-going concerns over the capabilities of that system and raised questions over the adequacy of the testing program for it. Gates's proposal would halt the continued deployment of those long-range interceptors and seek instead to "robustly fund continued research and development to improve the capability we already have." Congress has also expressed some concern over the MDA acquisition process in recent years, but whether this issue is addressed in the FY2010 defense budget request remains unclear.

### **Ground Combat Systems (FCS and EFV)<sup>113</sup>**

On April 6, 2009, Secretary of Defense Gates announced that he intended to significantly restructure the Army's Future Combat Systems (FCS) program, the Army's plan to modernize its entire suite of combat equipment. DOD plans to accelerate the spin out of selected FCS technologies to all brigade combat teams (BCTs) but will recommend cancelling the manned ground vehicle (MGV) component of the program. The MGV was intended to field eight separate tracked combat vehicle variants built on a common chassis that would eventually replace combat

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(...continued)

KEI program would use a very fast missile to do the job, rather than a laser.

<sup>112</sup> The April 6 letter, signed by Senators Joseph Lieberman, John Kyl, Lisa Murkowski, Mark Begich, Jeff Sessions, and James Inhofe, can be viewed at <http://lieberman.senate.gov/newsroom/release.cfm?id=311225&&>.

<sup>113</sup> Prepared by Andrew Feickert, Specialist in Military Ground Forces.

vehicles such as the M-1 *Abrams* tank, the M-2 *Bradley* infantry fighting vehicle, and the M-109 *Paladin* self-propelled artillery system.<sup>114</sup>

Secretary Gates said he was concerned that there were significant unanswered questions in the FCS vehicle design strategy and that despite some adjustments to the MGVs, that they did not adequately reflect the lessons of counterinsurgency and close quarters combat in Iraq and Afghanistan. Secretary Gates was also critical that the FCS program did not include a role for Mine-Resistant, Ambush-Protected (MRAP) vehicles that have been used successfully in current conflicts. After re-evaluating requirements, technology, and approach, DOD will re-launch the Army's vehicle modernization program, including a competitive bidding process.

There are a number of policy implications flowing from Secretary of Defense Gate's decision to restructure the FCS program. In essence, the Army was told to "go back to the drawing board" on this almost decade-old program once described as the "centerpiece" of Army modernization. Because the Army has focused exclusively on FCS for well over a decade, there has probably been little thought given to alternatives to the eight MGVs that were to be developed under the FCS program. DOD officials expressed misgivings that the Army had neither taken into account "the lessons learned of the operational realities in Iraq and Afghanistan" in the design of FCS MGVs nor carefully considered whether "one class of vehicles could in fact cover the range of operations that we envision are going to be the reality of the future."<sup>115</sup> Another point of contention is that the FCS program did not adequately address the role of MRAPs—a vehicle that the Army considers interim protection for soldiers in combat. MRAPs, while providing excellent protection to soldiers, are transport vehicles and are not fighting vehicles like the *Abrams*, *Bradleys*, *Strykers*, or the proposed FCS MGVs, so determining a more permanent role for these vehicles may prove challenging. Another implication will likely be developmental timelines. Should a decision eventually be made to develop and procure new non-MGV-based variants to replace the *Abrams*, *Bradley*, and *Paladins*, there will likely be questions raised about a decade long or greater development and procurement cycle, as was the case of the FCS program. There might also be resistance to an all-encompassing "systems of systems" FCS-like developmental effort for Army vehicle modernization, although commonality between platforms to reduce costs and improve maintainability and support could likely be viewed favorably.

Secretary Gates left unchanged the current plan to continue development and production of the Expeditionary Fighting Vehicle (EFV), an amphibious armored combat vehicle for the Marine Corps. But he said a decision on the future of that program, like the future of planned amphibious landing ships, would await the results of the QDR.<sup>116</sup>

## **Congressional Perspectives**

Congress has generally viewed the FCS program with a degree of skepticism due to its ambitious scope, significant price tag, and heavy reliance on theoretical and unproven technologies. In addition, the FCS program's reliance on defense industry lead systems integrators (LSIs) to

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<sup>114</sup> For further analysis of FCS see CRS Report RL32888, *The Army's Future Combat System (FCS): Background and Issues for Congress*, by Andrew Feickert

<sup>115</sup> U.S. Department of Defense News Transcript, Department of Defense Conference Call with Secretary of Defense Robert Gates and Gen. James Cartwright with Military Bloggers," April 7, 2009.

<sup>116</sup> The Expeditionary Fighting Vehicle is discussed further in CRS Report RS22947, *The Marines' Expeditionary Fighting Vehicle (EFV): Background and Issues for Congress*, by Andrew Feickert.

develop and manage much of the program has also come under significant congressional scrutiny.<sup>117</sup> Congress has been supportive of the Army's recent decision to focus the FCS program on "spinning out" sensor and unmanned aerial and ground systems, and networking technology to its Infantry Brigade Combat Teams and might be expected to support DOD's decision to accelerate these efforts. Congress has also been concerned about the development of the FCS Network, including complimentary programs to develop new software-programmable radios and satellites to accommodate the vast amounts of information needed by FCS-equipped units. In this regard, Congress has legislated a number of studies and testing requirements to insure that the FCS Network will be fully functional and not vulnerable to either attack or disruption. Secretary Gates did not mention restructuring the FCS Network, so it is possible that work on the network not related to FCS manned ground vehicles will continue with a commensurate level of congressional oversight.

The decision to not fund the development of FCS MGVs could be a more contentious issue in Congress. One combat vehicle in the FCS MGV family—the Non-Line-of-Sight Cannon (NLOS-C)—is a congressionally-mandated program,<sup>118</sup> requiring the Army to produce a total of 18 NLOS-C Initial Production Platforms by the end of 2011. One possible point of contention could be the necessity to build all 18 of these NLOS-Cs if DOD does not intend to procure additional NLOS-Cs. Other potential issues include the possible resumption and continuation of the M-1 *Abrams* and M-2 *Bradley* lines if the Army does not identify successors during the re-evaluation of its vehicle modernization program. In regards to the Army's re-evaluation of its vehicle modernization program, Congress might be expected to play a significant role in this process, as it not only may provide them with an opportunity to shape Army capabilities and force structure, but could also ensure that the eventual acquisition of any new ground combat systems is in line with proposed acquisition reform measures.

## **Acquisition Process<sup>119</sup>**

Secretary Gates called for stopping programs that significantly exceed budget, ensuring that requirements are reasonable and technology adequately mature, and ensuring that programs begin with realistic cost estimates and receive a stable budget. He also called for an end to "requirements creep"—the practice of adding to a system, after development has been initiated, capabilities that were not initially planned for.

Addressing programs with significant cost growth, Secretary Gates called for a number of systems to be canceled, including the VH-71 presidential helicopter and the Air Force Combat Search and Rescue X (CSAR-X) program. Regarding requirements and technology maturity, he called for the cancellation of programs where he questioned the validity of their requirements and the maturity of the technology, such as the Future Combat System and missile defense's Multiple Kill Vehicle (MKV). This is consistent with prior statements, in which he argued that in recent

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<sup>117</sup> For further analysis of the LSI issue see CRS Report RS22631, *Defense Acquisition: Use of Lead System Integrators (LSIs) - Background, Oversight Issues, and Options for Congress*, by Valerie Bailey Grasso

<sup>118</sup> See Section 216 of the FY 2003 National Defense Authorization Act (P.L. 107-314) and Section 8121 of the FY 2003 Department of Defense Appropriations Act (P.L. 107-248).

<sup>119</sup> Prepared by Moshe Schwartz, Analyst in Defense Acquisition.

years, weapon systems have added unnecessary requirements and proceeded with immature technology, resulting in higher costs, longer acquisition schedules, and fewer quantities.<sup>120</sup>

These issues have long been recognized as weaknesses in the current acquisition process and have been recurring themes at congressional hearings and in DOD reports. To date, the various acquisitions reform efforts that have been pursued over the last 30 years, some of which sought to address these same issues, have been unable to reign in cost growth and schedule extension.<sup>121</sup> In Fiscal Year 2009, both DOD and Congress are again focusing attention and resources on acquisition reform, particularly as it relates to the acquisition of major weapon and information technology (IT) systems. Current efforts appear to be focused on improving the current acquisition system, not creating a fundamentally new acquisition system.

Prior to Gates's press conference, DOD began taking steps toward reforming the acquisition process. In July 2008, John Young, then Under Secretary of Defense for Acquisition, Technology, and Logistics, in consultation with senior Army officials, cancelled the Armed Reconnaissance Helicopter (ARH) program because of cost growth and schedule slippage.<sup>122</sup> On December 8, 2008, DOD revised one of the regulations governing its acquisition process (DOD Instruction 5000.2), to require competitive prototyping of new systems and to place more emphasis on systems engineering and technical reviews in evaluating a program. In addition, on March 1, 2009, DOD revised another of its regulations—Instruction, *Joint Capabilities Integration and Development System* (CJCSI 3170.01G)—in order to streamline the process by which requirements are established and establish a new committee, the Joint Capability Board, to review and, if appropriate, endorse requirements before they are submitted to the Joint Requirement Oversight Council (JROC).

In Congress, Senators Carl Levin and John McCain, chairman and ranking minority member respectively of the Senate Armed Services Committee, sought to address these and other issues by introducing the Weapon Systems Acquisition Reform Act of 2009 (S. 454). Subsequently, Representatives Ellen O. Tauscher and John M. Spratt, Jr., members of the House Armed Services Committee, introduced the Weapon Systems Acquisition Reform Act of 2009 (H.R. 1830), which mirrors the original version of the Senate bill. Secretary Gates welcomed the Levin-McCain bill and promised to work with Congress to reform the acquisition system. S. 454 was placed on the Senate legislative calendar on April 2, 2009; H.R. 1830 was referred to the House Committee on Armed Services on March 31, 2009. Representative Ike Skelton, chairman of the House Armed Services Committee introduced the Weapons Acquisition System Reform Through Enhancing Technical Knowledge and Oversight Act of 2009 (H.R. 2101), which was referred to the Armed Services Committee on April 27, 2009. In addition, The House committee also established a Defense Acquisition Reform Panel to focus on acquisition reform.

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<sup>120</sup> Robert M. Gates, "A Balanced Strategy: Reprogramming The Pentagon For A New Age," *Foreign Affairs*, January 2009

<sup>121</sup> See CRS Written Statement submitted to the Senate Armed Services Committee, *Defense Acquisition Reform*, by: Moshe Schwartz, March 3, 2009.

<sup>122</sup> Department of Defense, "DoD Announces Non-Certification Of Armed Reconnaissance Helicopter Program," press release, October 16, 2008, <http://www.defenselink.mil/releases/release.aspx?releaseid=12288>. A review of the program was required by law because breached limits on cost increases and schedule slips mandated by the so-called Nunn-McCurdy Amendment, a provision of law enacted in 1982 and amended several times since. What was remarkable about Young's ARH decision is that most programs that breached the Nunn-McCurdy limits have been continued by DOD.

## **Acquisition Workforce<sup>123</sup>**

DOD has fielded, by all accounts, the most technologically advanced and superior military force in the world, supplied by a most sophisticated acquisition system. However, at the same time, DOD has experienced significant problems managing the costs, schedule, and performance of this acquisition system. These problems have occurred despite continued efforts to reform defense acquisition policies, personnel, and processes.

The package of decisions Secretary Gates announced April 6 marked a significant policy change and an apparent end to the former Bush Administration's reliance on private sector contractors to perform work previously performed by defense acquisition personnel. In his words, his recommendations mark, "a fundamental overhaul of our approach to procurement, acquisition, and contracting."<sup>124</sup> Together with announcements made by President Obama, it appears to signal the beginning of a new era of examination of DOD's use of private contractors and service contracts.<sup>125</sup>

Specifically, Gates recommended increasing the size of DOD's acquisition workforce by converting 11,000 contractors to full-time government employees and by hiring 9,000 additional government acquisition professionals by 2015, starting with 4,100 in FY2010. He also recommended reducing service contractors from our current 39% of the DOD workforce to the pre-2001 level of 26% and replacing them with full-time government employees. "Our goal is to hire as many as 13,000 new civil servants in FY2010 to replace contractors and up to 30,000 new civil servants in place of contractors over the next five years," he said.

Gates's decision to reduce the size of the contractor workforce appears to reverse a contracting boom that had escalated under the Bush Administration's Presidential Management Agenda's focus on "competitive sourcing."<sup>126</sup> These changes in policy and direction are potentially significant because the DOD acquisition workforce had been significantly downsized from 1996-1999 due to congressionally mandated reductions as well as recommendations from DOD experts.

From FY1996 through FY1999, Congress directed the Clinton Administration to reduce the size of the DOD acquisition workforce, which was defined as the employees who participated in the development and procurement of weapons, equipment, and provisions for the military services.<sup>127</sup>

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<sup>123</sup> Prepared by Valerie Bailey Grasso, Specialist in Defense Acquisition.

<sup>124</sup> U.S. Department of Defense. Defense Budget Recommendation Statement. Secretary of Defense Robert M. Gates, April 6, 2009.

<sup>125</sup> The White House. Office of the Press Secretary. Memorandum For The Heads Of Executive Departments and Agencies on Government Contracting. March 4, 2009.

<sup>126</sup> Under this policy, many agencies were required to meet privatization goals regardless of the impact on costs or quality of services.

<sup>127</sup> In the FY1996 Defense Authorization Act (P.L. 104-106), Congress directed the Administration to reduce the workforce by 15,000 people by October 1, 1996, and by a total of 25% (compared to the 1995 figure) over a period of five years. The act also required the Secretary of Defense to report to Congress on ways to restructure functions among DOD's acquisition departments and agencies. In the FY1997 Defense Authorization Act (P.L. 104-201), Congress directed the Administration to reduce the workforce by an additional 15,000 people by October 1, 1997, and stipulated that this reduction was to be in the form of actual acquisition personnel, not just acquisition positions. In the FY1998 Defense Authorization Act (P.L. 105-85), Congress directed the Administration to reduce the workforce by an additional 25,000 people by September 30, 1998, but permitted the Secretary of Defense to waive a portion of this reduction if the Secretary certified to Congress. These concerns include the failure of DOD to develop effective (continued...)

These congressional mandates reflected a view in the Congress that the workforce had not been downsized in proportion to the decline in the defense procurement budget.

In an April 7 media roundtable discussion, Secretary Gates contended that the number of DOD's private acquisition contractors had grown because the department's acquisition workforce had been "slashed in the nineties," that the Defense Contract Management Agency went from 27,000 professionals to about 9,000, and that the number of DOD employees involved in procurement went from 500,000 or 600,000 to less than half that number. However, he did not define which functions were "inherently governmental"—and thus, by policy, should not be delegated to private contractors—except for "the oversight of the process."<sup>128</sup>

Most experts agree that the size of the federal acquisition workforce, in general, and the DOD acquisition workforce, in particular, has remained relatively flat or has declined since 2001. Some policymakers have raised questions as to whether DOD has the right mix of acquisition workforce personnel trained and equipped to oversee large-scale contracts. Given concerns about the size of federal spending under the economic stimulus bill, some question whether the Obama Administration can bring in the appropriate quantity and quality of acquisition workforce personnel to support the significant amounts of contracting under the economic stimulus bill.

Further, while there is general agreement that the federal government needs to increase its in-house capability to oversee and manage contracts, it is not entirely clear what specific skills sets are needed to meet the challenge, and how many of those functions considered "inherently governmental" are being performed by private sector contractors. According to Shay Assad, DOD Senior Acquisition Executive and Director for Procurement and Acquisition Policy, DOD has conducted "extensive assessments of the federal workforce's gaps and capabilities."<sup>129</sup> DOD plans to hire about 800 pricing specialists and cost-estimators as part of the acquisition workforce; about 9,000 contract oversight personnel; and about 11,000 systems engineering personnel.<sup>130</sup>

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(...continued)

acquisition strategies to field weapons systems and effectively provide oversight and accountability for service contracts and contractors, particularly with the broader policy questions raised in the awarding and managing of contracts for the reconstruction and follow-on work performed in Iraq. s by June 1, 1998 that such reductions would adversely impact military readiness and acquisition efficiency. The act also required DOD to submit a report to Congress by April 1, 1998 that provides a plan for future acquisition policy, including future opportunities to restructure and streamline DOD's acquisition organizations, workforce and infrastructure. In the FY1999 Defense Authorization Act (P.L. 105-261), Congress directed the Administration to reduce the workforce by 25,000 acquisition personnel by October 1, 1999, lowering it to 12,500 personnel if the Secretary of Defense certifies that such a reduction would cause an adverse effect on military readiness or management of the acquisition system.

<sup>128</sup> U.S. Department of Defense. Media Roundtable with Secretary of Defense Robert Gates and General James Cartwright, Vice Chairman, Joint Chiefs of Staff and Selected Reporters, April 7, 2009. The Office of Management and Budget defines an "inherently governmental function" as one, "so intimately related to the public interest as to mandate performance by Government employees." OMB Policy Letter 92-1, Subject: "Inherently Governmental Functions," September 23, 1992.

<sup>129</sup> Newel, Elizabeth. Pentagon Workforce Could Benefit from Wall Street Layoffs, *Government Executive.com*, April 8, 2009, <http://www.govexec.com/dailyfed/0409/040809e1.htm>.

<sup>130</sup> Mr. Assad's remarks from a breakfast, "Acquisition and Reform in the Age of Stimulus and Bailout," hosted by *Government Executive* at the National Press Club, April 8, 2009.



## **Congressional Perspectives**

Congress has expressed increasing concerns with the management of the DOD acquisition system. Congressional interest in reducing the size and associated costs of the DOD acquisition workforce had been energized, over the past two decades, by a number of blue-ribbon commissions empanelled by the Secretaries of Defense. The May 1995 report of the DOD Commission on Roles and Missions, for example, noted that while private-sector defense contractors had undertaken large-scale reorganizations adjusting to a reduced level of defense spending, little corresponding reduction had been made in the number of DOD acquisition organizations or personnel.<sup>131</sup> In addition, in March 1998, the Undersecretary of Defense for Acquisition, Technology, and Logistics asked the Defense Science Board to examine DOD's acquisition organizations and workforce, and develop a set of recommendations that would lead to "better, cheaper, and faster acquisitions." The Board recommended that the size of the DOD acquisition workforce be substantially reduced.<sup>132</sup>

Congress subsequently expressed concern over the failure of DOD to develop effective acquisition strategies to field weapons systems and effectively provide oversight and accountability for service contracts and contractors, particularly with the broader policy questions raised in the awarding and managing of contracts for the reconstruction and follow-on work performed in Iraq.

Policymakers will examine Secretary Gates's announcement and may question how the Administration will balance potentially competing priorities:

- Given that DOD has an integrated acquisition workforce which includes both contractors and federal acquisition workforce personnel, DOD will need to quickly determine what functions are "inherently governmental" and should be performed only by federal acquisition workforce personnel, and what functions are appropriate for performance by contractor personnel.
- While the Obama Administration has a goal of increasing the size of the acquisition workforce, quantity is but one factor—quality is another important factor. The Obama Administration must ensure that tradeoffs of quality over quantity do not occur. The acquisition workforce must have sufficient education and training to meet the challenge and must take care to do it carefully and deliberately. New hires must be capable of developing the knowledge, skills, abilities, and ethical standards of the federal acquisition workforce, and must be willing and able to represent the interests of the federal government.
- Secretary Gates did not address the role of the ongoing work of the House Armed Services Committee Panel on Defense Acquisition Reform, nor did he address the use of certain problematic contracting vehicles such as "cost-reimbursement" contracts. While having additional acquisition workforce personnel may improve contract performance, DOD has to closely examine the use of large, executable,

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<sup>131</sup> U.S. Department of Defense. *Directions for Defense: Report of the Commission on Roles and Missions of the Armed Forces*, in accordance with Section 954(b) of the National Defense Authorization Act for Fiscal Year 1994. Washington, 1995, pp. 3-16 and 3-17.

<sup>132</sup> U.S. Department of Defense. Office of the Undersecretary of Defense for Acquisition and Technology. *Report of the Defense Science Board, Acquisition Workforce Sub-Panel of the Defense Acquisition Reform Task Force on Defense Reform*, March 1998.

contract vehicles and their role in improving contracting decisions, reducing costs, and addressing waste, fraud, abuse, and contract mismanagement.

## Strategic and Nuclear Forces<sup>133</sup>

Secretary Gates said on April 6 that requirements for long-range and nuclear strike forces would be examined in the light of the QDR, a concurrent Nuclear Posture Review (NPR), and the state of arms control negotiations with Russia occasioned by the expiration in December 2009 of the Strategic Arms Reduction Treaty (START) between the United States and the Soviet Union, signed in 1991.<sup>134</sup>

### Ballistic Missile Submarines

Secretary Gates recommended that the Navy begin in FY2010 developing replacements for the Navy's 14 Trident missile-launching submarines, which entered service between 1984 and 1997. The Navy initially planned to keep Trident submarines in service for 30 years, but has now extended that time period to 42 years. This extension reflects the judgment that ballistic missile submarines would have operated with less demanding missions than attack submarines, and could, therefore, be expected to have a much longer operating life than the expected 30 year life of attack submarines. Therefore, since 1998, the Navy has assumed that each Trident submarine would have an expected operating lifetime of at least 42 years—two 20-year operating cycles separated by a two-year refueling overhaul.<sup>135</sup>

The Navy has initiated studies into options for a replacement for the Trident—one would be a new, dedicated ballistic missile submarine and another would be a variant of the Virginia class attack submarine. According to Admiral Stephen Johnson, USN, the Navy would have to begin construction of a new class of missile submarines by 2019 so that they could begin to enter the fleet as the Tridents begin to retire. Congress approved the Navy's request for \$10 million in the FY2009 budget to begin conceptual design work on the replacement for the Trident submarine.

### Long-Range Bomber

Secretary Gates recommended the Air Force not “pursue a development program for a follow-on Air Force bomber until we have a better understanding of the need, the requirement and the technology.” This would put on hold the Air Force plan to develop a new strategic bomber for introduction into service in 2018.<sup>136</sup>

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<sup>133</sup> Prepared by Amy F. Woolf, Specialist in Nuclear Weapons Policy.

<sup>134</sup> Issues raised by the post-START arms control talks are analyzed in CRS Report R40084, *Strategic Arms Control After START: Issues and Options*, by Amy F. Woolf. Broader issues involved in U.S. strategic force modernization are analyzed in CRS Report RL33640, *U.S. Strategic Nuclear Forces: Background, Developments, and Issues*, by Amy F. Woolf.

<sup>135</sup> “SSBN Ohio-class FBM Submarines.” GlobalSecurity.org, <http://www.globalsecurity.org/wmd/systems/ssbn-726-recent.htm>.

<sup>136</sup> This program is further analyzed in CRS Report RL34406, *Air Force Next-Generation Bomber: Background and Issues for Congress*, by Ronald O'Rourke.

According to former Air Force Secretary Michael Wynne, the Air Force is seeking a new bomber with not only stealth characteristics and long range but also “persistence,” that is, “the ability to stay airborne and be on call for very long periods.”<sup>137</sup> The Air Force’s effort to develop a new bomber was delayed by a dispute over whether the program should stand alone or be merged with DOD’s effort to acquire a weapon system capable of Prompt Global Strike (PGS), that is, the ability to quickly attack a distant target. While a new bomber could perform some of the PGS missions, other systems, such as hypersonic aircraft and missiles also could be part of the a portfolio of systems intended to strike targets anywhere in the world. In May 2006, the Air Force decided to keep the bomber program separate from PGS reportedly because the PGS mission placed a premium on very high speed while some bomber missions require an airplane that can survive sophisticated anti-aircraft defenses and “loiter” near potential targets for some time.<sup>138</sup>

By May 2007, the Air Force had decided that the next-generation bomber would be manned and subsonic and would incorporate some stealth characteristics.<sup>139</sup> The service reportedly decided not to develop an aircraft capable of supersonic speed or unmanned operation in order to hold down the cost of the program and to ensure the versatility of the plane. In October 2008, Air Force Secretary Michael Donley said the new bomber would be capable of carrying nuclear weapons.<sup>140</sup> Secretary Gates’s decision to review the premises of the program may call those earlier choices into question.

## **Other Recommendations**

Secretary Gates made two additional recommendations:

- He called for terminating the \$26 billion Transformational Satellite (TSAT) program, an effort to greatly expand DOD’s high-speed connectivity with a network of communication satellites linked to users by laser communication. In its place, Gates recommended buying two additional copies of the Advanced Extremely High Frequency (AEHF) satellites that currently support DOD’s high-speed communications network.
- He called for expanding the number of cyber experts DOD trains annually from 80 to 250 by FY2011.

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<sup>137</sup> Rebecca Christie, “Air Force to Step Up New Bomber Search in Next Budget,” *Wall Street Journal*, June 29, 2006.

<sup>138</sup> Martin Matishak, “Long-Range, Prompt Global Strike Studies Will Remain Separate,” *InsideDefense.com*, June 16, 2006.

<sup>139</sup> Michael Sirak, “Air Force Identifies Manned, Subsonic Bomber as Most Promising 2018 Option,” *Defense Today*, May 2, 2007.

<sup>140</sup> Carlo Munoz, “Donley: Next Generation Bomber Will Be Nuclear Capable by 2018,” *Inside the Air Force*, October 31, 2008.

## **Bill-by-Bill Synopsis of Congressional Action to Date**

### **FY2010 Congressional Budget Resolution**

The conference report on the annual congressional budget resolution (S.Con.Res. 13) includes a recommended ceiling on FY2010 budget authority and outlays for the “national defense” function of the federal budget that matches President Obama’s request. The budget resolution’s ceilings on budget authority and outlays for national defense and other broad categories (or functions) of federal expenditure are not binding on the Appropriations committees, nor do they formally constrain the authorizing committees in any way.

However, the budget resolution’s ceilings on the so-called “050 function”—the budget accounts funding the military activities of DOD and the defense-related activities of the Department of Energy and other agencies—have in the past indicated the general level of support in the House and Senate for the President’s overall defense budget proposal.

The House version of the budget resolution (H.Con.Res. 85 ), adopted April 2, set the FY2010 budget authority ceiling for the 050 “national defense” function at \$562.0 billion and provided a separate allowance of \$130.0 billion—the amount requested for war costs—under function 970 (“overseas deployments and other activities”). Those two ceilings add up to \$692.0 billion. The Senate version of the budget resolution (S.Con.Res. 13 ), also adopted April 2, set the budget authority ceiling for the 050 national defense function at \$691.7 billion and did not set a separate ceiling for overseas deployments. In the reports accompanying their respective resolutions, the House and Senate Budget committees each indicated that the ceilings recommended were intended to accommodate President Obama’s FY2010 DOD budget request.

The conference report on the final version of the budget resolution (H.Rept. 111-89) follows House version’s pattern of setting separate ceilings for a national defense base budget and for overseas deployments. The House adopted the joint resolution April 29 by a vote of 233-193. The Senate adopted it the same day by a vote of 53-43.

### **National Defense Authorization Act (H.R. 2647, S. 1390)**

The House version of the FY2010 defense authorization bill, H.R. 2647, was reported by the House Armed Services Committee on June 18, 2009 (H.Rept. 111-166) and passed by the House June 25 with relatively few changes. It would authorize \$550.5 billion for the base budget (i.e., non-war costs) of DOD and defense-related programs of the Energy Department, which is \$348.0 million more than the President requested. For war costs, the House bill would authorize \$130 billion, as requested, but would redistribute some funds within that total bringing the total authorized by the bill to \$680.5 billion.

On July 2, 2009, the Senate Armed Services Committee reported S. 1390 (S.Rept. 111-35) which would authorize \$551.1 billion for the DOD base budget and related Energy Department programs, \$864.8 million more than the President requested. The Senate bill would authorize \$129.3 billion, for war costs, which is \$740 million less than the request, bringing the total authorized by S. 1390 to \$680.3 billion. The Senate bill also would require the Administration to

cut a total of \$500 million (to reflect unspecified “management efficiencies”) from the total DOD authorization, thus reducing the bill’s total authorization to \$679.8 billion. The Senate passed the bill July 23.

Funding levels authorized by H.R. 2647 as passed by the House and by S. 1390 as passed by the Senate **Table 7**. Funding levels authorized for selected programs are summarized in the **Appendix**.

Following are highlights of the versions of the FY2010 defense authorization bill passed by the House and Senate:

### **Ballistic Missile Defense.**

The aspect of the House bill that was most extensively debated, both in the Armed Services Committee and on the House floor, was its approval of the Obama Administration’s \$9.3 billion missile defense program, which would slow or terminate some technologically advanced systems while increasing the planned procurement of Aegis and THAAD interceptors designed to cope with near-term threats. Several Republican-sponsored amendments that would have increased funding for various missile defense programs were rejected by the House committee, during its markup of the bill, and on the House floor.

The Senate bill also supported the Administration’s principal missile defense decisions.

### ***Ground-Based Interceptors.***

Both bills support Secretary Gates’s proposals to cap the number of Ground-based Interceptors (GBI) deployed in Alaska and California at 30, instead of deploying a total of 44. Secretary Gates, Missile Defense Agency chief Lt. Gen. Patrick J. O’Reilly and other military commanders have said that 30 operationally effective GBIs are sufficient given the current and prospective threat over the next five years or so from Iran and North Korea. Secretary Gates has said that the cap at 30 would be revised upward if the threat assessment changes. Others, however, believe the threat of long-range ballistic missile attack from Iran and North Korea is more imminent and question whether 30 deployed GBIs are sufficient.

### ***Boost-phase Interception.***

Both bills also support the Administration’s proposal to cancel the Multiple Kill Vehicle (MKV) and Kinetic Energy Interceptor (KEI) programs and to construction of a second Airborne Laser (ABL) prototype aircraft (although the existing ABL plane would be retained for research). The Government Accountability Office (GAO) has faulted each of these programs for significant technical, cost and operational challenges. Some missile defense supporters contend that cancelling the KEI and relegating the ABL to a research program will leave the country without an active program to destroy attacking ballistic missiles in their boost-phase or shortly after their launch. Sec. Gates has said that the requirement for a boost-phase BMD program is being looked at as part of the current BMD Review and the Quadrennial Defense Review (QDR), expected to be completed later this year.

Meanwhile, the Administration has said it wants to pursue an Ascent Phase BMD program designed to destroy attacking missiles shortly after their rocket motors burn out in the boost-

phase. Because this effort is new, few details are available. H.R. 2647 would require the Defense Secretary to report to Congress the details and strategy behind the Ascent Phase effort.

### ***European Missile Defense Site***

The Obama Administration has not fully endorsed going forward with the Bush Administration's plan to deploy in Europe a radar in the Czech Republic and interceptor missiles in Poland that are intended to intercept missiles launched from Iran at Europe or the United States. According to Secretary Gates, unspent funds appropriated in FY2009 for the so-called "third site" (the other two being the GBI sites in Alaska and California) plus an additional \$50.5 million requested in the FY2010 budget would allow the project to go forward if the Polish and Czech parliaments ratify basing agreements reached with the United States in 2008. But the Administration has also said that the proposed third site is one of several options on the table for dealing with potential missile attacks from Iran.

The House bill would authorize a total of \$343.1 million from funds available for fiscal years 2009 and 2010 to develop missile defenses in Europe either to continue with research, development, test and evaluation of the proposed radar and interceptor site in Poland and the Czech Republic pending Czech and Polish ratification of the agreements, or to develop an alternative integrated missile defense system to protect Europe from threats posed by all types of ballistic missiles, subject to certain conditions. H.R. 2647 also provides, subject to appropriations and as consistent with U.S. national security interests stated in the BMD agreement reached with Poland, funds for deployment of a U.S. Army Patriot missile battery in Poland by 2012.

The Senate bill would authorize the \$50 million requested in FY2010 for work on the European system.

### **Shipbuilding**

Both bills supported the Administration's budget proposal for major shipbuilding programs. However, the Senate Armed Services committee was more critical than its House counterpart of the Navy's management of its shipbuilding program for surface combatant ships. S. 1390 includes a provision that would require the Navy to prepare a detailed acquisition strategy for purchasing surface combatants, supported by a battery of analyses. The Senate bill also would repeal a provision of the FY2008 national defense authorization act (P.L. 110-181) that would require that future cruisers, destroyers and large amphibious landing ships be nuclear-powered.<sup>141</sup>

### ***Surface Combatants: DDG-1000 and DDG-51 destroyers, CG(X) cruiser.***

Both bills accept the decision, recommended by senior Navy leaders in 2008 and embraced by the Obama Administration, to buy only three guided missile destroyers of the DDG-1000-class, instead of the seven ships that had been planned, and to resume procurement of DDG-51 class destroyers, 62 of which are in service or under construction. Accordingly, they would authorize, as requested, \$1.08 billion to complete the third DDG-1000, \$539 million to continue development of that class and \$1.91 billion for three DDG-51s. The House bill would add \$100

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<sup>141</sup> For background, see CRS Report RL33946, *Navy Nuclear-Powered Surface Ships: Background, Issues, and Options for Congress*, by Ronald O'Rourke.

million to the \$329.0 million requested for components to be used in DDG-51s to be funded in future budgets.

Both bills would authorize, as requested, \$340.0 million to continue development of the CG(X) class of cruisers to replace existing Aegis cruisers which are slated for retirement beginning in the early 2020s. However, the Senate bill would allow the Navy to spend only half those funds until the service produces the surface combatant acquisition plan (and supporting analyses) that the bill requires. S. 1390 also would add \$50 million to the portion of the CG(X)-related R&D budget that funds development of the very powerful radar planned for the CG(X).

### *Aircraft Carriers*

As requested, both bills would temporarily waive a law requiring the Navy to keep 11 carriers in service, thus allowing the number of flattops to drop to 10 between 2013, when the *Enterprise* is slated for retirement after 48 years of service, and 2015, when the *Gerald R. Ford* is scheduled to enter the fleet. The older ship would have required a very expensive overhaul if it had to be kept in service during those two years.

The House Armed Services Committee questioned Secretary Gates's recommendation to slow the rate at which future carriers are built to replace those being retired, a policy that would permanently reduce the carrier force from 11 ships to 10 after 2040. The House committee added to H.R. 2647 a provision (Section 122) requiring the Navy to submit a report on the effects of funding a new carrier at the proposed slower rate of one ship every five years instead of the previous plan under which some future carriers would have been funded only four years apart. The provision also bars the Navy from spending funds authorized by the bill in a way that would make it impossible to fund the next two carriers four years apart, as had been planned.

### *Littoral Combat Ships*

Both bills would authorize construction of three additional Littoral Combat Ships, as requested. H.R. 2647 also included a provision, requested by the Administration, that would liberalize the cost-cap of \$460 million per LCS set by existing law, by allowing the cap to be adjusted for inflation and by excluding certain costs. However, the House committee also added to that bill a provision (Section 121) authorizing the Navy to compile a technical data package that would allow it to put the contracts for these ships up for bid by other contractors if the two shipyards currently building LCS ships would not contract to build the FY2010 ships within the limits of the revised cost cap.

### **Combat Aircraft**

Both bills concur in Secretary Gates's recommendations to terminate development of the CSAR-X combat rescue helicopter and the VH-71 presidential helicopter and to end procurement of C-17 wide-body cargo jets. But each bill rejects several of Gates's recommendations concerning combat aircraft.

### ***F-22 Raptor***

By a vote of 31-30, the House Armed Services Committee added to the Administration's request an authorization of \$368 million to buy long lead-time components that would allow procurement in FY2011 of 12 additional F-22 fighters. H.R. 2647 would fund the F-22 add-on without increasing the total amount authorized by cutting \$368.8 million from the \$5.5 billion requested for environmental cleanup of Energy Department sites associated with the nuclear weapons program. The bill also would require (Section 132) the preservation of unique tooling that would be needed to resume F-22 production.

The Senate Armed Services Committee voted 13-11 to include in S. 1390 authorization of \$1.75 billion to purchase seven additional F-22s in FY2010. Of that total, \$32.3 million was money appropriated for F-22 procurement in FY2009 but not spent by the Obama administration. In floor action, however, by a vote of 58-40, the Senate adopted an amendment to the bill that would reverse the committee's action, stripping the \$1.75 billion from the F-22 program and reallocating it to the budget accounts the Armed Services Committee had reduced to cover the cost of the F-22 addition. The Senate acted after President Obama said unequivocally that he would veto any bill that would fund additional F-22s.

Secretary Gates maintained in April that the 187 F-22s previously funded, taken together with other aircraft, including F-35 Joint Strike fighters and armed Reaper aerial drones now entering service in significant numbers, is a large enough force. But F-22 supporters contend that Gates's view unduly minimizes the combat advantages of the F-22 over the F-35. Many senior Air Force officials have maintained for years that the service needs 381 F-22s, that buying only 250 of the planes would put U.S. strategy at "moderate risk" and that capping the force at 187 planes poses a "high risk" to U.S. strategy.

### ***F-35 Joint Strike Fighter***

Rejecting a position taken by both the Bush and Obama administrations, both bills would add to the budget request authorization of funds to continue developing an alternate engine for the single-engine F-35 Joint Strike Fighter.

H.R. 2647 would add a total of \$603 million to continue developing the alternate engine and prepare for its production, offsetting that increase by cutting from the request two of the 30 F-35s requested (a \$308 million reduction) and approving only two-thirds of a proposed management reserve fund for the program (a further reduction of \$156 million).

The Senate Armed Services Committee included in S. 1390 an increase of \$438.9 million to continue development of the alternate engine, offsetting that addition by cutting the proposed management reserve by \$156 million, the same amount the House bill cut from that request. As with the question of funding additional F-22 fighters, the President unequivocally said he would veto any defense bill the funded continuation of the alternate engine project. In floor action on the bill, the Senate adopted by voice vote an amendment to S. 1390 eliminating authorization to continue work on the alternate engine. This came after it rejected by a vote of 38-59 an amendment that would have reaffirmed the committee's action.



### ***Retirement of Older Jets***

The House bill would delay Secretary Gates's plan to retire 249 older combat jets, most of which are assigned to Air Force Reserve and Air National Guard units. It would shift from other parts of the Air Force budget request \$344.6 million to continue operating those planes. The bill (Section 1047) would also prohibit their retirement until 90 days after the secretary of the Air Force submits to the Senate and House Armed Services committees a report detailing how the Air Force will fill the gaps left by the retirement of those planes and what missions it will assign to the bases and personnel associated with the aircraft. H.R. 2647 also would require (Section 133) the Secretary of Defense to report on alternative plans to prevent a prospective shortfall in Air Force fighters (as the service retires old planes more quickly than it fields new F-35s) by purchasing so-called "4.5 generation" fighters, that is, types currently in service, such as F-16s and F/A-18s, that are equipped with improved radars and other upgrades.

The Senate committee directed the Air Force to develop a plan for defending U.S. airspace for the next 20 years including, as one option, the use of F-22s assigned to Air National Guard units. This so-called "air sovereignty alert" mission currently is assigned to Guard units flying some of the older fighters slated for retirement under the Administration's plan.

### ***F/A-18E/F Super Hornet***

The House and Senate Armed Services committees each took steps to put pressure on DOD to sign a multi-year contract for additional F/A-18E/F fighters, in order to reduce a prospective shortfall in carrier-based fighters.

The House bill would increase from \$51.4 million to \$159.4 million the amount authorized for long lead-time components for the planes that could be funded in FY2011 and it directed the Congressional Budget Office to compare, in terms of cost and effectiveness, the purchase of new F/A-18E/Fs with the refurbishing of older model F/A-18s. It also added to the bill a provision (Section 1051) expressing the sense of Congress that the Navy should field at least 10 carrier air wings, each equipped with at least 44 strike fighters.

The Senate Armed Services Committee, predicting that ongoing DOD studies would make the case for a signing a multi-year contract to buy new F/A-18E/Fs rather than refurbishing older planes, argued that the Navy should buy 18 of the planes in FY2010 – as earlier planned – rather than reducing the production run to nine planes, as the Administration's budget proposed. Accordingly, S. 1390 would authorize \$1.57 billion for 18 F/A-18E/Fs, an increase of \$560 million over the request.

## **Ground Combat Systems**

### ***Future Combat Systems (FCS)***

The House and Senate Armed Services committees both endorsed Secretary Gates's recommendation to terminate development of eight new kinds of manned ground combat vehicles as part of the Army's Future Combat Systems (FCS) program. The House committee denied \$426.8 million requested for termination costs, arguing that unspent FCS funds appropriated for FY2009 would cover the cost of ending the program. The Senate committee cut \$381.8 million of the FCS termination request and authorized the remaining \$45 million to continue developing

“active protection systems”—small weapons mounted on tanks and other combat vehicles to intercept approaching missiles.

The House Armed Services Committee also offered specific recommendations for how the Army should modernize its combat vehicle fleet in the absence of FCS, taking into account the large amounts spent to modernize existing vehicles in recent years. The committee recommended that current fleet of M-1 tanks, Paladin cannons and Stryker armored combat vehicles should be given upgrades—including some technologies developed as part of FCS, such as the “active defense system” intended to shoot down approaching anti-tank missiles. Two other types of armored carriers—Bradleys and the older M-113s—should be candidates for replacement by new vehicles, the committee said.

The Senate Armed Services Committee included in S. 1390 provisions requiring the Army to create two new programs—one to develop a new self-propelled cannon and one to develop a family of other ground combat vehicles – and to report on its plans to acquire those new systems. The bill also would require DOD to contract with a non-governmental organization to assess the research needed to develop technologies that would be required by a new generation of ground combat vehicles. Anticipating that some ongoing studies relevant to these issues might be completed before Congress concludes action on the FY2010 defense authorization bill, the Senate committee directed the Secretary of the Army to update the congressional defense committees by September 8, 2009 on the Army’s plans for developing new combat vehicles.

### ***Expeditionary Fighting Vehicle***

Both bills would authorize, as requested, \$293.5 million to continue development of the Marine Corps’ Expeditionary Fighting Vehicle (EFV), an armored amphibious troop carrier designed to carry Marines ashore from transport ships more than 20 miles offshore.

The House Armed Services Committee, which has criticized the EFV design as being too vulnerable to so-called improvised explosive devices (IEDs) insisted that the Marines explore various modifications that would give troops inside an EFV at least the same level of protection against IEDs as they would have riding in the heaviest Mine-Resistant, Ambush-Protected (MRAP) vehicles. The committee directed the Secretary of the Navy to give the congressional defense committees a report on EFV survivability options.

### **Military Personnel Policy: End-Strength, Pay Raise**

Both bills would authorize, as requested, a total end-strength of 1.41 million personnel for active-duty members of the four armed forces, an increase of 40,227 over the FY2009 level. This total includes limits of 547,400 for the Army and 202,100 for the Marine Corps, which mark the achievement by those two services three years earlier than planned of a decision to increase their combined end-strengths by a total of 92,000 personnel over their FY2007 levels. The House bill would authorize the Army to increase by an additional 40,000 active-duty personnel over the course of FY2011-12. The Senate bill would authorize an additional 30,000 active-duty Army personnel over the same period.

Both bills also would authorize a 3.4% increase in basic pay for military personnel, which is one-half of a percentage point above the Administration’s request. This would be the eleventh

consecutive year that Congress has given the military a pay raise that equals or exceeds the Labor Department's Employment Cost Index (ECI), a measure of private sector wage growth.

### **DOD Civilian Employees: NSPS, A-76**

The House bill would freeze implementation of the National Security Personnel System (NSPS) and the parallel Defense Civilian Intelligence Personnel System, both of which are pay-for-performance systems affording managers more flexibility in hiring and determining compensation for employees than the federal government's General Schedule.

S. 1390 also would freeze NSPS and would eliminate it unless the Secretary of Defense certifies that termination would not be in the best interest of DOD and provides a specific schedule for making changes "to improve the fairness, credibility and transparency" of NSPS.

Both bills would impose a moratorium on so-called "A-76" competitions to determine whether jobs currently performed by federal employees should be out-sourced to private contractors.

### **Concurrent Receipt**

H.R. 2647 would fund an initial increment of an initiative, proposed by President Obama, to expand the number of disabled military retirees entitled to "concurrent receipt" of both their military retired pay and disability-based stipends from the Department of Veterans Affairs. Since 2001, Congress has taken several steps to liberalize a general policy (the roots of which date from 1891) requiring disabled military retirees to forego an amount of their retired pay equal to the amount of any veterans disability stipend.

Under congressional budget rules, the cost of the Administration proposal would have to be offset by either a reduction in already-mandated expenditures or an increase in revenue. A funding offset large enough to cover the cost of the President's concurrent receipt proposal through FY2010 was provided by a bill (H.R. 2990) the House passed June 24 by a vote of 404-0. The text of H.R. 2990 was incorporated into the defense authorization bill by H.Res. 572, the rule governing floor action on the defense bill, which the House adopted June 24 by a vote of 222-202.

S. 1390 takes no action on the concurrent receipt issue.

### **Detainees, Military Commissions, Guantanamo Bay**

The Senate bill would make several changes to the Military Commissions Act of 2006 (P.L. 109-366), which codified rules under which military tribunals could try non-U.S. citizens who had been detained in the course of the war against terrorism. Some key provisions of S. 1390 include the following:

- Military commissions would have jurisdiction over "alien unprivileged enemy belligerents," a class of persons defined somewhat differently from "alien unlawful enemy combatants," the class of persons subject to military commissions under current law.

- The list of offenses for which an eligible person could be tried by a military commission is unchanged from current law, but the Senate committee bill would require that alleged offenses occurred “in the context of and associated with armed conflict.”
- Confessions allegedly elicited through cruel, inhuman, or degrading treatment, would be inadmissible even if they were made prior to the enactment of the Detainee Treatment Act of 2005 (42 U.S.C. § 2000dd), which bars the use of such confessions only if they were made after its enactment.
- In the case of hearsay evidence, the party offering the evidence would have the burden of demonstrating that it is reliable, whereas under current law, the opponent has the burden of proving that it is unreliable.
- The prosecutors’ obligation to disclose exculpatory information would include mitigating evidence, and the obligation would extend to all information that is known or reasonably should be known to any government officials who participated in the investigation and prosecution of the case.

The Senate committee bill also would prohibit the use of contract employees to conduct interrogations of individuals detained during hostilities.

The House-passed version of the authorization bill does not address military commissions. However, it has several provisions dealing with the treatment of detainees. These would:

- require a report on how the reading to detainees of their “Miranda rights” may affect military operations in Afghanistan, including any effects on intelligence collection through interrogations;
- require DOD to videotape or otherwise electronically record strategic intelligence interrogations of persons in its custody, under its effective control, or under detention at a DOD theater-level detention facility;
- require the President to prepare a plan for the disposition of each detainee held at the Guantanamo Bay Naval Station. It would prohibit the release or transfer of such non-citizen detainee to the United States, its territories, or possessions until 120 days after the President has submitted the plan to the congressional defense committees; and
- require that the International Committee of the Red Cross (ICRC) be notified whenever a detainee comes into U.S. custody or under U.S. control at the detention facility at Bagram Air Base in Afghanistan. The ICRC would have access to such detainees within 24 hours after submitting a request to visit a detainee.

## **Hate Crimes<sup>142</sup>**

During floor debate on S. 1390, the Senate considered several amendments related to so-called hate crimes. Current law defines hate crime as any crime against either person or property in which the offender intentionally selects the victim because of the victim’s actual or perceived

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<sup>142</sup> Prepared by William J. Krouse, Specialist in Domestic Security and Crime Policy.

race, color, religion, national origin, ethnicity, gender, disability, or sexual orientation. Hate crimes are not separate and distinct offenses. Rather, hate crimes are traditional crimes, during which the offender is motivated by one or more biases that are considered to be particularly reprehensible and damaging to society as a whole. Federal jurisdiction over hate crime, however, is limited to certain civil rights offenses, which are considered to be “hate crimes” when it is determined that the offender was motivated by a bias against race, color, religion, national origin, and, in limited instances, disability.

By voice vote, the Senate adopted an amendment that would broaden federal jurisdiction over hate crimes by authorizing the Attorney General to provide assistance (technical, forensic, prosecutorial, or other), when requested by a state, local, or tribal official, for crimes that (1) would constitute a violent crime under federal law or a felony under state or tribal law, and (2) are motivated by the victim’s actual or perceived race, color, religion, national origin, gender, sexual orientation, gender identity, or disability. The provisions of this amendment are very similar to provisions of House-passed H.R. 1913.

The Senate also adopted, by a vote of 78-13, an amendment to the hate crimes amendment that would prohibit the implementation of any provision of the amendment in a manner that would violate or burden the exercise of an individual or group’s First Amendment rights to free speech and association provided the actions in question were not intended to plan or incite violence against another individual.

Although supporters of the amendment argued that greater federal involvement would ensure that hate crimes are systematically addressed, some opponents contended that additional federal penalties for hate crimes would be redundant and largely symbolic, as penalties for those crimes already exist under state law. The Senate rejected by a vote of 29-62 an alternative amendment that would have required a report on state-level hate crimes investigations, prosecutions, and sentencing.

### **Other Senate Amendments**

Following are among the other amendments to S. 1390 on which the Senate took action:

#### ***“Concealed Carry” Permits.***

The Senate rejected an amendment that would allow citizens who have obtained permits from their home states to carry concealed firearms to carry concealed firearms in any other state the issues such permits. The amendment garnered 58 “aye” votes and 39 “nays” however it was debated under an agreement stipulating that the amendment would be agreed to only if obtained 60 or more “yeas.”

#### ***Strategic Arms Treaty***

By voice vote, the Senate adopted an amendment expressing the sense of the Senate that the follow-on agreement to the expiring Strategic Arms Reduction Treaty (START) should not include limitations on ballistic missile defense, military capabilities in space or advanced conventional weapons. The amendment also requires a presidential report on plans to improve the safety and reliability of U.S. nuclear weapons and to modernize the Energy Department’s nuclear weapons complex.

The version of the amendment that was adopted supplanted an earlier version which would have barred the use of funds to implement a START follow-on agreement unless (1) the treaty placed no limits on missile defenses, space capabilities or advanced conventional weapons and (2) the Administration's FY2011 budget provides sufficient funding for the Energy Department's nuclear complex to maintain the reliability and safety of remaining U.S. nuclear forces and to modernize the weapons complex.

### North Korean Sanctions

The Senate rejected by a vote of 43-54 an amendment expressing the sense of the Senate that North Korea should be officially designated as a state sponsor of terrorism. North Korea had been so-designated by the State Department, but that designation was rescinded in October 2008. Subsequently, the Senate adopted, by a vote of 66-31, an amendment requiring a review of North Korea's conduct to determine whether it should be re-listed as a state sponsor of terrorism.

**Table 7. FY2010 National Defense Authorization Act, House and Senate Action by Title, H.R. 2647, S. 1390**

(amounts in millions of dollars)

	Administration Request	House- Passed H.R. 2647	Senate- Passed S. 1390
<b>National Defense Authorization – Base Budget</b>			
Procurement	105,819.3	105,198.2	105,749.7
Research, Development, Test & Evaluation	78,634.3	79,654.5	79,617.8
Operation and Maintenance	156,444.2	157,276.6	156,393.0
Military Personnel	136,016.3	135,723.8	136,016.3
Other Authorizations	33,915.1	33,011.9	33,552.6
<b>Subtotal, DOD (non-MilCon) – Base Budget</b>	<b>510,829.2</b>	<b>510,865.0</b>	<b>511,329.4</b>
Military Construction	13,111.1	13,635.3	12,733.8
Family Housing	1,958.7	1,958.7	2,308.7
Base Realignment and Closure (BRAC)	7,876.3	7,666.3	7,876.3
Prior year savings	—	-85.3	-112.5
<b>Subtotal, MilCon, Family Housing, BRAC – Base Budget</b>	<b>22,946.0</b>	<b>23,175.0</b>	<b>22,806.3</b>
<b>Total, DOD – Base Budget</b>	<b>533,775.3</b>	<b>534,040.0</b>	<b>534,135.7</b>
<b>Atomic Energy Defense Programs</b>	<b>16,424.0</b>	<b>16,507.3</b>	<b>16,424.0</b>
<b>Total Base Budget, National Defense Authorization (Budget Function 050)</b>	<b>550,199.3</b>	<b>550,547.3</b>	<b>550,559.7</b>
<b>Overseas Contingency Operations</b>			
Procurement	23,741.2	24,416.0	24,370.1
Research, Development, Test & Evaluation	310.3	410.3	310.3
Operation and Maintenance	80,793.5	80,718.7	80,239.2 <sup>a</sup>
Military Personnel	13,586.3	13,586.3	13,586.3

	<b>Administration Request</b>	<b>House- Passed H.R. 2647</b>	<b>Senate- Passed S. 1390</b>
Other Authorizations <sup>a</sup>	10,163.7	9,463.7	9,351.5
Military Construction	1,405.0	1,405.0	1,405.0
<b>Total, DOD Overseas Contingency Operations</b>	<b>130,078.0</b>	<b>129,325.0</b>	<b>129,260.0</b>
Error correction		-120.0	
<b>Grand Total, National Defense Authorization</b>	<b>680,177.3</b>	<b>679,752.3</b>	<b>679,819.7</b>

**Sources:** CRS calculations based on House Armed Services Committee, Report to Accompany H.R. 2647, the National Defense Authorization Act for Fiscal Year 2010, H.Rept. 111-166, June 18, 2009; Senate Armed Services Committee, Report to Accompany S. 1390, the National Defense Authorization Act for Fiscal Year 2010, S.Rept. 111-35, July 2, 2009.

- a. The Senate Armed Services Committee includes in this line \$7.46 billion requested by the administration and authorized by both bills for the Afghanistan Security Forces Fund. This table, like the House Armed Services Committee's summary chart, includes that program in the line entitled, "Other Authorizations."

## FY2010 Defense Appropriations Bill

The FY2010 defense appropriations bill which the House passed July 30 by a vote of 400-30 (H.R. 3326) would challenge the Obama Administration's proposals to terminate or reduce funding for three major weapons programs. The bill would continue development of an alternate engine for the F-35 Joint Strike Fighter (\$560 million), continue production of the C-17 cargo plane (\$674 million), and spend an additional \$400 million on the VH-71 executive helicopter program, all of which actions the Administration opposed and two of which – the alternate engine and the VH-71 – drew threats that the President would veto a bill that funded them.

The bill also would add to the budget request nine F/A-18E/F fighters (\$495 million) one Littoral Combat Ship (\$540 million) plus \$240 million to fully fund the three LCS ships requested, and a third high-speed transport ship (\$180 million) in addition to the two requested (one apiece for the Army and Navy).

As reported by the House Appropriations Committee, H.R. 3326 also would have added to the budget request funds to continue production of the F-22 fighter, which the Obama Administration – like the preceding Bush Administration – had decided to terminate. President Obama also had said, in unusually explicit terms, that he would veto any defense bill that provided funding for continued F-22 production. Before the House passed the bill, in adopted by a vote of 269-165 an amendment deleting the additional F-22 procurement funds.

In its report, the House committee noted that the Administration had not submitted to Congress the annual Selected Acquisition Reports (SARs), which provide cost and schedule data on major equipment purchases. Noting that the Government Accountability Office (GAO) relied on data from these reports for to perform its annual assessment of major weapons programs, the committee directed the secretary of Defense to provide "SAR-like" data—including future budget projections—to GAO in time for that agency to present Congress with its annual program review in March 2010.

Funding levels appropriated by H.R. 3326 as reported by the House Appropriations Committee are summarized in **Table 8**. Funding levels authorized for selected programs are summarized in the **Appendix**.

Following are highlights of the H.R. 3326, which the House passed July 30 by a vote of 400-30 (H.Rept. 111-230):

### **Ballistic Missile Defense**

The bill generally supported the Administration's decisions to slow or terminate some technologically advanced anti-missile systems while increasing the procurement of Aegis and THAAD interceptor missiles designed to cope with near-term missile threats. One program on which the H.R. 3326 differed from the budget request and the two authorization bills was the Kinetic Energy Interceptor (KEI) intended to be a very fast missile that could intercept enemy missiles early in their flight. Defense Secretary Gates had recommended cancelling the program on cost and technical grounds. But H.R. 3326 would add to the budget \$80 million so that some KEI technologies could be adapted to other missile defense programs. The House rejected by a vote of 124-307 an amendment that would have dropped the KEI funding from the bill.

According to the Statement of Administration Policy (SAP) on H.R. 3326 issued by the Office of Management and Budget (OMB), the Administration "strongly objects" to a provision of the House bill that would rescind \$114.7 million that had been appropriated in FY2009 for work on a European missile defense site and \$40.2 million that had been appropriated for a missile tracking satellite.<sup>143</sup> These were among rescissions of prior appropriations included in the H.R. 3326 with a total value of \$1.39 billion which reduced the budgetary impact of the bill by that amount.

### **Shipbuilding**

The House committee warned that the FY2010 request for Navy ships would continue a pattern of buying too few ships annually to sustain a fleet of 313 vessels, which is the DOD goal. While the 313-ship fleet would require buying an average of 10 ships per year to replace vessels as they reach the end of their service-life, the Obama Administration's \$13.8 billion shipbuilding request would buy eight ships, slightly above the average for the past decade.

The committee added to H.R. 3326 funding for two additional ships:

- \$540 million for a fourth LCS, in addition to the three ships of this class for which the Administration requested \$1.38 billion. The committee also added to the bill \$240 million to fully fund the three ships in the budget request.
- \$180 million for a second Joint High Speed Vessel, in addition to the one requested in the Navy budget and another in the Army budget. These are small, ships based on the design of high-speed ferries intended to haul cargo and combat units over distances of up to several hundred miles.

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<sup>143</sup> Executive Office of the President, Office of Management and Budget, "Statement of Administration Policy: H.R. 3326 – Department of Defense Appropriations Act, 2010," July 28, 2009.



## **Combat Aircraft**

As reported, the bill included \$368.8 million for long lead-time components that would permit the funding of 12 more F-22 fighters in FY2010. However the House adopted by a vote of 269-165 an amendment by Defense Appropriations Subcommittee Chairman Representative John P. Murtha to reallocate that money, in light of President Obama's insistence that he would veto a bill that included funds to continue F-22 production. Subsequently, the House reaffirmed that position, rejecting by a vote of 169-261 a procedural motion that was, in effect, an amendment to restore the F-22 procurement funds.

The bill also includes a provision barring the use of funds to approve or license the sale of F-22s to any other country, a provision that has been included in the defense appropriations bill for every year since FY1998.

The bill includes \$560 million to continue development of an alternate engine for the F-35 Joint Strike Fighter, an addition the President also had warned would draw a veto. The Appropriations Committee largely offset the cost of the alternate engine project by cutting from the budget two of the 30 F-35s requested (\$300 million) and \$232 million requested for one-time costs associated with the program because, the committee said, the program had not yet expended more than \$200 million appropriated in prior years for these costs.

According to the SAP, the Administration "strongly objects" to any action that would delay the F-35 program, as administration officials insist the alternative engine project would do.

The bill would add nine F/A-18E/F Navy fighters (\$495 million) to the nine planes requested (\$1.0 billion), and it would add \$108 million for long lead-time components that would allow the Navy to sign a five-year contract for 150 additional F/A-18E/Fs beginning in FY2011. The committee's rationale is that additional F/A-18E/Fs are needed to mitigate a shortfall in the Navy's force of carrier-based fighters that otherwise would occur because repeated combat deployments are wearing out the F/A-18s currently in service earlier than had been projected, plans to extend the life of those aircraft are more problematic than had been assumed, and production of F-35 Joint Strike Fighters intended to replace the older F/A-18s has been delayed.

## **Cargo and Tanker Planes**

The bill would add to the budget request \$674.1 million for three C-17 wide-body, intercontinental cargo planes, and \$332.8 million for four personnel transports, including \$132.8 million for two C-37s (based on the commercial Gulfstream V) and \$200 million for two C-40s (based on the commercial Boeing 737). The Administration has "strongly objected" to the additional C-17s.

The committee said the Air Force was making excessive use of so-called "undefinitized contract actions" (UCAs) in managing the C-17 program. While acknowledging that there is a place for this procedure, which accord the service much more flexibility than more traditional contracts, the committee said the Air Force had "grossly abused" the process and directed the service to minimize their use in the future.

As requested, the bill would provide \$439.6 million to begin acquiring a new fleet of mid-air refueling tankers from one or both of the companies that had competed for the contract in 2008-2009, but requires that any tankers bought for the Air Force be assembled in the United States.

The Air Force had selected Europe-based EADS as the winner of that competition, but GAO nullified that decision, upholding a protest by Boeing—the other competitor—who argued that the service had not adhered to the announced criteria for selecting the winner.

If the tanker contract is awarded to a single source on the basis of a second competition, the bill provides that the criterion for selection “should” include a calculation of the life-cycle cost of each type of plane over a 40-year service life.

The Administration opposes the requirement that the tankers be assembled in the United States.

## **Helicopters**

H.R. 3326 includes two funding initiatives that respond to the Administration’s cancellation of two helicopter development programs. The bill would add to the request:

- \$400 million to continue testing and outfitting five VH-71 White House transport helicopters already built as the first stage of a program that had been intended to produce a fleet of 27 helicopters, most of which were to have been much more capable than the first five. The committee said that the added funding allow DOD to harvest useful aircraft from the \$3.2 billion already spent on the program. The Administration “strongly objects” to this funding and threatened to veto the bill if it is retained.
- \$140 million to buy five HH-60M search and rescue helicopters plus \$101.2 million to upgrade HH-60Ms currently in service. The Administration cancelled the CSAR-X program intended to develop a replacement for the HH-60M.

## **Ground Combat Systems: FCS, EFV, Stryker**

H.R. 2236 essentially supports the Administration’s decision to substantially redirect the Army’s Future Combat Systems (FCS) program, starting over the effort to develop a new family of ground combat vehicles. The bill provides \$2.67 billion of the \$2.88 billion requested for FCS, eliminating \$211 requested for termination costs the committee said could be covered by unspent funds previously appropriated for now-cancelled elements of the program.

The bill would cut \$50 million from the \$293 million requested to continue development of the Marine Corps’ Expeditionary Fighting Vehicle (EFV), a troop carrier intended to carry a squad of Marines from ship to shore at nearly 30 mph. and then function as an armored troop carrier on land. Citing delays and cost increases in the program, the committee said it had “serious reservations” as to whether the EFV development program would succeed.

The committee added to the budget request \$225 million to continue production of Stryker wheeled armored troop carriers, used by the Army.

## **Military Personnel**

The bill would fund the requested end-strength of 1,410,000 active-duty personnel and 844,500 drilling members of the reserves and National Guard. It would add to the request \$364.3 million to provide a 3.4% increase in military pay, rather than the 2.9% pay raise included in the budget.

The committee directed DOD to give Congress a report on the number and size of cash incentives the services were using to recruit and retain personnel. The committee speculated that the services had increased the number and size of such cash awards without measuring their effectiveness and without considering the effect on recruitment and retention of other increases in military compensation.

H.R. 3326 also cut from the military personnel accounts \$1.41 billion based on the GAO's findings that the services historically spent less in these accounts than they budgeted for.

**Table 8. FY2010 Defense Appropriations Act (H.R. 3326)  
Summary by Title**

Amounts in millions of dollars

	<b>Administration Request</b>	<b>House- Passed H.R. 3326</b>
Military Personnel	125,264.9	122,378.0
Operations and Maintenance	156,444.2	154,126.7
Procurement	105,213.4	104,837.8
Research, Development, Test & Evaluation	78,634.3	80,238.0
Revolving and Management Funds	3,119.8	3,147.8
Other DOD Programs	31,439.5	33,342.2
Related Agencies	963.7	901.9
General Provisions (net)	11.0	-1,381.5
Overseas Deployments and Other Activities	128,595.0	128,247.0
<b>Total, DOD (discretionary)</b>	<b>629,685.9</b>	<b>625,837.9</b>
Scorekeeping Adjustments	10,476.0	10,746.0
<b>Total, DOD mandatory and discretionary</b>	<b>640,431.9</b>	<b>636,583.9</b>

**Source:** CRS calculations based on House Appropriations Committee, Report to Accompany H.R. 3326, Department of Defense Appropriations Bill, 2010 (H.Rept. 111-230), p. 2., July 24, 2009.

# Appendix. Program Funding Tables

**Table A-I. Congressional Action on FY2010 Missile Defense Funding: Authorization**

(amounts in millions of dollars)

PE Number	Program Element Title	FY2009 Estimate	FY2010 Request	House- Passed	Senate Passed	
<b>RDT&amp;E Missile Defense Agency</b>						
0603175C	Ballistic Missile Defense Technology	119.3	109.8	109.8	109.8	
0603881C	Ballistic Missile Defense Terminal Defense Segment	956.7	719.5	719.5	719.5	
0603882C	Ballistic Missile Defense Midcourse Defense Segment	1,507.5	982.9	982.9	982.9	House and Senate concur in administration proposal to deploy 30 interceptor missiles in Alaska and California rather than 44 as earlier planned.
0603883C	Ballistic Missile Defense Boost Defense Segment	400.8	186.7	186.7	186.7	House and Senate concur in administration proposal to reorganize Airborne Laser as an R&D program rather than one aimed at deployment.
0603884C	Ballistic Missile Defense Sensors	767.6	636.9	636.9	641.9	Senate adds \$5 mn for airborne infrared technology
0603886C	Ballistic Missile Defense System Interceptor	385.5	–	–	–	House and Senate concur in administration proposal to cancel Kinetic Energy Interceptor.
0603888C	Ballistic Missile Defense Test & Targets	911.7	966.8	966.8	966.8	
0603890C	Ballistic Missile Defense Enabling Programs	402.8	369.1	344.1	369.1	
0603891C	Special Programs - MDA	175.7	301.6	301.6	301.6	
0603892C	AEGIS BMD	1,113.7	1,690.8	1,690.8	1,660.8	Senate cuts \$30 mn as excess to what can be spent

PE Number	Program Element Title	FY2009 Estimate	FY2010 Request	House-Passed	Senate Passed	
0603893C	Space Tracking & Surveillance System	208.9	180.0	180.0	180.0	
0603894C	Multiple Kill Vehicle	283.5	–	–	–	House and Senate concur in administration proposal to cancel Multiple Kill Vehicle,
0603895C	Ballistic Missile Defense System Space Programs	24.7	12.5	12.5	12.5	
0603896C	Ballistic Missile Defense Command and Control, Battle Management and Communications	288.3	340.0	340.0	340.0	
0603897C	Ballistic Missile Defense Hercules	55.8	48.2	48.2	48.2	
0603898C	Ballistic Missile Defense Joint Warfighter Support	69.7	60.9	61.4	60.9	
0603904C	Missile Defense Integration & Operations Center (MDIOC)	106.0	86.9	91.9	86.9	
0603906C	Regarding Trench	3.0	6.2	6.2	6.2	
0603907C	Sea-Based X-Band Radar (SBX)	146.7	174.6	174.6	174.6	
0603908C	BMD European Interceptor Site (Poland)	362.0	–	–	–	The House authorized \$50 million, as requested, for a missile defense site in Europe and also stipulated (Sec. 226) that a total of \$343.1 million made available in FY1009 and FY2010 (comprising \$50 million authorized in this bill and funds authorized for FY2009) could be spent either on the currently planned system – with a radar in the Czech Republic and interceptor missiles in Poland – or on an alternative system that would be at least as cost-effective and technically reliable as the planned system.
0603909C	BMD European Mid-Course Radar (Czech Republic)	76.5	–	–	–	
0603911C	BMD European Capability	—	50.5	50.5	50.5	
0603912C	BMD European Communications Support	27.0	–	–	–	
0603913C	Israeli Cooperative Programs	—	119.6	140.1	144.6	House adds \$20.5 mn; Senate adds \$25 mn.

PE Number	Program Element Title	FY2009 Estimate	FY2010 Request	House-Passed	Senate Passed
0901585C	Pentagon Reservation	19.7	19.7	19.7	19.7
0901598C	Management HQ - MDA	81.2	57.4	57.4	57.4
<b>Subtotal R&amp;D, Missile Defense Agency</b>		<b>8,474.6</b>	<b>7,120.5</b>	<b>7,121.6</b>	<b>7,120.5</b>
<b>Military Construction, Missile Defense Agency</b>					
	Aegis BMD Facility Expansion	–	24.5	24.5	24.5
	BMDs European Interceptor Site (Poland)	42.6	–	–	–
	BMDs European Mid-Course Radar (Czech Republic)	108.6	–	–	–
	Minor Construction	3.5	3.7	3.7	3.7
	Planning & Design	14.9	2.0	2.0	2.0
<b>Subtotal Military Construction, Missile Defense Agency</b>		<b>169.5</b>	<b>30.2</b>	<b>30.2</b>	<b>30.2</b>
<b>Base Realignment and Closure (BRAC), Missile Defense Agency</b>		<b>160.0</b>	<b>86.6</b>	<b>86.6</b>	<b>86.6</b>
The House approved the BRAC funding request for MDA, but it also made an unallocated reduction of \$350 million to the total \$2.39 billion BRAC request for Defense Agencies (of which MDA is one).					
<b>Procurement, Missile Defense Agency</b>					
	THAAD, Block 5 Fielding	104.8	420.3	420.3	420.3
	Aegis, Block 5 Fielding	56.8	168.7	168.7	168.7
<b>Subtotal Procurement, Missile Defense Agency</b>		<b>161.6</b>	<b>589.0</b>	<b>589.0</b>	<b>589.0</b>
<b>Total, Missile Defense Agency</b>		<b>8,965.7</b>	<b>7,826.3</b>	<b>7,827.4</b>	<b>7,826.4</b>
<b>Army and Joint Staff R&amp;D</b>					
0604869A	Patriot/MEADS Combined Aggregate Program (CAP)	429.8	569.2	568.2	569.2

PE Number	Program Element Title	FY2009 Estimate	FY2010 Request	House-Passed	Senate Passed	
0203801A	Missile/Air Defense Product Improvement Program	37.7	39.3	39.3	39.3	
0102419A	Aerostat Joint Program Office (JLENS)	355.3	360.1	238.1	340.1	Senate cuts \$20 mn due to program delay
0605126j	Joint Theater Air and Missile Defense Organization	55.3	96.9	75.9	96.9	House cuts \$21 mn.
<b>Subtotal R&amp;D, Army, Joint Staff</b>		<b>878.1</b>	<b>1,065.4</b>	<b>921.5</b>	<b>1,045.4</b>	
<b>Procurement, Army</b>						
C49100	Patriot/PAC-3	1,026.0	393.1	393.1	398.1	Senate adds \$5 mn for C2 mods
C50001	Patriot/MEADS	31.0	16.4	16.4	16.4	
<b>Subtotal, Procurement, Army</b>		<b>1,057.0</b>	<b>409.5</b>	<b>409.5</b>	<b>414.5</b>	
<b>Total Missile Defense R&amp;D, MilCon, Procurement, All Agencies</b>		<b>10,900.8</b>	<b>9,301.3</b>	<b>9,158.4</b>	<b>9,286.3</b>	

**Sources:** House Armed Services Committee, Report to Accompany H.R. 2647, the National Defense Authorization Act for Fiscal Year 2010, H.Rept. 111-166, June 18, 2009; Senate Armed Services Committee, Report to Accompany S. 1390, the National Defense Authorization Act for Fiscal Year 2010, S.Rept. 111-35, July 2, 2009.

**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 FY2010 Missile Defense Funding: Appropriations**

(amounts in millions of dollars)

PE Number	Program Element Title	FY2009 Estimate	FY2010 Request	House Committee	Senate Committee	Comments
<b>RDT&amp;E Missile Defense Agency</b>						
0603175C	Ballistic Missile Defense Technology	119.3	109.8	109.8	–	–
0603881C	Ballistic Missile Defense Terminal Defense Segment	956.7	719.5	719.5	–	–
0603882C	Ballistic Missile Defense Midcourse Defense Segment	1,507.5	982.9	982.9	–	–
0603883C	Ballistic Missile Defense Boost Defense Segment	400.8	186.7	186.7	–	–
0603884C	Ballistic Missile Defense Sensors	767.6	636.9	636.9	–	–
0603886C	Ballistic Missile Defense System Interceptor	385.5	–	80.0	–	House adds \$80 million for Kinetic Energy Interceptor that Administration proposed to terminate.
0603888C	Ballistic Missile Defense Test & Targets	911.7	966.8	940.8	–	House cuts \$26 million to synchronize with test schedule.
0603890C	Ballistic Missile Defense Enabling Programs	402.8	369.1	358.6	–	House makes general reduction of \$25 million offset by adds for specified projects.
0603891C	Special Programs - MDA	175.7	301.6	286.6	–	House cuts \$15 million due to excessive growth in funding.
0603892C	AEGIS BMD	1,113.7	1,690.8	1,670.8	–	House cuts \$50 million as CG-X requirements not determined, adds \$30 million for signal processor open architecture.
0603893C	Space Tracking & Surveillance System	208.9	180.0	160.0	–	House cuts \$20 million for demonstration satellites.
0603894C	Multiple Kill Vehicle	283.5	–	–	–	–
0603895C	Ballistic Missile Defense System Space Programs	24.7	12.5	12.5	–	–



PE Number	Program Element Title	FY2009 Estimate	FY2010 Request	House Committee	Senate Committee	Comments
0603896C	Ballistic Missile Defense Command and Control, Battle Management and Communications	288.3	340.0	340.0	–	–
0603897C	Ballistic Missile Defense Hercules	55.8	48.2	48.2	–	–
0603898C	Ballistic Missile Defense Joint Warfighter Support	69.7	60.9	61.4	–	House adds \$500 thousand for advisory group on BMD training needs.
0603904C	Missile Defense Integration & Operations Center (MDIOC)	106.0	86.9	86.9	–	–
0603906C	Regarding Trench	3.0	6.2	6.2	–	–
0603907C	Sea-Based X-Band Radar (SBX)	146.7	174.6	161.6	–	House cuts \$13 million as general reduction.
0603908C	BMD European Interceptor Site (Poland)	362.0	–	–	–	–
0603909C	BMD European Mid-Course Radar (Czech Republic)	76.5	–	–	–	–
0603911C	BMD European Capability	—	50.5	50.5	–	The House would rescind \$114.7 million previously appropriated for the European site.
0603912C	BMD European Communications Support	27.0	–	–	–	–
0603913C	Israeli Cooperative Programs	—	119.6	202.4	–	House adds \$82 million for Arrow and David's Sling.
0901585C	Pentagon Reservation	19.7	19.7	–	–	House deletes funding as duplicative
0901598C	Management HQ - MDA	81.2	57.4	52.4	–	House makes \$5 million general reduction
<b>Subtotal R&amp;D, Missile Defense Agency</b>		<b>8,474.6</b>	<b>7,120.5</b>	<b>7,154.6</b>	<b>–</b>	<b>–</b>
<b>Military Construction, Missile Defense Agency</b>						
	Aegis BMD Facility Expansion	–	24.5	NA	–	In military construction appropriations bill.
	BMDS European Interceptor Site (Poland)	42.6	–	NA	–	In military construction appropriations bill.
	BMDS European Mid-Course Radar (Czech Republic)	108.6	–	NA	–	In military construction appropriations bill.
	Minor Construction	3.5	3.7	NA	–	In military construction appropriations bill.
	Planning & Design	14.9	2.0	NA	–	In military construction appropriations bill.

PE Number	Program Element Title	FY2009 Estimate	FY2010 Request	House Committee	Senate Committee	Comments
<b>Subtotal Military Construction, Missile Defense Agency</b>		<b>169.5</b>	<b>30.2</b>	<b>NA</b>	<b>-</b>	In military construction appropriations bill.
<b>Base Realignment and Closure (BRAC), Missile Defense Agency</b>		<b>160.0</b>	<b>86.6</b>	<b>NA</b>	<b>-</b>	In military construction appropriations bill.
<b>Procurement, Missile Defense Agency</b>						
	THAAD, Block 5 Fielding	104.8	420.3	420.3	-	-
	Aegis, Block 5 Fielding	56.8	168.7	168.7	-	-
<b>Subtotal Procurement, Missile Defense Agency</b>		<b>161.6</b>	<b>589.0</b>	<b>589.0</b>	<b>-</b>	<b>-</b>
<b>Total, Missile Defense Agency</b>		<b>8,965.7</b>	<b>7,826.4</b>	<b>7,743.6</b>	<b>-</b>	House total excludes military construction.
<b>Army and Joint Staff R&amp;D</b>						
0604869A	Patriot/MEADS Combined Aggregate Program (CAP)	429.8	569.2	569.2	-	-
0203801A	Missile/Air Defense Product Improvement Program	37.7	39.3	39.3	-	-
0102419A	Aerostat Joint Program Office (JLENS)	355.3	360.1	288.1	-	House cuts \$72 million for funding ahead of need.
0605126J	Joint Theater Air and Missile Defense Organization	55.3	96.9	96.9	-	-
<b>Subtotal R&amp;D, Army, Joint Staff</b>		<b>878.1</b>	<b>1,065.4</b>	<b>993.4</b>	<b>-</b>	
<b>Procurement, Army</b>						
C49100	Patriot/PAC-3	1,026.0	393.1	383.6	-	House cuts \$9.5 million for unjustified cost growth.
C50001	Patriot/MEADS	31.0	16.4	16.4	-	-
<b>Subtotal, Procurement, Army</b>		<b>1,057.0</b>	<b>409.5</b>	<b>400.0</b>	<b>-</b>	<b>-</b>
<b>Total Missile Defense R&amp;D, MilCon, Procurement</b>		<b>10,900.8</b>	<b>9,301.3</b>	<b>9,137.1</b>	<b>-</b>	House total excludes military construction.

Source: House Appropriations Committee, Report to Accompany H.R. 3326, Department of Defense Appropriations Bill, 2010, H.Rept. 111-230, July 24, 2009.

**Table A-3. Congressional Action on Selected FY2010 Army and Marine Corps Programs: Authorization**

(amounts in millions of dollars)

	Request			House-Passed			Senate Passed			Final Bill			Comments
	Procurement		R&D	Procurement		R&D	Procurement		R&D	Procurement		R&D	
	#	\$	\$	#	\$	\$	#	\$	\$	#	\$	\$	
<b>Army Aircraft</b>													
Light Utility Helicopter	54	326.0	9.4	54	326.0	9.4	54	326.0	9.4				
UH-60 Blackhawk Helicopter (Base Budget)	79	1,357.1	33.5	79	1,357.1	33.5	79	1,357.1	33.5				
<i>UH-60 Blackhawk Helicopter (OCO)</i>	4	74.3	—	4	74.3	—	4	74.3	—				
CH-47 Chinook Helicopter (Base Budget)	35	860.1	10.8	35	882.1	10.8	35	882.1	10.8				
<i>CH-47 Chinook Helicopter (OCO)</i>	4	141.2	—	4	141.2	—	4	141.2	—				
CH-47 Helicopter Mods	—	102.9	—	—	86.9	—	—	80.9	—				
AH-64 Apache Helo Mods (Base Budget)	—	426.4	164.1	—	428.4	164.1	—	431.9	164.1				
<i>AH-64 Apache Helo Mods (OCO)</i>	—	315.3	—	—	315.3	—	—	315.3	—				
<b>Army and USMC Weapons &amp; Tracked Combat Vehicles</b>													
M-2 Bradley Mods (Base Budget)	—	526.4	88.6	—	526.4	88.6	—	526.4	88.6				
<i>M-2 Bradley Mods (OCO)</i>	—	243.6	—	—	243.6	—	—	243.6	—				
M-1 Abrams tank Mods	—	369.4	101.7	—	369.4	101.7	—	369.4	101.7				
Stryker Armored Vehicle	—	388.6	90.3	—	334.6	90.3	—	388.6	140.3				Senate adds \$50 mn in R&D

	Request			House-Passed			Senate Passed			Final Bill			Comments
	Procurement		R&D	Procurement		R&D	Procurement		R&D	Procurement		R&D	
	#	\$	\$	#	\$	\$	#	\$	\$	#	\$	\$	
Future Combat System	—	327.9	2,553.0	—	327.9	2,226.0	—	327.9	2,171.3				House denied \$326.8 million and Senate denied \$381.8 million requested in R&D to terminate development of FCS manned ground vehicles and N-LOS cannon, on grounds that previously appropriated funds could cover termination costs.
USMC Expeditionary Fighting Vehicle (EFV)	—	—	293.5	—	—	293.5	—	—	293.5				
<b>Army and USMC Wheeled Vehicles</b>													
HMMWV, Army and USMC (Base Budget)	1,824	290.9	—	1,824	295.9	—	1,824	290.9	—				
HMMWV, Army (OCO)	8,444	1,456.1	—	8,444	1,456.1	—	8,444	1,456.1	—				
Family of Medium Tactical Vehicles (Base Budget)	3,889	1,158.5	5.7	3,889	1,158.5	5.7	3,889	1,158.5	15.7				
Family of Medium Tactical Vehicles (OCO)	1,643	461.7	—	1,643	261.7	—	1,643	461.7	—				
Family of Heavy Tactical Vehicles (Base Budget)	—	812.9	7.5	—	812.9	7.5	—	812.9	17.5				
Family of Heavy Tactical Vehicles (OCO)	—	623.2	—	—	623.2	—	—	623.2	—				
MRAP Vehicle (OCO)	1,080	5,456.0	—	1,080	5,456.0	—	1,080	5,456.0	—				
<b>Radios and Other Tactical Electronic Devices</b>													
Joint Tactical Radio System (JTRS)	—	—	876.4	—	—	876.4	—	—	867.4				

	Request			House-Passed			Senate Passed			Final Bill			Comments
	Procurement		R&D	Procurement		R&D	Procurement		R&D	Procurement		R&D	
	#	\$	\$	#	\$	\$	#	\$	\$	#	\$	\$	
SINCGARS Family (Base Budget and OCO)	—	135.0	—	—	—	—	—	60.0	—				HASC denied funds for SINCGARS radios on grounds that they would not be compatible with the JTRS radios planned for future procurement. Senate cut \$75 million in OCO for unjustified program growth.
WIN-T Ground Forces Tactical Network (Base Budget and OCO)	—	557.7	180.6	—	555.7	165.6	—	557.7	180.6				
FBCB2 digital combat Information network (Base Budget and OCO)	—	515.0	—	—	693.9	—	—	336.0	—				Senate cut \$179 million in OCO as unjustified program growth.
Night vision equipment—various (Base Budget and OCO)	—	863.9	—	—	801.8	—	—	763.9	—				Senate cut \$100 million in Army base procurement due to contractor delays

**Sources:** House Armed Services Committee, Report to Accompany H.R. 2647, the National Defense Authorization Act for Fiscal Year 2010, H.Rept. 111-166, June 18, 2009; Senate Armed Services Committee, Report to Accompany S. 1390, the National Defense Authorization Act for Fiscal Year 2010, S.Rept. 111-35, July 2, 2009 and text of S. 1390, National Defense Authorization Act for Fiscal Year 2010, as reported by the Senate Armed Services Committee.

**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 Army and Marine Corps Programs: Appropriations**

(amounts in millions of dollars)

	Request			House-Passed			Senate			Final Bill			Comments
	Procurement		R&D	Procurement		R&D	Procurement		R&D	Procurement		R&D	
	#	\$	\$	#	\$	\$	#	\$	\$	#	\$	\$	
<b>Army Aircraft</b>													
Light Utility Helicopter	54	326.0	–	54	326.0	–	–	–	–	–	–	–	
UH-60 Blackhawk Helicopter (Base Budget)	79	1,357.1	33.5	79	1,357.1	33.5	–	–	–	–	–	–	
<i>UH-60 Blackhawk Helicopter (OCO)</i>	4	74.3	–	4	74.3	–	–	–	–	–	–	–	
CH-47 Chinook Helicopter (Base Budget)	35	910.8	10.8	34	897.8	10.8	–	–	–	–	–	–	– House cuts \$13 million and 1 aircraft.
<i>CH-47 Chinook Helicopter (OCO)</i>	4	141.2	–	4	141.2	–	–	–	–	–	–	–	
CH-47 Helicopter Mods	–	102.9	–	–	83.9	–	–	–	–	–	–	–	
AH-64 Apache Helo Mods (Base Budget)	–	426.4	164.1	–	429.4	164.1	–	–	–	–	–	–	
<i>AH-64 Apache Helo Mods (OCO)</i>	4	315.3	–	4	315.3	–	–	–	–	–	–	–	
<b>Army and USMC Weapons &amp; Tracked Combat Vehicles</b>													
M-2 Bradley Mods (Base Budget)	–	526.4	88.6	–	526.4	88.6	–	–	–	–	–	–	
<i>M-2 Bradley Mods (OCO)</i>	–	243.6	–	–	243.6	–	–	–	–	–	–	–	
M-1 Abrams tank Mods	22	369.4	101.7	22	369.4	101.7	–	–	–	–	–	–	
Stryker Armored Vehicle	–	388.6	90.3	–	613.6	90.3	–	–	–	–	–	–	– House adds \$250 million to continue rate of Stryker production, with \$25 million offset.
Future Combat System	–	327.9	2,553.0	–	327.9	2,342.0	–	–	–	–	–	–	– House cuts \$211 million in R&D for unjustified termination costs.
USMC Expeditionary Fighting Vehicle (EFV)	–	–	293.5	–	0.0	243.5	–	–	–	–	–	–	– House cuts \$50 million in R&D due to program delay.
<b>Army and USMC Wheeled Vehicles</b>													

HMMWV, Army and USMC (Base Budget)	1,824	293.8	–	1,824	293.8	–	–	–	–	–	–	–
<i>HMMWV, Army (OCO)</i>	8,444	1,456.1	–	8,444	1,456.1	–	–	–	–	–	–	–
Family of Medium Tactical Vehicles (Base Budget)	3,889	1,158.5	5.7	3,241	965.5	5.7	–	–	–	–	–	– House cuts \$193 million due to schedule slip.
<i>Family of Medium Tactical Vehicles (OCO)</i>	1,643	461.7	–	1,643	461.7	–	–	–	–	–	–	–
Family of Heavy Tactical Vehicles (Base Budget)	–	812.9	7.5	–	786.6	10.5	–	–	–	–	–	– House cuts \$26.4 million for funding ahead of need.
<i>Family of Heavy Tactical Vehicles (OCO)</i>	–	623.2	–	–	623.2	–	–	–	–	–	–	–
<i>MRAP Vehicle (OCO)</i>	1,080	5,456.0	–	1,080	5,456.0	–	–	–	–	–	–	–
<b>Radios and Other Tactical Electronic Devices</b>												
Joint Tactical Radio System (JTRS)	–	90.2	876.4	–	35.0	880.9	–	–	–	–	–	– House cuts \$55.2 million for funding ahead of need.
SINCGARS Family (Base Budget and OCO)	–	135.0	–	–	131.2	–	–	–	–	–	–	–
WIN-T Ground Forces Tactical Network (Base Budget and OCO)	–	557.7	180.7	–	557.7	165.7	–	–	–	–	–	–
FBCB2 digital combat Information network (Base Budget and OCO)	–	515.0	–	–	515.0	–	–	–	–	–	–	–
Night vision equipment—various (Base Budget and OCO)	–	718.6	122.6	–	543.0	171.6	–	–	–	–	–	– House cuts \$175.5 million in Army procurement for funding ahead of need, adds \$49 million in R&D.

**Source:** House Appropriations Committee, Report to Accompany H.R. 3326, Department of Defense Appropriations Bill, 2010, H.Rept. 111-230, July 24, 2009.

**Table A-5. Congressional Action on Selected FY2010 Shipbuilding Programs: Authorization**

(amounts in millions of dollars)

	Request			House-Passed			Senate Passed			Final Bill			Comments
	Procurement		R&D	Procurement		R&D	Procurement		R&D	Procurement		R&D	
	#	\$	\$	#	\$	\$	#	\$	\$	#	\$	\$	
<b>Shipbuilding and Conversion, Navy</b>													
CVN-21 Carrier	—	739.3	173.6	—	739.3	173.6	—	739.3	173.6	—	—	—	
CVN-21 Carrier (long-lead components)	—	484.4	—	—	484.4	—	—	484.4	—	—	—	—	
Virginia Class Submarine	1	1,964.3	154.8	1	1,964.3	165.8	1	1,964.3	165.8	—	—	—	
Virginia Class Submarine (long-lead components)	—	1,959.7	—	—	1,959.7	—	—	1,959.7	—	—	—	—	
Carrier Refueling Overhaul	—	1,775.4	—	—	1,775.4	—	—	1,775.4	—	—	—	—	
CG(X) missile defense cruiser	—	—	150.0	—	—	150.0	—	—	150.0	—	—	—	
DD(X)/DDG-1000 Destroyer	—	1,084.2	539.1	—	1,084.2	539.1	—	1,084.2	539.1	—	—	—	
DDG-51 Destroyer	1	1,912.3	—	1	1,912.3	—	1	1,912.3	—	—	—	—	
DDG-51 Destroyer (long-lead components)	—	329.0	—	—	429.0	—	—	329.0	—	—	—	—	
LCS Littoral Combat Ship	3	1,380.0	360.5	3	1,380.0	360.5	3	1,380.0	360.5	—	—	—	
LPD-17 Amphibious Ship	—	872.4	—	—	872.4	—	—	872.4	—	—	—	—	
LPD-17 (long-lead components)	—	184.6	—	—	244.6	—	—	184.6	—	—	—	—	
Intratheater Connector, Navy	1	178.0	8.4	1	178.0	8.4	1	178.0	8.4	—	—	—	
Outfitting	—	391.2	—	—	391.2	—	—	391.2	—	—	—	—	
Service Craft	—	3.7	—	—	3.7	—	—	3.7	—	—	—	—	
LCAC Service Life Extension	3	63.9	—	3	63.9	—	3	63.9	—	—	—	—	
Completion of Prior Year Shipbuilding	—	454.6	—	—	304.6	—	—	454.6	—	—	—	—	



	Request			House-Passed			Senate Passed			Final Bill			Comments
	Procurement		R&D	Procurement		R&D	Procurement		R&D	Procurement		R&D	
	#	\$	\$	#	\$	\$	#	\$	\$	#	\$	\$	
<b>National Defense Sealift Fund</b>													
T-AKE Cargo Ship	2	940.1	—	2	940.1	—	1	540.1	—	—	—	—	Senate cuts \$400 million to delay 2 <sup>nd</sup> ship pending outcome of QDR
<b>Army</b>													
Joint High Speed Vessel, Army	1	183.7	3.1	1	183.7	3.1	1	183.7	3.1	—	—	—	

**Sources:** House Armed Services Committee, Report to Accompany H.R. 2647, the National Defense Authorization Act for Fiscal Year 2010, H.Rept. 111-166, June 18, 2009; Senate Armed Services Committee, Report to Accompany S. 1390, the National Defense Authorization Act for Fiscal Year 2010, S.Rept. 111-35, July 2, 2009 and text of S. 1390, National Defense Authorization Act for Fiscal Year 2010, as reported by the Senate Armed Services Committee.

**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-6. Congressional Action on FY2010 Shipbuilding Programs: Appropriations**

(amounts in millions of dollars)

	Request			House-Passed			Senate			Final Bill			Comments
	Procurement		R&D	Procurement		R&D	Procurement		R&D	Procurement		R&D	
	#	\$	\$	#	\$	\$	#	\$	\$	#	\$	\$	
<b>Shipbuilding and Conversion, Navy</b>													
CVN-21 Carrier	-	739.3	173.6	-	739.3	173.6	-	-	-	-	-	-	
CVN-21 Carrier (long-lead components)	-	484.4	-	-	484.4	-	-	-	-	-	-	-	
Virginia Class Submarine	1	1,964.3	154.8	1	1,964.3	195.3	-	-	-	-	-	-	
Virginia Class Submarine (long-lead components)	-	1,959.7	-	-	1,959.7	-	-	-	-	-	-	-	
Carrier Refueling Overhaul	-	1,775.4	-	-	1,775.4	-	-	-	-	-	-	-	
CG(X) missile defense cruiser	-	-	150.0	-	-	110.0	-	-	-	-	-	-	
DD(X)/DDG-1000 Destroyer	-	1,084.2	539.1	-	1,073.2	539.1	-	-	-	-	-	-	
DDG-51 Destroyer	1	1,912.3	-	1	1,912.3	-	-	-	-	-	-	-	
DDG-51 Destroyer (long-lead components)	-	329.0	-	-	329.0	-	-	-	-	-	-	-	
LCS Littoral Combat Ship	3	1,380.0	360.5	4	2,160.0	366.9	-	-	-	-	-	-	House adds \$240 million to properly price ships, adds \$540 million for one additional ship.

LPD-17 Amphibious Ship	–	872.4	5.3	–	872.4	5.3	–	–	–	–	–	–	
LPD-17 (long-lead components)	–	184.6	–	–	184.6	–	–	–	–	–	–	–	
Intratheater Connector, Navy	1	178.0	8.4	2	358.0	8.4	–	–	–	–	–	–	House adds \$180 million for one additional ship.
Outfitting	–	391.2	–	–	391.2	–	–	–	–	–	–	–	
Service Craft	–	3.7	–	–	3.7	–	–	–	–	–	–	–	
LCAC Service Life Extension	3	63.9	–	3	63.9	–	–	–	–	–	–	–	
Completion of Prior Year Shipbuilding	–	454.6	–	–	454.6	–	–	–	–	–	–	–	
<b>National Defense Sealift Fund</b>													
T-AKE Cargo Ship	2	940.1	–	2	940.1	–	–	–	–	–	–	–	
<b>Army</b>													
Joint High Speed Vessel, Army	–	183.7	3.1	–	183.7	3.1	–	–	–	–	–	–	

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**Source:** House Appropriations Committee, Report to Accompany H.R. 3326, Department of Defense Appropriations Bill, 2010, H.Rept. 111-230, July 24, 2009.

**Table A-7. Congressional Action on Selected FY2010 Navy, Marine Corps and Air Force Aircraft Programs: Authorization**

(amounts in millions of dollars)

	Request			House-Passed			Senate			Final Bill			Comments
	Procurement		R&D	Procurement		R&D	Procurement		R&D	Procurement		R&D	
	#	\$	\$	#	\$	\$	#	\$	\$	#	\$	\$	
F-35 Joint Strike Fighter, AF	10	2,048.8	1,858.1	9	2,115.8	2,011.6	10	2,048.8	1,858.1	—	—	—	To fund continued development of an alternative engine for the Joint Strike Fighter, over the Administration's objections, the House made a net addition of \$255 million to the total of \$10.4 billion requested for the program. The House cut from the request two planes and associated spare parts (-\$308 million) and part of a requested R&D management reserve (-\$156 million) to partly offset increases that included \$590 million to continue work on the alternate engine.
F-35 Joint Strike Fighter, Navy	20	3,997.1	1,741.3	19	3,873.1	1,894.8	20	3,997.1	1,741.3	—	—	—	
F-35 Joint Strike Fighter, long-lead components (AF and Navy)	—	781.6	—	—	799.6	—	—	781.6	—	—	—	—	
F-22 Fighter, AF	—	95.1	569.3	—	95.1	569.3	—	95.1	569.3	—	—	—	The House added funds for components that would allow procurement of 12 F-22s in FY2011; but it largely offset the cost by cutting the amount requested to modify existing F-22s, which reduction HASC said could be made up for by unspent FY2009 funds for F-22.
F-22 Fighter (long-lead components)	—	—	—	—	368.8	—	—	—	—	—	—	—	
F-22 Fighter Mods	—	350.7	—	—	12.7	—	—	—	—	—	—	—	
EA-18G Aircraft, Navy	22	1,632.4	55.4	22	1,688.4	55.4	22	1,632.4	55.4	—	—	—	The House added \$108 million for components that would support a multiyear contract to purchase additional F/A-18E/F and EA-18G aircraft beginning in FY2011. The Senate added \$560 million for 9 additional F/A-18s.
F/A-18E/F Fighter, Navy	9	1,060.9	127.7	9	1,168.9	127.7	18	2,129.5	127.7	—	—	—	
F/A-18 Aircraft variant Mods	—	484.1	—	—	484.1	—	—	484.1	—	—	—	—	
F-15 Fighter Mods	—	92.9	311.2	—	143.4	313.2	—	92.9	311.2	—	—	—	

	Request			House-Passed			Senate			Final Bill			Comments
	Procurement		R&D	Procurement		R&D	Procurement		R&D	Procurement		R&D	
	#	\$	\$	#	\$	\$	#	\$	\$	#	\$	\$	
A-10 Attack Plane Mods	—	262.5	9.7	—	319.6	9.7	—	262.5	9.7	—	—	—	
B-1B Bomber Mods	—	128.1	148.0	—	128.1	148.0	—	128.1	130.1	—	—	—	
B-2A Bomber Mods	—	284.0	415.4	—	284.0	415.4	—	284.0	415.4	—	—	—	
C-130 Cargo Aircraft variants AF	12	1,410.2	231.3	12	1,348.2	231.3	12	1,410.2	231.3	—	—	—	
C-130 Cargo Aircraft variant Mods, AF	—	368.0	—	—	167.9	—	—	144.9	—	—	—	—	
C-5 Cargo Aircraft Mods, AF	—	715.3	95.3	—	715.3	95.3	—	715.3	95.3	—	—	—	
C-17 Cargo Aircraft Mods	—	469.7	161.9	—	469.7	161.9	—	469.7	161.9	—	—	—	
Joint Cargo Aircraft	8	319.1	—	8	319.1	—	8	319.1	—	—	—	—	
KC-X Tanker Replacement, AF	—	—	439.6	—	—	439.6	—	—	439.6	—	—	—	
C-40 Aircraft	3	154.0	—	4	259.3	—	3	154.0	—	—	—	—	
V-22 Osprey, Navy	30	2,215.8	89.5	20	2,215.9	89.5	30	2,215.8	89.5	—	—	—	
CV-22 Osprey, AF	5	437.3	19.6	5	437.3	19.6	5	437.3	19.6	—	—	—	
V-22 Osprey variants Long-lead components	—	98.1	—	—	98.1	—	—	98.1	—	—	—	—	
CV-22 Special Ops Mods, SOF	5	114.6	12.7	5	114.6	12.7	5	114.6	12.7	—	—	—	
CH-53K Helicopter	—	—	554.8	—	—	554.8	—	—	554.8	—	—	—	
VH-71A Executive Helicopter	—	—	85.2	—	—	85.2	—	—	85.2	—	—	—	
Combat Search & Rescue Helicopter (CSAR-X)	—	—	89.0	—	—	15.0	—	—	—	—	—	—	House cuts all but \$15 million, Senate eliminates funds, mandates use of prior year funds.

	Request			House-Passed			Senate			Final Bill			Comments
	Procurement		R&D	Procurement		R&D	Procurement		R&D	Procurement		R&D	
	#	\$	\$	#	\$	\$	#	\$	\$	#	\$	\$	
UH-1Y/AH-1Z	30	835.4	32.8	20	552.9	32.8	20	552.9	32.8	-	-	-	House and Senate both cut \$282.9 million to maintain production at FY2009 level of 10 aircraft.
MH-60R/MH-60S Helicopter, Navy	42	1,436.2	131.1	42	1,436.2	131.1	42	1,436.2	131.1	-	-	-	
P-8A Poseidon Multi-Mission Maritime Aircraft	6	1,825.0	1,162.4	6	1,825.0	1,162.4	6	1,825.0	1,162.4	-	-	-	
E-2D Hawkeye Aircraft, Navy	2	606.1	364.6	2	511.2	606.1	2	606.1	364.6	-	-	-	
P-3/EP-3 Aircraft Mods	—	577.7	11.9	—	527.7	11.9	—	577.7	11.9	-	-	-	
Unmanned Aerial Systems (UAS), Base Budget and OCO													
MQ-4 Global Hawk	5	802.7	783.1	5	802.7	783.1	5	752.7	783.1	-	-	-	Senate cuts \$50 million due to delays.
MQ-1 Predator	36	955.0	21.6	24	791.6	21.6	24	755.0	25.6	-	-	-	The House reduced the number of Predators to be funded and shifted all Predator funding into the part of the budget funding war costs. Senate cut \$200 million for 12 aircraft to avoid forward funding.
MQ-9 Reaper	24	650.2	45.0	24	650.2	45.0	24	590.3	45.0	-	-	-	The House shifted some funding for Reapers into the part of the budget funding war costs. Senate cut \$19.9 million in base budget procurement for “Gorgon Stare” system and \$40 million from the \$99 million request for mods in OCO budget.
RQ-7 Shadow	11	666.2	1.0	11	668.7	1.0	11	666.2	1.0	-	-	-	
RQ-11 Raven	1221	135.1	0.6	1221	135.1	0.6	1221	135.1	0.6	-	-	-	
MQ-8 Fire Scout	5	77.6	25.6	5	77.6	26.5	5	77.6	25.6	-	-	-	

	Request			House-Passed			Senate			Final Bill			Comments
	Procurement		R&D	Procurement		R&D	Procurement		R&D	Procurement		R&D	
	#	\$	\$	#	\$	\$	#	\$	\$	#	\$	\$	
Future Combat System UAS	—	—	68.7	—	—	68.7	—	—	68.7	—	—	—	
UCAS Unmanned Combat Aerial System (Navy)	—	—	311.2	—	—	311.2	—	—	311.2	—	—	—	
Tactical Unmanned Aerial Vehicles (Army)	—	—	202.5	—	—	202.5	—	—	288.5	—	—	—	The Senate added \$86 million to deploy in Afghanistan Hummingbird drone helicopters carrying radars designed to detect individual humans walking.

**Sources:** House Armed Services Committee, Report to Accompany H.R. 2647, the National Defense Authorization Act for Fiscal Year 2010, H.Rept. 111-166, June 18, 2009; Senate Armed Services Committee, Report to Accompany S. 1390, the National Defense Authorization Act for Fiscal Year 2010, S.Rept. 111-35, July 2, 2009 and text of S. 1390, National Defense Authorization Act for Fiscal Year 2010, as reported by the Senate Armed Services Committee.

**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-8. Congressional Action on Selected FY2010 Navy, Marine Corps, and Air Force Aircraft Programs: Appropriations**

(amounts in millions of dollars)

	Request			House-Passed			Senate			Final Bill			Comments
	Procurement		R&D	Procurement		R&D	Procurement		R&D	Procurement		R&D	
	#	\$	\$	#	\$	\$	#	\$	\$	#	\$	\$	
F-35 Joint Strike Fighter, AF	10	2,048.8	1,858.1	10	2,067.4	2,073.1	-	-	-	-	-	-	
F-35 Joint Strike Fighter, Navy	20	3,997.0	1,741.3	18	3,576.4	1,956.3	-	-	-	-	-	-	
F-35 Joint Strike Fighter, long-lead components (AF and Navy)	-	781.6	-	-	759.6	-	-	-	-	-	-	-	House cuts \$22 million due to 2 fewer aircraft funded in FY2009.
F-22 Fighter, AF	-	95.2	569.3	-	31.2	569.3	-	-	-	-	-	-	House cuts \$64 million due to program reduction.
F-22 Fighter (long-lead components)	-	-	-	-	-	-	-	-	-	-	-	-	House committee added \$368.8 million in advance procurement for 12 aircraft, eliminated by floor vote.
F-22 Fighter Mods	-	350.7	-	-	187.3	-	-	-	-	-	-	-	House cuts \$163 million as prior to need.
EA-18G Aircraft, Navy	22	1,632.4	55.4	22	1,632.4	57.4	-	-	-	-	-	-	
F/A-18E/F Fighter, Navy	9	1,061.0	127.7	18	1,664.0	127.7	-	-	-	-	-	-	House adds \$603 million for 9 additional aircraft and multi-year procurement



	Request		House-Passed		Senate		Final Bill			
	Procurement	R&D	Procurement	R&D	Procurement	R&D	Procurement	R&D		
F/A-18 Aircraft variant Mods	–	484.1	–	396.9	–	–	–	–	–	House cuts \$87 million for radar upgrades ahead of need.
F-15 Fighter Mods	–	92.9	311.2	132.3	320.2	–	–	–	–	
A-10 Attack Plane Mods	–	252.5	9.7	252.5	9.7	–	–	–	–	
B-1B Bomber Mods	–	111.5	148.0	111.5	178.0	–	–	–	–	
B-2A Bomber Mods	–	284.0	415.4	255.0	436.7	–	–	–	–	
C-130 Cargo Aircraft variants AF	12	1,410.2	231.3	6	906.2	231.3	–	–	–	House cuts \$504 million funded in FY2009 supplemental.
C-130 Cargo Aircraft variant Mods, AF	–	368.0	–	–	113.6	–	–	–	–	House cuts total of \$254.5 million due to delays and funding in advance of need.
C-5 Cargo Aircraft Mods, AF	–	715.3	95.3	–	658.7	95.3	–	–	–	
C-17 Cargo Aircraft Mods	–	469.7	161.9	–	317.2	161.9	–	–	–	House cuts total of \$152.6 million, mainly for excess funding for installation of mods.
Joint Cargo Aircraft	8	319.1	–	8	319.1	–	–	–	–	
KC-X Tanker Replacement, AF	–	–	439.6	–	–	439.6	–	–	–	House shifts funding from R&D to a general provision and allows either a single supplier or dual sourcing.

	Request			House-Passed			Senate			Final Bill			
	Procurement		R&D	Procurement		R&D	Procurement		R&D	Procurement		R&D	
C-40 Aircraft	4	237.6	–	6	437.6	–	–	–	–	–	–	–	House adds \$200 million for 2 aircraft.
V-22 Osprey, Navy	30	2,300.2	89.5	30	2,300.2	89.5	–	–	–	–	–	–	
CV-22 Osprey, AF	5	451.1	19.6	5	451.1	19.6	–	–	–	–	–	–	
CV-22 Special Ops Mods, SOF	5	114.6	12.7	5	114.6	12.7	–	–	–	–	–	–	
CH-53K Helicopter	–	–	554.8	–	–	524.4	–	–	–	–	–	–	
VH-71A Executive Helicopter	–	–	85.2	–	–	485.2	–	–	–	–	–	–	House adds \$400 million to resume development.
Combat Search & Rescue Helicopter (CSAR-X)	–	–	90.0	–	–	10.0	–	–	–	–	–	–	
UH-1Y/AH-1Z	28	780.4	32.8	24	645.4	25.8	–	–	–	–	–	–	House cuts \$100 million for 4 aircraft and \$35 million for excess advance procurement.
MH-60R/MH-60S Helicopter, Navy	42	1,436.3	130.7	42	1,442.8	133.7	–	–	–	–	–	–	
P-8A Poseidon Multi-Mission Maritime Aircraft	6	1,825.1	1,162.4	6	1,803.0	1,182.4	–	–	–	–	–	–	House trims \$22 million for production related matters.
E-2D Hawkeye Aircraft, Navy	2	606.2	364.6	3	744.4	362.6	–	–	–	–	–	–	House adds \$138 million for 1 additional aircraft.
P-3/EP-3 Aircraft Mods, Base and OCO	–	652.6	12.0	–	595.8	12.0	–	–	–	–	–	–	House cuts \$56.8 million for excess cost growth.

	Request		House-Passed		Senate		Final Bill						
	Procurement	R&D	Procurement	R&D	Procurement	R&D	Procurement	R&D					
<b>Unmanned Aerial Systems, Base Budget and OCO</b>													
MQ-4 Global Hawk, Base and OCO	5	802.7	783.2	5	473.0	698.2	-	-	-	-	-	-	House cuts \$279.7 million due to Block 40 delay, cuts \$50 million in advance procurement, cuts \$85 million in R&D due to slow program execution.
MQ-1 Predator, Base and OCO	36	954.9	21.6	24	812.9	27.8	-	-	-	-	-	-	House cuts \$163 million for 12 aircraft due to funding ahead of need.
MQ-9 Reaper, Base and OCO	24	650.2	43.6	24	655.4	113.6	-	-	-	-	-	-	House adds \$70 million in R&D.
RQ-7 Shadow, Base and OCO	11	666.2	1.0	11	661.0	1.0	-	-	-	-	-	-	
RQ-11 Raven, Base and OCO	1,221	135.1	0.6	1,221	135.1	0.6	-	-	-	-	-	-	
MQ-8 Fire Scout, Base and OCO	5	77.6	25.6	5	64.3	25.6	-	-	-	-	-	-	
Future Combat System UAS	-	-	68.7	-	-	68.7	-	-	-	-	-	-	
UCAS Unmanned Combat Aerial System, Navy	-	-	311.2	-	-	306.2	-	-	-	-	-	-	
Tactical Unmanned Aerial Vehicles, Army	-	-	202.5	-	-	172.5	-	-	-	-	-	-	House cuts \$30 million in R&D.

Source: House Appropriations Committee, Report to Accompany H.R. 3326, Department of Defense Appropriations Bill, 2010, H.Rept. 111-230, July 24, 2009.

**Table A-9. Congressional Action on FY2010 DOD War Funding Request  
(Defense Appropriations and Military Construction Appropriations Bills)**

in millions of dollars

<b>Title/Service/Category</b>	<b>Total Enacted FY2009 Bridge/Supplemental</b>	<b>FY2010 DOD Request</b>	<b>House-passed FY2010 Authorization H.R. 2647</b>	<b>Senate-passed FY2010 Authorization S. 1390</b>	<b>House-passed Appropriations H.R. 3326, H.R. 3082</b>	<b>Senate Appropriations Committee Markup Military Construction S. 1407</b>
<b>Military Personnel</b>						
Army	12,589.7	9,046.3	—	—	10,492.7	TBD
Navy	1,702.3	1,175.6	—	—	1,622.7	TBD
Marine Corps	1,579.9	670.7	—	—	997.5	TBD
Air Force	1,575.7	1,445.4	—	—	1,855.3	TBD
Army Reserve	418.2	294.6	—	—	302.6	TBD
Navy Reserve	39.5	39.0	—	—	39.0	TBD
Marine Corps Reserve	29.2	31.3	—	—	31.3	TBD
Air Force Reserve	14.9	24.8	—	—	24.8	TBD
Army National Guard	1,925.7	840.0	—	—	840.0	TBD
Air National Guard	45.0	18.5	—	—	18.5	TBD
<b>Total, Military Personnel</b>	<b>19,920.2</b>	<b>13,586.3</b>	<b>13,586.3</b>	<b>13,586.3</b>	<b>16,224.5</b>	<b>TBD</b>
<b>Operation and Maintenance<sup>a</sup></b>						
Army	51,069.4	52,170.7	51,970.7	52,070.7	41,836.0	TBD
Navy	5,774.9	6,219.6	6,219.6	5,650.7	4,975.7	TBD
Marine Corps	3,934.4	3,701.6	3,701.6	3,701.6	2,961.3	TBD
Air Force	10,980.4	10,026.9	10,152.1	10,026.9	7,858.9	TBD
Defense-Wide	7,750.3	7,578.3	7,578.3	7,578.3	7,397.8	TBD
Army Reserve	189.3	204.3	204.3	204.3	163.5	TBD
Navy Reserve	68.1	68.1	68.1	68.1	54.4	TBD
Marine Corps Reserve	77.9	86.7	86.7	86.7	69.3	TBD
Air Force Reserve	47.0	125.9	125.9	125.9	100.7	TBD

Title/Service/Category	Total Enacted FY2009 Bridge/Supplemental	FY2010 DOD Request	House-passed FY2010 Authorization H.R. 2647	Senate-passed FY2010 Authorization S. 1390	House-passed Appropriations H.R. 3326, H.R. 3082	Senate Appropriations Committee Markup Military Construction S. 1407
Army National Guard	511.9	321.6	321.6	321.6	257.3	TBD
Air National Guard	52.7	289.9	289.9	289.9	231.9	TBD
Overseas Contingency Operations Transfer Fund <sup>b</sup>	0.0	0.0	0.0	0.0	14,636.9	TBD
<b>Total, Operation and Maintenance<sup>a</sup></b>	<b>80,456.2</b>	<b>80,793.5</b>	<b>80,718.7</b>	<b>80,124.6</b>	<b>80,543.8</b>	<b>TBD</b>
<b>Special Funds<sup>c</sup></b>						
Joint IED Defeat Fund	3,116.7	1,535.0	1,435.0	2,099.9	1,490.0	TBD
Iraq Freedom Fund <sup>d</sup>	0.0	115.3	115.3	115.3	0.0	TBD
Afghanistan Security Forces Fund	5,606.9	7,462.8	7,462.8	7,462.8	7,462.8	TBD
Iraq Security Forces Fund	1,000.0	0.0	0.0	0.0	0.0	TBD
Pakistan Counterinsurgency Capability Fund <sup>e</sup>	0.0	700.0	0.0	0.0	0.0	TBD
Pakistan Counterinsurgency Fund <sup>e</sup>	400.0	0.0	0.0	0.0	0.0	TBD
Commanders Emergency Response Fund (funded within Army O&M)	[1.453]	[1,500.0]	[1,300.0]	[1,400.0]	[1,300.0]	TBD
Coalition Support (funded within O&M Defense-wide)	[1.100]	[1,550.0]	[1,550.0]	[1,550.0]	[1,540.0]	TBD
Coalition Support, Lift and Sustain (funded within O&M Defense-wide)	[.350]	[300.0]	[NA]	[0]	[250.0]	TBD
Coalition Support, Train and Equip (new request in FY2010) <sup>f</sup>	[0]	[NS]	[0]	[NS]	[NS]	TBD
<b>Total, Special Funds</b>	<b>10,123.7</b>	<b>9,813.1</b>	<b>9,013.1</b>	<b>9,677.9</b>	<b>8,952.8</b>	<b>TBD</b>
<b>Procurements<sup>g</sup></b>						
Army Aircraft	1,276.7	1,636.2	1,976.5	1,636.2	1,636.2	TBD

Title/Service/Category	Total Enacted FY2009 Bridge/Supplemental	FY2010 DOD Request	House-passed FY2010 Authorization H.R. 2647	Senate-passed FY2010 Authorization S. 1390	House-passed Appropriations H.R. 3326, H.R. 3082	Senate Appropriations Committee Markup Military Construction S. 1407
Missile	704.0	531.6	531.6	531.6	469.5	TBD
Weapons & Tracked Combat Vehicles	2,806.7	759.5	874.5	759.5	1,219.5	TBD
Ammunition	276.6	370.6	370.6	370.6	370.6	TBD
Other Procurement Army	8,122.8	6,226.0	6,021.8	6,330.0	5,635.3	TBD
Navy						
Aircraft	636.7	916.6	916.6	916.6	889.1	TBD
Missile	29.5	73.7	73.7	73.7	73.7	TBD
Ammunition Navy & Marine Corps	348.9	710.8	710.8	710.8	698.8	TBD
Other Procurement Navy	225.1	318.0	318.0	318.0	260.8	TBD
Marine Corps	2,091.8	1,164.4	1,164.4	1,164.4	1,100.3	TBD
Air Force						
Aircraft	4,793.9	936.4	1,151.8	896.4	825.7	TBD
Missile	49.7	36.6	36.6	36.6	36.6	TBD
Ammunition	158.7	256.8	256.8	256.8	256.8	TBD
Other Procurement Air Force	3,302.7	2,321.5	2,321.5	2,321.5	2,275.2	TBD
Defense-Wide	415.1	491.4	799.8	491.4	490.0	TBD
National Guard and Reserve Equipment <sup>h</sup>	500.0	0.0	[600.0]	0.0	500.0	TBD
Rapid Acquisition Fund <sup>h</sup>	0.0	[79.3]	55.0	[79.3]	40.0	TBD
MRAP Fund (Continuing Resolution)	0.0	0.0	0.0	0.0	0.0	TBD
MRAP Fund (Defense Appropriations Act)	0.0	0.0	0.0	0.0	0.0	TBD
MRAP (FY2008-2009 Supplemental & FY2010 Request) <sup>h</sup>	6,243.0	5,456.0	5,456.0	5,456.0	3,606.0	TBD
<b>Total, Procurement<sup>g</sup></b>	<b>31,981.9</b>	<b>22,206.2</b>	<b>22,981.0</b>	<b>22,270.2</b>	<b>20,384.1</b>	<b>TBD</b>
<b>Research, Development, Test and Evaluation (RDT&amp;E)</b>						

Title/Service/Category	Total Enacted FY2009 Bridge/Supplemental	FY2010 DOD Request	House-passed FY2010 Authorization H.R. 2647	Senate-passed FY2010 Authorization S. 1390	House-passed Appropriations H.R. 3326, H.R. 3082	Senate Appropriations Committee Markup Military Construction S. 1407
Army	52.9	58.0	58.0	58.0	58.0	TBD
Navy	250.0	107.2	107.2	107.2	38.3	TBD
Air Force	232.5	29.3	29.3	29.3	29.3	TBD
Defense-Wide	685.9	115.8	215.8	115.8	115.8	TBD
<b>Total, RDT&amp; E</b>	<b>1,221.3</b>	<b>310.3</b>	<b>410.3</b>	<b>310.3</b>	<b>241.4</b>	<b>TBD</b>
<b>Revolving and Management Funds</b>						
Defense Working Capital Funds	861.7	396.9	396.9	396.9	412.2	TBD
National Defense Sealift	0.0	0.0	0.0	0.0	0.0	TBD
<b>Total, Revolving and Management Funds</b>	<b>861.7</b>	<b>396.9</b>	<b>396.9</b>	<b>396.9</b>	<b>412.2</b>	<b>TBD</b>
<b>Other Department of Defense Programs</b>						
Defense Health Program <sup>i</sup>	2,155.3	1,155.2	1,155.2	1,155.2	1,115.2	TBD
Drug Interdiction and Counter-Drug Activities, Defense	308.4	324.3	324.6	324.6	317.6	TBD
Office of the Inspector General	9.6	8.9	8.9	8.9	8.9	TBD
<b>Total, Other Department of Defense Programs</b>	<b>2,473.2</b>	<b>1,488.4</b>	<b>1,488.7</b>	<b>1,488.7</b>	<b>1,481.7</b>	<b>TBD</b>
<b>Military Construction</b>						
Military construction, Army	1,183.0	923.9	930.5	930.5	924.5	924.5
Military construction, Navy and Marine Corps	235.9	0.0	0.0	0.0	0.0	0
Military construction, Air Force	281.6	474.5	474.5	474.5	474.5	474.5
Military construction, Defense-Wide	661.6	6.6	0.0	0.0	0.0	0
Family Housing, Navy & Marine Corps	0.0	0.0	0.0	0.0	0.0	0

Title/Service/Category	Total Enacted FY2009 Bridge/Supplemental	FY2010 DOD Request	House-passed FY2010 Authorization H.R. 2647	Senate-passed FY2010 Authorization S. 1390	House-passed Appropriations H.R. 3326, H.R. 3082	Senate Appropriations Committee Markup Military Construction S. 1407
Base realignment and closure account, 2005	263.3	0.0	0.0	0.0	0.0	0
NATO Security Investment Program	100.0	0.0	0.0	0.0	0.0	0
General Provisions, Military Construction, Barracks Improvements	0.0	0.0	0.0	0.0	0.0	0
<b>Total Military Construction</b>	<b>2,725.3</b>	<b>1,405.0</b>	<b>1,405.0</b>	<b>1,399.0</b>	<b>1,399.0</b>	<b>1,399.0</b>
<b>General Provisions</b>						
Transfer from Defense Cooperation Account	6.5	0.0	0.0	0.0	0.0	TBD
Rescissions	-3,961.2	0.0	0.0	0.0	0.0	TBD
Reappropriation Reduction Army	0.0	0.0	0.0	0.0	0.0	TBD
Rescission to O&M, Defensewide	-181.5	0.0	0.0	0.0	0.0	TBD
Rescission, Procurement, Army	-354.0	0.0	0.0	0.0	0.0	TBD
Stop Loss Transfer Fund	534.4	0.0	0.0	0.0	0.0	TBD
Transfer Capi	[6.500]	[4.000]	[4.000]	[4.500]	[3.000]	TBD
<b>Total, General Provisions</b>	<b>-3,955.8</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>TBD</b>
<b>Total, Department of Defense</b>	<b>145,807.8</b>	<b>130,000.0</b>	<b>130,000.0</b>	<b>129,260.0</b>	<b>129,639.5</b>	<b>TBD</b>

**Source:** CRS calculations for FY2010 based on H.R. 2647 as passed by the House, S. 1390 as reported by the Senate, H.Rept. 111-166, S.Rept. 111-35, H.Rept. 111-230, H.R. 3326, H.R. 3082/H.R. 188, S. 1407/ S.Rept. 111-40 and for FY2009 from House Appropriations Committee Table, *Congressional Record*, June 16, 2009, p. H6871.

**Notes:** NS=Not Specified; TBD= To be determined; the Senate Appropriations Committee has not yet taken action on the defense bill.

- a. Operation and Maintenance total excludes the Afghanistan Security Forces Fund, Iraq Security Forces Fund, and the Pakistan Counterinsurgency Capabilities Fund, which are included under Special Funds.
- b. House Appropriations Committee transferred 20% of DOD's O&M request to this new transfer fund because of uncertainty of war funding and required 15-day advance notification from DOD of transfers.



- c. Special Funds includes Afghanistan Security Forces Fund, Iraq Security Forces Fund, Pakistan Counterinsurgency Capability Fund, Pakistan Counterinsurgency Fund, Iraq Freedom Fund and Joint Improvised Explosive Device Fund.
- d. DOD requested \$100 million for Guantanamo Bay detainee relocation in FY2010 in the Iraq Freedom Fund.
- e. DOD received funds in the Pakistan Counterinsurgency Fund in the FY2009 Supplemental; the Administration requested funds for DOD in the Pakistan Counterinsurgency Capability Fund in FY2010 but later agreed that the State Department would administer these funds in FY2010.
- f. Administration requested broadening the language to reimburse nations supporting U.S. operations for not only logistical support but also to train and equip their forces. The Senate authorization and House appropriations bill broadened the language and the House authorization bill did not.
- g. Procurement total includes Mine Resistant Ambush Protected Transfer Fund and excludes Joint Improvised Explosive Device Fund , which is included under Special Funds.
- h. Funding for National Guard and Reserve was moved to DOD's base budget by the HASC this year but continued to be provided as Title IX war funding by the HAC. DOD requested funding the Rapid Acquisition Fund, a fund originated to get war-critical items to the field quickly, to its base budget where the Senate authorizers approved it. The HASC and the HAC continued to treat it as war funding. DOD requested MRAP funding in both its base budget and war funding; the authorizers approved the war request while the House appropriators reduced the request to reflect additional funding provided in the FY2009 Supplemental.
- i. DOD transferred about \$1 billion in defense health costs for Traumatic Brain Injury/psychological health treatment, Post- Deployment Health Reassessments, and Casualty Care; see Office of the Secretary of Defense, Comptroller, DOD, *Defense Health Program, Fiscal Year (FY) 2010 Budget Estimates*. Overseas Contingency Operations (OCO), Budget Activity 1, Operation and Maintenance; [http://www.defenselink.mil/comptroller/defbudget/fy2010/budget\\_justification/pdfs/09\\_Defense\\_Health\\_Program/VOL\\_2/Vol%20II\\_Sec4-B\\_Overseas-Contingency\\_Operations\\_Detail\\_wErrata\\_10PB\\_DHP.pdf](http://www.defenselink.mil/comptroller/defbudget/fy2010/budget_justification/pdfs/09_Defense_Health_Program/VOL_2/Vol%20II_Sec4-B_Overseas-Contingency_Operations_Detail_wErrata_10PB_DHP.pdf)
- j. Congress sets annual caps on the total amount that DOD can transfer between accounts after enactment.

## Acknowledgments

The annual consideration of appropriations bills (regular, continuing, and supplemental) by Congress is part of a complex set of budget processes that also encompasses the consideration of budget resolutions, revenue and debt-limit legislation, other spending measures, and reconciliation bills. In addition, the operation of programs and the spending of appropriated funds are subject to constraints established in authorizing statutes. Congressional action on the budget for a fiscal year usually begins following the submission of the President’s budget at the beginning of each annual session of Congress. Congressional practices governing the consideration of appropriations and other budgetary measures are rooted in the Constitution, the standing rules of the House and Senate, and statutes, such as the Congressional Budget and Impoundment Control Act of 1974.

This report is a guide to one of the regular appropriations bills that Congress considers each year. It is designed to supplement the information provided by the House and Senate Appropriations Subcommittees on Defense. For both defense authorization and appropriations, this report summarizes the status of the bills, their scope, major issues, funding levels, and related congressional activity. This report is updated as events warrant and lists the key CRS staff relevant to the issues covered as well as related CRS products.

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