

**NATIONAL DEFENSE AUTHORIZATION  
ACT FOR FISCAL YEAR 2010**

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**R E P O R T**

[TO ACCOMPANY S. 1390]

ON

AUTHORIZING APPROPRIATIONS FOR FISCAL YEAR 2010 FOR MILITARY ACTIVITIES OF THE DEPARTMENT OF DEFENSE, TO PRESCRIBE MILITARY PERSONNEL STRENGTHS FOR FISCAL YEAR 2010, AND FOR OTHER PURPOSES

TOGETHER WITH

**ADDITIONAL VIEWS**

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**COMMITTEE ON ARMED SERVICES  
UNITED STATES SENATE**



JULY 2, 2009.—Ordered to be printed  
Filed, under authority of the order of the Senate of June 25, 2009

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111TH CONGRESS }  
*1st Session*

SENATE

{ REPORT  
111-35

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U.S. GOVERNMENT PRINTING OFFICE

50-630

WASHINGTON : 2009

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(111th Congress, 1st Session)

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111TH CONGRESS }  
*1st Session* }

SENATE

{ REPORT  
111-35

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AUTHORIZING APPROPRIATIONS FOR FISCAL YEAR 2010 FOR MILITARY ACTIVITIES OF THE DEPARTMENT OF DEFENSE, FOR MILITARY CONSTRUCTION, AND FOR DEFENSE ACTIVITIES OF THE DEPARTMENT OF ENERGY, TO PRESCRIBE PERSONNEL STRENGTHS FOR SUCH FISCAL YEAR, AND FOR OTHER PURPOSES

\_\_\_\_\_  
JULY 2, 2009.—Ordered to be printed  
\_\_\_\_\_

Mr. LEVIN, from the Committee on Armed Services, submitted the following

R E P O R T

[To accompany S. 1390]

The Committee on Armed Services reports favorably an original bill to authorize appropriations for the fiscal year 2010 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe personnel strengths for such fiscal year, and for other purposes, and recommends that the bill do pass.

PURPOSE OF THE BILL

This bill would:

- (1) authorize appropriations for (a) procurement, (b) research, development, test and evaluation, (c) operation and maintenance and the revolving and management funds of the Department of Defense for fiscal year 2010;
- (2) authorize the personnel end strengths for each military active duty component of the Armed Forces for fiscal year 2010;
- (3) authorize the personnel end strengths for the Selected Reserve of each of the reserve components of the Armed Forces for fiscal year 2010;
- (4) impose certain reporting requirements;
- (5) impose certain limitations with regard to specific procurement and research, development, test and evaluation actions and manpower strengths; provide certain additional legislative authority, and make certain changes to existing law;
- (6) authorize appropriations for military construction programs of the Department of Defense for fiscal year 2010; and
- (7) authorize appropriations for national security programs of the Department of Energy for fiscal year 2010.

### **Committee overview**

The United States Armed Forces have been involved in armed conflict for more than 7 years—7½ years in Afghanistan and 6 years in Iraq. Whether engaged in combat in Afghanistan or Iraq, delivering humanitarian assistance to victims of disasters, training foreign national forces to combat terrorism in their own countries, or assisting State and federal agencies responding to emergencies here at home, the men and women of our armed forces, both active and reserve, are serving honorably and courageously to promote and defend our Nation's interests. They do so often at great personal risk and significant sacrifice to themselves and their families.

After more than 7 years of war, our military, particularly our ground forces, is severely stressed and the readiness of the military services to conduct the full range of their assigned missions is low.

The administration has revised the overall strategy for the war in Afghanistan to encompass a more regional approach, including in particular a greater emphasis on Pakistan. Additional U.S. forces are being deployed to Afghanistan and a new American general has taken over as the U.S. and North Atlantic Treaty Organization Commander, with the promise of a change in operational strategy and tactics for conducting the war.

Meanwhile, the Secretary of Defense announced, and the President approved, a series of decisions relating to the budget for Fiscal Year 2010 that are based upon an increased emphasis on irregular war, implementing lessons learned in Iraq, terminating troubled acquisition programs, and delaying programs for which requirements are not yet defined.

To date in this First Session of the 111th Congress, the Senate Committee on Armed Services has conducted 35 hearings and numerous briefings on the President's budget request for fiscal year 2010 and related defense matters, as well as six nomination hearings. The committee's early focus on acquisition reform resulted in the enactment into law of the Weapon Systems Acquisition Reform Act of 2009 (Public Law 111-23).

In order to provide a framework for the consideration of these matters, the committee identified seven guidelines to guide its work on the National Defense Authorization Act for Fiscal Year 2010. These guidelines are:

1. Provide fair compensation and first rate health care, address the needs of the wounded, ill and injured, and improve the quality of life of the men and women of the all-volunteer force (active duty, National Guard and Reserves) and their families.
2. Provide our servicemen and women with the resources, training, technology, equipment (especially force protection) and authorities they need to succeed in combat and stability operations.
3. Enhance the capability of the armed forces to conduct counterinsurgency operations and apply the lessons of Iraq to Afghanistan, as appropriate.
4. Improve the ability of the armed forces to counter non-traditional threats, including terrorism and the proliferation of weapons of mass destruction and their means of delivery.
5. Seek to reduce our Nation's strategic risk by taking action aimed at restoring, as soon as possible, the readiness of the

military services to conduct the full range of their assigned missions.

6. Terminate troubled programs and activities, improve efficiencies, and apply the savings to higher-priority programs.

7. Ensure aggressive and thorough oversight of the Department's programs and activities to ensure proper stewardship of taxpayer dollars and compliance with relevant laws and regulations.

### **Explanation of funding summary**

The administration's budget request for national defense discretionary programs within the jurisdiction of the Senate Committee on Armed Services for fiscal year 2010 was \$680.2 billion. Of this amount \$550.2 billion was for the so-called "base" budget of which \$533.8 billion was for the Department of Defense and \$16.4 billion was for the Department of Energy. The discretionary budget request included \$130.0 billion for overseas contingency operations. In total, the bill authorizes \$679.8 billion, which is slightly below the request. The bill authorizes \$551.1 billion for the base budget and \$129.3 billion for overseas contingency operations. The bill also includes a general reduction of \$500.0 million in Division A and Division B authorizations for management efficiencies.

The administration's budget for national defense also included discretionary programs outside the jurisdiction of the Senate Committee on Armed Services, discretionary programs that do not require further authorizations, mandatory programs that are part of current law, and a new mandatory proposal dealing with concurrent receipt. When these programs are added to the administration's budget the total request for national defense equals \$693.1 billion as re-estimated by the Congressional Budget Office. The bill is consistent with this level with the exception that it does not include the concurrent receipt proposal as the proposed offsets were not within the jurisdiction of the committee.

The following two tables summarize the direct authorizations and the equivalent budget authority levels for fiscal year 2010 defense programs. The first table summarizes committee action on the authorizations within the jurisdiction of this committee. It includes the authorization for spending from the trust fund of the Armed Forces Retirement Home which is outside the national defense budget function. The second table summarizes the total budget authority implication for national defense by adding funding for items that are not within the jurisdiction of this committee or that do not require an annual authorization.





**DIVISION A—DEPARTMENT OF DEFENSE  
AUTHORIZATIONS**

**TITLE I—PROCUREMENT**

**Subtitle A—Authorization of Appropriations**

## SUMMARY OF NATIONAL DEFENSE AUTHORIZATIONS FOR FISCAL YEAR 2010

(In Thousands of Dollars)

	Authorization Request	Senate Change	Senate Authorization
<b>DISCRETIONARY AUTHORIZATIONS WITHIN THE JURISDICTION OF THE ARMED SERVICES COMMITTEE</b>			
<b>Department of Defense Authorizations—Base Bill</b>			
<b>Division A: Department of Defense Authorization</b>			
<b>Title I—PROCUREMENT</b>			
Aircraft Procurement, Army .....	5,315,991	-171,100	5,144,891
Missile Procurement, Army .....	1,370,109	5,000	1,375,109
Weapons & Tracked Combat Vehicles, Army .....	2,451,952		2,451,952
Procurement of Ammunition, Army .....	2,051,895	8,000	2,059,895
Other Procurement, Army .....	9,907,151	-289,160	9,617,991
Joint Improvised Explosive Device Defeat Fund .....	564,850	-564,850	
Aircraft Procurement, Navy .....	18,378,312	277,100	18,655,412
Weapons Procurement, Navy .....	3,453,455	62,000	3,515,455
Procurement of Ammunition, Navy & Marine Corps .....	840,675		840,675
Shipbuilding & Conversion, Navy .....	13,776,867		13,776,867
Other Procurement, Navy .....	5,661,176	-66,000	5,595,176
Procurement, Marine Corps .....	1,600,638		1,600,638
Aircraft Procurement, Air Force .....	11,966,276	1,111,600	13,077,876
Missile Procurement, Air Force .....	6,300,728	-193,000	6,107,728
Procurement of Ammunition, Air Force .....	822,462		822,462
Other Procurement, Air Force .....	17,293,141	-47,800	17,245,341
Procurement, Defense-Wide .....	3,984,352	65,700	4,050,052
Mine Resistant Ambush Protection Veh Fund .....		1,200,000	1,200,000
Rapid Acquisition Fund .....	79,300		79,300
Defense Production Act Purchases <sup>1</sup> .....	[38,246]		
<b>Subtotal, PROCUREMENT</b> .....	<b>105,819,330</b>	<b>1,397,490</b>	<b>107,216,820</b>
<b>Title II—RESEARCH, DEVELOPMENT, TEST &amp; EVALUATION</b>			
RDT&E, Army .....	10,438,218	424,785	10,863,003
RDT&E, Navy .....	19,270,932	326,764	19,597,696
RDT&E, Air Force .....	27,992,827	701,125	28,693,952
RDT&E, Defense-Wide .....	20,741,542	-186,272	20,555,270
Operational Test & Evaluation, Defense .....	190,770		190,770
<b>Subtotal, RESEARCH, DEVELOPMENT, TEST &amp; EVALUATION</b> .....	<b>78,634,289</b>	<b>1,266,402</b>	<b>79,900,691</b>
<b>Title III—OPERATION AND MAINTENANCE</b>			
Operation and Maintenance, Army .....	31,274,882	-342,000	30,932,882
Operation and Maintenance, Navy .....	35,070,346	819,700	35,890,046
Operation and Maintenance, Marine Corps .....	5,536,223	11,000	5,547,223
Operation and Maintenance, Air Force .....	34,748,159	-694,600	34,053,559
Operation and Maintenance, Defense-wide .....	28,357,246	-711,249	27,645,997
Operation and Maintenance, Army Reserve .....	2,620,196	3,600	2,623,796
Operation and Maintenance, Navy Reserve .....	1,278,501		1,278,501
Operation and Maintenance, Marine Corps Reserve .....	228,925		228,925
Operation and Maintenance, Air Force Reserve .....	3,079,228		3,079,228
Operation and Maintenance, Army National Guard .....	6,257,034	3,600	6,260,634
Operation and Maintenance, Air National Guard .....	5,885,761	2,700	5,888,461

## SUMMARY OF NATIONAL DEFENSE AUTHORIZATIONS FOR FISCAL YEAR 2010—Continued

(In Thousands of Dollars)

	Authorization Request	Senate Change	Senate Authorization
US Court of Appeals for the Armed Forces, Defense .....	13,932		13,932
Defense Acquisition Development Workforce Fund .....	100,000		100,000
Overseas Humanitarian, Disaster and Civic Aid .....	109,869		109,869
Cooperative Threat Reduction .....	404,093	20,000	424,093
Environmental Restoration, Army .....	415,864		415,864
Environmental Restoration, Navy .....	285,869		285,869
Environmental Restoration, Air Force .....	494,276		494,276
Environmental Restoration, Defense-Wide .....	11,100		11,100
Environmental Restoration Formerly Used Sites .....	267,700		267,700
Overseas Contingency Operations Transfer Fund .....	5,000		5,000
<b>Subtotal, OPERATION AND MAINTENANCE .....</b>	<b>156,444,204</b>	<b>-887,249</b>	<b>155,556,955</b>
<b>Title IV—MILITARY PERSONNEL .....</b>	<b>136,016,281</b>	<b>-400,000</b>	<b>135,616,281</b>
<b>Title XIV—OTHER AUTHORIZATIONS</b>			
Defense Working Capital Funds .....	141,388		141,388
Defense Commissary Agency .....	1,313,616		1,313,616
National Defense Sealift Fund .....	1,642,758	-400,000	1,242,758
Defense Coalition Support Fund .....	22,000	-22,000	
Defense Health Program .....	27,903,163	10,700	27,913,863
Chemical Agents & Munitions Destruction, Defense .....	1,560,760		1,560,760
Drug Interdiction & Counter-Drug Activities, Defense .....	1,058,984	18,800	1,077,784
Office of the Inspector General .....	272,444	16,000	288,444
<b>Subtotal, OTHER AUTHORIZATIONS .....</b>	<b>33,915,113</b>	<b>-376,500</b>	<b>33,538,613</b>
<b>Division B: Military Construction Authorization</b>			
<b>MILITARY CONSTRUCTION</b>			
Military Construction, Army .....	3,660,779	-194,633	3,466,146
Military Construction, Navy and Marine Corps .....	3,763,264	-224,493	3,538,771
Military Construction, Air Force .....	1,145,434	32,350	1,177,784
Military Construction, Defense-Wide .....	3,097,526	-241,399	2,856,127
Chemical Demilitarization Construction .....	146,541	5,000	151,541
NATO Security Investment Program .....	276,314		276,314
Military Construction, Army National Guard .....	426,491	55,282	481,773
Military Construction, Army Reserve .....	374,862	3,850	378,712
Military Construction, Naval Reserve .....	64,124		64,124
Military Construction, Air National Guard .....	128,261	173,100	301,361
Military Construction, Air Force Reserve .....	27,476	18,100	45,576
<b>Subtotal, MILITARY CONSTRUCTION .....</b>	<b>13,111,072</b>	<b>-372,843</b>	<b>12,738,229</b>
<b>FAMILY HOUSING</b>			
Family Housing Construction, Army .....	273,236		273,236
Family Housing O&M, Army .....	523,418		523,418
Family Housing Construction, Navy & Marine Corps .....	146,569		146,569
Family Housing O&M, Navy & Marine Corps .....	368,540		368,540
Family Housing Construction, Air Force .....	66,101		66,101
Family Housing O&M, Air Force .....	502,936		502,936
Family Housing Construction, Defense-Wide .....	2,859		2,859

## SUMMARY OF NATIONAL DEFENSE AUTHORIZATIONS FOR FISCAL YEAR 2010—Continued

(In Thousands of Dollars)

	Authorization Request	Senate Change	Senate Authorization
Family Housing O&M, Defense-Wide .....	49,214		49,214
Homeowners Assistance Fund .....	23,225	350,000	373,225
DoD Family Housing Improvement Fund .....	2,600		2,600
<b>Subtotal, FAMILY HOUSING .....</b>	<b>1,958,698</b>	<b>350,000</b>	<b>2,308,698</b>
<b>BRAC</b>			
Base Realignment and Closure Account 1990 .....	396,768		396,768
Base Realignment and Closure Account 2005 .....	7,479,498		7,479,498
<b>Subtotal, BRAC .....</b>	<b>7,876,266</b>		<b>7,876,266</b>
Prior Year Savings .....		-112,500	-112,500
<b>Subtotal, MILITARY CONSTRUCTION, FAMILY HOUSING &amp; BRAC</b>	<b>22,946,036</b>	<b>-135,343</b>	<b>22,810,693</b>
General Transfer Authority (non-add) .....	[5,000,000]	[-1,000,000]	[4,000,000]
<b>SUBTOTAL, DEPARTMENT OF DEFENSE (051) .....</b>	<b>533,775,253</b>	<b>864,800</b>	<b>534,640,053</b>
<b>Division C: Department of Energy Authorization</b>			
<b>Electricity Delivery and Energy Reliability .....</b>	<b>6,188</b>	<b>-6,188</b>	
<b>NATIONAL NUCLEAR SECURITY ADMINISTRATION</b>			
Weapons Activities .....	6,384,431	106,188	6,490,619
Defense Nuclear Nonproliferation .....	2,136,709		2,136,709
Naval Reactors .....	1,003,133		1,003,133
Office of the Administrator .....	420,754		420,754
<b>Subtotal NATIONAL NUCLEAR SECURITY ADMINISTRATION .....</b>	<b>9,945,027</b>	<b>106,188</b>	<b>10,051,215</b>
<b>ENVIRONMENTAL AND OTHER DEFENSE ACTIVITIES</b>			
Defense Environmental Cleanup .....	5,495,831	-100,000	5,395,831
Other Defense Activities .....	852,468		852,468
Defense Nuclear Waste Disposal .....	98,400		98,400
<b>Subtotal ENVIRONMENTAL AND OTHER DEFENSE ACTIVITIES .....</b>	<b>6,446,699</b>	<b>-100,000</b>	<b>6,346,699</b>
<b>TOTAL, DEPARTMENT OF ENERGY .....</b>	<b>16,397,914</b>		<b>16,397,914</b>
<b>Independent Federal Agency Authorization</b>			
Defense Nuclear Facilities Safety Board .....	26,086		26,086
<b>Subtotal, DEFENSE NUCLEAR FACILITIES SAFETY BOARD .....</b>	<b>26,086</b>		<b>26,086</b>
<b>SUBTOTAL, ATOMIC ENERGY DEFENSE PROGRAMS (053) .....</b>	<b>16,424,000</b>		<b>16,424,000</b>
<b>TOTAL, NATIONAL DEFENSE (050)—BASE BILL .....</b>	<b>550,199,253</b>	<b>864,800</b>	<b>551,064,053</b>

Department of Defense Authorizations—Overseas Contingency Operations

## SUMMARY OF NATIONAL DEFENSE AUTHORIZATIONS FOR FISCAL YEAR 2010—Continued

(In Thousands of Dollars)

	Authorization Request	Senate Change	Senate Authorization
<b>Division A: Department of Defense Authorization</b>			
<b>Title XV—OVERSEAS CONTINGENCY OPERATIONS (OCO)</b>			
<b>PROCUREMENT</b>			
Aircraft Procurement, Army .....	1,636,229		1,636,229
Missile Procurement, Army .....	531,570		531,570
Procurement of WTCV, Army .....	759,466		759,466
Procurement of Ammunition, Army .....	370,635		370,635
Other Procurement, Army .....	6,225,966	104,000	6,329,966
Joint Improvised Explosive Device Defeat Fund .....	1,535,000	564,850	2,099,850
Aircraft Procurement, Navy .....	916,553		916,553
Weapons Procurement, Navy .....	73,700		73,700
Procurement of Ammunition, Navy and MC .....	710,780		710,780
Other Procurement, Navy .....	318,018		318,018
Procurement, Marine Corps .....	1,164,445		1,164,445
Aircraft Procurement, Air Force .....	936,441	-40,000	896,441
Missile Procurement, AF .....	36,625		36,625
Procurement of Ammunition, AF .....	256,819		256,819
Other Procurement, Air Force .....	2,321,549		2,321,549
Procurement, Defense-Wide .....	491,430		491,430
Mine Resistant Ambush Protected Vehicle Fund .....	5,456,000		5,456,000
<b>Subtotal, PROCUREMENT, OCO .....</b>	<b>23,741,226</b>	<b>628,850</b>	<b>24,370,076</b>
<b>RESEARCH, DEVELOPMENT, TEST &amp; EVALUATION .....</b>			
RDT&E, Army .....	57,962		57,962
RDT&E, Navy .....	107,180		107,180
RDT&E, Air Force .....	29,286		29,286
RDT&E, Defense-Wide .....	115,826		115,826
<b>Subtotal, RDT&amp;E, OCO .....</b>	<b>310,254</b>		<b>310,254</b>
<b>OPERATION AND MAINTENANCE</b>			
Operation & Maintenance, Army .....	52,170,661	-100,000	52,070,661
Operation & Maintenance, Navy .....	6,219,583	-568,850	5,650,733
Operation & Maintenance, Marine Corps .....	3,701,600		3,701,600
Operation & Maintenance, Air Force .....	10,026,868		10,026,868
Operation & Maintenance, Defense-Wide .....	7,578,300		7,578,300
Operation & Maintenance, Army Reserve .....	204,326		204,326
Operation & Maintenance, Navy Reserve .....	68,059		68,059
Operation & Maintenance, Marine Corps Reserve .....	86,667		86,667
Operation & Maintenance, Air Force Reserve .....	125,925		125,925
Operation & Maintenance, Army National Guard .....	321,646		321,646
Operation & Maintenance, Air National Guard .....	289,862		289,862
Afghanistan Security Forces Fund .....	7,462,769		7,462,769
Pakistan Counterinsurgency Capability Fund .....	700,000	-700,000	
Iraq Freedom Fund .....	115,300		115,300
<b>Subtotal, OPERATION AND MAINTENANCE, OCO .....</b>	<b>89,071,566</b>	<b>-1,368,850</b>	<b>87,702,716</b>
<b>MILITARY PERSONNEL, OCO .....</b>	<b>13,586,341</b>		<b>13,586,341</b>
<b>OTHER AUTHORIZATIONS</b>			

## SUMMARY OF NATIONAL DEFENSE AUTHORIZATIONS FOR FISCAL YEAR 2010—Continued

(In Thousands of Dollars)

	Authorization Request	Senate Change	Senate Authorization
Defense Working Capital Funds .....	396,915		396,915
Defense Health Program .....	1,155,235		1,155,235
Drug Interdiction and Counter-Drug Activities, Defense .....	324,603		324,603
Office of the Inspector General .....	8,876		8,876
<b>Subtotal, OTHER AUTHORIZATIONS, OCO .....</b>	<b>1,885,629</b>		<b>1,885,629</b>
Special Transfer Authority (non-add) .....	[4,000,000]	[500,000]	[4,500,000]
<b>Division B: Military Construction Authorization</b>			
<b>MILITARY CONSTRUCTION</b>			
Military Construction, Army .....	923,884	6,600	930,484
Military Construction, Air Force .....	474,500		474,500
Military Construction, Defense-Wide .....	6,600	-6,600	
<b>Subtotal, MILITARY CONSTRUCTION, OCO .....</b>	<b>1,404,984</b>		<b>1,404,984</b>
<b>TOTAL, OVERSEAS CONTINGENCY OPERATIONS .....</b>	<b>130,000,000</b>	<b>-740,000</b>	<b>129,260,000</b>
<b>TOTAL, DEPARTMENT OF DEFENSE .....</b>	<b>663,775,253</b>	<b>124,800</b>	<b>663,900,053</b>
<b>Reduction in Authorizations for Management Efficiencies (Divisions A and B) .....</b>		<b>-500,000</b>	<b>-500,000</b>
<b>GRAND TOTAL, NATIONAL DEFENSE .....</b>	<b>680,199,253</b>	<b>-375,200</b>	<b>679,824,053</b>
<b>MEMORANDUM: NON-DEFENSE AUTHORIZATION</b>			
Title IV—Armed Forces Retirement Home (Function 600) .....	134,000		134,000

<sup>1</sup> Defense Production Act Purchases are not in the jurisdiction of the Armed Services Committee (see Budget Implication).

## NATIONAL DEFENSE BUDGET AUTHORITY IMPLICATION

(In Thousands of Dollars)

	Authorization Request	Senate Change	Senate Authorization
<b>Summary, Discretionary Authorizations Within the Jurisdiction of the Armed Services Committee</b>			
SUBTOTAL, DEPARTMENT OF DEFENSE (051) .....	533,775,253	864,800	534,640,053
SUBTOTAL, ATOMIC ENERGY DEFENSE PROGRAMS (053) .....	16,424,000		16,424,000
TOTAL, NATIONAL DEFENSE (050)—BASE BILL .....	550,199,253	864,800	551,064,053
TOTAL, OVERSEAS CONTINGENCY OPERATIONS .....	130,000,000	– 740,000	129,260,000
Reduction in Authorizations for Management Efficiencies (Divisions A and B) .....		– 500,000	– 500,000
<b>GRAND TOTAL, NATIONAL DEFENSE</b>	<b>680,199,253</b>	<b>– 375,200</b>	<b>679,824,053</b>
<b>Base National Defense Discretionary Programs that are not in the jurisdiction of the Armed Services Committee or do not require additional authorization</b>			
Defense Production Act Purchases .....	38,246		38,246
National Science Center, Army .....	25		25
Disposal Of DOD Real Property .....	10,393		10,393
Lease Of DOD Real Property .....	8,856		8,856
DOD Overseas Military Facility Investment Recovery .....	1,227		1,227
<b>Subtotal, Budget Sub-Function (051) .....</b>	<b>58,747</b>		<b>58,747</b>
Formerly Utilized Sites Remedial Action Program .....	134,000		134,000
<b>Subtotal, Budget Sub-Function (053) .....</b>	<b>134,000</b>		<b>134,000</b>
Other Discretionary Programs .....	6,751,000		6,751,000
<b>Subtotal, Budget Sub-Function (054) .....</b>	<b>6,751,000</b>		<b>6,751,000</b>
<b>Total Defense Discretionary Adjustments (050)</b>	<b>6,943,747</b>		<b>6,943,747</b>
<b>OCO National Defense Discretionary Programs that are not in the jurisdiction of the Armed Services Committee</b>			
FBI Salaries and Expenses .....	101,066		101,066
<b>Subtotal, Budget Sub-Function (054)</b>	<b>101,066</b>		<b>101,066</b>
<b>Budget Authority Implication, National Defense Discretionary</b>			
Department of Defense—Military (051) .....	663,834,000	– 375,200	663,458,800
Atomic Energy Defense Activities (053) .....	16,558,000		16,558,000
Defense-Related Activities (054) .....	6,852,066		6,852,066
<b>Total BA Implication, National Defense Discretionary</b>	<b>687,244,066</b>	<b>– 375,200</b>	<b>686,868,866</b>
<b>National Defense Mandatory Programs, Current Law (CBO Estimates)</b>			
Concurrent receipt accrual payments to the Military Retirement Fund .....	4,376,000		4,376,000
Concurrent receipt policy proposal .....	330,000	– 330,000	
Revolving, trust and other DOD Mandatory .....	1,240,000		1,240,000
<b>Subtotal, Budget Sub-Function (051) .....</b>	<b>4,205,000</b>	<b>– 330,000</b>	<b>3,875,000</b>
Energy employees occupational illness compensation programs and other .....	1,377,000		1,377,000
<b>Subtotal, Budget Sub-Function (053) .....</b>	<b>1,377,000</b>		<b>1,377,000</b>
Radiation exposure compensation trust fund .....	32,000		32,000
Payment to CIA retirement fund and other .....	291,000		291,000
<b>Subtotal, Budget Sub-Function (054) .....</b>	<b>323,000</b>		<b>323,000</b>
<b>Total National Defense Mandatory (050)</b>	<b>5,905,000</b>	<b>– 330,000</b>	<b>5,575,000</b>

## NATIONAL DEFENSE BUDGET AUTHORITY IMPLICATION—Continued

(In Thousands of Dollars)

	Authorization Request	Senate Change	Senate Authorization
<b>Budget Authority Implication, National Defense Discretionary and Mandatory</b>			
Department of Defense—Military (051) .....	668,039,000	– 705,200	667,333,800
Atomic Energy Defense Activities (053) .....	17,935,000		17,935,000
Defense-Related Activities (054) .....	7,175,066		7,175,066
<b>Total BA Implication, National Defense Discretionary and Mandatory</b>	<b>693,149,066</b>	<b>– 705,200</b>	<b>692,443,866</b>

**Subtitle B—Navy Programs****Treatment of Littoral Combat Ship program as a major defense acquisition program (sec. 111)**

The committee recommends a provision that would require the Department to manage and report on the Littoral Combat Ship (LCS) program as a major defense acquisition program (MDAP).

The Weapon Systems Acquisition Reform Act of 2009 (Public Law 111–23) emphasizes the need to start acquisition programs on sure footing as a central mechanism by which the Department of Defense (DOD) can get control of cost growth and schedule slippage on MDAP programs. The cost and schedule reporting requirements in chapter 144 of title 10, United States Code, play a key role in ensuring that the Department and Congress are aware of emerging problems in such programs.

The Navy was able to avoid this oversight in the case of the LCS program by claiming that the program was just to build a handful of ships to test their capabilities and then see what the Navy wanted to build later. From the outset of the LCS program, however, program proponents within the Navy, including all three Chiefs of Naval Operations in office during the development of the LCS program, have invariably called this a 55–ship program. Some officials have even suggested that it might grow to be larger than that. The Weapon Systems Acquisition Reform Act of 2009 amended section 2430 of title 10, United States Code, to ensure that the Department include future program spirals in assessing whether a program should fall within the definition of a MDAP. That modification alone should cause DOD to define LCS as a MDAP, but the committee recommends this provision to remove any discretion in treating this program.

Had the Navy leadership been operating within the spirit of the title 10, United States Code, provisions regarding MDAPS, LCS would have fallen under the management and reporting requirements required for MDAPs.

No one can say that MDAP oversight would have prevented the problems of poor requirements generation, poor requirements control, poor program oversight, insufficient supervision of program execution, and abysmal cost estimating. However, when a program is expected to cost roughly \$12.0 billion (even under the rosier cost scenario), it should be subject to the requirements development, cost estimating, acquisition planning, and other requirements es-



tablished in statute and regulation for the beginning of MDAP programs. Otherwise, we will have little chance of fixing such programs after they fall into trouble, and DOD will never be able to get control of its acquisition problems.

**Report on strategic plan for homeporting the Littoral Combat Ship (sec. 112)**

The committee recommends a provision that would require the Secretary of the Navy to report on the Navy's strategic plan for homeporting the Littoral Combat Ship on the east coast and west coast of the United States.

**Procurement programs for future naval surface combatants (sec. 113)**

The committee recommends a provision that would prevent the Navy from obligating any funds for building surface combatants after 2011 until the Navy conducts particular analyses, and completes certain tasks that should be required at the beginning of major defense acquisition programs (MDAP).

For at least the past couple of years, the Navy's strategy for modernizing the major surface combatants in the fleet has been in upheaval. The Navy was adamant that the next generation cruiser had to begin construction in the 2011–2012 timeframe. After 15 years of consistent, unequivocal support of the uniformed Navy for the fire support requirement, and for the DDG–1000 destroyer that was intended to meet that requirement (i.e., gun fire support for Marine Corps or Army forces ashore), the Navy leadership, in the middle of last year, decided that they should truncate the DDG–1000 destroyer program and buy DDG–51 destroyers instead.

The Defense Department has announced that the Navy will complete construction of the three DDG–1000 vessels and will build three DDG–51 destroyers, one in fiscal year 2010 and two in fiscal year 2011. Beyond that, the plan is less well defined, and includes building only a notional "future surface combatant," with requirements, capabilities, and costs to be determined.

Notwithstanding Navy protests to the contrary, this was mainly due to the Navy's affordability concerns. The committee notes with no little irony that this sudden change of heart on the DDG–1000 program is at odds with its own consistent testimony that "stability" in the shipbuilding programs is fundamental to controlling costs and protecting the industrial base.

The Navy claims the change of heart on the DDG–1000 program was related to an emerging need for additional missile defense capability that would be provided by DDG–51s and is being requested by the combatant commanders, and would be used to protect carrier battle groups against new threats.

The committee certainly believes that the services should have the ability to change course as the long-term situation dictates. However, since we are talking about the long-term and hundreds of billions of dollars of development and production costs for MDAPs, the committee believes that the Defense Department should exercise greater rigor in making sure such course corrections are made with full understanding of the alternatives and the implications of such decisions, rather than relying on inputs from

a handful of individuals. The committee has only to look at the decision-making behind the major course correction in Navy shipbuilding that yielded the Littoral Combat Ship (LCS) to be concerned by that prospect.

Before deciding on a course of action regarding acquisition of surface combatants after 2011, we collectively have time to perform the due diligence that should be and must be performed at the beginning of any MDAP. That is what this section will ensure.

In addition, in order to deter any delaying action on conducting and completing the activities required by this section before 2011, the committee directs that the Secretary of the Navy obligate no more than 50 percent of the funds authorized for fiscal year 2010 in PE 24201N, CG(X), until the Navy submits a plan for implementing the requirements of this section to the congressional defense committees.

**Report on a service life extension program for Oliver Hazard Perry-class frigates (sec. 114)**

The committee recommends a provision that would require the Secretary of the Navy to report on a potential service life extension program (SLEP) for the Oliver Hazard Perry-class frigates, to include: (1) costs and schedules for a program, and shipyards capable of conducting such a program; (2) a detailed plan for achieving a 313-ship fleet; (3) the strategic plan for the Littoral Combat Ship (LCS) to fulfill roles and missions currently performed by Oliver Hazard Perry-class frigates; (4) the strategic plan for LCS if a SLEP were performed on Oliver Hazard Perry-class frigates; and (5) a description of the manner in which the Navy has been meeting the needs of United States Southern Command during the past 5 years.

**Subtitle C—Air Force Matters**

**Limitation on retirement of C-5 aircraft (sec. 121)**

The committee recommends a provision that would prevent the Air Force from retiring any C-5 aircraft until certain conditions are met. These include: (1) completing operational testing of the C-5 Reliability Enhancement and Re-engining Program; (2) providing a report by the Director of Operational Testing on the results of that operational testing; and (3) delivering reports on the economic and risk analyses that led to any decision to retire the aircraft before the end of their useful service lives.

**Revised availability of certain funds available for the F-22A fighter aircraft (sec. 122)**

In section 134 of the National Defense Authorization Act for Fiscal Year 2009 (Public Law 110-417), Congress authorized \$523.0 million in funds for F-22A advance procurement, but prohibited obligation of more than \$140.0 million of that amount until the President certified to the congressional defense committees that: (1) the procurement of F-22A fighter aircraft is in the national interest of the United States; or (2) the termination of the production line for F-22A fighter aircraft is in the national interest of the United

States. The certification was required to be submitted before March 1, 2009.

The President made no such certification. The Department has determined that, since the President did not make a determination under section 134 of Public Law 110–417, the remaining \$383.0 million is unavailable for obligation.

The President’s budget request includes a proposal to terminate production for the F–22A and includes no funds for additional F–22A aircraft. The budget request also includes a request for \$95.2 million to fund various activities related to the F–22A production line, and \$350.7 million to purchase and install various modifications for the F–22A fleet.

The committee recommends a provision that would: (1) repeal section 134 of Public Law 110–417 to lower the fence around the \$383.0 million that might have been used for advance procurement; and (2) allow the Secretary of the Air Force to reallocate those funds for other priorities. Lowering that fence would allow the Secretary to use these fiscal year 2009 funds to pay for fiscal year 2010 F–22A funding needs. The committee believes that, subsequent to action on the Supplemental Appropriations Act, 2009 (Public Law 111–32) the Air Force should have \$383.0 million available for such purposes.

Therefore, the committee recommends a decrease of \$383.0 million to Aircraft Procurement, Air Force, with \$350.7 million of that amount applied to the F–22A modifications request, and \$32.3 million applied to the full funding line.

#### **Report on potential foreign military sales of the F–22A fighter aircraft (sec. 123)**

The committee recommends a provision that would require the Secretary of Defense, in coordination with the Secretary of State, and in consultation with the Secretary of the Air Force, to report on: (1) the costs of developing an exportable version of the F–22A; (2) an assessment of whether such development is technically feasible, and if so, how long it would take; (3) an assessment of the strategic implications of permitting foreign sales of the F–22A; (4) an assessment of the potential impact of foreign sales on the domestic aerospace industry; and (5) any changes in law that would be required to permit such sales.

#### **Next generation bomber aircraft (sec. 124)**

The committee recommends a provision that would make a series of findings with respect to the next-generation bomber and that would declare that it is the policy of the United States to support a development program for next-generation bomber technologies.

On April 6, 2009, Secretary Gates announced that the United States “will not pursue a development program for a follow-on Air Force bomber until we have a better understanding of the need, the requirement, and technology.” Subsequent to this announcement, commanders of the United States Strategic Command, the United States Pacific Command, and the United States Joint Forces Command all testified before the committee that the capability that a next-generation bomber would provide will be needed in the future.

The committee understands that discussion on a next-generation bomber will occur in the context of the Quadrennial Defense Review and the Nuclear Posture Review, which will inform the fiscal year 2011 budget deliberations.

#### **Subtitle D—Joint and Multiservice Matters**

##### **Modification of nature of data link utilizable by tactical unmanned aerial vehicles (sec. 131)**

The committee recommends a provision that would amend section 141 of The National Defense Authorization Act for Fiscal Year 2006 (Public Law 109–163), which mandates that all Department of Defense (DOD) unmanned aerial vehicles (UAV) utilize data links from the Common Data Link family. The recommended provision would establish Internet Protocol-capable communications relays as an additional standard for DOD UAVs.

The committee believes this change is necessary because new requirements exist for communications relays that are Internet Protocol-capable and that support mobile ad hoc networking, range extension, and point to multi-point networking, as well as interoperability between Joint Tactical Radio System air- and surface-domain waveforms, which are capabilities not previously available with the Common Data Link.

#### **Budget Items**

##### **Army**

##### **Extended range multi-purpose Sky Warrior**

The budget request included \$651.4 million in Aircraft Procurement, Army (APA), to procure 36 MQ–1C extended range multi-purpose (ERMP) Sky Warrior unmanned aerial vehicles (UAV) in the Overseas Contingency Operations account and the base budget request. The Government Accountability Office reports, as is confirmed in the APA budget exhibits, that only 24 of these 36 aircraft will be delivered over a single year period, and that, therefore, the budget request reflects substantial forward funding. The committee strongly supports the ERMP program, but agrees that the Army should budget only for a single year’s worth of aircraft production and deliveries. The committee recommends a reduction to the request of 12 ERMP aircraft and \$200.0 million.

##### **CH–47 multiyear procurement execution**

The budget request included \$1,001.3 million in Aircraft Procurement, Army (APA), for the purchase of CH–47 Chinook cargo helicopters. The Army informed the committee that funds requested are insufficient to support the multiyear procurement contract. The committee recommends a decrease of \$22.0 million in APA, line 22 for the modification of CH–47 Chinook helicopters and an increase of \$22.0 million in APA, line 13 to support CH–47 Chinook multiyear procurement.

##### **Apache AH–64 fuselage manufacturing**

The budget request included \$426.4 million in Aircraft Procurement, Army (APA) for Apache AH–64 helicopter modifications. The

committee recommends an increase of \$5.5 million in APA to procure one set of the special tooling required to qualify a domestic source for the manufacture of the Apache AH-64 fuselage.

#### **Blackhawk UH-60A conversion to UH-60L**

The budget request included \$66.7 million in Aircraft Procurement, Army (APA) for utility helicopter modifications. The committee recommends an increase of \$20.4 million in APA to accelerate the conversion of older UH-60A model aircraft to the newer, more capable UH-60L model.

#### **Air warrior ensemble generation III**

The budget request included \$52.7 million in Aircraft Procurement, Army (APA) for aircrew integrated systems. The committee recommends an increase of \$3.0 million in APA for air warrior ensemble generation III systems.

#### **Patriot command and control modifications**

The budget request included \$44.8 million in Missile Procurement, Army, for modification of Patriot missile systems. The committee recommends an increase of \$5.0 million to modify the Patriot Tactical Command System/Battery Command Post to meet the threshold requirements of the Patriot Advanced Capability 3 system. This upgrade will help improve the Patriot system capability until the follow-on Medium Extended Air Defense System is fielded.

#### **60mm mortars Army**

The budget request included \$21.6 million in Procurement of Ammunition, Army (PAA) for 60mm mortars, all types. The committee recommends an increase of \$3.0 million in PAA for the procurement of additional mortars.

#### **Bomb line modernization**

The budget request included \$151.9 million in Procurement of Ammunition, Army (PAA) for the provision of industrial facilities, but provided no funds for bomb line modernization at the McAlester Army Ammunition Plant, Oklahoma. The committee recommends an increase of \$5.0 million in PAA for bomb line modernization.

#### **Mine protection vehicle family**

The budget request includes \$134.7 million in Other Procurement, Army (OPA), for 93 medium mine protected vehicles (MMPV). The committee notes that mine resistant ambush protected (MRAP) category 2 (Cat II) vehicles, of which the Army currently has approximately 2,000 in its inventory, and which have not yet been incorporated into Army doctrine, organization, or materiel, meet the Army's requirement for a medium mine protected vehicle. The committee is aware that, instead of deploying with vehicles organic to their formations, engineer and explosive ordnance disposal (EOD) units receive Cat II vehicles in theater. Therefore, the committee believes that procuring 93 more of an eventual 443 new Cat II MRAP vehicles which would principally be used for

training, is imprudent, especially in light of the draw-down in forces from Iraq and the future availability of excess MRAP vehicles.

In the interim, the committee recommends a decrease of \$90.0 million in OPA to slow the production of these vehicles in fiscal year 2010 so that the Army may perform an assessment of its requirement and current inventory.

#### **Joint tactical radio system**

The budget request includes \$55.2 million in Other Procurement, Army (OPA), for the procurement of engineering design model four-channel joint tactical radio system ground mobile radios for use in a multi-service operational test and evaluation. The committee understands that these tests will not occur until fiscal year 2011 due to ongoing technical complexities in the program's testing schedule and a recent shift in the program's milestone C decision. The committee also understands that both the Department's Defense Contract Management Agency and its cost analysis improvement group have conducted assessments indicating the schedule may slip further. Therefore, the committee recommends a decrease in OPA of \$55.2 million due to program delays.

#### **Night vision devices**

The budget request includes \$250.6 million in Other Procurement, Army (OPA) for the procurement of enhanced night vision goggles (ENVG). The committee strongly supports the Army's ongoing efforts to equip soldiers with the most advanced night vision devices available and the ongoing work at the Army's night vision lab to maintain and extend the U.S. military's strategic advantage in this technology area. ENVGs permit superior tactical mobility and engagement during limited visibility conditions and enable soldiers to see, understand, and act first on the battlefield. This advantage is critical to current and future operations.

The committee understands that the ENVG production line is significantly behind on its production schedule and has a backlog of systems due to failures found during monthly quality control testing of ENVG systems. Additionally, the committee understands that the ENVG contractor has notified the Army of a reduction in their capacity in the second quarter of 2009. The committee is aware of the Army's plan to award contracts to other suppliers in order to increase capacity; however, even with this mitigation strategy, the Army will not be able to execute all of the funding requested for fiscal year 2010.

The committee recommends a decrease of \$100.0 million in OPA due to ENVG production delays.

#### **Fido explosives detector**

The budget request included \$56.1 million in Other Procurement, Army (OPA) for ground standoff mine detection systems, but provided no funds for the Fido explosives detector. The Fido explosives detector is deployed and in use by units in Iraq to counter improvised explosive devices and land mines. The committee recommends an increase of \$7.0 million in OPA for additional Fido explosives detectors.

**Combat casualty care equipment upgrade program**

The budget request included \$33.7 million in Other Procurement, Army (OPA) for medical combat support equipment. The committee recommends an increase of \$8.3 million in OPA to accelerate the upgrade of Army field medical equipment.

**Operator driving simulators**

The budget request included \$261.3 million in Other Procurement, Army (OPA) for non-system training devices. Additional driving simulators would allow deploying soldiers to maximize their training time while providing a realistic experience without risk to personnel or equipment. The committee recommends an increase of \$5.0 million in OPA for operator driving simulators.

**Immersive Group Simulation Virtual Training System**

The budget request included \$261.3 million in Other Procurement, Army (OPA) for non-system training devices, but provided no funding for the Immersive Group Simulation Virtual Training System (IGS-VTS). The IGS-VTS is a fully immersive, interactive virtual reality platform that supports soldier vehicle training. The committee recommends an increase of \$5.5 million in OPA for the IGS-VTS.

**Joint Fires and Effects Trainer System**

The budget request included \$3.1 million in Other Procurement, Army (OPA) for the Call for Fire Trainer, but included no funds for the Joint Fires and Effects Trainer System (JFETS) project. JFETS is a next-generation, virtual reality call for fire training simulation. The committee recommends an increase of \$5.0 million in OPA for JFETS.

**Urban training center instrumentation**

The budget request included \$261.3 million in Other Procurement, Army (OPA) for non-system training devices. The committee notes that the Army's readiness and rotation training strategies call for units to accomplish more of their mission training and rehearsals at their local training areas and facilities. The Army is using several technologies to increase the flexibility and value of local training ranges and facilities including the Deployable Range Package, the Homestation Instrumentation System, and the Integrated Military Operations in Urbanized Terrain Training System. The committee recommends an increase of \$2.0 million in OPA for the instrumentation of a regional urban operations training center.

**Virtual Interactive Combat Environment System**

The budget request included \$261.3 million in Other Procurement, Army (OPA) for non-system training devices, but included no funds for the Virtual Interactive Combat Environment (VICE) system. VICE is a team tactics, techniques, and procedures training system for dismounted infantry tasks. The committee recommends an increase of \$4.9 million in OPA for VICE.

### **Joint Improvised Explosive Device Defeat Fund**

#### **Joint Improvised Explosive Device Defeat Fund**

The budget request includes \$564.9 million for the Joint Improvised Explosive Device Defeat Fund (JIEDDF), which funds the operations of the Joint Improvised Explosive Device Defeat Organization (JIEDDO), including \$203.1 million for JIEDDO's attack the network line of operation; \$199.1 million for JIEDDO's defeat the device operation; \$41.1 million for JIEDDO's train the force operation; and \$121.6 million for JIEDDO's staff and infrastructure line of operation. The committee recommends full funding for JIEDDO, but recommends transferring all of JIEDDF funds from title I to the same budget activities in title XV, which funds the overseas contingency operations of the Department.

### **Navy**

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

The budget request included \$1,009.5 million to purchase nine F/A-18E/F aircraft. This is nine fewer aircraft than the Navy had planned to buy in fiscal year 2010 in the fiscal year 2009 future-years defense program.

The committee has expressed concern that the Navy is facing a sizeable gap in aircraft inventory as older F/A-18A-D Hornets retire before the aircraft carrier variant (F-35C) of the Joint Strike Fighter (JSF) is available. The committee raised this issue in the committee reports accompanying S. 1547 (S. Rept. 110-77) of the National Defense Authorization Act for Fiscal Year 2008 and accompanying S. 3001 (S. Rept. 110-335) of the National Defense Authorization Act for Fiscal Year 2009. The committee is disappointed that the Navy has failed to provide the report comparing single versus multiyear procurement costs mandated by the second of those committee reports.

Last year, the committee received testimony from the Navy of a projected shortfall in Navy tactical aviation. The Navy indicated that, under assumptions current at that time, it would experience a shortfall of 69 tactical aircraft in the year 2017, a number that swells to 125 when requirements of the United States Marine Corps are included. The committee believes that the Navy's projection of this shortfall was, however, based on a series of questionable assumptions.

This year, the Chief of Naval Operations said that the projected gap may be as high as 250 aircraft total for the Department of the Navy. The committee believes that the Navy has failed to present a budget in fiscal year 2010 that takes effective action to deal with this substantially increased projected shortfall in the Department of the Navy's tactical air fleet and is concerned about the potential risk such a shortfall could pose to national security. The committee also notes that this shortfall figure is still predicated on an initial operation capability of the F-35C in 2015 but that achieving this is considered optimistic by many observers. The Navy's delay in taking action causes concern that it: (1) is continuing to accept the substantial security risks associated with the projected shortfall; (2) remains overly reliant on a potentially costly service life exten-



sion program (SLEP) for legacy F/A-18s as a means to mitigate the gap until the Joint Strike Fighter achieves full operational capability; and (3) is not adequately considering realistic, fiscally responsible long-range procurement plans to address the carrier strike aircraft shortfall, such as a multiyear procurement of F/A-18E/F aircraft as opposed to a series of single year purchases.

The committee is concerned that, in response to possible further delays, expanding costs and technological immaturity with the JSF, the Navy appears increasingly reliant on its proposal to extend the life of select legacy F/A-18's from 8,600 to 10,000 flight hours through a SLEP currently estimated to cost on average \$26.0 million per plane. This life extension would be in addition to the 2,600-hour service life extension that the Navy already plans for most legacy F/A-18s. By the Navy's own testimony, it is unclear how many of the planes are capable of reaching 10,000 flight hours even with a SLEP. The committee is concerned that the cost uncertainties of a SLEP achieving an additional 1,400 flight hours make such a plan risky. In any case, the committee believes such SLEP may be inefficient when compared with the benefits of procuring new F/A-18E/F's, which might cost less than \$50.0 million each in 2009 constant dollars under a multiyear procurement acquisition strategy. Normalizing costs for the expected return in additional service life, a SLEP to achieve the additional 1,400 hours would cost approximately \$18,571 per flight hour gained, versus \$8,333 per flight hour provided by a new F/A-18E/F (at a 6,000 flight hour life, the cost per flight hour of a new F/A-18E/F would fall even further to \$5,814 if those planes are similarly extended to 8,600 flight hours as have legacy F/A-18s). In light of such costs, the committee believes the Navy must more carefully evaluate costs and benefits of new F/A-18E/F procurements, compared to investing in a SLEP of legacy aircraft.

The committee further notes that new F/A-18E/F models come equipped with improved technological capabilities over the legacy F/A-18's, including active electronically scanned array radar, modernized avionics, advanced aerial refueling system capability, and added weapon hard points, among other features that would not be part of a SLEP upgrade package for the older aircraft. These factors would tend to increase the benefit of purchasing new F/A-18E/Fs compared to conducting a SLEP on legacy aircraft. The Navy projects that the F/A-18E/F will remain in the fleet until at least 2040, and should be able to use most or all of the full service life of any newly purchased aircraft.

The committee understands that the Department of Defense intends to review the whole issue of tactical aircraft forces in the pending Quadrennial Defense Review. The committee expects the Department to conduct and submit the analysis of multiyear procurement for the F/A-18 as directed in the committee report last year to include cost differentials between single year and multiyear procurement strategies and tradeoffs between a SLEP and new procurements of the F/A-18E/F. The Department should include such information derived from that analysis in deciding how to implement the results on the ongoing Quadrennial Defense Review regarding tactical aviation.

The committee expects that the Department's tactical aviation procurement strategies will be informed by the Quadrennial Defense Review. In light of the significant increase in the strike-fighter shortfall testified to before the committee this year, additional actions to address that shortfall cannot be delayed too long. The committee emphasizes, as it did last year, that if purchasing new F/A-18E/F aircraft proves to be the preferred method of resolving the shortfall, not acquiring those aircraft under a multiyear contract could lead to the loss of "substantial savings" to the government—subject to the outcome of required independent cost estimates. The committee notes that a request for a multiyear procurement must fully comply with the requirements of section 2306b of title 10, United States Code, as amended by section 811 of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 110-181).

In the interim, the committee fails to see the wisdom in cutting planned F/A-18E/F procurement with potential shortfalls this large. Therefore, the committee recommends an increase of \$560.0 million to buy 18 F/A-18E/F aircraft in fiscal year 2010 as originally planned.

#### **UH-1Y/AH-1Z**

The budget request included \$835.4 million in Aircraft Procurement, Navy (APN), for the UH-1Y/AH-1Z helicopter program. These funds would support purchasing 16 new UH-1Ys, 2 new AH-1Zs, and remanufacturing 12 existing AH-1Ws to the AH-1Z configuration. This compares to the program for fiscal year 2009 of 15 new UH-1Ys, and remanufacturing 5 existing AH-1Ws to the AH-1Z configuration.

In conjunction with the plan to increase the size of the Marine Corps, the total program quantities have been increased to 123 UH-1Ys and 226 AH-1Zs. A total of 58 of the programmed 226 AH-1Zs will be new production to reduce the impact on operational forces of taking operational helicopters off the line and inducting them into the remanufacturing effort. Fiscal year 2010 would be the first year of buying new AH-1Zs.

Operational testing for the UH-1Y has been completed, which resulted in a positive Milestone B decision in September 2008. Operational testing for the AH-1Z has been delayed, mainly due to issues surrounding the targeting sight system. The program office now predicts that operational testing for the AH-1Z configuration will not be completed until late in fiscal year 2010. Despite these delays, the fiscal year 2010 request reflects an increase of two AH-1Z aircraft since the plan last year.

Also since last year, the Secretary of the Navy notified Congress that the Service Acquisition Executive had determined the program had breached the significant cost growth threshold of 15 percent, compared to the baseline average procurement unit cost.

The committee supports the Marine Corps plans to expand the size of the force, but also believes that the Department should not proceed too quickly in ramping up this program absent successful operational testing.

The committee recommends a decrease of \$282.9 million to keep the UH-1Y/AH-1Z program at the same level of effort as fiscal year 2009.

#### **Weapons industrial facilities**

The budget request included \$3.2 million for various activities at government-owned, contractor-operated weapons industrial facilities. The committee recommends an increase of \$30.0 million to accelerate the facilities restoration program at the Allegany Ballistics Laboratory.

#### **Multiple User Objective System**

The committee recommends an increase of \$32.0 million in Weapons Procurement, Navy, line 18 for the Multiple User Objective System (MUOS). A complete discussion of the MUOS program is contained in title II of this Act.

#### **Smart valves**

The budget request included \$11.4 million in Other Procurement, Navy (OPN), for firefighting equipment, but included no funding to expand the application of “smart valves” for firefighting systems to support the DDG-51 modernization program.

The Navy developed smart valve technology as part of the DDG-1000 autonomous fire suppression system (AFSS). These systems support reducing crew sizes because they can automatically reconfigure a ship’s firefighting system to route around damaged sections of piping without human intervention.

The current DDG-51 modernization program is upgrading various systems on the DDGs, including the hull, mechanical and electrical systems. If the Navy were to make appropriate engineering changes, this smart valve technology could be backfit to the DDG-51 during this modernization period, and provide the opportunity to reduce crew sizes.

Therefore, the committee recommends an increase of \$4.0 million in OPN for expanding the application of smart valve technology.

#### **TB-33 thinline towed array**

The budget request included \$28.2 million in Other Procurement, Navy (OPN), for purchasing various components of the thinline towed systems. Installing these arrays holds the promise of providing much better acoustics performance for our submarines.

The committee understands that additional funding would permit the Navy to accelerate initial qualification testing, implement automated manufacturing processes, qualify commercial suppliers for critical components, and improve acceptance testing methods.

Therefore, the committee recommends an increase of \$4.0 million in OPN for the TB-33 thinline towed array.

#### **Man overboard indicators**

The budget request included \$55.3 million in Other Procurement, Navy (OPN), for command support equipment, but no funding to procure man overboard indicators (MOBI).

The Navy has tested a one-per-person MOBI transmitter. Additionally, at least two expeditionary strike groups recommended the

Navy procure MOBI transmitters for each embarked sailor, marine, and airman. The committee understands that a large majority of ship commanding officers having MOBI systems installed have requested additional MOBI transmitters in order to protect all embarked personnel. In addition, the U.S. Navy Safety Center has recommended that each embarked sailor and marine be afforded MOBI protection.

Therefore, the committee recommends an increase of \$4.0 million for the procurement of additional MOBI systems.

### **Air Force**

#### **F-22A fighter aircraft**

The budget request included \$95.2 million in Aircraft Procurement, Air Force (APAF), for the F-22A aircraft program, including \$64.0 million for shutting down the production line.

The committee recommends an increase of \$1.75 billion to purchase an additional seven F-22A aircraft in fiscal year 2010. The committee also directs that the production shutdown costs be applied to other program requirements.

The Air National Guard is charged with providing homeland aerial defense for the United States and is primarily responsible for executing the air sovereignty alert (ASA) mission as part of the National Defense Strategy. In carrying out this mission on a daily basis, the Air National Guard relies on more than 1,600 Air National Guard men and women who operate legacy F-15 and F-16 fighter aircraft. The committee has been informed that the projected retirements of these legacy aircraft with which the Air National Guard currently executes the ASA mission will leave the Guard short of the required number of aircraft to execute this mission. Additionally, the Government Accountability Office has commented that “unless the Air Force modifies its current fielding schedules or extends the service lives of its F-15s and F-16s . . . it will lack viable aircraft to conduct ASA operations at some of the 18 current ASA sites after fiscal year 2015.”

The committee is concerned that no plan has been developed to fill this shortfall, either through modernizing legacy aircraft or buying new aircraft. Of specific concern is the fact that 80 percent of the F-16s will be gone in 8 years and since the majority of the ASA mission is accomplished by these F-16s, this will negatively impact the Air National Guard’s ability to execute the ASA mission.

In a recent letter, the Director of the Air National Guard commented, “While a variety of solutions abound, I believe the nature of the current and future asymmetric threats to our Nation, particularly from seaborne cruise missiles, requires a fighter platform with the requisite speed and detection to address them. The F-22’s unique capability in this arena enables it to handle a full spectrum of threats that the Air National Guard’s current legacy systems are not capable of addressing . . . basing F-22 (and eventually F-35s) at strategic Air National Guard locations throughout the United States while simultaneously making them available to rotationally support worldwide contingency operations is the most responsible approach to satisfying all of our Nation’s needs.”

For these reasons, the committee directs the Secretary of the Air Force to develop a plan, including force structure and basing requirements, for executing the ASA mission over the next 2 decades. The Secretary shall deliver that plan to the congressional defense committees no later than March 1, 2010. The plan shall give full consideration toward: (1) stationing the additional F-22s procured in fiscal year 2010 at strategic Air National Guard locations; (2) creating new or expanding current Active/Guard associate units in which both active-duty and Air National Guard personnel could operate these additional aircraft, as well as F-22s and F-35s procured in the future; and (3) transitioning earlier model F-22s as well as F-35s procured in the future to the Air National Guard at the first possible opportunity.

#### **Global Hawk**

The budget request included \$554.8 million for procurement of the Global Hawk high-altitude unmanned aerial system. The Government Accounting Office recommends a reduction to the request to slow production because of continued delays in the program, including operational testing. Accordingly, the committee recommends a reduction of \$50.0 million to the request.

#### **C-130 Avionics Modernization Program**

The budget request included \$354.4 million in Aircraft Procurement, Air Force (APAF), for the C-130 Modifications Program, including \$209.5 million for the C-130 Avionics Modernization Program (AMP). The C-130 AMP effort suffered a Nunn-McCurdy breach in February 2007, which caused the Department of Defense to significantly restructure and recertify the program in June 2007. Since last year, there have been additional delays in starting production, primarily because of software testing issues and a failure to complete required documentation. The milestone decision review to authorize production is at least 1 year later than the projected date of June, 2008. This means that production funds from fiscal years 2008 and 2009 will be awarded, at the earliest, sometime late this summer.

While the committee remains supportive of the program, the committee sees no need to provide additional kit and installation funding in fiscal year 2010, with the program running at least a full year behind the planned schedule and not requiring additional production funds until fiscal year 2011.

The committee recommends a reduction of \$209.5 million in APAF for the C-130 AMP Modification Program.

#### **Advanced targeting pod**

The budget request included \$103.3 million in Aircraft Procurement, Air Force (APAF), for other aircraft modifications, including \$0.9 million for modifications of advanced targeting pods (ATP), also known as precision attack systems.

The Air Force and the contractor team for the Litening ATP program have devised a spiral enhancement kit for existing Litening ATPs that will provide:

- (1) a new fourth generation forward-looking infrared sensor;

(2) a new fourth generation charged coupled device camera that enables targeting acquisition and identification;

(3) a C-Band video downlink capability which will provide exceptional standoff capability outside of most surface-to-air threats at twice the distance of the earlier Litening ATPs; and

(4) a laser spot tracker and a laser target imaging processor which yield much improved performance for targeting at long-ranges using precision weapons.

The committee recommends an increase of \$24.0 million in APAF for the procurement of spiral upgrade kits for Litening ATPs.

#### **Evolved Expendable Launch Vehicle**

The budget request included \$1.3 billion for the Evolved Expendable Launch Vehicle (EELV), in Missile Procurement, Air Force, line 24. The committee recommends a reduction of \$88.0 million as a result of the delay of the Global Positioning System IIF satellite number 8 (GPS IIF-8). The EELV booster for GPS IIF-8 will have to be purchased in fiscal year 2011.

#### **Evolved Expendable Launch Vehicle**

The budget request included \$1.3 billion for the Evolved Expendable Launch Vehicle (EELV), in Missile Procurement, Air Force, line 24. The committee recommends a reduction of \$105.0 million as a result of the ability of the Air Force to utilize a previously purchased booster for AFSPC-4. As a result the funds requested for the AFSPC-4 booster in the fiscal year 2010 budget request are excess.

#### **Halvorsen loaders**

The budget request included \$19.6 billion for Other Procurement, Air Force, but did not include any funds for Halvorsen loaders. The committee recommends an increase of \$12.0 million for the procurement of 15 Halvorsen loaders to assist the Air Force to meet its requirement of 538 loaders.

#### **Unmanned modular threat emitter modernization**

The budget request included \$40.6 million in Other Procurement, Air Force, for Combat Training Ranges, but no funds to sustain the Unmanned Modular Threat Emitter (UMTE) modernization program. Current threat emitters supporting the Air Warfare Center Nellis Range Complex are out of date and inadequate for training, particularly with the F-22 and F-35. The UMTE modernization program will provide affordable and realistic threats at the required density, and the upgraded performance and extended life of existing assets needed at the Nevada Test and Training Range. The committee recommends authorization of \$43.6 million, \$3.0 million above the request for UMTE.

#### **Joint threat emitter**

The budget request included \$40.6 million in Other Procurement, Air Force (OPAF), for making improvements at combat training ranges, including \$7.1 million for the joint threat emitter (JTE) program. These improvements are aimed at increasing the capability to support realistic air-to-air, air-to-ground, ground-to-air,

and electronic warfare training, along with the ability to record and play-back events for aircrew debriefing and analysis.

The Air Force has developed a new infrared threat simulator for augmenting the JTE system, called the aviation crew trainer (ACT). The Air Force needs to buy additional ACT systems to be able to field that system to all of its training ranges.

Therefore, the committee recommends an increase of \$3.2 million in OPAF for buying additional ACT systems for the JTE program.

#### **Application software**

The budget request included \$111.3 million in Other Procurement, Air Force (OPAF), line 37, for Milsatcom Space but no funds for the Application Software Assurance Center of Excellence. The committee recommends an increase of \$9.0 million for the Center to assess and strengthen defenses against cyber attacks at the software application level.

#### **Mine Resistant Ambush Protected Vehicle Fund**

##### **Mine Resistant Ambush Protected Vehicle Fund**

The base budget request included no funding for the Mine Resistant Ambush Protected Vehicle (MRAP) Fund to procure MRAP all-terrain-vehicles (M-ATV). The overseas contingency operations (OCO) budget request, however, included \$5,456.0 million to procure approximately 2,080 M-ATVs and sustain the approximately 15,000 MRAP vehicles in the Department's existing inventory, much of which is in Iraq.

The committee is aware that the Department is close to a decision to increase the M-ATV requirement to more than 5,200 M-ATVs to support combat operations in Afghanistan. This process was spurred by the inadequate armor protection of the High Mobility Multipurpose Wheeled Vehicle and the poor mobility of the MRAP vehicles in Afghanistan's rugged terrain. In anticipation of an increase in the M-ATV requirement, the committee recommends an increase of \$1,200.0 million for the MRAP Fund, thereby bringing the total funding in the base and OCO components to \$6,956.0 million for M-ATVs.

The committee is aware that the MRAP program office has funds available from lower-than-expected MRAP sustainment costs that can be shifted to begin production of additional M-ATVs. The committee is committed to ensuring that this critical force protection program proceeds rapidly with all the necessary resources.

The committee also continues to monitor closely the Army's ongoing assessment of its MRAP fleet and how it plans to incorporate the more than 12,000 MRAPs it has procured over the past 2 years into its current force structure and fleet of tactical wheeled vehicles, as directed by the Secretary of Defense.

#### **Defense-wide**

##### **MC-130W multi-mission modifications**

The budget request included \$31.6 million in Procurement, Defense-wide for MC-130 Multi-Mission Modifications. These modifications fulfill an urgent combat requirement to rapidly arm and

field multi-mission precision strike platforms. These aircraft will provide an enhanced armed-overwatch capability utilizing various sensors, communications systems, precision guided munitions, and a medium-caliber gun. The Commander of the U.S. Special Operations Command has identified an \$85.0 million shortfall in funding for these aircraft modifications.

The committee recommends an increase of \$85.0 million in Procurement, Defense-wide, C-130 Modifications, for the U.S. Special Operations Command.

#### **Advanced lightweight grenade launcher**

The budget request included no funding in Procurement, Defense-wide, for advanced lightweight grenade launchers for special operations forces. These grenade launchers provide special operations forces with a vehicle and man-portable weapon to defeat personnel and lightly armored targets from extended distances. U.S. Special Operations Command has a basis of issue requirement for 926 advanced lightweight grenade launchers, but has only fielded 709 toward that requirement.

The committee recommends an increase of \$5.0 million in Procurement, Defense-wide, Small Arms and Weapons, to help the U.S. Special Operations Command meet its basis of issue requirement.

#### **Special operations visual augmentation systems**

The budget request included \$33.7 million in Procurement, Defense-wide, for the special operations forces (SOF) visual augmentation, lasers, and sensor systems. However, no funding was included for the special operations visual augmentation systems hand-held imager/long-range. These hand-held imagers allow special operators to detect, recognize, and identify targets under varying conditions or at ranges at which the operator would not normally be able to see the target. The Commander of the U.S. Special Operations Command has identified a \$15.4 million shortfall in funding for these hand-held imagers.

The committee recommends an increase of \$15.4 million in Procurement, Defense-wide, SOF Visual Augmentation, Lasers and Sensor Systems, for the U.S. Special Operations Command.

#### **Special operations forces multi-band inter/intra team radio**

The budget request included \$32.9 million in Procurement, Defense-wide for Multi-band Inter/Intra Team Radios for special operations forces (SOF). These radios provide SOF with a lightweight, hand-held communications capability adequate for the air, ground, and maritime missions they are tasked to perform. The Commander of the U.S. Special Operations Command has identified a \$31.3 million shortfall in funding for these radios.

The committee recommends an increase of \$31.3 million in Procurement, Defense-wide, SOF Tactical Radio Systems, for the U.S. Special Operations Command.

#### **M53 Joint Chemical Biological Protective Mask**

The budget request included \$92.0 million in Procurement, Defense-wide for chemical and biological individual protection equip-



ment, including \$48.4 million for the Joint Service General Purpose Mask (JSPGM). However, there was no funding for the special operations forces variant of the JSPGM, the M53 Joint Chemical Biological Protective Mask (JCBPM). The committee recommends an increase of \$4.0 million in Procurement, Defense-wide, Line 93, for M53 JCBPM.

United States Special Operations Command (SOCOM) has a validated requirement for 14,601 JCBPMs, but only 70 percent of that requirement has been procured to date. Additional funding for this program would allow the purchase of the remaining 30 percent of the JCBPMs that are required by SOCOM.

### **Procurement of computing services**

The committee recommends a total reduction of \$300.0 million from service and defense-wide operation and maintenance accounts that support the procurement and delivery of computing services. The reductions include a \$75.0 million decrease from each of the Army, Navy, Air Force, and defense-wide accounts. The committee does not intend for these reductions to be assessed against Defense Information Systems Agency (DISA) computing services activities.

The committee directs the services to aggressively explore increased opportunities to utilize DISA computing services and eliminate redundant, wasteful service-specific computing services activities. The committee notes that consolidation of computing services activities, such as reductions in numbers of computing centers, data storage systems, and electronic file servers, has saved the Department of Defense an estimated \$200.0 million or more annually since 1990, according to DISA. Further, a June 2007 independent assessment of DISA's computing services noted that they "...provided world-class computing services that enable the DOD community to better execute their missions," and compared DISA's services favorably to general government, federal, and workload peers. The assessment also recommended continuing assessment of organizational staffing, structure, and realignment, as well as continued maturation of data center processes. Finally, the committee notes that uncoordinated, Department-wide deployment of servers, mainframes, data warehouses, websites, and other computing services has resulted in inefficiencies, underutilization of computing infrastructure, and interoperability difficulties.

The committee recommends that the Assistant Secretary of Defense for Networks and Information Integration initiate independent, comparative benchmarking studies of computing services across the Department of Defense to inform and accelerate the consolidation of the provision of computing services to increase efficiency, improve services, and reduce costs.

## **Items of Special Interest**

### **Body armor protocol and requirements**

The committee concurs with the Department of Defense Inspector General's recommendation that the Department should establish standardization for testing and evaluation of all body armor components. Standard protocols by all military departments will improve confidence in the level of ballistic protection provided by

the Department and will better facilitate rapid procurement and fielding. The committee believes the use of common test and evaluation standards will also enable commercial ballistic test facilities and body armor component producers to more quickly and effectively respond to the Department's requirements.

Additionally, the committee recommends the Department consult a peer review of any proposed standardized test and evaluation procedures from ballistics experts in other federal agencies and departments prior to publication. The committee is aware that such expertise resides in the Department of Commerce, the National Institute of Standards and Technology, and in the National Institute of Justice. The committee would also recommend that representatives from commercial ballistics test facilities be given an opportunity to comment on the draft test and evaluation standards before final versions are issued.

The committee believes body armor requirements for the military services should be coordinated through the Joint Capabilities Integration and Development System process. The committee encourages the Joint Requirements Oversight Council to review and determine if an update to the current body armor requirements is necessary.

The committee echoes the testimony of the Vice Chief of Staff of the Army and the Assistant Commandant of the Marine Corps, that there is an urgent need to lighten the warfighter's combat load. The committee urges the Secretary of Defense to consider establishing and funding a Department-wide task force which could expedite efforts and advancements in weight reduction for body armor. The committee highlights similar task forces such as the Mine Resistant Ambush Protected Vehicle Task Force and the Intelligence, Surveillance, and Reconnaissance Task Force which were created to confront the urgent operational requirements for Iraq and Afghanistan.

### **Irregular warfare in the Navy**

In prepared statements before the committee on the posture of the Department of Defense regarding the authorization request for fiscal year 2010, the Secretary of Defense and the Chairman of the Joint Chiefs of Staff both observed that the Department of Defense (DOD) needed to shift relative emphasis in resource allocations towards the threats we face today and will likely face tomorrow.

One of those threats encompasses the irregular warfare (IW) mission area. The committee is concerned that DOD has not shifted enough emphasis quickly enough in certain areas. One such area is in the Department of the Navy's budget for IW programs, which may be inadequate to achieve the objectives the Secretary has laid out.

A major component of the Navy's ability to contribute to the IW mission area is the Naval Expeditionary Combat Command (NECC). A large proportion of NECC force structure is ground equipment (i.e., SEABEE equipment and vehicles), underwater demolition and diving equipment, small boats, riverine craft and maritime expeditionary force equipment. These categories of equipment have seen persistent use and have been exposed to the harsh elements in Iraq, Afghanistan, and elsewhere in the Central Com-

mand theater of operations. The committee understands that much of that equipment will be left behind or given to local forces, such as the Iraqi National Army or police forces, when the U.S. withdraws the bulk of its forces.

The committee expects that the Quadrennial Defense Review will review this situation and help inform DOD on the requirements to fully fund NECC modernization and sustainment requirements, and that the Navy will adequately apply resources to those requirements in future budgets. In addition, the committee believes that any such review of NECC requirements should account for equipment shortfalls due to: (1) transferring equipment to local forces; (2) changing force structure requirements; (3) changing threat levels requiring equipment modifications or different equipment entirely; (4) losing equipment in combat; (5) operating beyond economic service life; and (6) operating in environments which result in excessive wear and tear.

### **Joint cargo aircraft**

The budget request included \$319.1 million in Aircraft Procurement, Air Force (APAF), to purchase eight C-27J Joint Cargo Aircraft (JCA).

Over the past several years, the Department of Defense (DOD) has produced a number of studies for Joint Cargo Aircraft, including an Analysis of Alternatives, which the Army conducted in 2005–2006. More recent studies produced by the RAND Corporation as late as 2009 suggest that the requirement for the JCA program would be 78 aircraft. Originally, both the Army and Air Force planned to buy JCA aircraft, with 54 and 24 aircraft in the future-years defense program for the Army and Air Force, respectively.

This year, DOD, the Army, and the Air Force are recommending that the Air Force assume sole responsibility for the JCA program and mission set. Against that backdrop, the committee heard testimony from DOD and Air Force officials on their commitment to replace the Army National Guard's C-23 Sherpa aircraft. That testimony reflected the Army's need for less than a full load of cargo carrying capacity for the "last tactical mile," where the C-27J may be able to operate more effectively and efficiently than other Army or Air Force aircraft.

This year, both the Secretary and the Chief of Staff of the Air Force testified that the correct number of C-27J aircraft is at least 38, and that the goal for the program as identified in the budget request for a program of 38 C-27s was a floor, not the ceiling.

The committee understands that DOD intends to review the whole issue of intra-theater airlift in terms of relative balance between heavy-lift helicopters, C-27s, and C-130s in the pending Quadrennial Defense Review (QDR). The committee believes that any complete review of intra-theater airlift requirements and programs must give due consideration to the potential requirements for and contribution of these systems to the homeland security mission.

The committee will continue to follow this program through the QDR process and provide oversight to ensure that: (1) the program's schedule is maintained during transition from Army to Air Force management; (2) the Air Force meets flight test and aircraft

worthiness certification schedules; (3) that the Department meets all Operational Test and Evaluation objectives in 2010; and (4) the Air Force satisfies the Army's direct support airlift requirements.

In addition, the committee directs the Secretary of the Air Force, in conjunction with the Chief of the National Guard Bureau, to submit a report to the congressional defense committees within 120 days of enactment of this Act on the Air Force's plans for: (1) integrating these aircraft in the Department of the Air Force's force structure; (2) deploying these aircraft to support combatant commander requirements; and (3) permanent stationing for these aircraft.

#### **Reports to Congress on up-armored high mobility multipurpose wheeled vehicles and mine resistant ambush protected vehicle**

The Emergency Supplemental Appropriations Act for Defense, Global War on Terror, and Tsunami Relief, 2005 (Public Law 109-13) directed the Secretary of Defense to submit a report to the congressional defense committees not later than 60 days after enactment, and every 60 days thereafter until the termination of Operation Iraqi Freedom, setting forth the current requirements of the armed forces for Up-Armored High Mobility Multipurpose Wheeled Vehicles (HMMWVs). The U.S. Troop Readiness, Veteran's Care, Katrina Recovery, and Iraq Accountability Act (House Report 110-104) directed the military services to jointly report on the mine resistant ambush protected (MRAP) vehicle program's status, requirements, and execution of funds.

While both of these reports provide helpful information to the congressional defense committees, the committee believes the picture remains incomplete. As such, the committee directs the military services to consolidate these two reports into one single report that details the following information for operations in Iraq and Afghanistan: (1) current requirements for up-armored HMMWVs, MRAPs, and MRAP all-terrain-vehicles; (2) status of theater equipment (i.e., quantities and vehicles readiness levels); and (3) execution of funds to support these programs.

#### **Unmanned aerial vehicle planning**

The Air Force is required to acquire and maintain enough Predator and Reaper unmanned aerial vehicles (UAVs), along with the processing, exploitation, and dissemination (PED) capacity, for 50 combat air patrols (CAP). The committee is aware that U.S. Strategic Command is conducting a force mix study that may well result in an increase in the required number of CAPs.

The Air Force has produced a plan to achieve the 50-CAP requirement by September 2011. The UAV Task Force in the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) is concerned that the Air Force plan is substantially underfunded, specifically in sustainment of the Predator portion of the planned fleet, the money for which was re-directed to Reaper procurement. While the Air Force states that it will fully fund the plan in the next budget cycle, the Task Force expects that budget pressures on the Air Force will make it very difficult for the Air Force to make good on this pledge.

The Air Force plan also shows that there will be a shortage of the number of aircraft required to fully equip the number of CAPs the Air Force is pledged to provide between 2010 and 2013. The Air Force plan is to compensate for the shortage by maintaining a “surge” profile, whereby less than the four aircraft standard for a CAP will be operated at higher tempo. The reason for this “flat spot” in the aircraft inventory is that funds appropriated in fiscal year 2009 for production of 18 Predators have not been obligated and the Air Force indicates that the funds will be reprogrammed for other activities.

The committee regards this as unacceptable and will not be favorably inclined towards a future reprogramming request. The committee urges the Secretary of Defense to resolve the issues between the Air Force and USD (AT&L) promptly and proceed to procure the Predator aircraft approved by Congress.

The committee directs the USD (AT&L) to report to the congressional intelligence and defense committees coincident with the submission of the fiscal year 2011 budget request on:

- The number of endurance UAV CAPs required by date through the Future Years Defense Program;
- The Department’s plans, including funding, to achieve the required CAP levels;
- The mix of Predators and Reapers over time, including the mix of Predator 1Bs and 1Cs;
- The adequacy of data relay and PED resources to support the CAPs, including appropriately cleared analysts to support sensitive special operations; and
- How the Department intends to manage the relationship between the Air Force Global Hawk and the Navy Broad-Area Maritime Surveillance version of the RQ-4, in terms of interoperability and data relays.

The report also should include an update on the Department’s efforts to engage the Federal Aviation Administration (FAA) on all aspects of integrating UAVs into the national airspace control system. The committee is discouraged that the FAA has yet to establish a UAV program office to work jointly with DOD on this critical challenge. The committee believes that an FAA program office with a separate funding line and adequate resources is essential for the FAA to meet its obligations in this area.



## **TITLE II—RESEARCH, DEVELOPMENT, TEST, AND EVALUATION**

### **Subtitle A—Authorization of Appropriations**

### **Subtitle B—Program Requirements, Restrictions, and Limitations**

#### **Continued development of competitive propulsion system for the Joint Strike Fighter program (sec. 211)**

The committee recommends a provision that would require the Department to obligate sufficient funds for fiscal year 2010 for the continued development and procurement of the F136 competitive propulsion system for the F-35 Lightning II to ensure that the Department continues the system development and demonstration (SDD) program during fiscal year 2010. The committee understands that current plans for the F136 Joint Strike Fighter (JSF) propulsion system would complete the development in sufficient time to conduct a first competitive contract award in fiscal year 2012, concurrent with the award for the sixth lot of low-rate initial production aircraft.

The budget request included \$1,741.3 million in PE 64800N, and \$1,858.1 million in PE 64800F for continued development of the JSF program, but included no funds for continuing the SDD phase of the F136 program.

The committee continues to believe that, in light of studies performed by the Department of Defense, the Institute for Defense Analyses, and the Government Accountability Office, it is in the best interests of the Nation to continue the development of the F136. Though the results of these studies were, in the aggregate, inconclusive on whether there would be a financial benefit to the Department in continuing to develop a competitive propulsion system for the JSF program, the committee notes that all studies identified significant non-financial factors of a two-engine competitive program. These included better engine performance; improved contractor responsiveness; a more robust industrial base; increased engine reliability; and improved operational readiness. The committee believes that the benefits, which could be derived from the non-financial factors, favor continuing the JSF competitive propulsion system program.

Therefore, the committee recommends an increase of \$438.9 million for continuing F136 SDD, with half that amount added to PE 64800N and the other half added to PE 64800F.

**Enhancement of duties of Director of Department of Defense Test Resource Management Center with respect to the major range and test facility base (sec. 212)**

The committee recommends a provision that would amend the authority of the Director of the Department of Defense Test Resource Management Center to review changes to major test range funding before changes are implemented. The committee established the Test Resource Management Center in order to ensure that the Department is adequately investing in the test capabilities it requires to develop and deploy needed defense systems to meet current and emerging operational needs. The provision would allow the Director to review changes to test resource funding that occur outside the traditional planning, programming, and budgeting process, as well as to ensure that the Director has access to all the information he or she needs to make recommendations to the Undersecretary of Defense for Acquisition, Technology, and Logistics on test resource issues.

**Guidance on specification of funding requested for operation, sustainment, modernization, and personnel of major ranges and test facilities (sec. 213)**

The committee recommends a provision that would clarify the information required in budget justification materials delivered to Congress describing amounts requested for test and evaluation activities. The committee is concerned that existing justification materials provide incomplete and inconsistent information and are not comparable across services and agencies. The committee believes that the Army, Air Force, and the Defense Information Systems Agency (DISA) are each underfunding test and evaluation capabilities potentially to the long-term detriment of the Department of Defense and its ability to develop and field new systems. The committee believes that the Director of the Test Resource Management Center should play a key role in ensuring that the budget justification materials are prepared and displayed in a consistent manner across the Department to provide maximum transparency for Congress and the public.

**Permanent authority for the Joint Defense Manufacturing Technology Panel (sec. 214)**

The committee recommends a provision that would authorize the establishment of a Joint Defense Manufacturing Technology Panel (JDMTP) as a permanent part of the statutorily mandated Manufacturing Technology Program. The committee notes that the December 2008 Report to Congress on Implementation of Department of Defense ManTech Projects estimated that investments in the program made between fiscal years 2003 and 2005 could result in over \$6.3 billion in savings for the Department through lower production costs and increased systems reliability and performance. The committee believes that the activities of the existing JDMTP have contributed significantly to these types of successes for the program, as well as other important initiatives, such as the use of manufacturing readiness level assessment tools, investment in joint manufacturing research projects, and enhanced dissemination of manufacturing advances into the defense industrial base. The com-



mittee directs the services and the Office of the Secretary of Defense to continue to support the activities and initiatives of the JDMTP in order to continue to reduce life cycle and acquisition costs for defense systems.

**Extension and enhancement of Global Research Watch program (sec. 215)**

The committee recommends a provision that would extend the requirement for the Department to execute the Global Research Watch program. The program was established by the committee to provide a centralized repository of information on international research and technology capabilities in areas of interest to the Department for the purposes of enabling international cooperative activities and providing data and analyses to inform Department research investment decisions. The provision would also limit the funds available to military department programs that support international research assessment activities until the military departments provide information consistent with the statutory goals of the Global Research Watch program to the Director of Defense Research and Engineering.

The committee notes that Department efforts to comply with the statutory requirement for the program have not been complete or successful to date. The committee further notes that the Department has requested funding for fiscal year 2010 in the Militarily Critical Technologies Program for the purpose of improving and expanding “the focus of the DSTL [Defense Science and Technology List] effort to represent a broader global research watch.”

**Three-year extension of authority for prizes for advanced technology achievements (sec. 216)**

The committee recommends a provision that would extend the Department of Defense’s authority to award prizes for advanced technology achievements. The committee notes that the Department has successfully used this authority to hold challenge competitions for robotic vehicles and wearable power technologies. These competitions have encouraged large groups of researchers and innovators to work on defense challenges for the first time, highlighted the importance of defense research and technology to address warfighter needs, and advanced state-of-the-art critical defense technologies.

**Modification of report requirements regarding defense science and technology program (sec. 217)**

The committee recommends a provision that would modify the funding objective established by Congress for the defense science and technology program as well as the reporting requirements triggered when the Department fails to achieve established goals. The committee notes that the Department’s rhetoric on modernizing defense capabilities to meet the emerging threats of the 21st century does not match its investment strategy for the programs that develop those capabilities. The committee notes that the fiscal year 2010 budget request for science and technology programs has decreased by over \$50.0 million in constant dollars with respect to the fiscal year 2009 budget request.

The committee notes that reduced investments in science and technology programs will inevitably lead to a number of negative consequences. First, the Department will not be able to take advantage of new research ideas and innovative technologies that are being developed within the private sector, which may lead to enhanced defense capabilities. Second, the United States may lose the technical lead it enjoys in critical defense research areas such as advanced materials, nanotechnology, biotechnology, and cybersecurity to global competitors. Both of these outcomes would result in a long-term loss of military superiority for the United States. The committee's provision requires the Department to provide information to Congress that will help address both of these concerns and better evaluate future science and technology budget submissions.

**Programs for ground combat vehicle and self propelled howitzer capabilities for the Army (sec. 218)**

The committee recommends a provision that would require the Secretary of Defense to carry out programs to develop, test, and field an operationally effective, suitable, survivable, and affordable next-generation ground combat vehicle and next-generation self-propelled howitzer for the Army. The Secretary of Defense is further required to develop a strategy and plan for each of these programs and to report annually on the investments made for each in the budget request.

On April 6, 2009, Secretary of Defense Gates announced the restructuring of the Future Combat Systems (FCS) program and cancelled the manned ground vehicle (MGV) component of the program, including the non-line of sight cannon (NLOS-C). Secretary Gates was concerned that there were significant unanswered questions in the FCS vehicle design strategy and that despite some adjustments to the MGVs, they did not adequately reflect the lessons of counterinsurgency and close quarters combat in Iraq and Afghanistan. Secretary Gates was also critical that the Army's vehicle modernization and equipping strategy did not include a role for Mine-Resistant Ambush-Protected vehicles that have been used successfully in current conflicts. After re-evaluating requirements, technology, and approach, the Army will re-launch its next-generation ground combat vehicle modernization program, including a competitive bidding process. Also, in his April 6th announcement, and again shortly after at a speech delivered to the Army War College, Secretary Gates emphasized his conviction that the Army needs a next-generation ground combat vehicle program and his commitment to support the Army's resource requirements to field this vehicle in 5 to 7 years.

Secretary Gates' decisions were implemented on June 23, 2009, by the Under Secretary of Defense for Acquisition, Technology, and Logistics issuing an Acquisition Decision Memorandum to the Secretary of the Army directing the cancellation of the FCS Brigade Combat Team acquisition program and a stop-work order for the NLOS-C.

The committee recognizes that the Army will need some time to react to these programmatic changes and reexamine its ground combat vehicle requirements. The committee is also aware that Army modernization priorities and programs are subject to further

adjustment depending upon the analysis and recommendations of the Quadrennial Defense Review. The committee is concerned that Secretary Gates' pronouncement that the Army will have a new ground combat vehicle in 5 to 7 years and the Chief of Staff of the Army's target fielding for such a system by 2015 to 2017 may be introducing schedule pressure on the program before its requirements have been defined and technologically realistic and affordable alternatives considered.

The committee has been a strong supporter of Army modernization over the years, including FCS and its MGV and NLOS-C components. However, the committee is concerned that instability in Army modernization strategy and plans contributes to management problems and avoidable cost, schedule, and technology risk. The Army's best chance to ultimately deliver a next-generation ground combat vehicle and a self-propelled howitzer depends on the creation of well planned, realistic, and affordable programs resourced and managed in a disciplined manner consistent with acquisition law and regulation.

The recommended provision would direct the creation of two development programs, one each for a next-generation ground combat vehicle and a next-generation self-propelled howitzer to ensure the continuation of the Army's effort to meet its future requirements for these capabilities. To the extent practical, these new programs should take advantage of the range of relevant and mature technologies already developed as part of the full FCS program and its MGV and NLOS-C components.

The recommended provision would also require appropriate acquisition strategies and plans to ensure that these programs comply with the requirements of the recently enacted Weapons Systems Acquisition Reform Act of 2009 (Public Law 111-124). Additionally, the provision would require an annual report detailing the investments requested to develop these capabilities and ensure that the Defense Department is honoring its commitment that necessary resources will be available for the next-generation ground combat vehicle to provide program stability and reduce risk.

Finally, the committee understands that continuing analysis and important initial decisions will be made in the coming months with regard to the next-generation ground combat vehicle program. Information from these analyses and decisions could be available for the committee's consideration before completing action on the National Defense Authorization Act for Fiscal Year 2010. Therefore, the committee directs the Secretary of the Army to provide a report to the congressional defense committees not later than September 8, 2009, that updates the Army's strategy and plans for the next-generation ground combat vehicle program, including its requirements determination, analysis of alternatives, and any cost and schedule estimates.

**Assessment of technological maturity and integration risk of Army modernization programs (sec. 219)**

The committee recommends a provision that would require the Director of Defense Research and Engineering to review and assess the technological maturity and integration risk of the technologies critical to the development and deployment of systems and tech-

nologies related to the platforms, sensors, and networks of the Future Combat Systems (FCS). The committee understands that major restructuring of the FCS program was partially driven by concerns over the lack of technological maturity of important elements of this system of systems. The committee believes that a detailed technical review and analysis of FCS-related technologies and associated systems will provide important insight and data to inform the requirements, structure, baseline, and schedule for a successor modernization program, as well as to help prioritize the investment of resources.

The committee notes that these types of reviews and assessments are consistent with the mandates established in the Weapon Systems Acquisition Reform Act of 2009 (Public Law 111–23).

**Assessment of strategy for technology for modernization of the combat vehicle and tactical wheeled vehicle fleets (sec. 220)**

The committee recommends a provision that would require the Secretary of Defense to contract for an independent assessment of a strategy for technology development that could support the modernization of the defense combat vehicle and tactical wheeled vehicle fleet. The committee notes that these types of vehicles have played a critical role in the military operations of various nations in operations in Lebanon, Afghanistan, and Iraq, and have incorporated new technologies, such as armor and improvised explosive device jammers, as a result of lessons learned from those operations.

In light of the major restructuring of the Future Combat Systems program; the termination of the Manned Ground Vehicle program; the initiation of the Joint Light Tactical Vehicle program; the fielding of Mine Resistant Ambush Protected Vehicles; the desire to reduce energy costs to the Department of Defense; and the proliferation of threats such as improvised explosive devices, explosively formed penetrators, and rocket propelled grenades; the committee believes that it is an opportune time to reshape the Department's vehicle modernization research, development, and fielding strategies, so as to prioritize capability gaps that need to be addressed and investments that will support those efforts. The committee understands that some of these discussions are currently ongoing in the Department of Defense and believes that an independent technical assessment will contribute useful data and analysis to those deliberations.

The committee directs that this assessment address all aspects of vehicle systems and the full range of operational missions for the Army, Marine Corps, and U.S. Special Operations Command.

**Systems engineering and prototyping program (sec. 221)**

The committee recommends a provision that would establish a systems engineering and prototyping program in the Department of Defense under the management of the Under Secretary of Defense for Acquisition, Technology, and Logistics.

The committee notes that the Weapons Acquisition Reform Act of 2009 (Public Law 111–23) has highlighted the need for a greater emphasis on systems engineering and prototyping as a means to

improve the acquisition process. The recommended provision would support those efforts by establishing a program that will help build and train the government and industry workforce needed to perform those critical design and engineering tasks. Through the funding of innovative, rapid systems engineering and prototyping projects this initiative will encourage the exercising of the Nation's systems engineering technical workforce as well as the development of systems and technology that can address Department needs and requirements.

The provision would require the Under Secretary to manage the program through the services and defense agencies and would require cost sharing between organizations to help maximize the probability of addressing joint problems, grow the base of experienced acquisition personnel, and promote the likelihood of transition into programs of record or deployment. The committee intends that programs funded under the programs be selected on a competitive basis. Elsewhere in this report, the committee recommends an authorization of funding to support the initiation of this program.

Finally, the committee notes that this provision is not intended to change in any way the requirements of the recently enacted Weapon Systems Acquisition Reform Act of 2009 (Public Law 111-23) regarding competitive prototyping.

### **Subtitle C—Missile Defense Programs**

#### **Sense of Congress on ballistic missile defense (sec. 241)**

The committee recommends a provision that would express the sense of Congress regarding ballistic missile defense, namely that the United States should develop, test, field, and maintain operationally effective, cost-effective, affordable, reliable, suitable, and survivable ballistic missile defense systems that are capable of defending the United States, its forward deployed forces, allies, and other friendly nations from the threat of ballistic missile attacks from nations such as North Korea and Iran; that the missile defense force structure and inventory levels of such missile defense systems should be determined based on an assessment of ballistic missile threats and a determination by senior military leaders, combatant commanders, and defense officials of the requirements and capabilities needed to address those threats; and that the test and evaluation program for such missile defense systems should be rigorous, robust, operationally realistic, and capable of providing a high level of confidence in the capability of such systems, including their continuing effectiveness over the course of their service lives, and that adequate resources should be available for such test and evaluation program, including interceptor missiles and targets for flight tests.

#### **Comprehensive plan for test and evaluation of the ballistic missile defense system (sec. 242)**

The committee recommends a provision that would require the Secretary of Defense to establish a comprehensive plan for the developmental and operational testing and evaluation of the Ballistic Missile Defense System and its various elements. The plan would

include a number of specific elements related to objectives, procedures, data requirements, and related test activities. The provision would require the Secretary to submit an unclassified report to the congressional defense committees, not later than March 1, 2011, setting forth and describing the test plan and each of its elements. Additionally, the report would include a description of test and evaluation activities specifically related to the Ground-based Midcourse Defense (GMD) element, including plans for salvo tests, multiple simultaneous target engagement testing, intercept testing using the Cobra Dane radar as the engagement sensor, and plans to test and demonstrate the ability of the GMD system to accomplish its mission over the planned term of its operational service life (sustainment testing).

**Assessment and plan for the Ground-based Midcourse Defense element of the Ballistic Missile Defense System (sec. 243)**

The committee recommends a provision that would require the Secretary of Defense, as part of the Quadrennial Defense Review and the Ballistic Missile Defense Review, to conduct an assessment of the Ground-based Midcourse Defense (GMD) element of the Ballistic Missile Defense System, and future options for the GMD element. The assessment would consider such matters as: the military requirement for GMD capabilities; current and planned GMD capabilities; force structure and inventory levels; infrastructure; and the number of Ground-Based Interceptors needed for operational and testing purposes.

The provision would also require the Secretary to establish a plan for the GMD element, covering such matters as the GMD program schedule, funding plan, maintaining the effectiveness of the GMD element over the course of its service life; flight testing; and production of Ground-Based Interceptors for operational and testing purposes.

The provision would require the Secretary to submit to the congressional defense committees, at the time of the budget submission for fiscal year 2011, a report setting forth the results of the assessment and a report setting forth the plan required in the provision.

The provision would also express the Sense of Congress concerning the GMD element.

The committee is aware that, as part of its plan to field 30 effective operational Ground-Based Interceptors, the Missile Defense Agency plans to complete seven silos at Missile Field 2 at Fort Greely, Alaska, to replace the older silos at Missile Field 1. The committee notes that four of the seven silos at Missile Field 2 are nearly complete, and that it would be possible to complete all seven silos in fiscal year 2010 with additional funding. The committee understands there could be a cost savings benefit to such an acceleration. If the Department believes there is benefit to completing the seven silos in Missile Field 2 during fiscal year 2010, the committee would look favorably upon a reprogramming request from the Secretary of Defense to provide the funds to complete the seven silos in fiscal year 2010.

**Report on potential missile defense cooperation with Russia  
(sec. 244)**

The committee recommends a provision that would require the Secretary of Defense to submit a report to the congressional defense committees, not later than 120 days after enactment of this Act, setting forth potential options for cooperation among or between the United States, the North Atlantic Treaty Organization (NATO), and the Russian Federation on ballistic missile defense. The report would include a description of proposals made by the United States, NATO, or the Russian Federation for such cooperation, as well as a description of data sharing options, assessments of the potential for certain types of cooperation, and an assessment of the potential security benefits of such cooperation.

**Subtitle D—Other Matters**

**Repeal of requirement for biennial Joint Warfighting Science and Technology Plan (sec. 251)**

The committee recommends a provision that would eliminate the biennial Joint Warfighting Science and Technology Plan reporting requirement. The committee commends efforts to invest in research and technologies that will develop joint warfighting capabilities, but believes that Department resources can be better invested in higher priority research or management endeavors.

**Budget Items**

**Army**

**Army basic research**

The budget request included \$377.3 million for Army basic research programs. The Army's basic research program makes investments in a number of thrust areas including materials science, mathematical and information sciences, network science, and environmental science. Consistent with those research thrusts, the committee recommends increases in PE 61102A of an additional \$3.5 million for ballistic protection materials research and an additional \$2.0 million for research characterizing critical global natural environments in support of military operations worldwide. The committee also recommends increases in PE 61103A of \$2.0 million for nanocomposite materials research; \$2.0 million for research on open source intelligence analyses techniques; \$2.0 million for research on advanced nanoscale memory devices and nanosensors; \$1.0 million for electrolyte research for battery applications; \$1.2 million for immersive simulation research; \$2.0 million for materials processing research; and \$1.5 million for structural response modeling and analysis.

**Minerva**

The budget request included \$88.4 million in PE 61103A for Army university research initiatives. This account includes a total of \$13.3 million for the Minerva Research Initiative, a portion of the roughly \$20.0 million being requested for this purpose across the Department of Defense. The committee directs that at least

\$7.5 million of the amount requested in PE 61103A be used to develop in-house Department of Defense capabilities at defense laboratories and schools consistent with the research goals of the Minerva Initiative. Further, the committee directs that no Minerva Initiative funds may be transferred to the National Science Foundation unless that agency equally matches any Department of Defense funding provided for research projects funded under the Initiative.

### **Materials technologies**

The budget request included \$27.2 million in PE 62105A for applied research on materials technology. The committee notes that the Defense Science Board Task Force on the Department of Defense Energy Strategy recommended that the Department continue to invest in mobile, in-theater synthetic fuels processes which would address the Department's fuel problem by reducing battlespace fuel demand. Consistent with that recommendation, the committee recommends an additional \$4.0 million for the research on advanced biofuels.

The Army's current Future Combat Systems armor development technology objective seeks to develop lightweight, affordable, manufacturable armor protection against a variety of threats. In support of that objective, the committee recommends an additional \$3.0 million for applied composite materials research; \$3.0 million for research on high strength glass fibers for armor applications; \$2.5 million for advanced moldable composite armor technology development; \$2.0 million for advanced manufacturing technologies; and \$4.5 million for smart materials and structures research.

The 2007 report on the Defense Nanotechnology Research Program indicated that the Department is working to increase investments in nanomanufacturing since "this area remains a significant barrier to the commercialization of nanomaterials and nanotechnology-based products." The committee recommends an additional \$4.0 million for research on manufacturing of nanosensors for military applications.

### **Sensor research**

The budget request included \$50.6 million in PE 62120A for applied research on sensors and electronic survivability. The 2007 Department of Defense Nanotechnology Research and Development Report recommended that sustained support of development of novel devices and systems was necessary to enhance Department of Defense capabilities in information technology, energy storage, and other areas. In support of that recommendation, the committee recommends an increase of \$2.5 million for research on nanoelectronic memory, sensor, and energy devices.

### **Manned-unmanned systems teaming**

The budget request included \$41.3 million in PE 62211A for research on aviation technologies. The 2005 National Research Council report on "Interfaces for Ground and Air Military Robots" identified one of the goals of Army efforts in robotics is to support collaborative operations among manned and unmanned vehicles. In support of that goal, the committee recommends an additional \$2.0



million for development of guidance, navigation, and control technologies for manned-unmanned systems teaming operations.

#### **Advanced concepts and simulation**

The budget request included \$17.5 million in PE 62308A for advanced concepts and simulation research. The 2006 National Research Council study on “Defense Modeling, Simulation, and Analysis” recommended research investment on video game-based training and simulation to further training and education activities in the Department of Defense. Consistent with that recommendation, the committee recommends an additional \$2.0 million for cognitive modeling and simulation research to support tactical decision-making by military planners in training and operational scenarios.

#### **Ground vehicle research**

The budget request included \$55.9 million in PE 62601A and \$89.6 million in PE 63005A for research on combat vehicles and automotive technologies. The Army has established a technology objective to develop advanced survivability systems for the protection of crew and passengers in current and future tactical wheeled vehicles. To support these efforts, the committee recommends an increase of \$2.0 million in PE 63005A for systems that identify and warn vehicles of incoming threats, and \$11.0 million in PE 62601A for research on advanced coatings, composite materials, and metals for vehicle armor and vehicle shelters.

The Army has established a technology objective to develop and demonstrate wheeled vehicle power and mobility technologies, including commercial engines adapted to military requirements that reduce cost, increase efficiency, and improve reliability. To support these efforts, the committee recommends an increase of \$2.0 million in PE 62601A for research on engine and transmission friction and wear, and an increase of \$23.5 million in PE 63005A for development of suspension systems, advanced power electronics, reliability assessment systems, and other engine subsystems.

The committee also recommends an increase of \$20.0 million in PE 62601A for vehicle systems engineering and an additional \$4.0 million in PE 63005A for equipment to accurately measure vehicle engine performance. These additions are to support Army efforts to integrate advanced armors, networks, active protection systems, power and propulsion systems, and to enhance the government workforce’s capabilities to replace the systems engineering efforts that have been traditionally performed by contractors.

#### **Army electromagnetic gun**

The budget request included \$11.7 million in PE 63004A, \$4.1 million in PE 62618A, and \$6.4 million in PE 61104A for activities related to the Army’s Electromagnetic (EM) Gun initiative. The committee believes that the technologies related to EM Gun size, weight, power, and thermal management require a platform much larger than the system currently or will prospectively provide in direct-fire capability to the Army, therefore calling into question the operational utility of the system as currently envisioned. The committee is also concerned that the Army, Navy, and the Defense Advanced Research Projects Agency collaborative program on EM gun

technologies, as envisioned originally by Congress and the Department of Defense, has never materialized. Therefore, the committee reduces funding relating to the Army's EM Gun initiative by \$11.5 million in PE 63004A and \$2.0 million in PE 62618A. The committee continues to authorize funding for activities on power and energy issues and basic research efforts to support development of future EM gun systems.

#### **Reactive armor technologies**

The budget request included \$61.8 million in PE 62618A for ballistics technologies. The Army has established a technology objective to develop armor and vehicle structure technologies to influence all future generations of combat vehicles. To support this effort and enhance industrial production capacity, the committee recommends an increase of \$3.0 million for research on reactive armor systems.

#### **Acoustic sensors systems**

The budget request included \$41.1 million in PE 62624A for applied research on weapons and munitions technology. The Army's Sensor and Information Fusion for Improved Hostile Fire Situational Awareness technology objective seeks to develop enhanced acoustic and other sensors to detect, locate, and classify a wide range of threats. In support of these efforts, the committee recommends an additional \$2.0 million for continued development of gunfire detection and location systems, and an additional \$3.0 million for research on innovative acoustic signal processing techniques to address high clutter environment battlefield sensing challenges.

#### **Army electronics research**

The budget request included \$61.4 million in PE 62705A for research on electronics and electronic devices. The Army's non-primary power system technology objective seeks to provide electrical power solutions for ground vehicles during engine-off operations. In support of that goal, the committee recommends an increase of \$2.5 million for hybrid battery systems that could be used during silent watch operations.

The Army's dismounted soldier power technology objective seeks to develop and demonstrate technologies to provide small, lightweight, low-cost power sources. Consistent with that objective, the committee recommends an increase of \$3.5 million for research on hybrid portable power systems.

#### **Military engineering technology**

The budget request included \$54.8 million in PE 62784A for military engineering technologies. In support of efforts to develop lower cost, lightweight, blast resistant materials for use at forward operating bases and other military installations, the committee recommends an additional \$3.0 million for research on ballistic materials for force protection applications.

The Army's has established a technology objective to improve battlespace and terrain awareness for forces by creating actionable information from terrain, atmospheric, and weather impacts and

their effects on Army assets. In support of this objective, the committee recommends an additional \$2.0 million for geosciences and atmospheric research.

The Army has a stated objective to create prognostics and diagnostic systems for operational readiness and condition-based maintenance by developing technologies to detect health status and performance as well as environmental conditions and metrics that limit the lifetime of military assets. In support of this objective, the committee recommends an additional \$3.5 million for sensors and communication systems to monitor structural integrity of defense infrastructure.

### **Ballistic protection systems**

The budget request included \$27.1 million in PE 62787A for warfighter technologies. The Army is currently undertaking efforts to improve the ballistic protection capabilities of infrastructures at base camps in order to reduce vulnerability to mortars and improvised explosive devices. In support of those efforts, the committee recommends an increase of \$3.0 million for development of advanced composite ballistic panels.

The Army's enhanced performance personnel armor technology objective seeks to develop materials technology and tools to address emerging ballistic and blast threats. In support of that objective, the committee recommends an increase of \$3.0 million for research on enhanced ballistic protection materials. In order to help address the threat of burn injuries to deployed warfighters, the committee recommends an increase of \$2.5 million for thermal resistant fiber research.

### **Medical technologies**

The budget request included \$99.0 million in PE 62787A for applied research on medical technologies. In support of the Army's objective to develop fluid resuscitation technology to reduce injury and loss of life on the battlefield, the committee recommends an additional \$2.0 million for research on advanced functional nanomaterials for biological processes such as drug and critical fluid delivery.

To support development of combat casualty care capabilities, the committee recommends an additional \$5.5 million for research on hemorrhaging, advanced tissue replacement, and bone regeneration relevant to military trauma care; an additional \$3.5 million for biomechanics research to evaluate the risk of brain injury from blast and blunt loading; \$3.5 million for research on equipment designs to reduce neurotrauma in warfighters; and \$5.0 million for research on explosion blast interactions with protective equipment and personnel. The committee also recommends an additional \$2.5 million for research on secondary trauma issues facing service personnel who are treating mental health problems, in coordination with existing Army and Department of Defense programs in this area.

The committee notes that although the Department of Defense has significantly increased investments in medical research over previous budget requests, there is still limited investment in capabilities to prevent and treat infectious diseases. To enhance efforts in this area, the committee recommends an additional \$2.0 million

for research on treatments for dengue fever and \$2.5 million for malaria vaccine research.

### **Army advanced medical research and technologies**

The budget request included \$72.9 million in PE 63002A for advanced medical technologies. The Army's medical research program on this effort focuses on warfighter medical protection performance standards that demonstrate and transition technologies and tools associated with biomechanical-based health risks, injury assessment and prediction, soldier survivability, and performance during continuous operations. Consistent with these efforts, the committee recommends an additional \$2.0 million for the development of biosensor controller and monitor systems, and \$2.5 million for body temperature conditioning technologies.

The committee notes that the Army has established the Armed Forces Institute of Regenerative Medicine (AFIRM). The committee notes that AFIRM is developing clinical therapies in areas including burn repair, wound healing, and limb reconstruction, regeneration, or transplantation. The committee recommends an additional \$4.0 million to support the activities of the institute.

The committee commends the Defense Advanced Research Projects Agency for its work developing advanced prosthetics technologies for use by wounded warriors. In support of these efforts, the committee recommends an additional \$2.0 million for lower limb prosthetics development, and \$8.0 million to support transition of prosthetics technologies to clinical practice to improve amputee patient care.

The committee further recommends an additional \$7.5 million for research on the integration of medical technologies to address combat casualty care issues, and \$12.0 million to support research on Gulf War illnesses.

### **Army aviation technologies**

The budget request included \$60.1 million in PE 63003A for advanced aviation technologies. The Army's aviation science and technology program includes funding for the Advanced Affordable Turbine Engine (AATE) program. The goal of the AATE program is to develop the next generation utility and attack helicopter engine. In support of that goal, the committee recommends an additional \$4.0 million for the AATE program, and \$5.0 million for the development of full authority digital engine controls.

In support of the Army's technology objective to develop technologies for small JP-8 fueled engines for small unmanned aerial vehicles (UAV), the committee recommends an additional \$3.0 million for research on heavy fuel UAV propulsion systems.

Consistent with committee efforts to enhance systems engineering and prototyping capabilities, the committee recommends an additional \$2.0 million for aviation weapon systems integration technologies and \$3.75 million for an enterprise resource planning system for Army prototype integration efforts.

The Army is currently investing in a number of capability-based operations and sustainment technologies that improve the operational availability of rotorcraft while reducing operating and support costs. In support of these efforts, the committee recommends

an additional \$2.0 million for development of an inspection system for helicopter rotor blades and other composite components.

### **Army weapons and munitions technology**

The budget request included \$66.4 million in PE 63004A for advanced weapons and munitions technologies. The committee recommends an additional \$3.0 million for efforts to reduce vehicle weight and improve fuel efficiency by developing low cost, lightweight, high strength metals such as castings, powder metal forgings, and titanium components. In support of Department of Defense efforts to increase manufacturing capabilities of advanced systems based on nanotechnology, the committee recommends an increase of \$4.0 million for nanotechnology manufacturing research.

### **Alternative energy research**

The committee notes that the Department of Defense has begun to make significant efforts to improve energy efficiency of its installations, processes, platforms, and weapons systems. These investments have the promise of reducing Department costs, increasing defense capabilities, and reducing dependence on foreign sources of energy.

In order to support these efforts and expand Department investments in next generation energy technologies, promote technology demonstration and prototyping of advance energy technology systems, and to enhance the Department's role as an aggressive early adopter of novel energy technologies, the committee recommends a set of increases for competitively awarded energy research projects. The committee recommends an increase of \$20.0 million in PE 63005A, \$20.0 million in PE 62123N, \$20.0 million in PE 63216F, and \$20.0 million in PE 63712S for alternative energy research efforts.

### **Robotic systems**

The budget request included \$89.6 million in PE 63005A for research on combat vehicles and automotive technologies. The committee notes the increasing use and value of robotic systems on the battlefield to perform counter-improvised explosive device maneuvers; intelligence, surveillance, and reconnaissance; and other tactical missions. The committee also notes that section 220 of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (Public Law 106-398) established a goal that by 2015, one-third of the operational ground combat vehicles acquired through the Army's Future Combat Systems program will be unmanned. In support of these goals, the committee recommends an increase of \$24.5 million for the development of robotics systems, vehicle autonomy, and advanced energy and propulsion systems for robotic vehicles. The committee also recommends an increase of \$2.0 million in PE 63711D8Z for robotics operations training efforts. Finally, the committee recommends an increase of \$4.0 million in PE 62624A to continue the testing and development of weaponized unmanned ground vehicle platforms.

**Tire development for joint light tactical vehicle program**

The budget request includes \$181.6 million for combat vehicle and automotive advanced technology development. The committee recommends an increase of \$1.5 million to continue development efforts for lighter, more agile tires. This project will also sustain a critical manufacturing capability in the defense industrial base, thereby providing the Department with competitive alternatives for critical components in price and supply.

**Vehicle energy and power programs**

The budget request included \$89.6 million in PE 63005A and \$55.9 million in PE 62601A for combat vehicle research and development. The committee has been supportive of efforts to increase the energy efficiency and performance of combat and tactical vehicles through the application of advanced energy technologies. These technologies can also enable capabilities such as silent watch, extended range, and the provision of mobile electric power, all of which serve to enhance the operational capability of warfighters. To support the development of advanced battery technologies for vehicle systems, the committee recommends an increase of \$23.0 million for battery research and demonstrations.

The committee notes that the Army has been experimenting with a variety of hybrid systems to support Future Combat Systems, trucks, and light tactical vehicles. Consistent with the development of hybrid engines and systems to support military applications, the committee recommends an increase of \$30.6 million for hybrid engines and components.

In support of the development of advanced auxiliary power units (APU) to meet growing vehicle and equipment power requirements, the committee recommends an increase of \$9.0 million for the development of advanced APU systems.

**Water analysis technologies**

The budget request included \$89.6 million in PE 63005A for combat vehicle and automotive technologies. The committee notes that water represents a significant part of the sustainment requirement for deployed operations. The committee recommends an increase of \$2.0 million for the development of water analysis systems to improve water quality monitoring for deployed forces.

**Training and simulation systems**

The budget request included \$19.4 million in PE 63015A for next generation training and simulation systems. To enhance training for battlefield lifesaving skills, the committee recommends an additional \$2.5 million for combat medic training systems. The committee notes that the Army's Institute for Creative Technologies has developed a number of computer simulations that are being transitioned into Army training systems. To support these types of efforts, the committee recommends an additional \$4.5 million for joint fires and effects trainer system enhancements.

**Mid-size unmanned ground vehicles**

The budget request included \$12.0 million in PE 63125A for technologies to combat terrorism. The Army has an established tech-

nology objective to develop near autonomous unmanned systems for a variety of combat missions. In support of this effort, and to encourage systems engineering and prototyping activities, the committee recommends an increase of \$3.5 million for development of mid-size unmanned ground vehicles for counterterrorism missions.

#### **Aircraft survivability systems**

The budget request included \$19.2 million in PE 63270A for electronic warfare technologies. The Army has established a technology objective to develop and integrate threat warning sensors and countermeasures to protect aircraft against small arms, rocket propelled grenades, man-portable air defense systems, and other threats. Consistent with that objective, the committee recommends an additional \$2.0 million for development of laser technologies to improve aircraft survivability against missile threats.

#### **Advanced imaging technologies**

The budget request included \$64.0 million in PE 63313A for advanced missile and rocket technologies. The Army has a technical objective to develop tactical information technologies for assured network operations and to enable battlefield information sharing. Consistent with that objective, the committee recommends an increase of \$3.0 million for imaging and networking research to enable rapid and precise target discrimination and identification.

#### **Bradley third generation forward looking infrared**

The budget request included \$40.3 million in PE 63710A for night vision advanced technology, but provided no funds for third generation infrared technology. The committee recommends an increase of \$5.0 million in PE 63710A for Bradley infantry fighting vehicle third generation forward looking infrared technology development.

#### **Military engineering systems**

The budget request included \$5.9 million in PE 63734A for advanced military engineering technologies. The committee recommends an additional \$500,000 for permafrost research to enhance the understanding and implications of permafrost-related geophysical phenomenology on defense infrastructure and systems for current and future operations.

Consistent with efforts to improve Department of Defense energy security and efficiency, the committee recommends an additional \$8.0 million for development of solar cell technologies for use at military installations.

#### **Counter-mortar radar systems**

The budget request included \$41.2 million in PE 63772A for advanced tactical computer science and sensor technologies. The National Research Council's 2008 study on "Directed Energy Technology for Countering Rockets, Artillery, and Mortars (CRAM)" highlights the potential need for the development of radar systems that can perform precise tracking of targets in all-weather conditions. In support of that need, the committee recommends an in-

crease of \$4.0 million for research on advanced CRAM radar systems.

#### **Advanced environmental controls**

The budget request included \$14.7 million in PE 63305A for Army missile defense systems integration, but no funds for advanced environmental control systems. The committee recommends an increase of \$5.0 million in PE 63305A for the development of thermal management control systems that can support sensors and electronic systems that operate in the harsh environmental conditions required by missile defense systems. The committee notes that advanced environmental control systems have applicability to a variety of military systems that operate in harsh environments.

#### **Advanced electronics integration**

The budget request included \$14.7 million in PE 63305A for Army missile defense systems integration, but no funds for advanced electronics integration. The committee recommends an increase of \$4.0 million in PE 63305A for advanced electronics integration to improve state-of-the-art weapon system electronics, with the goal of reducing the size, weight, and cost of electronic components, while also reducing hazardous materials used in such advanced electronics. This effort supports Army objectives for research, prototyping, testing, and production technologies that have potential to produce more efficient, high performance, less hazardous, and lower cost electronics.

#### **Adaptive robotic technology**

The budget request included \$14.7 million in PE 63305A for Army missile defense systems integration, but no funds for development of adaptive robotic technology to improve integrated missile defense capabilities. The committee recommends an increase of \$3.5 million in PE 63305A for development of adaptive robotic technology for Army missile defense and space mission requirements, including processes, tools, models, and simulations for improved integration of complex functions and operations.

#### **Joint future theater lift**

The budget request included \$8.5 million in PE 63801A for Aviation Advanced Development, but no funds to sustain the technology base and risk reduction activities for advanced tiltrotor platforms, particularly for the joint future theater lift (JFTL) mission. In addition, the Joint Advanced Concepts Office within the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)), which has purview over all Department of Defense (DOD) vertical take-off and landing (VTOL) technology, has insufficient resources to conduct analyses, planning, and oversight. The committee is concerned that the Department of Defense is on the verge of losing an opportunity to exploit technology that could enable fundamentally new ground force operational concepts, and provide major energy efficiencies, a baseline for future VTOL aircraft, and major benefits to commercial aviation.

The Army, the Defense Advanced Research Projects Agency (DARPA), U.S. Special Operations Command (SOCOM), the Na-



tional Aeronautics and Space Administration, along with private sector investments, have methodically matured technology for high-performance tiltrotor aircraft. In parallel, the Army, the Army Science Board, and the Defense Science Board, have examined the potential operational benefits and concepts of operation that advanced tiltrotor platforms could enable. The results of these activities indicate that a credible option exists to make large gains in effectiveness that the committee believes the Department must seriously address.

These efforts have been building towards a decision point that DOD must, in any event, soon face: a long-term replacement for the C-130 theater lift capability. The 2008 Air Mobility Master Plan stated that planned initial operational capability for a C-130 replacement is 2021, and, to support that date, that a prototype would need to be flying by 2015. As far as the committee knows, the Department has budgeted no funds for accomplishing this objective.

The Army and the Air Force are currently deadlocked over requirements for the JFTL platform. The Army is proposing requirements that only a high-performance VTOL/short take-off and vertical landing (STOVL) aircraft could meet; the Air Force is insisting on requirements that favor a fixed-wing jet. The committee notes that the Air Force touts that the C-17 is designed for the strategic delivery of troops and cargo directly to forward bases in the deployment area, operating through small, austere airfields. Extrapolating from this, the committee would expect the Air Force to embrace the direct delivery goal on the operational and tactical level.

The Army wants a VTOL/STOVL transport with strategic range that could (1) carry all the Army's ground vehicles except the M-1 tank; (2) support mounted vertical maneuver, including from sea basing; and (3) routinely deliver supplies and equipment directly to the point of need, instead of first to airfields and then via helicopter to forward locations. These missions could be conducted only with a heavy-lift VTOL/STOVL. Because of the ability to deliver cargo directly to the point of need, and the anticipated far greater efficiency of a tiltrotor as compared to helicopter transport, the Army projects that a tiltrotor JFTL would be far more efficient than a fixed-wing replacement for the C-130, providing major fuel savings, in addition to supporting revolutionary operational concepts.

Proponents of advanced tiltrotor concepts in the Army, the Army Science Board, and the Defense Science Board argue also that it could serve as a flexible tanker able to operate from forward locations near the point of need, rather than from distant airbases, including picking up fuel at sea. Proponents foresee that a large tiltrotor would also have major benefits for commercial aviation in relieving congestion at airports. Scaled down in size, proponents believe that advanced tiltrotor platforms would provide tremendous gains in performance and efficiency over current helicopters, and could become the basis in the future for higher-performing unmanned aerial vehicles.

The committee is aware that, for a number of years, the Army Science Board has recommended that the best way to resolve or

prove whether these capabilities are realistic is to conduct a competitive prototyping effort. The Defense Science Board in 2008 (Report on DOD Energy Strategy) made a similar, strongly worded recommendation.

The cost of such a prototyping effort would be substantial if it were conducted in the normal manner. Moreover, a plan to wait to conduct a competitive prototyping effort as part of an acquisition program would take years to begin, and presupposes that the current requirements dispute is resolved and that there is confidence in the cost and performance estimates of an advanced tiltrotor. This scenario seems unlikely, but possible, provided funds are forthcoming to sustain the industrial base in the interim.

An alternative would be to initiate now a competitive prototype of an advanced tiltrotor independent of a program of record and a formally approved requirement in the most streamlined manner possible. This is the approach used successfully to prototype the aircraft that became the F-16 and F-18 fighters, which was relatively inexpensive.

The committee is aware that DARPA offered to fund half the cost of this type of prototyping effort if a suitable partner would step forward. In addition to the Army and Marine Corps, potential participants include SOCOM and the Central Intelligence Agency, which could value, for a variety of sensitive missions, an efficient, large, and long-range aircraft that requires no runway.

The committee directs that the USD (AT&L), in consultation with the Vice Chairman of the Joint Chiefs of Staff, report to the congressional defense committees by December 1, 2009, on:

1. Plans to sustain the tiltrotor risk reduction activities for a JFTL;
2. How the Department intends to determine whether the revolutionary benefits of a heavy lift tiltrotor can be realized so that the Department may make an informed decision on the C-130 replacement program; and
3. The merits of initiating a low-cost, highly streamlined competitive prototyping effort immediately, at an appropriate scale to cover all potential mission applications, to determine whether cost and performance goals can be met, to help define requirements, and to sustain the industrial base.

The committee also recommends authorization of \$58.5 million for Aviation Advanced Development, an increase of \$50.0 million above the request, to sustain the tiltrotor industrial base through risk reduction activities. The committee recommends authorization of \$3.0 million in PE 63200D8Z, Joint Advanced Concepts Office, for planning and oversight of VTOL programs and activities across the Department.

Finally, the committee urges the Vice Chairman of the Joint Chiefs, as Chairman of the Joint Requirements Oversight Council, to ask the combatant commanders (COCOM) to provide detailed views on the requirements for JFTL. The committee notes that section 105 of the Weapon System Acquisition Reform Act of 2009 (Public Law 111-23) requires input from the COCOMs.

**Logistics and engineer equipment-advanced development**

The budget request includes \$32.1 million in PE 63804A for the ongoing development of the joint light tactical vehicle (JLTV). The committee continues to support the Army and Marine Corps development of a next-generation family of light tactical vehicles. However, the committee understands that the Army and Marine Corps lack a long-term tactical wheeled vehicle strategy. Additionally, the committee is concerned about the uncertainty in the services' plan to incorporate the sizable fleet of mine resistant ambush protected vehicles (MRAP) and the MRAP all-terrain-vehicle (M-ATV), which is still in development. Further, the committee believes that lessons learned from the eventual deployment of the M-ATV in Afghanistan will ultimately benefit the JLTV program and that JLTV should be more appropriately phased to incorporate these lessons.

Therefore, the committee recommends a decrease of \$10.0 million in funding for the JLTV program. This decrease is in addition to the committee's \$12.0 million reduction in the Marine Corps' funding request for the JLTV program.

**Next-generation helmet ballistic materials technology**

The budget request included \$74.8 million in PE 64601A for infantry support weapons. The committee notes that the Army is accelerating research and development of materials to increase personal protective equipment while reducing its weight. The committee recommends an increase of \$3.0 million in PE 64601A for next-generation helmet ballistic materials technology.

**Type classification of the lightweight .50 caliber machine gun**

The budget request included \$1.9 million in PE 64601A for the development of the lightweight .50 caliber machine gun. The committee recommends an increase of \$5.0 million in PE 64601A to complete the type classification of the lightweight .50 caliber machine gun.

**Future combat system non-line of sight cannon**

The budget request included \$58.2 million in PE 64647A for the contract termination liability associated with the cancellation of the Future Combat Systems (FCS) non-line of sight cannon (NLOS-C).

The Department of Defense has directed the cancellation of the FCS Brigade Combat Team acquisition program and issued a stop-work order with respect to the NLOS-C pending resolution of statutory requirements for system fielding. The committee understands that as of June 2, 2009, \$215.9 million in fiscal year 2009 research and development, procurement, and advanced procurement funds for FCS NLOS-C has not been executed. Final termination liability will not be negotiated until the program is formally cancelled; however, unexecuted funds currently available in the program appear adequate to cover the potential cost. Therefore, the funds requested for fiscal year 2010 are unjustified.

The committee notes that the Army has been attempting to modernize its armored self-propelled howitzer fleet for several years. The cancellation of the NLOS-C, following cancellation of the Crusader program in 2002, means that the current self-propelled how-

itzer system, the M109A6 Paladin, may remain the workhorse of the Army's armored artillery for several more years.

In 2008, the Army started the Paladin Integration Management (PIM) program to modernize and upgrade the M109A6 Paladin. The PIM program is part of the Army's overall heavy force management strategy to ensure the sustainability of current armored weapon systems capabilities. Planned Paladin upgrades to improve power train, suspension, power management, and electronic subsystems will support the modernization of fire control, navigation, communications, and gun drive systems. All these improvements will increase the Paladin's performance and reliability, reduce life cycle costs, and address electronic obsolescence issues to meet the Army's needs to 2050.

Accordingly, the committee recommends a decrease of \$58.2 million in PE 64660A and an increase of \$58.2 million in PE 64854A to complete testing, continue cost reduction efforts, and accelerate low rate initial production of the PIM program.

The committee further notes that the most mature prototype FCS NLOC-C technologies were those mission module components that were in some cases carried forward from the cancelled Crusader program. These weapons system technologies applied to M109A6 Paladin could have the potential to significantly improve the accuracy, reliability, and responsiveness of indirect fire support. The committee acknowledges that the Paladin PIM program provides critical capability updates for the M109A6 Paladin for today's heavy force. At the same time, the committee notes the need for a networked next-generation self-propelled howitzer program that keeps pace with other Army weapons modernization programs.

The committee therefore directs that the Army conduct an analysis of the technical feasibility, suitability, and affordability of upgrading the M109A6 Paladin with NLOS-C mission module components, such as fire control, munitions handling, and crew station capabilities. The Army shall provide the congressional defense committees with a report on the results of this analysis not later than September 30, 2009. The report required is not intended to delay the current PIM development or production schedule.

#### **Future combat system manned ground vehicles and common ground vehicle**

The budget request included \$368.6 million in PE 64660A for the contract termination liability associated with the cancellation of the Future Combat Systems (FCS) manned ground vehicle (MGV).

The Department of Defense has directed the cancellation of the FCS Brigade Combat Team program and initiation of a new Army ground vehicle program. After re-evaluating requirements, technology, and approach, the Department of Defense will re-launch the Army's combat vehicle modernization program, including a competitive process.

The committee understands that as of June 2, 2009, \$612.7 million in fiscal year 2008 and 2009 funds for FCS MGV has not been executed. Final termination liability has not been negotiated; however, unexecuted funds currently available in the program appear adequate to cover the potential cost. Therefore, the funds requested for fiscal year 2010 are unjustified.

Accordingly, the committee recommends a decrease of \$323.6 million in PE 64660A.

The committee agrees with the Secretary of Defense's assessment that the Army does need a next-generation ground combat vehicle modernization program and believes that the funds requested are better invested in related armored and tactical vehicle research and development activities. The committee recommends increases as follows for research and development activities to support Army ground vehicle modernization:

[In millions of dollars]

PE 62601A Army vehicle modernization research .....	\$25.0
PE 62618A Army vehicle survivability research .....	\$25.0
PE 63005A Army vehicle modernization technologies .....	\$50.0
PE 63653A Advanced tank armament systems .....	\$50.0
PE 64604A Medium tactical vehicle development .....	\$10.0
PE 64622A Heavy tactical vehicle development .....	\$10.0
PE 78045A Combat vehicle manufacturing technology .....	\$30.0

Elsewhere in this report, the committee recommends increases for additional high priority Army vehicle research and development projects.

The committee further recommends that all of the \$45.0 million remaining in PE 64660A shall be available only for the research and development of active protection systems for light, medium, and heavy vehicles against the full range of threats, including rocket-propelled grenades, antitank guided missiles, kinetic energy rounds, and other threats. The committee believes that these funds should be used to leverage ongoing live fire testing activities previously mandated by Congress, to develop common active protection system (APS) components that can be used for a variety of vehicle types, and also to address specific APS vehicle integration issues.

### **Urban training development**

The budget request included \$30.2 million in PE 64715A for engineering development of non-system training devices. The committee recognizes the importance of developing up to date concepts and systems for training joint military operations in complex urban terrain that will increase unit effectiveness at reduced training costs. The committee recommends an increase of \$3.0 million in PE 64715A for research projects leading to the development of concepts and systems for joint military training in urban terrain and cultural environments.

### **Common guidance control module**

The budget request included \$23.1 million in PE 64802A for development of precision guidance systems for artillery and mortar munitions. The committee recommends an increase of \$7.5 million in PE 64802A to accelerate the development of a common guidance control module adapted to the precision guidance kit for 105mm howitzer munitions.

### **Army test and evaluation programs**

The budget request included \$51.8 million in PE 64759A for major test and evaluation investment. The committee notes that this account funds the operations, sustainment, and modernization

of Army test ranges. These ranges are critical to the delivery of operational systems to deployed forces since they provide the facilities and infrastructure for both the developmental and operational testing of defense systems to validate their operational effectiveness, suitability, and reliability.

The committee notes that the Director of the Test Resource Management Center has not certified the Army's fiscal year 2010 test budget after analyses indicated there was insufficient funding in this account to support the projected workload. The insufficient request in the fiscal year 2010 budget seems to indicate to the committee that the Army is willing to take risks with the effectiveness of both Army and other joint systems by providing inadequate testing resources. Risking inadequate testing resources can quickly lead to unknowable consequences for the cost and effectiveness of deployed systems as well as for the warfighters who depend on those systems. The committee directs the Secretary of the Army to work more closely with the Undersecretary of Defense for Acquisition, Technology, and Logistics to ensure that future Army investments in test resources is sufficient to meet the projected workload requirements of the users of Army test facilities. The committee recommends an increase of \$25.6 million in PE 65601A to correct the Army's underfunding of this account.

The budget request included \$2.9 million in PE 65605A for the Department of Defense High Energy Laser Test Facility (HELSTF). The committee notes that in 2009, the Army will complete a significant upgrade of the facility by adding a solid-state laser source from the Joint High Power Solid State Laser program. Following these upgrades, the Army plans to use the facility beginning in 2010 for tests associated with the High Energy Laser Technology Demonstrator program. To support these activities, the committee recommends an increase of \$6.0 million for HELSTF.

The committee notes that the Dugway Proving Grounds is the Department of Defense's premier testing facility for chemical and biological defense systems. To support the development of these capabilities, the committee recommends an increase of \$7.0 million for data fusion and test equipment improvements.

To help address the integration of test and training activities between Fort Bliss, White Sands Missile Range, and Holloman Air Force Base, the committee recommends an increase of \$3.0 million for tools for frequency management, airspace deconfliction, and real-time monitoring of ranges.

### **3D woven preform technology for Army munitions**

The budget request included \$45.0 million in PE 65805A for munitions standardization, effectiveness, and safety, but provided no funds for 3D woven preform technology. The committee recommends an increase of \$2.2 million in PE 65805A for 3D woven preform technology for Army munitions applications.

### **Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System**

The budget request included \$360.1 million in PE 12419A for continued development of the Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS). The committee

notes that the JLENS program schedule has slipped by 1 year since last year. Accordingly, the committee recommends a reduction of \$20.0 million in PE 12419A for the JLENS program.

#### **TOW missile improvements**

The budget request included no funds in PE 23802A for other missile product improvements. The committee recommends an increase of \$5.0 million in PE 23802A for TOW missile improvements to demonstrate a new propulsion system that will be insensitive-munitions compliant, reduces time of flight, and extends the missile's maximum effective range beyond 5,000 meters.

#### **Joint tactical ground station**

The budget request included \$13.3 million in PE 28053A for Research, Development, Test, and Evaluation, for the Joint Tactical Ground Station (JTAGS), and \$6.7 million in Other Procurement, Army, line 70. The committee concludes that this program is an unnecessary expense since the Air Force provides the same missile warning data through the same principal data dissemination means—the Global Broadcast System. The Air Force also maintains survivable direct downlink and processing capabilities for assured injection into the broadcast. The committee recommends no funding in these accounts for JTAGS.

#### **Collection management tools development**

The budget request included \$2.1 million in PE 33028A for Research, Development, Test, and Evaluation, for Security and Intelligence Activities, but no funds to sustain the program to develop and improve automated tools for tasking the all-source intelligence collection process on foreign missile threats, from the identification of collection requirements through optimization of collection system deployment. The committee recommends an authorization of \$5.0 million above the requested amount for this activity.

#### **A160 hummingbird**

The budget request included \$202.5 million for Research, Development, Test, and Evaluation, in PE 35204A for Army Tactical Unmanned Aerial Vehicles (UAV), but no funds for the A160 Hummingbird. The A160 was developed by the Defense Advanced Research Projects Agency (DARPA) and has completed successful demonstrations. The A160 can carry a larger payload than the Predator with the same endurance and range, but, as a helicopter, is not dependent on any sort of prepared runway surface. The optimal speed rotor on the A160 makes it quiet and fuel efficient. There is every reason to believe that the A160, when matured through the accumulation of flight time, will be an excellent platform with huge potential across multiple mission areas.

DARPA developed the A160 along with the Foliage Penetration Reconnaissance, Surveillance, Tracking and Engagement Radar (FORESTER). This radar has a demonstrated capability to detect and track people walking beneath forest canopy at substantial range, but only when operated from a motionless platform like the A160. DARPA's objective was to produce a system that could support special forces and conventional forces in conducting surveil-

lance in the forest and jungle, such as in U.S. Southern Command (SOUTHCOM).

Congress and DARPA have already funded the production of a significant number of A160 airframes, in various configurations, most of which are owned by U.S. Special Operations Command (SOCOM). SOCOM has budgeted significant funds for an upcoming 4-month duration operational deployment to SOUTHCOM. However, SOCOM lacks the resources to sustain the factory and workforce that build the A160. Without additional funding by the start of fiscal year 2010, the factory will shut down, which could, practically speaking, mean the end of the program before users can determine fully its value. This situation is a reflection of DARPA's recurring problem in transitioning even its most successful technology developments.

The committee is dismayed at the prospect of the A160 program dying. It is very hard to conceive that the Department of Defense (DOD) would have no use for an endurance vertical take-off and landing (VTOL) UAV that requires no airfield and carries a large payload. Fortunately, the Army and the Intelligence, Surveillance, and Reconnaissance (ISR) Task Force have begun to take notice of this platform and recognize its potential. The Army G2 has indicated to the committee that the Army wants to deploy four A160 aircraft to Afghanistan, to be flown with the FORESTER or another radar that is also designed to detect humans walking, only in the open rather than under foliage. This radar, called the vehicle and dismount exploitation radar (VADER), also was developed by DARPA and the Joint Improvised Explosive Device (IED) Defeat Organization.

VADER does not have to be operated on a motionless platform to detect the movement of dismounted people, but platform speed affects performance. Above a certain platform speed, VADER cannot discriminate small target velocities from platform motion-induced clutter. The committee understands that the ISR Task Force intends to deploy VADER to Afghanistan as soon as possible. The VADER radar is too large for the Predator-1B and even the Predator-1C UAVs. The Task Force reluctantly decided to deploy on the Reaper UAV, and reportedly will seek funding in a reprogramming request.

However, the Reaper minimum airspeed is at the limit of where VADER is calculated to be able to detect dismounts, and is therefore a poor candidate for an initial deployment, at least until more sophisticated versions of VADER are available. The A160, in contrast, would be an excellent match for VADER, as it is for FORESTER. The committee therefore urges DOD to alter any planned reprogramming request to direct funds to an A160 deployment, as outlined here.

To support a sustained A160 deployment to Afghanistan, DOD would need to standardize existing SOCOM airframes, and manufacture new ones. These activities would sustain the factory and workforce through the end of fiscal year 2010 and, significantly, through the deployment to SOUTHCOM and part of the deployment to Afghanistan. The expectation is that, by that time, the A160 will have accumulated enough flight time to determine its vi-



tality and utility. At that point, DOD could make a fully informed decision on transitioning the A160 to a program of record.

The committee recommends \$288.5 million, \$86.0 million above the request, to support the sustained deployment of the A160 to Afghanistan with the FORESTER and VADER systems, including the production of five additional aircraft.

#### **Army manufacturing technologies**

The budget request included \$68.5 million in PE 78045A for manufacturing technologies. Among the Army's manufacturing technology program goals are the development of advanced manufacturing processes, enhancing quality while reducing cost, and transferring improved manufacturing technologies to the industrial base. In support of those goals, the committee recommends increases of \$2.0 million for the development of software-based intelligent manufacturing techniques to reduce costs of systems production; \$2.75 million for manufacturing metrology research; and \$2.5 million for repair technology development for aging and battle-damaged equipment.

### **Navy**

#### **Navy basic research**

The budget request included \$531.3 million for Navy basic research activities. The Navy's survivability and self-defense science and technology focus area has a specific objective to develop advanced construction materials for survivable platforms. In support of that objective, the committee recommends an additional \$2.0 million in PE 61153N for blast and impact resistant structures, and an increase of \$2.0 million for research on nanoscale materials.

In support of efforts to train the next generation of defense scientists and engineers, the committee recommends an increase of \$1.0 million in PE 61152N for education outreach programs.

#### **Energetics research**

The budget request included \$59.8 million in PE 62114N for applied research on power projection technologies. The committee recommends an additional \$3.0 million for research on advanced energetic materials to support efforts to counter new types of asymmetric threats such as chemical-biological weapons as well as increasing capabilities to defeat deeply buried targets.

#### **Navy force protection research**

The budget request included \$91.4 million in PE 62123N for applied research on force protection technologies. The Navy's power, energy science, and technology focus area has a goal to develop efficient power conversion technologies with a wide range of energy sources to provide reliable power to a range of naval systems. To support this goal, the committee recommends increases of: \$4.0 million for research on integrated power systems for future platforms that have all-electric propulsion and weapon loads and \$2.5 million for research on reconfigurable shipboard power systems to increase system reliability and survivability.

The Navy's survivability and self-defense science and technology focus area seeks to enhance force protection by using innovative sensors to help detect and defeat incoming attacks. In support of that initiative, the committee recommends an increase of \$3.5 million for the development of port security sensors for under-hull inspection of ships.

Consistent with the Navy's platform mobility technology objectives to develop new advanced platform designs supporting new directions in naval warfare, such as increased agility, the committee recommends an increase of \$2.0 million for continued design and development of composite high-speed boats.

#### **Warfighter sustainment technologies**

The budget request included \$104.2 million in PE 62236N for applied research on warfighter sustainment technologies.

In support of continuing Navy and Department of Defense initiatives to reduce corrosion cost, the committee recommends an additional \$4.0 million for efforts on the development of sustainment and remanufacturing processes, asset health and logistics management techniques, and materials aging and corrosion abatement technologies.

The Department of Defense anti-tamper program seeks to deter the reverse engineering and exploitation of critical technology in order to impede technology transfer, stop alteration of system capability, and prevent the development of countermeasures to U.S. systems. In support of these efforts, the committee recommends an additional \$1.0 million in PE 62236N for research on anti-reverse engineering nanodevices, as well as an increase of \$3.0 million in PE 65790D8Z for research on anti-tamper software.

#### **Advanced antenna technologies**

The budget request included \$64.8 million in PE 62271N for applied research on electromagnetic systems. The Navy is seeking to reduce the number and size of antennae needed on ships but still maintain all necessary radar, communication, target tracking, and imaging capabilities. To support these efforts, the committee recommends an additional \$3.0 million for advanced digital radar systems.

#### **Advanced unmanned underwater vehicle research**

The budget request included \$48.8 million in PE 62435N for applied research on ocean warfighting environments. The Navy's platform mobility science and technology focus area includes the goal of development and delivery of system and equipment technologies to improve the performance of sea platforms to meet operational requirements. In support of this goal, the committee recommends an increase of \$3.5 million for advanced unmanned undersea vehicle research.

In order to support Navy efforts to enhance the understanding of optical propagation within challenging ocean environments in support of mine countermeasures and underwater autonomous network communications, the committee recommends an additional \$2.0 million for research on extended range underwater imaging sensors and optical communications networks.

**Undersea warfare systems**

The budget request included \$55.7 million in PE 62747N for applied research on undersea warfare technologies. The committee notes that undersea unmanned gliders are being developed for use in intelligence, surveillance, and reconnaissance and anti-submarine warfare missions. In support of those efforts, and to promote systems engineering and prototyping activities, the committee recommends an increase of \$3.0 million for littoral glider development.

**Low observable platforms**

The budget request included \$40.9 million in PE 62782N for applied research on mine and expeditionary warfare capabilities. To support Navy science and ethnology objectives to develop multi-spectral low observable technologies to improve platform stealth, the committee recommends an additional \$2.0 million for the development of electromagnetic signature assessment systems, and an increase of \$750,000 in PE 62747N for quiet, compact power systems for naval platforms.

**Mobile intelligence and tracking systems**

The budget request included \$108.0 million in PE 63114N for advanced technologies for power projection. The Navy has a science and technology objective to develop data fusion and analysis technologies for actionable intelligence generation to defeat adaptive irregular threats in complex environments. In support of that objective, the committee recommends an increase of \$4.0 million for research on data processing and fusion technologies to support multiple simultaneous detections, tracking, identification, and targeting of asymmetric and mobile threats in combat operations.

**Force protection advanced technology**

The budget request included \$66.0 million in PE 63123N for force protection advanced technology. This program addresses applied research associated with providing force protection capability for all naval platforms.

The budget request included no funding to develop advanced coating process technologies for naval aviation platforms and components. The committee believes that advancements in technologies, such as thermal/plasma spraying and physical/chemical vapor deposition would be suitable for naval aviation components. For example, these spray and vapor deposition technologies have the potential to produce thermal barrier coatings using conventional ceramics/metals or even novel nano-materials that produce the same or better properties than currently available exotic materials, while achieving substantial savings. The committee recommends an increase of \$3.0 million for developing and testing the advanced coating process technologies in manufacturing and remanufacturing naval aviation components.

The budget request included no funding for development of a lithium battery technology that could replace one of the three generators normally in operation or reserve aboard all large Navy ships. If lithium battery technology could be scaled up to a capacity of roughly 2.5 megawatts, such a battery would replace one of the

three ship service generators normally in operation or in reserve aboard all surface combatants. Such a battery system could provide a lower cost, higher quality source of electrical power that would replace redundant back-up power sources dedicated to subsystems throughout the ship. The committee recommends an increase of \$5.0 million to enable the development of such lithium battery technology.

The committee recommends a total authorization of \$74.0 million in PE 63123N for force protection advanced technology.

#### **High-integrity global positioning system**

The budget request included \$59.1 million in PE 63235N for the High-Integrity Global Positioning System. The committee recommends no funding for this program. The committee notes that there is still no demonstrated user for the concept; moreover the cost of implementing the concept would be very high and require additional expensive user equipment. It is also not clear how the approach is being considered or how the required hardware modifications are being coordinated with the Joint Tactical Radio System open architecture approach.

#### **Marine Corps advanced technology demonstrations**

The budget request included \$107.4 million in PE 63640M for Marine Corps advanced technology demonstrations. The most recent Marine Corps Science and Technology Strategic Plan identifies science and technology objectives related to development of high information content tactical sensors and urban-specific situational awareness capabilities. In support of those objectives, the committee recommends an increase of \$7.5 million for the development of acoustic sensors systems for ground warfare missions.

The Marine Corps Science and Technology Strategic Plan has a specific technology objective of developing advanced robotics systems for ground combat. In support of that objective, the committee recommends an additional \$2.0 million for the development of unmanned ground vehicle systems.

#### **Semi-submersible unmanned undersea vehicle**

The budget request included \$116.1 million in PE 63207N for air/ocean tactical applications. This program identifies new state-of-the-art government and commercial technologies, transitions, demonstrates, and integrates them into Navy combat systems that determine the operational effects of the physical environment on the performance of combat forces and their new and emerging platforms, sensors, systems, and munitions.

The budget request included no funding to develop a semisubmersible unmanned undersea vehicle (UUV) that could be used to evaluate new sensor technologies and reduce risk of employing them in regular Navy applications.

The committee understands that at least one such vehicle has been designed and completed development, and with modest additional funding, could complete launch and recovery validations and demonstrate UUV performance.

The committee recommends an increase of \$1.4 million in PE 63207N for these purposes.

**Sonobuoy wave energy module**

The budget request included \$16.6 million in PE 63254N for anti-submarine warfare systems development, but included no funding for developing technology that would extend the in-water life of sonobuoys. One such technology would rely on wave energy to recharge batteries of operating sonobuoys. The committee understands that this technology could also yield the benefit of replacing existing batteries with lighter, and more environmentally friendly power sources.

The committee recommends an increase of \$4.0 million in PE 63254N for maturing this wave energy application for sonobuoys.

**Shipboard system component development**

The budget request included \$1.7 million in PE 63513N for shipboard system component development, but included no funding for developing a hybrid propulsion system for the DDG-51 Aegis destroyer.

The committee believes that such a system installed on a DDG-51 would pay back the investment very quickly, as it would save potentially thousands of barrels of fuel per ship per year. The committee recommends an increase of \$9.3 million to design, build and test a hybrid electric drive system for DDG-51 destroyers.

The committee recommends a total authorization of \$11.0 million in PE 63513N for shipboard system component development.

**Remote monitoring and troubleshooting project**

The budget request included \$22.5 million in PE 63563N for ship concept advanced design activities, but included no funding for developing and implementing a remote monitoring and troubleshooting capability that would allow Navy engineers to provide global remote sustainment support to the fleet by remotely reading on-board sensors, monitoring shipboard system status, and providing expert advice to sailors as they maintain and repair ship systems. The committee believes that such a capability would yield savings, but, perhaps more importantly, lead to better readiness levels.

Therefore, the committee recommends an increase of \$5.8 million in PE 63563N for developing and fielding this capability.

**Marine Corps ground combat/support systems**

The budget request includes \$58.0 million in PE 63635N for the ongoing development of the joint light tactical vehicle (JLTV). The committee continues to support the Army and Marine Corps development of a next generation family of light tactical vehicles. However, the committee understands that the Army and Marine Corps lack a long-term tactical wheeled vehicle strategy. Additionally, the committee is concerned about the uncertainty in the services' plan to incorporate the sizable fleet of mine resistant ambush protected vehicles (MRAP) and the MRAP all-terrain-vehicle (M-ATV), which is still in development. Further, the committee believes that lessons learned from the eventual deployment of the M-ATV in Afghanistan will ultimately benefit the JLTV program and that JLTV should be more appropriately phased to incorporate these lessons.

Therefore, the committee recommends a decrease of \$12.0 million in funding for the JLTV program. This decrease is in addition to the committee's \$10.0 million reduction in the Army's funding request for the JLTV program.

#### **Model-based management decision tools for ground vehicles**

The budget request included \$73.8 million in PE 63635M for Research, Development, Testing, and Evaluation, of Marine Corps Ground Combat and Support Systems, but no funds for model-based management decision tools for ground vehicles.

The development of modern ground combat vehicles is more difficult due to the growing complexity of vehicle armor, suspension, electronics, and weapons. This complexity increases development time and expense, including the time to test components and subsystems. Computer simulation technology, however, is now robust enough to accurately model and simulate the behavior of multiple components simultaneously (co-simulation). Full-vehicle co-simulation could lower costs, speed development, and improve designs.

Therefore, the committee recommends an authorization of \$78.3 million, an increase of \$4.5 million for computer simulation tools for ground vehicle design and evaluation.

#### **Navy energy program**

The budget request included \$8.5 million in PE 63724N for the Navy energy program. The Navy has indicated that the budget request is not funding any energy research programs outside those in science and technology accounts and was unable to provide additional justification for the projects to be funded with the money requested in this program element. Therefore, the committee recommends a reduction of \$8.476 million from this account to reflect a lack of coordination with other Navy energy research investments.

#### **Navy energy research**

The budget request included \$8.5 million in PE 63724N for the Navy energy program. This program works to evaluate, adapt, and demonstrate energy related technologies for Navy aircraft and ship operations. In support of these goals the committee recommends an increase of \$5.5 million for the development of fuel cell technologies for naval applications, and an additional \$4.75 million for solar heat reflective materials to reduce cooling requirements.

#### **Optical interconnect**

The budget request included \$4.3 million in PE 63739N for Navy logistics productivity initiatives, but included no funding to develop low cost, high quality fiber optic interconnect technology for military aerospace application. The Department of Defense continues to demand increasing data processing, communication, and system control capabilities. The next-generation data and communication management systems needed for weapons systems will depend upon tightly integrated optical fiber solutions, also known as optical interconnect. This solution optimizes space utilization while achieving high bandwidth, decreased weight, immunity to electromagnetic interference, resistance to corrosion, and improved safety

and security. The Navy has requirements for next-generation optical interconnect technology for several aircraft platform systems, and anticipates that this technology could be applied to Navy vessels as well. The committee recommends an increase of \$4.0 million to develop this important technology.

#### **Radio frequency identification technology program**

The budget request included \$4.3 million in PE 63739N for Navy logistics productivity initiatives, but included no funding to develop next-generation logistics management models that would allow the Department of the Navy and the Department of Defense to exploit the full potential of radio frequency identification (RFID) systems. The Department of Defense continues to field RFID systems, but has yet to exploit the full potential of the information available from RFID systems and the contribution such information could make to improving logistics management information systems. The committee recommends an increase of \$1.0 million to improve the decision support capability of existing logistics models and develop better algorithms for these models.

#### **Mobile maritime sensor development**

The budget request included \$190.0 million in PE 64501N for development efforts in support of a next-generation cruiser, CG(X). CG(X) is planned to be the replacement for the CG-47 class cruiser, with primary missions including air and missile defense. The Navy's last long-range shipbuilding plan proposed to procure the first ship of the CG(X) program in 2011. That schedule was clearly too optimistic.

Part of the delay came from questions about the CG(X) Analysis of Alternatives (AoA), called the Maritime Air and Missile Defense of Joint Forces (MAMDJF) AoA. One problem has been that demanding threat requirements have led to very demanding sensor requirements, some of which could only be fit on a cruiser-size vessel by achieving major technology breakthroughs.

Another cause of the delay was that, as the committee understands it, the Secretary of the Navy was asking questions about potential contributions of off-board, networked sensors and why the MAMDJF vessel had to be self-sufficient for target acquisition and tracking.

The committee recognizes that there are at least two other platforms within DOD inventories that could provide the basis for developing a more robust off-board sensor augmentation. Such an incremental development approach might not require that the Navy make such heroic technology improvements in surface combatant radar technology. These are the Navy's own programs to develop a Cobra Judy replacement vessel, and the Missile Defense Agency's Sea-Based X-Band radar.

A mobile maritime sensor could improve upon the performance of either of these radars by making more modest technology improvements that could provide requisite capability for radars that would be less risky, cheaper to acquire and operate, and potentially available sooner than sensors that must provide equivalent performance from within the relatively constrained confines of a surface combatant.

The committee recommends an increase of \$50.0 million to: (1) develop a radar architecture that would provide full field of view; (2) design of a partial array prototype; (3) develop, build, and test components of such an array; and (4) fabricate and test a partial array prototype. Information resulting from such an effort could provide valuable information upon which to base informed decisions about the best way to support the maritime air and missile defense mission.

#### **Submarine communications at speed and depth**

The budget request included \$122.7 million in PE 64503N, including \$16.2 million to continue development of capabilities to communicate with submarines when they are operating at normal depths and speeds. Such communications capability would permit submarines to provide better support to other forces in a battle group, while allowing submarines to maintain their stealthy posture.

The Navy has embarked on a program to develop this capability that is divided into two parts: Increment 1 and Increment 2. The Increment 1 program will bring some currently available, expendable buoy technologies to the fleet over the next 2 years.

The Navy plans to begin the Increment 2 program in fiscal year 2011. This program will include submarine-towed buoy systems to provide more persistent connectivity to submarines operating below periscope depth. However, the committee does not believe that the Navy has provided sufficient funding in the fiscal year 2010 budget request to develop the advanced technologies required in order to implement this next phase of the program.

The committee recommends an increase of \$5.0 million to develop these technologies.

#### **Mold-in-place coating development**

The budget request included \$154.8 million in PE 64558N to support design and development activities for submarines, but included no funding for developing a mold-in-place technology for installing or restoring advance submarine hull coatings. Since current techniques for installing these coatings are expensive and manpower intensive, having a process available that would reduce the time and effort to install or replace these coatings would yield savings to the Navy.

The committee recommends an increase of \$2.0 million to develop this capability.

#### **New design SSN**

The budget request included \$154.8 million in PE 64558N to support design and development activities for submarines, but included no funding for developing a common command and control module for application to *Virginia*-class submarines or a potential Trident replacement program.

The committee understands that the Navy could design a new command and control module for submarines that would enable rapid reconfiguration of mission equipment in these spaces, reduce the demands on watch standers, and reduce the total ownership costs to the Navy for supporting disparate command and control



configurations. Starting such a design now would permit the Navy to take best advantage of potential savings from achieving a common configuration in the fleet.

Therefore, the committee recommends an increase of \$9.0 million in PE 64558N to support these development activities.

#### **Submarine tactical warfare system**

The budget request included \$59.7 million in PE 64562N for developing enhancements to submarine combat control systems.

The budget request included no funding for developing an artificial intelligence-based combat systems kernel. Such a kernel would use expert systems, advanced signal and data processing, and mission-focused human systems integration to introduce much higher levels of automation that would optimize manning and increase command decision and combat system performance. The committee recommends an increase of \$5.0 million to support this development.

The budget request included no funding for developing a weapon acquisition and firing system (WAFS). Today's weapons systems are complex and require many manual procedures using reference documents to determine weapon settings and tactics while ensuring the safety of ships by employing proper weapon safety settings. This cumbersome process is too slow and error prone in many close combat situations. The WAFS provides a data fusion capability that can automatically develop an accurate target solution based on acoustic and non-acoustic sensors, eliminating the need for reference documents and lowering ship manning requirements. The committee recommends an increase of \$4.0 million to initiate research and development efforts as well as allowing for at-sea testing and implementation of real-time algorithms and associated in-board electronics necessary for installing WAFS on legacy and future classes of submarines.

The budget request included no funding for developing a submarine environment for evaluation and development. The Naval Undersea Warfare Center has created a futuristic submarine attack center to evaluate new command decision aids in a realistic environment. This facility has provided a low-cost, easily accessible testbed for small businesses, academia, and production system developers to create and test innovative technologies without incurring the expense of creating their own test facility. This has led to getting better technology to the fleet more quickly. The committee recommends an increase of \$4.0 million to expand this activity to improve the ability to perform proof of concept testing and concept of operations testing with fleet sailors using current submarines systems augmented by new technologies.

The committee recommends a total increase of \$13.0 million in PE 64562N for the submarine tactical warfare system programs.

#### **Automated fiber optic manufacturing**

The budget request included \$90.0 million in PE 64567N for ship contract design, but included no funding to build on an Office of Naval Research initiative to provide automated manufacturing for military-grade fiber optic assemblies for aircraft carriers and other naval vessels. The committee believes that such an activity could:

(1) improve the quality, reliability, and cost of such assemblies; and (2) facilitate field installation and maintenance of such systems for vessels while they are deployed. The committee recommends an increase of \$2.0 million to continue this development.

#### **Autonomous unmanned surface vehicle**

The budget request included \$35.5 million in PE 64755N for ship self-defense (detect and control) projects, but included no funding for the autonomous unmanned surface vehicle (AUSV) program. The AUSV program supports the U.S. Navy's anti-terrorism, force protection, and homeland defense missions. The AUSV can protect commercial harbors, coastal facilities such as commercial and military airports and nuclear power plants, inland waterways, and large lakes. The vessel will utilize a variety of advanced sensing and perimeter monitoring equipment for surveillance and detection of targets of interest. The committee recommends an increase of \$5.0 million to continue this development.

#### **Next-generation Phalanx**

The budget request included \$34.2 million in PE 64756N for ship self-defense (hard kill), but included no funding for next-generation Phalanx. The Phalanx weapon system is the Navy's principal close-in weapon system for ship self-defense, and has proven to be extremely adaptive for performance against emerging air and surface target sets. The continually evolving nature of the threat, unique challenges posed by operations in the littorals, increased emphasis on single ship probability of raid annihilation, and fact of life technology obsolescence require a continued development effort to sustain the superior performance of this critical ship self-defense system. The committee recommends an increase of \$12.0 million in PE 64756N for the continued development of the next-generation Phalanx.

#### **NULKA anti-ship missile decoy system**

The budget request included \$88.9 million for ship self-defense soft-kill systems development in PE 64757N, including \$4.8 million for various development activities related to the NULKA anti-ship missile decoy system.

The Navy has identified a series of development activities associated with the NULKA system that are required to understand and deal with emerging threats:

- (1) continue to pace anti-ship cruise missile threats with long pulse capability by incorporating radio frequency and digital design enhancements;
- (2) design an architecture that will ensure flawless operation with the SPY-3 multi-function radar (MFR);
- (3) integrate into NULKA into the Navy's Aegis weapon control system open architecture; and
- (4) provide shipboard test and trial support.

The committee recommends an increase of \$9.0 million for the NULKA development program to continue these efforts.

**Navy medical research**

The budget request included \$9.9 million in PE 64771N for medical systems development. To support efforts to protect deployed forces from infectious diseases, the committee recommends an increase of \$3.5 million for research on dengue fever vaccines. To support efforts to treat injured service members, the committee recommends an additional \$2.0 million for research on composite tissue transplantation techniques for treatment of traumatic injuries, an additional \$3.0 million for the development of advanced orthopedic surgical instrumentation, and an additional \$2.0 million for the development of custom body part and prosthetic implants.

**Navy information technology programs**

The budget request included \$69.0 million in PE 65013N for information technology development. To support initiatives to improve network centric operations, data fusion, and human systems interfaces, the committee recommends an increase of \$5.0 million for the development of integrated network-centric technology systems, and an increase of \$7.0 million for information systems research and technology.

**Navy test and evaluation programs**

The budget request included \$79.6 million in PE 64759N for major test and evaluation investment. To support effective interoperability testing and evaluation of complex, emerging joint systems, the committee recommends an increase of \$5.0 million for aviation enterprise interoperability upgrades.

**Advanced linear accelerator facility**

The budget request included \$75.0 million in PE 11221N, Research, Development, Test, and Evaluation, Navy (RDTEN), but included no funding for the Crane linear accelerator facility (LINAC). The committee recommends an increase of \$1.2 million for the LINAC to simulate the high radiation environment in space. The committee notes that this will complete the construction of the LINAC facility. The committee directs the Navy to develop and use the additional funds in conjunction with the Joint Radiation Hardened Electronics Oversight Council.

**Expandable rigid wall composite shelter**

The budget request included \$120.4 million in PE 26623M for Research, Development, Test, and Evaluation, for Marine Corps Ground Combat/Supporting Arms Systems. Current rigid wall shelters do not have ballistic protection, cannot carry loads such as sandbags on the roof, are poorly insulated, are subject to corrosion, and cannot be efficiently stacked on container ships. New carbon fiber hybrid composite technology will provide lightweight, rugged, thermally efficient, and electromagnetic interference-hardened shelters for the Marine Corps. The committee recommends an authorization of \$1.3 million for this initiative.

**Marine personnel carrier support system**

The budget request included \$120.4 million for Research, Development, Test, and Evaluation, in PE 26623M for Marine Corps

Ground Combat/Supporting Arms Systems, but no funds to initiate the Marine Personnel Carrier (MPC) Design for Supportability System. This system, initiated during the program's design phase, will reduce management and maintenance costs throughout the program's life cycle using modern modeling and collaborative software technology. The committee recommends an authorization of \$123.4 million, an increase of \$3.0 million above the request.

#### **Ultrasonic consolidation for smart armor applications**

The budget request included \$120.4 million in PE 26623M, Research, Development, Test, and Evaluation, Navy, for Marine Corps Ground Combat/Supporting Arms Systems, but insufficient funds to complete development of Ultrasonic Consolidation for Armor Applications technology.

Ultrasonic consolidation is a low-temperature process that enables the production of laminates of dissimilar metals to achieve properties not possible with conventional casting and welding techniques. This process can be used to fashion titanium aluminide, a lighter, cheaper, and more effective armor.

The committee recommends authorization of \$124.3 million, \$3.9 million above the request, to complete development of this technology.

#### **High performance capabilities for military vehicles**

The budget request included \$17.1 million in PE 26624M for Research, Development, Test, and Evaluation, for Marine Corps Combat Services Support, but no funds for the high performance capabilities for military vehicles project. This project is dedicated to applying the best practices of the motorsports industry to military vehicles, including engineering expertise, equipment, and technology. The committee recommends authorization of \$18.1 million, \$1.0 million above the request for this project.

#### **Mobile User Objective System**

The Navy is responsible for maintaining narrow band ultra-high frequency (UHF) satellite communications capability. The current on-orbit capability is provided through a combination of leased satellite capability, the Ultra-high frequency follow-on (UFO) satellites, the last of which was launched in 2003, and two previous generation UHF satellites, which have long surpassed their design lives. Several of the UFO satellites have failed early and several others are single string satellites. As a result, the UHF constellation is very fragile. If all the satellites continue to operate with no further failures the Navy expects to see the UHF constellation degrade to unacceptable levels in May 2010. The first Mobile User Objective System (MUOS), the next-generation UHF satellite, is already 11 months behind schedule and continues to have technical problems.

The committee continues to believe that the Navy should initiate a UHF backup capability through leased or hosted payload options. The committee understands that \$32.0 million remains from the brief but cancelled prior effort to look at this option. The committee recommends a decrease in Research, Development, Test, and Evaluation, Navy, PE 303109N line 192 of \$32.0 million and an in-

crease of \$32.0 million in Weapons Procurement, Navy, line 18, for a small UHF payload, of eight or fewer channels, on an existing small satellite bus. The committee directs the Navy to explore using a competition for a fixed price contract for additional UHF capability. In reviewing this option the Navy should look at utilizing the Operationally Responsive Space Office as a possible option for managing the augmentation, if the Navy believes that augmentation efforts will take program office focus away from the MUOS program.

The committee directs the Secretary of the Navy to report back to the congressional defense committees no later than January 1, 2010, with the plans for UHF augmentation and constellation sustainment.

#### **Navy manufacturing technology**

The budget request included \$56.7 million in PE 78011N for Navy manufacturing technology programs. The committee notes that the Defense Science Board has recommended that investments in the manufacturing technology program be increased to a level of 1 percent of the total research, development, test, and evaluation budget. The Board also found that the manufacturing technology program has invested in efforts that have reduced systems cost and improved systems performance. Consistent with those recommendations and findings, the committee recommends an increase of \$5.0 million for integrated manufacturing enterprise development to streamline manufacturing techniques, business practices, and practices to reduce costs of Navy platforms, and an additional \$2.5 million for development of advanced materials processing technologies and lower cost repair methods for a variety of sea and air systems.

#### **National Shipbuilding Research Program-Advanced Shipbuilding Enterprise**

The budget request included no funding in PE 78730N for maritime technology. The National Shipbuilding Research Program—Advanced Shipbuilding Enterprise (NSRP–ASE) is a collaborative effort between the Navy and industry which has yielded significant productivity improvements for Navy ship construction and repair. Under this program the Navy provides funding that is matched and exceeded by industry investment. Using this approach, the Navy has achieved a high return on investment by providing near-term savings and avoiding significant future costs. The committee believes that continuation of the NSRP–ASE effort is a vital element of the overarching objective of improving the affordability of naval warship construction and maintaining a healthy, innovative shipbuilding industrial base.

The committee recommends an increase of \$20.0 million in PE 78730N for the NSRP–ASE. The committee expects that the Navy will allocate funds directly to this program in future budget requests.

## **Air Force**

### **Air Force basic research**

The budget request included \$321.0 million in PE 61102F for defense research sciences activities. To support efforts in the development of next generation energy sources for military applications, the committee recommends an additional \$1.0 million for research supporting liquid fuel production processes and an additional \$1.5 million for research on wireless beamed power systems.

The National Research Council's 2006 study on "Basic Research in Information Science and Technology for Air Force Needs" recommended that the Air Force invest in research in information security "in support of the goal of measurable, available, secure, trustworthy, and sustainable network-enabled systems." Consistent with that recommendation the committee recommends increases of: \$4.0 million for development of cyber security related educational programs; \$4.0 million for research on security for critical and vulnerable control networks; and \$2.0 million for software engineering research to develop secure embedded software systems.

The report also highlighted the significant challenges that the Air Force will face in managing ever-larger volumes of data. To support the development of enhanced information management capabilities, the committee recommends an additional \$1.5 million for informatics research.

Finally, consistent with the committee's efforts to enhance systems engineering capabilities in the Department of Defense, the committee recommends an additional \$2.0 million for research on integrated design and manufacturing technologies and systems.

### **Air Force materials research**

The budget request included \$128.0 million in PE 62102F for applied materials research. The committee notes that advanced tactical aircraft such as the F-22 and F-35 are facing critical thermal management issues which are forcing operational adjustments and potentially costly design and engineering changes. To help address these issues, the committee recommends an additional \$3.0 million for research on advanced thermal management structures.

The Air Force Research Laboratory has found that 3.9 percent (or nearly \$1.5 billion) of the Air Force's fiscal year 2004 operations and maintenance budget went toward addressing the costs of corrosion on Air Force platforms and weapon systems. To address corrosion issues in the Air Force, the committee recommends an additional \$2.0 million in PE 62102F for corrosion protection materials, and \$1.0 million to address corrosion issues in light alloy aerospace and automotive parts.

The Air Force's Energy Program Policy has a stated objective of developing renewable resources on Air Force bases. In support of that objective, the committee recommends an increase of \$4.0 million for efforts to design, implement, and test systems and processes capable of producing renewable energy at large scales for military installations, and an additional \$4.0 million for research to refine, as well as develop novel, energy bioconversion technologies to support defense needs.

The committee notes that the 2003 National Research Council study “Materials Research to Meet 21st Century Defense Needs” identified a number of high priority research areas in advanced materials in order to address defense requirements. The study recommended investing in technologies that would integrate non-destructive inspection and evaluation into the original design of both materials and structures. Consistent with this recommendation, the committee recommends an additional \$2.0 million for the development of health monitoring sensors for aerospace components. The National Research Council recommended that the Department of Defense “make investments in research leading to new strategies for the processing, manufacture, inspection, and maintenance of materials and systems.” Therefore, the committee recommends an increase of \$1.0 million for research on intelligent manufacturing models, analyses, and controls to develop the next generation of manufacturing processes and systems.

Finally, the committee recommends an additional \$2.75 million for the development of infrared laser media materials to support the development of laser communications, countermeasure, and sensing systems.

#### **Aerospace vehicle technologies**

The budget request included \$127.1 million in PE 62201F for aerospace vehicle technologies. The committee recommends an additional \$2.5 million for unmanned aerial system (UAS) collaboration technologies to support the development of advanced UAS and enhance the ability to integrate UAS pilots, sensor operators, and information analysts, as well as to better coordinate and collaborate their activities.

#### **Air Force propulsion research**

The budget request included \$196.5 million in PE 62203F for applied research in aerospace propulsion. Advanced aircraft engines require high reliability components that survive high vibrations, temperature, and speeds. In support of component development for the F-35, the committee recommends an increase of \$1.0 million for high speed bearing research.

In support of efforts to meet onboard electrical power requirements of engines and airborne weapon systems, the committee recommends an additional \$2.5 million for materials research and development via prototype fabrication and developmental testing of novel electric power technologies for propulsion applications. The committee also recommends an additional \$7.0 million for the development of lithium ion batteries for aviation applications.

To support efforts to develop hypersonics technology for missile, aircraft, and space access missions, the committee recommends an additional \$3.5 million for scramjet research.

Finally, to support efforts to reduce operating temperatures of turbine engines and improve their efficiency, the committee recommends an increase of \$4.0 million for the development of thermally efficient engine fuel pumping systems.

**Reconfigurable electronics and software**

The budget request included \$104.1 million in PE 62601F for space technologies. The Department of Defense's January 2007 "Response to Findings and Recommendations of the Defense Science Board Task Force on High Performance Microchip Supply" highlighted the Department's need for microelectronic systems, local field programmable gate arrays, with functions that could be changed to support different types of systems. In support of meeting that need, the committee recommends an increase of \$2.0 million for research on reconfigurable electronics.

The committee also recommends an increase of \$4.0 million in PE 63203F for the development of secure reconfigurable computing systems that would support development of protection technologies with sensors to meet the requirement for critical weapon systems technology to be tamperproof and uncompromised.

**Seismic research program**

The budget request included \$104.1 million in PE 62601F for space technologies. The committee recommends an additional \$7.5 million for the Air Force seismic research program. The committee notes that this program has and will continue to enable the United States to monitor compliance with the current moratorium on nuclear testing.

**Chemical laser research**

The committee notes that the 2008 Air Force Scientific Advisory Board study on advanced tactical lasers highlighted the fact that chemical lasers would be unsuitable for tactical applications "due to the atmospheric propagation of its operational wavelength, its weight and volume, its logistical requirements, and its limited magazine." The committee notes that the Department of Defense is moving towards the development and eventual fielding of solid state, fiber, and free electron lasers for a variety of missions that require high energy lasers, but has no such similar plans for chemical lasers. Therefore the committee recommends a reduction of \$5.75 million in PE 62605F and \$6.1 million in PE 62890F for activities related to chemical laser research and development.

**High energy laser research**

The budget request included \$52.8 million in PE 62890F for applied research on high energy lasers. The Department of Defense's report "Adaptive Optics for Military Applications: Laser Weapons and Space Surveillance" identified the development of deformable mirrors as a technical challenge to achieving laser weapon systems. The committee recommends an additional \$2.0 million to support research on advanced deformable mirrors for high energy laser weapons systems.

**Air Force advanced materials research**

The budget request included \$37.9 million in PE 63112F for the development of advanced materials for weapon systems. The committee recommends an additional \$7.0 million to support the Metals Affordability Initiative, a joint government and industry consortium aimed at strengthening the metals industrial base through



collaborative technology development and transition projects. The overall program helps improve current processing technologies and develop novel techniques for primary metal production, part manufacturing, and weapon system support.

To support Air Force efforts to develop cheaper, alternative sources of aviation fuel, the committee recommends an increase of \$5.0 million for sewage-derived biofuels research. Finally, to support efforts to improve the readiness and maintainability of airframes, the committee recommends an increase of \$2.0 million for research on nondestructive testing technologies.

#### **Air Force advanced propulsion systems**

The budget request included \$175.7 million in PE 63126F for aerospace propulsion and power technology. To support efforts under the High Speed Turbine Engine Demonstrator project as part of the Versatile Affordable Advanced Turbine Engine program, the committee recommends an additional \$10.0 million to develop supersonic turbine engines that can support the development of a long-range high-speed strike missile. The committee notes that the Department of Defense is continuing its investments in the development of unmanned aerial vehicle (UAV) capabilities for intelligence, strike, logistics, and other missions. In support of those efforts, the committee recommends an additional \$3.5 million for the development of scalable UAV engines.

Finally, to support continued development of high-temperature power electronics to meet critical needs of the Joint Strike Fighter and other aircraft platform systems, the committee recommends an increase of \$6.0 million for research on silicon carbide electronics.

#### **Air Force manufacturing technology**

The budget request included \$39.9 million in PE 63680F for the Air Force manufacturing technology program. The committee recommends an additional \$3.25 million for research on casting technology to support efforts to provide the Department of Defense an integrated approach to metal castings used in defense systems to improve component performance and affordability.

#### **Optical interconnect technologies**

The budget request included \$39.7 million in PE 63788F for development and demonstration of battlespace knowledge technologies. The Defense Research and Engineering's 2007 strategic plan highlights networks and communications, including technologies to address airborne networks, as an enabling technology that should receive the highest level of corporate attention and coordination. To support these efforts, the committee recommends an additional \$2.5 million for development of optical interconnects to support data communications onboard unmanned aircraft systems and satellites.

#### **Space Protection Program**

The budget request included \$97.7 million for Space Control Technology in Research, Development, Test, and Evaluation, Air Force, in line 40 including \$6.5 million for the Space Protection

Program (SPP). The committee recommends an additional \$6.5 million for the SPP.

Improving space situational awareness and protecting space assets is a high priority for the intelligence community and the Department of Defense as well as for the civilian community. A recent “day without space” exercise made clear that not only military systems but a broad array of civilian systems are dependent on military and intelligence space systems. Even such simple tasks such as getting money from an ATM or using a credit card to fill up a gas tank become impossible without space assets.

The SPP is a joint Air Force-National Reconnaissance Office program to bring in-depth analytic capacity to the problem of protecting space assets from natural occurring events, accidental events, and intentional actions of adversaries. The committee supports this collaborative approach to protect U.S. space interests and commends the Air Force and the National Reconnaissance Office (NRO) for establishing this unique effort. Having established this needed effort the committee expects both the Air Force and the NRO to support the effort.

The committee expects the SPP to execute an integrated strategy to review threats identified by the intelligence community to ascertain risks and vulnerabilities to space capabilities and then recommend solutions leading to comprehensive space protection capabilities. Specifically, the SPP office should focus on developing space protection architectures, identifying national capabilities and interdependencies, delivering tailored decision aids to operations centers, develop methodologies to address vulnerabilities in multiple orbit regimes, integrate cyber risks and threats into the National Infrastructure Protection Framework, and continue with the specific tasks currently assigned.

#### **Space situational awareness**

The budget request included \$97.7 million in Research, Development, Test, and Evaluation, Air Force (RDTEF), PE 63438F for Space Control Technology but no funds to integrate data from the Missile Defense X-band radar on the Sea-based X-band platform to integrate into the space surveillance network. The committee recommends an increase of \$6.0 million to develop a prototype to import this sensor capability into the space surveillance network.

#### **Intercontinental Ballistic Missile Demonstration/Validation**

The budget request included \$66.1 million for Intercontinental Ballistic Missile (ICBM) Demonstration Validation in Research, Development, Test, and Evaluation, Air Force, PE 63851F line 46. The committee notes that the various ICBM modernization programs will be coming to a close and will need to focus on sustainment. ICBM Demonstration Validation is focused on future ICBM concepts some of which, such as guidance systems, could be common to the Air Force and the Navy. The committee notes that the Navy is working on common concepts and urges the two services to work together to determine the full range of common applications for ballistic missile sustainment and modernization if needed. As a result the committee recommends a reduction of \$5.0 million.

### **Operationally Responsive Space**

The budget request included \$112.9 million for Operationally Responsive Space (ORS) in Air Force Research, Development, Test, and Evaluation PE 64857 including \$31.9 million for ORS-1, a small satellite being built at the request of U.S. Central Command (CENTCOM) to satisfy the Command's urgent need number 3. The budget request does not keep the manufacture of the ORS-1 on schedule to meet the CENTCOM schedule. The committee notes that the Air Force intends to reprogram some additional funds to support ORS-1 but more is needed. The committee recommends an additional \$40.0 million for ORS-1.

On May 18, 2009, the ORS Office successfully launched another small satellite, which is in the process of completing its on-orbit check out. The committee expects the ORS Office to keep it informed as to the progress and operational utility of this most recent satellite.

ORS continues to make progress in all of its three tiers and in continuing to assess the value of small satellites to the warfighter, including the ability to rapidly configure and launch small satellites to meet need not otherwise met by airborne platforms. One of the ORS efforts could have applicability to the general space community approach to command satellites thorough multi-purpose systems rather than stove-piped ground systems.

The committee commends the ORS Office and other agencies and military services for participating in this innovative approach to space. The committee is concerned, however, that the ORS Office has not been able to take full advantage of various streamlined acquisition approaches and directs the Air Force to assist ORS in identifying areas where improvement is needed and to grant ORS the necessary authorities. ORS has been ably supported in its acquisition by the Air Force Space Development and Test Wing and the committee believes that this is a productive partnership.

One of the areas that the ORS Office has not focused on is next-generation launch capabilities. At the present there is adequate launch capability but it is expensive. The committee is aware of a different approach to designing launch vehicles that might reduce in the long run the cost of launch, and that might be suitable for small and medium (Delta II) class and below launch. The committee recommends \$15.0 million for the radially segmented launch vehicle for ORS and the Space Test Program to continue concept development and determine the technical validity of the approach.

### **Small imaging satellite competitive prototyping**

The budget request included \$112.9 million in PE 64857F for Research, Development, Test, and Evaluation, for the Operationally Responsive Space (ORS) program. Elsewhere in this report, the committee recommends that the Department of Defense acquire the equivalent of one 1.5-meter commercial-class electro-optical imaging satellite, along with acquisition of the equivalent of one additional 1.1-meter commercial imaging satellite. These actions are recommended to mitigate risks in the collection capabilities of the intelligence community, to enhance the availability and utility of unclassified imagery for the warfighter, to increase the frequency

of satellite coverage, and to also enhance the survivability of space-based imaging in wartime.

For the longer-term, however, the committee believes the time has come to try a different approach to moderate-resolution imagery collection from space. The committee is persuaded that the technology exists to build very small and very inexpensive medium resolution (approximately .5 meter ground resolution) imaging satellites. A large constellation of very small satellites would provide frequent revisit, inherent survivability, graceful degradation, broad-area coverage and faster upgrades. The costs should not exceed \$100.0 million per satellite, including launch, with the ultimate goal being fixed pricing. If achievable, this concept would open up important new opportunities for the commercial data providers and government consumers alike.

The committee believes that the time is right to establish a competitive prototyping program to test the industry's cost claims and to demonstrate performance levels.

Accordingly, the committee recommends \$227.9 million, \$115.0 million above the request, to initiate a competitive proof-of-concept demonstration involving at least two credible industry teams. The committee expects that the Department of Defense will require each vendor to deliver at least two satellites, with a goal of spacecraft in orbit within 36 months of award. The satellites should be limited to a small mass and volume, with low development and recurring costs. The program should be guided by the Joint Staff, U.S. Strategic Command, the Air Force A2, and the Under Secretary of Defense for Intelligence.

#### **National Polar-Orbiting Operational Environmental Satellite System**

The budget request includes \$396.6 million in Research, Development, Test, and Evaluation, Air Force (RDTEF), PE 35178F for the National Polar-Orbiting Operational Environmental satellite system (NPOESS). As a result of a recent review, the Department of Defense has determined that the program is not adequately funded in fiscal year 2010. The committee recommends an additional \$80.0 million for NPOESS.

#### **Internet routing in space**

The budget request included no funds in Air Force Research, Development, Test, and Evaluation, to support the demonstration, evaluation, and use of a commercial Internet Router in Space (IRIS) for military communications on a commercial satellite for 1 year. The IRIS program, a joint concept technology demonstrator (JCTD) sponsored by U.S. Strategic Command, was funded as a demonstration project and will be launched later this year. Funding for the JCTD, however, only supports a 3 month demonstration of the capability. The committee recommends an increase of \$3.0 million in PE 604xxxF to continue the demonstration and to provide operational capability for an additional year. To address this and other new communications technologies for military communications satellites the committee recommends a new program element (PE) designed to reduce technological risk and mature tech-

nologies for potential future applications. This PE is discussed more fully elsewhere in this report.

The committee notes that IRIS is not useful for protected, secure, survivable communications such as had been envisioned for the transformational communications satellite program because the router is not designed to be radiation hardened. On the other hand, the router could be useful for other satellite applications, such as the Wide-band Global System (WGS) that do not have a requirement for radiation hardening.

#### **Next-generation military satellite communications**

The budget request included no funds in Air Force Research, Development, Test, and Evaluation (RDTEF), for next-generation military satellite communications to identify technologies that could be used on future military communications satellites. When the transformational communications satellite (T-Sat) was cancelled, several risk reduction efforts that could have application on future satellites were also cancelled. In addition, work on military unique radiation hardening requirements was also cancelled.

The committee recommends an increase of \$50.0 million in a new program element, PE 604xxxF. This new PE would be created to explore communications technologies that could be utilized on future blocks of current communications satellite or eventually on next-generation communications satellite. This program would be similar in concept to the Third Generation Infrared Satellite System (3GIRS), which is conducting risk reduction efforts for next-generation overhead persistent infrared technologies. These risk reduction efforts should include continued efforts to reduce the cost, weight, and complexity of current radiation hardening techniques.

One of the many problems with the T-Sat program was that it was started with very immature technologies. In the future if there are to be new or evolved communications satellites, the committee wants to ensure that the technologies are sufficiently mature to be fielded with low cost and schedule risk.

#### **B-1B bomber active electronically scanned array radar**

The budget request included no funds in Research, Development, Test, and Evaluation, Air Force (RDTEF) in PE 64226F for the B-1B bomber. The committee recommends an increase of \$2.0 million to design, install, and test an active electronically scanned array (AESA) radar on a B-1B bomber to evaluate the utility of an AESA to bomber operations. The AESA was developed for use on fighter and other aircraft and should require minimum modification for application and evaluation on the B-1B.

#### **Space-based Infrared System**

The budget request included \$512.6 million for the Space-based Infrared system (SBIRS) for Research, Development, Test, and Evaluation, Air Force, PE 64441 including \$62.6 million for ground systems development. The committee recommends an additional \$15.0 million for Highly Elliptical Orbit (HEO) ground integration and data exploitation.

The SBIRS program is a missile early warning, technical intelligence, and battlespace awareness system. Currently, there are

two of the HEO sensors on orbit. The Geosynchronous Earth Orbit (GEO) satellites continue to be plagued by schedule delays and cost overruns. The GEO-1 satellite has slipped an additional year since last year as it continues to have software problems. Additional funds were reprogrammed into SBIRS in fiscal year 2009 but the problems continue with the GEO-1 satellite. As a result, funds needed to resolve ground issues and HEO data exploitation have not been sufficient. The committee is very concerned that the performance capability of the two HEO sensors be fully understood and exploited including the benefits from HEO stereo applications.

Notwithstanding the continuing GEO-1 problems the Air Force will continue the SBIRS program through GEO-4 and most likely to GEO-5, -6, and even beyond. In looking ahead the committee is concerned that the Air Force is not buying the future GEO satellites in the most cost effective way possible. To reduce the cost of future GEO satellites, the committee directs the Secretary of the Air Force to determine the number of GEO satellites that will be needed beyond GEO-4 and the possibility of buying these satellites using fixed pricing. The committee notes that the overhead persistent infrared architecture study will be completed later this summer and that this study will inform the future requirements for SBIRS satellites and sensors.

### **Joint Strike Fighter**

The budget request included \$1,741.3 million in PE 64800N, and \$1,858.1 million in PE 64800F for continued development of the Joint Strike Fighter (JSF) program, including \$476.0 million for management reserves to cover unforeseen problems that may arise during the system development and demonstration (SDD) phase of the program.

The Department conducted a review of JSF program costs and schedules last year. The group conducting the review, called the Joint Estimating Team (JET), recommended, among other things, that the management reserves available to the program executive officer (PEO) be increased throughout the remainder of SDD program. As a result of the JET recommendations, the Department increased management reserves to the level requested in the budget.

The Department has informed the committee that the PEO now believes that he can fully execute the fiscal year 2010 SDD program with only \$320.0 million, or \$156.0 million less than was included in the request.

Therefore, the committee recommends a decrease of \$78.0 million in PE 64800N and a decrease of \$78.0 million in PE 64800F to eliminate these excess management reserves.

### **Evolved Expendable Launch Vehicle**

The budget request included \$26.5 million in Research, Development, Test, and Evaluation, Air Force, PE 64853F for the Evolved Expendable Launch Vehicle (EELV) but no funds to continue the Global Positioning System (GPS) based metric tracking effort. The committee recommends an additional \$12.0 million for GPS metric tracking. The committee understands that the Air Force will be reprogramming fiscal year 2009 funds for EELV GPS metric tracking and funds are needed in fiscal year 2010 to continue this important

effort need to support the east and west coast launch ranges. The long-term plan is to have all launches utilize GPS and reduce the amount of radar support for launches.

#### **Combat Search and Rescue Replacement Aircraft**

The budget request included \$90.0 million in PE 65277F for development of the Combat Search and Rescue Replacement Aircraft (CSAR-X). These fund various activities, including program support and purchasing helicopters for replacing operational losses.

The Air Force anticipated awarding the development contract for the CSAR-X in the spring of 2008, but the award was delayed twice by successful protests, and Secretary Gates has recommended terminating the current effort while the Department reviews the entire combat search and rescue mission area as part of the Quadrennial Defense Review (QDR).

The committee believes that funds available within this program from prior years is sufficient to support all of these fiscal year 2010 activities, and therefore, recommends a reduction of \$90.0 million in PE 65277F for CSAR-X. The committee strongly supports modernizing the combat search and rescue capability, but sees no need to authorize more funds than are required to support these activities in the interim while the Department conducts the QDR review.

#### **Air Force test and evaluation**

The budget request included \$60.8 million in PE 64759F for major test and evaluation investment. The committee notes that the Director of the Test Resource Management Center has expressed concern over the reductions in funding for government and contractor personnel at the Air Force's test ranges. The committee is also concerned that Air Force underinvestment will prevent the test ranges from fully meeting the workload projected for the ranges, putting developmental and operational testing of critical programs at risk. Cost growth and potentially insufficiently tested equipment may then be deployed to operational forces given insufficient testing. Therefore, the committee directs the Secretary of the Air Force to work more closely with the Director of the Test Resource Management Center to ensure that Air Force investment in its test ranges is sufficient to meet the workload requirements of its joint users. The committee recommends an increase of \$20.0 million in PE 65807F to address the shortfall in the Air Force budget request and alleviate the risk to operational users of equipment to be tested.

The committee also notes the importance to preserve the capability to test missiles and their sub-systems, such as sensors and structures, at very high speeds. To support the enhancement of these capabilities the committee recommends an increase of \$5.0 million for upgrades to the high speed test track at Holloman Air Force Base.

#### **Multi-platform radar technology insertion program**

The budget request included \$140.7 million in PE 27581F for research and development projects for the E-8 joint surveillance target attack radar system (JSTARS).

The cancelled E-10 aircraft program was supposed to be a test bed for the multi-platform radar technology insertion program (MP-RTIP). The Air Force, however, intends to field this MP-RTIP sensor suite on a number of other air vehicles, including the Global Hawk unmanned aerial vehicle (UAV).

The committee believes that the Air Force should pursue another path, whether that would be the E-8 JSTARS or some other platform, and field the better capability than can be achieved with the Global Hawk. Therefore, the committee recommends an increase of \$92.0 million in PE 27581F for maturing the MP-RTIP sensor suite.

### **Wide-area airborne surveillance**

The budget request included \$46.0 million in PE 35206F for Research, Development, Test, and Evaluation (RDT&E) of the Gorgon Stare wide-area airborne surveillance system (WAAS); \$19.9 million in Aircraft Procurement Air Force, Line 25, and \$13.0 million in Operations and Maintenance, Air Force.

The committee recommends no funds to continue Gorgon Stare development, following the action of the appropriations conference on the fiscal year 2009 supplemental to deny funding for additional quick-reaction capability (QRC) systems. The committee recommends this action for multiple reasons.

WAAS requirements remain murky, despite the fact that the Gorgon Stare program passed through the Joint Requirements Oversight Council (JROC) process. The Air Force and the Marine Corps canceled delivery of five Angel Fire WAAS systems that had already been largely paid for even though the first increment of Gorgon Stare would provide similar performance. If current systems are not useful, there is little point in spending large sums and waiting an additional 1–2 years for a similar capability, even if it is to be deployed on a longer-endurance platform.

Data-driven studies by the Joint Staff, Program Analysis and Evaluation (PA&E), and the Office of the Under Secretary of Defense for Intelligence (USDI), raise serious questions about the utility of moderate resolution wide-area motion imagery. Increasing the resolution of these cameras to the levels that these studies suggest are needed leads to a dramatic reduction in the size of the area imaged. This reduction, in turn, leads to a large increase in the number of orbiting combat air patrols (CAPs), which casts doubt on the affordability of the capability.

Furthermore, the studies referenced above, so far, have not produced sufficient evidence that forensic analysis of moderate-resolution, wide-area motion imagery is productive enough to justify a large investment in sensors and platforms—especially in the absence of effective automated analytic tools.

The committee is also concerned that the Air Force has not demonstrated that it is prepared to optimize its ability to perform the joint WAAS mission. The Air Force insists that the Reaper platform, even when conducting WAAS missions, must carry a large weapons load as well as ancillary sensors, which limits the weight, space and power available for the WAAS sensor.

The committee's recommendation to terminate the Gorgon Stare program does not reflect lack of support for vigorous efforts to de-



termine the potential value of, and requirements for, WAAS motion imagery. The committee fully supports sustaining the Army Constant Hawk program and fully examining the value of forensic analysis based on all sources of geo-referenced intelligence data. The committee urges the Intelligence, Surveillance, and Reconnaissance (ISR) Task Force, the National Geospatial Intelligence Agency's Office of Counterterrorism, the Joint Staff, USDI, PA&E, and the Counter-improvised explosive device(IED) Operations Integration Center (COIC) of the Joint IED Defeat organization (JIEDDO) to rigorously assess the current and potential utility of the analysis of layered geo-referenced intelligence data, including WAAS and ground moving target indicator radar data.

The committee also strongly supports the ISR Task Force recommendation to accept delivery of the Angel Fire WAAS systems, narrow the sensor field of view for higher resolution, and pair the system with high-resolution motion video and other sensors.

These activities should assist the Department of Defense (DOD) in defining WAAS requirements. Meanwhile, DOD should sustain the vibrant WAAS technology industrial base to provide solutions to future QRC and program-of-record initiatives. The committee recommends authorization of \$10.0 million in PE 64400D8Z, Unmanned Systems Common Development, RDT&E Defense-Wide, line 101, for WAAS technology development broadly across the industrial base. The committee also recommends \$5.0 million in the same account to sustain the innovative processing activities planned in the Gorgon Stare program, and to develop automated WAAS motion imagery exploitation tools to support forensic analysis.

#### **Multi-sensor detect, sense, and avoid**

The Department of Defense faces a serious challenge in working with the Federal Aviation Administration to develop capabilities and procedures to enable unmanned aerial vehicles (UAVs) to operate safely within the national airspace. One element of these capabilities is sense and avoid technology for collision avoidance. The committee recommends authorization of \$4.0 million in PE 35219F, for the continued development of multi-sensor detect, sense, and avoid capabilities that will help achieve the goal of permitting UAV pilots/operators to file a flight plan, obtain an air traffic control clearance, and fly in domestic and international airspace.

#### **Joint Space Operation Center System**

The budget request included \$131.3 million for the Joint Space Operation Center (JSpOC) system in Air Force Research, Development, Testing, and Evaluation PE 35614F line 210. This is a new program element that results from a consolidation of several previous separate space situational awareness programs. The JSpOC system is focused on upgrading the ability of the JSpOC to track, monitor, predict, and to respond in real time to events in space. The committee recommends an additional \$6.0 million to continue the Karnac study, which is a joint Air Force and Department of Energy National Laboratory effort to utilize and modify existing capabilities developed to support the nuclear weapons program to im-

prove the JSpOC capabilities, including using nontraditional data and three dimensional modeling and simulation capability.

#### **Biometric signature and passive physiological monitoring**

The budget request included \$6.4 million in PE 91202F for research and development projects for Joint Personnel Recovery Agency, but included no funding to develop personnel identification technologies based on biometric sensors.

Passive biometric sensors show promise as a way of uniquely identifying personnel prior to deploying air rescue and evacuation forces to extract them.

The committee believes that the Department should pursue these technologies to avoid exposing search and rescue forces to needless risk. Therefore, the committee recommends an increase of \$5.0 million in PE 91202F for developing biometric signature and passive physiological monitoring systems.

### **Defense-wide**

#### **Defense Experimental Program to Stimulate Competitive Research**

The budget request included no funding in PE 61114D8Z for the Defense Experimental Program to Stimulate Competitive Research (DEPSCoR). This program was established by Congress to enhance the capabilities of universities in eligible States to perform defense science and engineering research by competitively funding defense basic research programs and investing in research infrastructure. The committee notes that the recent Institute for Defense Analyses' study on DEPSCoR found that the program has led to successful transition of research innovations into Department acquisition programs and operational use. The study also found that participating States have increased the number and value of non-DEPSCoR research awards they have received from the Department of Defense. To support these successes and continue the congressionally mandated program, the committee recommends an increase of \$8.0 million for DEPSCoR.

#### **In-vitro models for bio-defense vaccines**

The budget request included \$59.0 million in PE 61384BP for chemical and biological defense basic research, but included no funds for development of lung models to improve vaccine development. The committee recommends an increase of \$2.0 million in PE 61384BP for development of an in-vitro lung model to support bio-defense vaccines against aerosolized pathogens. This research will improve understanding of the interaction between human lung immune cells and aerosolized biological agents, thus improving the effectiveness of future vaccines.

#### **Information and communications technology**

The budget request included \$282.3 million in PE 62303E for information and communications technology development. The committee recommends a reduction of \$4.5 million for the content distribution program. The committee recommends a reduction of \$7.5 million for the next generation core optical networks program. The

committee is concerned that these activities are not well coordinated with the well funded enterprise services and network communications programs in the military services and the Defense Information Systems Agency.

### **Cognitive computing**

The budget request included \$142.8 million in PE 62304E for development of cognitive computing systems. The committee recommends a reduction of \$25.0 million for cognitive computing activities, including cognitive networking and computer learning programs such as Local Area Network droids, Situation-Aware Protocols in Edge Network Technologies, and Brood of Spectrum Supremacy. The Defense Advanced Research Projects Agency has been funding a number of these efforts in parallel for a number of years with limited transition success. The committee believes that some of these activities are redundant with extensive investments being made in the private sector and have unclear transition pathways to operational systems.

### **Biological decontamination research**

The budget request included \$209.1 million in PE 62384BP for chemical and biological defense applied research. The committee recommends an increase of \$1.0 million in PE 62384BP for research of improved decontamination capabilities against spores of anthrax and *Clostridium difficile*, two agents of considerable concern to the Department of Defense. Such capabilities could be used to improve both protection and treatment of military service members.

### **Chemical and biological infrared detector**

The budget request included \$209.1 million in PE 62384BP for chemical and biological defense applied research, but included no funds to develop miniaturized infrared detection technology. The committee recommends an increase of \$3.0 million in PE 62384BP to continue development and miniaturization of an advanced infrared detection system for chemical and biological agents. The objective is to demonstrate a functional prototype that operates at high speed and sensitivity with low false alarm rates. Such a system could reduce the logistical burden compared to other technologies.

### **Funding for meritorious bio-defense projects**

The budget request included \$209.1 million in PE 62384BP for chemical and biological defense applied research, including \$21.0 million for the Transformational Medical Technologies Initiative (TMTI) program. The TMTI program is intended to develop new technologies to reduce risk from the likely emergence of genetically engineered or manipulated biological agents. A recent Broad Agency Announcement for the TMTI program stated that “the Government reserves the right to create and maintain a reserve list of proposals for potential funding, in the event that sufficient funding becomes available.” The committee is aware that there are eight such proposed TMTI projects that have been judged meritorious of funding, for a total of \$9.9 million. The committee believes that it is important for the Department to acknowledge when there are

proposed projects that would advance our military capabilities if funding were available, and encourages the Department to make this information known to the congressional defense committees, to help guide an assessment of the adequacy of resources and in the authorization of new investment activities.

The committee recommends an increase of \$9.9 million in PE 62384BP for the eight proposals that have been judged by the Department to be meritorious of funding, if funding becomes available.

#### **Tactical technology**

The budget request included \$276.1 million in PE 62702E for applied research on tactical technologies. The committee recommends a reduction of \$3.0 million from this account to delay the Submersible Aircraft new start program. The committee further recommends a reduction of \$10.0 million from the Extreme Accuracy Tasked Ordnance program. The committee believes that there are higher priority Army technologies on which the Defense Advanced Research Projects Agency and the Army could be collaborating.

#### **Blast mitigation and protection**

The budget request included \$219.1 million in PE 62718BR for the development of technologies to defeat weapons of mass destruction. The committee recommends an increase of \$2.0 million in PE 62718BR to continue blast mitigation and protection analysis and software development to improve the Vulnerability Assessment and Protection Option analytic tool used by the Defense Threat Reduction Agency to predict the effects of high-explosive blasts on buildings, and to design protection and mitigation options for military and government facilities.

#### **Combating terrorism technologies**

The budget request included \$81.9 million in PE 63122D8Z for combating terrorism technology support. The committee notes that urgent operational need statements have called for improved intelligence, reconnaissance, and surveillance tools. To support efforts to fulfill these operational needs, the committee recommends an increase of \$3.5 million for advanced reconnaissance and data exploitation systems. In order to support the development of advanced blast resistant construction materials and buildings, the committee recommends an increase of \$2.5 million for impact and blast loading laboratory testing technologies.

#### **Advanced aerospace systems**

The budget request included \$338.4 million in PE 63286E for advanced aerospace systems. The committee recommends a reduction of \$4.0 million for the Heliplane program. The committee recommends a reduction of \$5.0 million for the Disc-Rotor Compound Helicopter program. The transition pathway for these demonstrator programs to a Service is largely unclear at this time. The committee recommends a reduction of \$7.0 million for the Triple Target Terminator program. The committee believes that there are higher priority threats that can be addressed with technology development

activities than engaging counter air, countering cruise missile, and destroying enemy air defense targets.

### **Integrated Sensor is Structure**

The budget request included \$338.4 million in PE 63286E for Advanced Aerospace Systems. Of that amount, \$180.5 million supports persistent or responsive intelligence, surveillance, and reconnaissance (ISR) programs, including Rapid Eye, Vulture, and Integrated Sensor is Structure (ISIS). The committee notes that the Defense Advanced Research Projects Agency (DARPA), the Office of the Secretary of Defense, and the military departments have numerous persistent or responsive ISR capabilities in development. The committee recommends a decrease in PE 63286E of \$90.0 million for these efforts at DARPA. The committee directs the Director of Defense Research and Engineering, with assistance from the Director of DARPA and the military department science and technology acquisition executives, to review the portfolio of programs across the Department to ensure that the highest priority science and technology challenges in persistent unmanned capability are being addressed with limited available resources.

The committee further recommends a reduction of \$35.0 million in PE 35205F for activities related to the support of the ISIS program. The committee notes that ISIS is a science and technology program and its funding should be derived from such accounts, and also that there is no clear indication of an Air Force transition strategy for the ISIS capability.

### **Joint capability technology demonstrations**

The budget request included \$198.4 million in PE 63648D8Z for Joint Capability Technology Demonstrations (JCTD). The committee recommends a reduction of \$25.0 million from JCTD new starts. The committee is concerned that the JCTD program record of transitioning technologies to operational forces or programs of record is limited. Often, a large investment of resources in a JCTD program results in only the delivery of a limited residual capability to a Service, defense agency, or operational unit, and no formal transition into a program of record or procurement for operational use. The committee believes that limited JCTD resources should be focused on fewer, higher priority concept and technology demonstration and development efforts, which have stronger support and greater cost-share from sponsoring Services or defense agencies, in order to increase the effectiveness of the program.

### **High performance defense manufacturing technology program**

The budget request included \$14.6 million in PE 63680D8Z for manufacturing science and technology programs. In title II, subtitle D of the National Defense Authorization Act for Fiscal Year 2006 (Public Law 109-163), the committee established the High Performance Defense Manufacturing Technology Program to promote the use of information technologies, enhance manufacturing efficiency, undertake technology roadmapping efforts to coordinate research and manufacturing efforts, and to accelerate the dissemination of manufacturing innovations into the defense industrial base.

To continue efforts under the program, the committee recommends an increase of \$10.0 million for the High Performance Defense Manufacturing Technology Program.

#### **Defense Logistics Agency energy research**

The budget request included \$19.0 million in PE 63712S for generic logistics technology demonstrations. The Defense Logistics Agency (DLA) is responsible for acquiring and managing all of the fuel required by the military. The DLA energy readiness research and development program has thrust areas that include research on alternative energy, including fuel cells and the conversion of waste and biomass into fuels. In support of these objectives, the committee recommends an additional: \$4.0 million for biofuels research; \$2.5 million on research on the conversion of biomass into logistics fuels; \$8.0 million to continue the vehicle fuel cell and logistics program; \$3.0 million for development and demonstrations of microgrids at forward operating bases; and \$3.75 million for research on the manufacturing of fuel cells for defense missions.

#### **High performance computing**

The budget request included \$221.3 million in PE 63755D8Z for the high performance computing modernization program. The 2007 report from the President's Council of Advisors on Science and Technology recommended that a plan be developed to support the use of high-end computing assets to conduct long-term research on important national problems. Consistent with that recommendation, the committee recommends an increase of \$3.0 million for research on high performance computational design of novel materials for defense applications.

#### **Deep green**

The budget request included \$293.5 million in PE 63760E for command, control, and communications systems. The committee recommends a reduction of \$10.0 million for the Deep Green program. The program's technologies are intended to transition into Army command and control systems. The committee notes that Army current and future command and control systems, such as the Global Command and Control Systems-Army and the Net Enabled Command Capability, are undergoing significant restructuring, thereby reducing the priority of this research investment.

#### **Small unmanned aerial vehicle detection system**

The budget request included \$243.1 million in PE 63767E for sensor technology development. The committee recommends a reduction of \$7.5 million for the development of the small unmanned aerial vehicle detection system. The committee believes that these funds can be better used addressing high priority threats.

#### **Quick Reaction Fund**

The budget request included \$29.2 million in PE 63826D8Z for the Quick Reaction Fund. The committee recommends a reduction of \$15.0 million for this effort. The committee commends efforts of the Department of Defense to transition promising technologies into programs of record and deploying them into operational use.

The committee is concerned that the funds appropriated for the Quick Reaction Fund have been invested in technologies which are not close to transitioning, as well as to support studies and analyses efforts that are more properly supported by other accounts. Further, the committee is concerned about the lack of coordination between the activities of the Quick Reaction Fund and those of the Services and defense agencies. The Services and defense agencies should be encouraged to leverage the fund in order to accelerate the transition of promising technologies into their programs or into the hands of their operational organizations.

#### **Special warfare situational awareness systems**

The budget request included \$108.0 million in PE 63826D8Z for Quick Reaction Special Projects. The committee supports the Navy's efforts to integrate advanced threat awareness technology into all facets of small craft operations. To continue these efforts, the committee recommends an increase of \$1.8 million for development of integrated situational awareness systems for special warfare missions.

#### **Joint Forces Command activities**

The budget request included \$124.5 million in PE 63828D8Z for joint experimentation. The committee recommends a reduction of \$5.0 million for efforts related to space control and global positioning system experimentation. The committee believes these are redundant to activities underway in both the Air Force and United States Strategic Command.

#### **Lithium ion battery safety research**

The budget request included \$31.7 million in PE 1160402BB for the demonstration and evaluation of advanced technologies that, among other things, enhance the performance of mobility platforms. Lithium ion technology has shown promise for reducing the size of batteries while also improving their performance characteristics. The committee recommends an increase of \$1.6 million for the development of monitoring techniques and battery management systems that will allow early detection and control of impending failures in lithium ion batteries.

#### **Defense Advanced Research Projects Agency execution issues**

The budget request included \$3,248.1 million for the research and management activities of the Defense Advanced Research Projects Agency (DARPA). The committee notes that DARPA has had significant difficulty over the last few fiscal years in executing all of its authorized funds in a timely fashion. The committee also notes that, on average, since fiscal year 2005, DARPA has executed over \$300.0 million less per year than the agency's annual appropriated budget. The funds have either been used as sources for re-programming actions, Congressional rescissions, or have expired. The committee believes that this slow execution of funds reflects a combination of DARPA's program management style and a shortage of program managers within the agency. The committee recommends a reduction of \$150.0 million from DARPA's overall budg-

et to reflect continuing concerns about timely and effective execution of funds by the agency.

#### **Real-time non-specific viral agent detector**

The budget request included \$206.0 million in PE 63884BP for chemical and biological defense advanced component development and prototypes, but included no funds for development of a mobile non-specific viral agent detector. The committee recommends an increase of \$2.0 million in PE 63884BP for development of a mobile real-time non-specific viral agent detector that would improve current detection capabilities. This could be a significant upgrade to the Joint Biological Agent Identification and Diagnostic System.

#### **Airborne infrared surveillance technology**

The budget request included \$636.9 million in PE 63884C for ballistic missile defense sensors. The Missile Defense Agency has initiated an ascent-phase intercept program that will benefit from improved infrared sensor technology. The committee recommends an increase of \$5.0 million in PE 63884C for airborne infrared surveillance technology development to improve the capability for precision tracking data on ballistic missiles, particularly in their ascent phase.

#### **Aegis ballistic missile defense**

The budget request included \$1.7 billion in PE 63892C for research and development of the Aegis Ballistic Missile Defense (BMD) program and its Standard Missile-3 (SM-3) interceptor.

The committee notes with satisfaction that the budget request would increase substantially the planned inventory of SM-3 interceptors, from a previously planned inventory of 147 to 329, and would increase by six the number of Aegis BMD ship conversions. As indicated by Secretary of Defense Robert Gates, this increase in planned capability represents a fundamental shift in focus of the ballistic missile defense program to capabilities for protecting our forward-deployed forces, allies, and other friendly nations against the large number of existing short- and medium-range theater missile threats.

This shift is consistent with the guidance provided by Congress over the last few years and with the findings of the Joint Capabilities Mix studies conducted by the Joint Staff over the last 3 years. Those studies concluded that the Department of Defense was planning to procure fewer than half of the minimum inventory of SM-3 and Terminal High Altitude Area Defense (THAAD) interceptors that would be needed to meet the operational requirements of the regional combatant commanders against existing and expected short- and medium-range missile threats.

In the report to accompany the National Defense Authorization Act for Fiscal Year 2009 (Public Law 110-417), the committee stated the following: "The committee notes that the Joint Capabilities Mix (JCM) study, conducted by the Joint Staff, concluded that U.S. combatant commanders need about twice as many SM-3 and THAAD interceptors as currently planned to meet just their minimum operational requirements for defending against the many hundreds of existing short- and medium-range ballistic missiles.



The committee is deeply disappointed that the Missile Defense Agency (MDA) has not planned or budgeted to acquire more than a fraction of the SM-3 interceptors needed to meet the warfighters' minimum operational needs. The committee believes that achieving at least the JCM levels of upper tier interceptors in a timely manner should be the highest priority for MDA, and expects the Agency to modify its plans and budgets to meet our combatant commanders' current operational needs."

The committee welcomes the shift in focus toward providing effective near-term capabilities against existing regional missile threats, and commends the Department of Defense for this shift.

The budget request would also begin the development of a land-based variant of the SM-3 missile. The committee believes such a capability could provide a significant enhancement to U.S. missile defense capabilities in a number of circumstances. It is being developed, in part, as a relatively low-risk and near-term option as a component of an Israeli upper tier missile defense system, as a risk mitigation path for the possibility that the development of the Arrow-3 interceptor will take longer than planned, or might not achieve technical success. A land-based SM-3 could also provide regional defense capability in Europe and Asia, and could be a crucial element of the ascent-phase/early intercept capability initiative included in the budget request. In this regard, a land-based SM-3 has the potential, if deployed in the European theater, to defend Europe and the United States from a potential future long-range Iranian ballistic missile threat. The committee commends the Department for initiating this land-based SM-3 development effort. The committee sees this program as a high priority, and considers it an item of special interest to the committee.

The budget request of \$1.7 billion in PE 63892C for the Aegis BMD system is nearly \$600.0 million more than the level of funding provided in fiscal year 2009, a 34 percent increase. Although the committee strongly supports the Aegis BMD program, and the Department's shift in focus toward meeting the current needs of the regional combatant commanders against the thousands of existing short- and medium-range ballistic missiles, the committee believes that the proposed level of increased funding will be too high to execute. The committee therefore recommends, without prejudice, a reduction of \$30.0 million to PE 63892C for the Aegis BMD program.

#### **Short-range ballistic missile defense**

The budget request included \$119.7 million in PE 63913C for cooperative U.S.-Israeli missile defense programs, including \$45.8 million for joint development of a short-range ballistic missile defense system known as "David's Sling." This system is intended to defend Israel against short-range missiles and rockets of the type fired from Lebanon. The United States is sharing the development of the system to ensure that it is compatible with U.S. missile defense systems, and to provide an option for the U.S. military to procure the system in the future, if needed. The committee recommends an increase of \$25.0 million in PE 63913C to accelerate the development of the David's Sling short-range ballistic missile defense system.

**Corrosion control research**

The budget request included \$4.9 million in PE 64400D8Z for corrosion programs. In support of Department of Defense efforts to reduce maintenance costs due to corrosion, the committee recommends an additional \$3.5 million in PE 64400D8Z for corrosion research activities.

**Systems engineering and prototyping program**

The budget request included \$19.7 million in PE 64787D8Z for the Joint Systems Integration Command. The committee notes that the budget request is inconsistent with the Department's rhetoric on encouraging systems engineering and prototyping activities. The budget request reduces funding for advanced component development and prototype programs by 12.8 percent (more than \$1.5 billion) relative to the fiscal year 2009 budget request. To encourage more prototyping where warranted and more robust systems engineering activities, the committee recommends an increase of \$50.0 million in PE 64787D8Z to be managed by the Under Secretary of Defense for Acquisition, Technology, and Logistics to initiate the systems engineering and prototyping program established elsewhere in this Act.

**Test and evaluation programs**

The budget request included \$145.1 million in PE 64940D8Z for test and evaluation investments. The 2007 Strategic Plan for Department of Defense Test and Evaluation Resources noted, "Outdated threat missile fly-out models reduced the effectiveness of both active and passive countermeasures testing." To help address this shortfall, the committee recommends an additional \$4.0 million for development of surface-to-air missile hardware simulators.

**Cyber test range**

The budget request included \$50.0 million in PE 35103E for the Cyber Security Initiative. The committee recommends a reduction of \$19.6 million for investment related development of a cyber test range. The committee notes that the Department of Defense is investing in the development of a number of cyber security related developmental and operational test ranges, in addition to currently operating a number of advanced ranges in this area. The committee also notes that the Director of the Test Resource Management Center is currently assessing the Department's overall capabilities for network systems testing, including for cyber security capabilities. The committee believes that the Defense Advanced Research Projects Agency's investment in this area should be limited to developing advanced tools for testing cyber security technologies, and should not expand into the wholesale development of operational test ranges or the management of such capabilities.

**Technology applications for security enhancement**

The budget request for PE 35884L, Research, Development, Test, and Evaluation, for the Defense Intelligence Agency's Intelligence Planning and Review Activities is classified. An effective national bio-security plan must address prevention, preparedness, response, and attribution. The committee recommends an authorization of

\$4.0 million for the Center for the Mitigation of Evolving Threats for research and development of early detection capabilities, impact mitigation, and forensic analysis.

#### **Policy decision point technology**

The budget request included \$24.2 million in PE 33140N for the Information Systems Security Program (ISSP), but no funds for the development of a policy decision point capability for the Navy's Consolidated Afloat Networks and Enterprise Services (CANES).

The secure discovery function of CANES requires a policy decision point capability for access control that cannot be satisfied with available commercial or government-owned technology. The committee recommends an authorization of \$27.7 million for the Navy's ISSP, an increase of \$3.5 million above the request.

#### **Software assurance courseware development**

The budget request included \$408.3 million in PE 33140G for Research, Development, Test, and Evaluation, Defense-Wide, for the Information Systems Security Program, but no funds for the continued development of information assurance instructional materials, curricula, and courseware reflecting best practices for institutes of higher education. Such instructional materials are essential for community colleges, colleges, and universities to educate students to produce secure software to protect government and commercial information systems from attack.

The National Security Agency has conducted this activity at a designated National Center of Academic Excellence in Information Assurance Education for 2 years. An additional \$1.8 million will allow the completion of this capability. Accordingly, the committee recommends an authorization of \$410.1 million, an increase of \$1.8 million above the request.

#### **Policy research, development, test, and evaluation**

The budget request included \$6.9 million in PE 35186D8Z for policy research and development. The committee recommends a reduction of \$6.0 million for this account. The committee is concerned that many of the international cooperation, linguistics, and wargaming activities that are planned for this funding are already being undertaken by other organizations within the Department of Defense, including the United States Joint Forces Command, service laboratories, and defense agencies. Further, the justification materials provided to Congress for the account are unclear and inconsistent. The committee directs that policy research and development activities be more closely coordinated with efforts in research, development, and acquisition programs under the oversight of the Under Secretary of Defense for Acquisition, Technology, and Logistics.

#### **Logistics manufacturing research**

The budget request included \$20.5 million in PE 78011S for Defense Logistics Agency (DLA) manufacturing technology efforts. The DLA Advanced Microcircuit Emulation program develops continuing technical capability for providing military specification equivalent integrated circuits to mitigate electronic parts obsoles-

cence in new and legacy defense systems. To support these efforts, the committee recommends an additional \$4.5 million for micro-circuit emulation efforts.

DLA has a stated research thrust to improve casting procurement processes at its Defense Supply Centers in order to reduce lead times, improve reliability, and strengthen the defense supply chain. To enhance these efforts the committee recommends an additional \$3.0 million for castings research.

The Department of Defense has established a policy of increasing the use of insensitive munitions in all weapons applications. To support the production of these systems, the committee recommends an increase of \$2.5 million for insensitive munitions manufacturing research.

Finally, the committee recommends an additional \$30.0 million to continue the Industrial Base Innovation Fund program. The committee directs that DLA, jointly with the Deputy Undersecretary of Defense for Industrial Policy, continue to make investments in manufacturing research that address defense industrial base shortfalls especially related to surge production requirements and diminishing sources of defense material.

#### **Long endurance unattended ground sensor technologies**

The budget request included \$21.2 million in PE 1160405BB for identification, development, and testing of intelligence equipment for special operators to provide timely exchange of intelligence and threat warning to all organizational echelons. The committee recommends an increase of \$5.0 million for the development of long endurance unattended ground sensor technologies to provide special operators with enhanced situational awareness; target detection, imaging, tagging and tracking; and high bandwidth communication of data, voice, and video.

### **Items of Special Interest**

#### **Ballistic missile defense overview**

The budget request included \$7.8 billion for Missile Defense Agency (MDA) missile defense programs, including research, development, test and evaluation, procurement, and military construction funds. The committee notes a number of positive developments with the ballistic missile defense program of MDA included in the budget request.

The budget request includes a shift in focus on increasing capabilities needed by regional combatant commanders to defend our forward deployed forces, allies, and other friendly nations against the many existing short- and medium-range threats. As announced by Secretary of Defense Robert Gates, the budget would increase funding by \$900.0 million to increase the inventory of Terminal High Altitude Area Defense (THAAD) and Standard Missile-3 (SM-3) interceptors, and to convert an additional six Aegis Ballistic Missile Defense (BMD) ships for deployment in the Atlantic Fleet. In accordance with the budget request, the Department of Defense would plan to increase the SM-3 interceptor inventory from 147 to 329, and increase the THAAD interceptor inventory from 96 to 289. These numbers are consistent with the level of THAAD and SM-

3 interceptors recommended by the Joint Capabilities Mix (JCM) studies conducted by the Joint Staff, and are consistent with the guidance of the committee and Congress.

For the Ground-based Midcourse Defense (GMD) system, the budget request would continue to procure all 44 Ground-Based Interceptors (GBIs), with 14 of them planned for testing and spares. The budget request would cap the deployment of GBIs in Alaska and California at 30, and focus on further development and robust testing to improve the capability of this system to defend against the limited threat to our country from nations such as North Korea and possibly Iran in the future. This decision was supported by the Joint Chiefs of Staff and the relevant combatant commanders. Senior Department of Defense officials explained that the Department conducted an assessment, involving the Joint Chiefs of Staff and the combatant commands, of the long-range missile threat to the United States and determined that, according to Secretary Gates, 30 GBIs “are fully adequate to protect us against a North Korean threat for a number of years.”

The committee welcomes the emphasis on improving the capability of the GMD system, including through robust and operationally realistic testing and evaluation. In December 2008, the Director of Operational Test and Evaluation (DOT&E) reported that “GMD flight testing to date will not support a high degree of confidence in its limited capabilities.” In January 2009, DOT&E issued an annual assessment of the Ballistic Missile Defense System (BMDS), which included a number of concerns about the GMD system. The committee notes that MDA has worked for half a year with DOT&E and the operational test elements of the military departments to establish a comprehensive test and evaluation plan for the BMDS, and expects that plan to be completed by the end of the summer. The committee expects that plan to guide a long-term test plan for GMD, including operationally realistic tests that provide a high degree of confidence in the capability of the system, including its ability to perform its mission for the duration of its operational life. If such testing requires additional interceptors, the committee notes that senior Department officials testified that it would be possible to buy more GBIs in the future if they are needed.

The budget request includes an initiative to develop a new capability for ascent-phase (or early) intercepts, relying on improved use of existing and new sensors and interceptors such as the SM-3, whether on ships or on land. According to senior Department officials, such a capability would allow U.S. forces to engage threat missiles early in their flight, including long-range missiles, thus providing multiple opportunities to destroy the missiles in flight. In the case of long-range threat missiles, such a capability could also permit destruction of the threat missile before the GMD system would be needed to defend the Nation. If the initiative proves successful, such a capability could, if deployed in the European theater, provide defense of Europe and the United States against a potential future long-range missile threat from Iran. The committee supports this initiative, and commends the Department for conceiving of the concept for a cost-effective and operationally effective

system that relies, to a large extent, on existing or near-term technologies.

The committee notes that Secretary of Defense Gates decided to terminate a number of long-term research and development programs for missile defense that had technical, conceptual, cost, or operational problems. These decisions include the termination of the Multiple Kill Vehicle program, the Kinetic Energy Interceptor program, and cancellation of the second Airborne Laser (ABL) aircraft, and shifting the ABL program to a research and development effort. The Director of MDA testified that he recommended these changes, and Secretary Gates' decision was supported by the Joint Chiefs of Staff and the combatant commanders. The committee supports the Secretary's decision.

Finally, the committee notes that MDA has initiated a number of significant acquisition reform initiatives that are consistent with the Weapons System Acquisition Reform Act of 2009 (Public Law 111-124), and are intended to increase the accountability and effectiveness of MDA acquisition programs. The committee welcomes these acquisition initiatives, and believes they are long overdue.

#### **Federally funded research and development centers**

The committee notes that the Department of Defense's federally funded research and development centers (FFRDC) play an important role undertaking studies, analyses, research, and systems engineering projects to support defense missions. The committee believes that the requirement to make use of defense FFRDCs will be increased by the initiatives being undertaken by the Department to reform the acquisition process, and also by the urgent demands for technical and analytic support related to current operations. The committee urges the Department to maintain a stable and consistent investment in defense FFRDCs, including in core programs funded directly by research, development, test, and evaluation appropriations.

#### **Ground/air task oriented radar**

The budget request included \$63.9 million in PE 26313M, Marine Corps Communications Systems, for Research, Development, Test, and Evaluation, for the Ground/Air Task oriented Radar (GATOR). The committee understands that this program is being restructured, and has been designated as an item of special interest by the Under Secretary of Defense for Acquisition, Technology, and Logistics, who will retain milestone decision authority. The committee further understands that the Marine Corps leadership is reviewing the program for affordability and for possible joint development of a mobile ground multi-mode radar capability with the Army. The committee expects to be kept informed as these deliberations progress. In particular, the committee expects to be informed of any decision affecting fiscal year 2010 program plans or budgets prior to conference on the National Defense Authorization Act for Fiscal Year 2010.

#### **Israeli upper tier missile defense**

The budget request included \$119.7 million in PE 63913C for cooperative U.S.-Israeli missile defense programs, including \$37.5

million for joint development of an upper tier interceptor to replace the Arrow-2 interceptor, known as the Arrow-3. The committee supports the joint U.S.-Israeli development of the Arrow-3 interceptor, but is concerned that the program has risks that may take significantly longer to resolve than the timeline envisioned, and not in time to meet Israel's required schedule.

According to the testimony of Lieutenant General Patrick O'Reilly, Director of the Missile Defense Agency, the Arrow-3 development program is "deemed to have very high schedule and technical risk." The Missile Defense Agency is currently negotiating an Upper Tier Project Agreement that is intended to ensure that the Arrow-3 program is managed according to sound acquisition and management principles, including a requirement for accomplishing technology knowledge points according to a schedule.

According to Lieutenant General O'Reilly, to "mitigate the Arrow-3 development schedule risk, we are ensuring that the development of a land-based variant of the proven Aegis SM-3 missile is available to meet Israel's upper tier requirements." The committee agrees with this management and risk mitigation approach, and commends the Department for ensuring there will be a relatively low-risk and near-term upper tier option, based on the operationally effective SM-3, to meet Israel's upper tier missile defense needs in a timely manner. The committee requests that the Missile Defense Agency keep the congressional defense committees apprised of developments in the Israeli upper tier missile defense program, including both the Arrow-3 and land-based SM-3 development programs.

#### **KC-X tanker replacement program**

The committee regards the need to modernize the current fleet of KC-135 aerial refueling tanker aircraft as a vital national security priority and supports the KC-X tanker recapitalization program, as well as efforts by the Air Force both to maintain the existing fleet and augment capability with aerial fee-for-service, if it proves cost-effective under the pending pilot program. Given the troubled history of the program, the committee expects that the Department of Defense will pursue a process of procuring replacement tankers that will ensure that the joint warfighter receives the best capability at the best price. The committee believes that this can only be achieved by an acquisition strategy that does not pre-determine the outcome of the competition and a competition that is fair and open. In addition, the committee believes that, in accordance with the principles of the Weapon Systems Acquisition Reform Act of 2009 (Public Law 111-23) and as a means of improving contractor performance, the Department of Defense must ensure that the acquisition strategy of the KC-X program includes measures that ensure competition, or the option of competition, throughout the life cycle of the program, where appropriate and cost-effective.

#### **Laboratory recapitalization and sustainment issues**

The committee is aware that Department of Defense laboratories have chronically been underfunded for upgrade and modernization requirements that use military construction and facility sustainment funds. The unique mission of Department laboratories

requires an aggressive and proactive investment strategy to support emerging technologies and state-of-the-art systems and equipment. The average rate of investment for recapitalization, as well as for sustainment restoration and modernization (SRM) funding, has been appreciably below industry standards and other governmental laboratories, despite special authorities provided by Congress in recent years to use Research, Development, Testing, and Evaluation funds for military construction activities at higher thresholds than other types of facilities. In addition, the committee is concerned that the military departments do not have processes in place to obtain quantitative data to assess the overall ability of the laboratory infrastructure to support existing missions and emerging requirements.

Therefore, the committee directs the Secretary of Defense, through the Director of Defense Research and Engineering and the Deputy Under Secretary of Defense for Installations and Environment, to report to the congressional defense committees, not later than 180 days after enactment of this Act, on the health of the Department's laboratory infrastructure. The report should include a list and description of unfunded laboratory military construction and major repair projects for the Army, Navy, and Air Force research labs, including the Army research, development and engineering command laboratories, corps of engineers laboratory facilities, and naval warfare centers, and an investment plan required to modernize defense laboratories to meet current mission and known future mission requirements, as well as data on funding for military construction projects and SRM at the defense laboratories from fiscal years 2008 and 2009.

#### **Net-Enabled Command Capability**

The committee is deeply disappointed that the Department has been unable to come to grips with ongoing dissent within the Department regarding sorely needed modernization in the area of joint command and control. It is apparent that the Department's management and governance construct for the Net-Enabled Command Capability (NECC) program has delayed the Department's ability to develop and field the next generation of joint command and control capabilities.

Due to the unwillingness of the Services and others to agree to a joint command and control modernization that is centrally managed, the committee directs the termination of the NECC system. The committee directs that any remaining Service NECC funds be moved into their respective Global Command and Control System (GCCS) programs, while the Defense Information Systems Agency (DISA) funding programmed for NECC should be aligned to Global Command and Control System-Joint program.

The committee supports the need for a joint command and control architecture and standards to be used in the development of the Department's command and control modernization effort. The committee further expects the GCCS program to be modernized into a Department-wide joint command and control program and expects the Department to appropriately fund this activity so that it will transform and incorporate the most advanced technologies and capabilities possible. The committee expects that the Services,



DISA, and the Assistant Secretary for Network and Information Integration will jointly work together to determine the best governance and funding structure to achieve these results efficiently and effectively.

#### **Test and evaluation workforce**

The committee directs the Director of the Test Resource Management Center (TRMC) to provide a report to the congressional defense committees within 120 days of enactment of this Act on the extent to which contractor positions in the Major Range and Test Facility Base should be converted to Department of Defense civilian employee positions. The report should identify any actions the military departments and defense agencies plan to take to convert such positions between fiscal year 2010 to fiscal year 2015, including any funding and manpower adjustments needed to make the conversions. The report should also make an assessment of the impact that the conversion process will have on acquisition programs that require the use of affected test facilities. To assist in the development of this report, the committee directs the secretaries of the military departments and the heads of the appropriate defense agencies to provide TRMC with any information required for this report within 90 days of enactment of this Act.

#### **Third Generation Infrared Surveillance**

The budget request included \$143.2 million for Third Generation Infrared Surveillance (3GIRS). The committee supports technology risk reduction and demonstration efforts to develop the next generation infrared capability to enable the Air Force to launch a successor to the Spaced-based Infrared Satellite (SBIRS) when needed. At the same time the committee recognizes that the program of record, SBIRS, continues to struggle. While the first two highly elliptical orbit sensors are on orbit and are performing the first of the geosynchronous earth orbit (GEO), SBIRS has slipped yet another year due to continuing software issues. The committee urges the Air Force to continue to improve the wide field of view focal plane array technology, including the digital focal plane arrays, so that when the technology is sufficiently mature the Air Force can make the transition to a less costly, more capable infrared satellite system. The committee notes that the plan for next-generation overhead persistent infrared architecture is due to Congress in July 2009.



## **TITLE III—OPERATION AND MAINTENANCE**

### **Subtitle A—Authorization of Appropriations**

#### **Subtitle B—Environmental Provisions**

##### **Reimbursement of Environmental Protection Agency for certain costs in connection with the former Nansmond Ordnance Depot Site, Suffolk, Virginia (sec. 311)**

The committee recommends a provision that would authorize the Secretary of Defense to pay not more than \$68,623 as the final payment to reimburse the Environmental Protection Agency for costs incurred in overseeing the removal action performed by the Department of Defense under the Defense Environmental Restoration Program for ordnance and explosive safety hazards at the Former Nansmond Ordnance Depot Site, Suffolk, Virginia.

#### **Subtitle C—Workplace and Depot Issues**

##### **Modification of authority for Army industrial facilities to engage in cooperative activities with non-Army entities (sec. 321)**

The committee recommends a provision to clarify the authority for the Army to enter into cooperative agreements with non-Army entities.

##### **Improvement of inventory management practices (sec. 322)**

The committee recommends a provision that would require the Secretary of Defense to develop a comprehensive plan for improving its inventory management systems with the objective of reducing costs incurred to acquire and store secondary inventory that is excess to requirements.

The Government Accountability Office has recommended that the Department of Defense improve its management of secondary inventory by improving demand forecasting procedures and providing better information to item managers. The military departments have adopted improved spare parts demand forecasting and life cycle cost analysis methodologies for selected programs. The committee encourages the Department to expand these efforts and adopt advanced predictive modeling and simulation methodology that incorporates asset demand-influencing factors such as time, usage, aging of parts, maintenance, and logistics support.

##### **Temporary suspension of authority for public-private competitions (sec. 323)**

The committee recommends a provision that would place a moratorium on the initiation of public-private competitions under Office of Management and Budget Circular A-76 until the Department of

Defense (DOD) implements the requirements of section 2330a of title 10, United States Code.

Section 2330a requires DOD to develop an inventory of activities performed for the Department by service contractors. The required inventory will provide critical information needed for DOD to rationalize its supplier base, develop effective human capital plans, and identify functions that should be considered for public-private competition.

Section 2330a required that the first inventory be submitted to Congress by not later than July 1, 2008. Instead of collecting the data required to meet this requirement, the Department submitted what it called a “prototype inventory list,” consisting of limited data available from existing sources. Further, the Department developed a “phased implementation” plan which does not provide for full compliance until July 1, 2011—a full 3 years after the statutory deadline.

The committee notes that DOD and other federal agencies complied with a requirement imposed by the Federal Activities Inventory Reform Act of 1998 (Public Law 105–270) to inventory functions performed by federal employees within 1 year of the date of enactment. The committee concludes that the Department is capable of producing the inventory required by section 2330a within a comparable period of time.

#### **Extension of Arsenal Support Program Initiative (sec. 324)**

The National Defense Authorization Act for fiscal year 2008 (Public Law 110–181) extended the Arsenal Support Program Initiative (ASPI) for 2 years and is currently set to expire at the end of fiscal year 2010. A report to accompany the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110–417) directed a comprehensive depot study to assess a wide range of manufacturing and depot maintenance activities to include ASPI.

The committee remains concerned regarding the cost savings to the Army and encourages other authorities to be explored which will accomplish the same goals as ASPI.

Accordingly, the committee extends ASPI authority for 1 fiscal year and awaits the findings of the comprehensive depot study.

#### **Modification of date for submittal to Congress of annual report on funding for public and private performance of depot-level maintenance and repair workloads (sec. 325)**

The committee recommends a provision that would modify the date for the report required by section 2466 of title 10, United States Code, as requested by the Department of Defense.

### **Subtitle D—Energy Provisions**

#### **Energy security on Department of Defense installations (sec. 331)**

The committee recommends a provision that would require the Secretary of Defense to develop a comprehensive plan for identifying and addressing areas in which electricity needed to carry out critical missions on Department of Defense installations is vulner-

able to disruption. The provision would: (1) direct the Secretary of Defense to work with federal, State and local regulatory authorities to address areas of vulnerability; and (2) authorize the Secretary to award contracts, grants, or other agreements to reimburse private parties for actions taken to address areas of vulnerability.

**Extension and expansion of reporting requirements regarding Department of Defense energy efficiency programs (sec. 332)**

The committee is concerned that the Department of Defense lacks a comprehensive and organized policy regarding energy. It appears that each service operates irrespective of each other due to lack of Department guidance, resulting in uneven accomplishments with respect to energy efficiencies. The committee recommends a provision that will also gain visibility on installation renewable energy projects, determine if existing funding mechanisms are sufficient, enhance installation energy security, and provide a cost and feasibility response for implementing the recommendations of the 2008 Defense Science Board study “More Fight—Less Fuel”.

**Alternative aviation fuel initiative (sec. 333)**

The committee recommends a provision that would establish goals for the alternative aviation fuel initiative of the Air Force. The provision would also require the submission of reports by the Air Force, the Army, the Navy, and the Defense Science Board.

**Authorization of appropriations for Director of Operational Energy (sec. 334)**

The committee recommends a provision that would authorize funding for the Director of Operational Energy Plans and Programs authorized in the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110–417).

**Subtitle E—Reports**

**Study on Army modularity (sec. 341)**

The committee recommends a provision that would require the Secretary of Defense to contract for an independent study on the current and planned modularity structures of the Army.

Modularity refers to the Army’s fundamental reconfiguration of its force from a large division-based to a brigade-based structure. The new modular brigade combat team (BCT) is intended to have an increased capability to operate independently based upon embedded combat support capabilities such as military intelligence, reconnaissance, and logistics. Although somewhat smaller in size, the new modular brigades are supposed to be just as or more capable than the divisional brigades they replace because they will have a more capable mix of equipment—such as advanced communications, intelligence, and surveillance systems.

At its inception in 2004, the conversion of Army divisional combat brigades to this new modular structure were projected to be accomplished in 3 years, without the need for additional end-strength, and at a cost of \$21 billion. Since then, however, the modularity initiative has grown in scope, duration, and cost.

Through fiscal year 2008, the Army has established over 80 percent of its planned modular units, however, estimates on how long it will take to equip this force as required in authorization documents has slipped from 2011 to 2019.

A June 2009 Congressional Budget Office (CBO) study found that the modularity program has cost more and yielded fewer benefits than were originally estimated. The Army has had to add personnel to support the additional units created within the BCTs. Planned increases in personnel end-strength were unlikely to be sufficient to fully support the force structure of the Army's originally planned growth to 76 brigade combat teams (BCT). For this reason and others, Secretary Gates has announced that Army active component growth would be limited to 45 instead of 48 BCTs. The CBO also found that although modular BCTs might require less time to prepare to respond to an overseas contingency than the divisional brigades they replaced, they require roughly the same amount of time to transport their equipment overseas. Finally, the CBO noted that costs to carry out the initiative have grown beyond the initial estimate of \$21.0 billion and may total more than \$140.0 billion through 2013.

In its November 2008 study of Army modularity, the Government Accountability Office (GAO) observed that the Army is making progress in fielding its modular units but does not have an objective, results oriented, fully funded plan to equip and man this new structure to documented authorization levels. Despite assuming increased modular unit capabilities based on new or soon to be available technologies, Army projections to achieve its aggregate equipping requirements are based partly on the indefinite use of some older equipment. The GAO also found that the Army does not have a comprehensive plan to evaluate the modular force.

The Army argues that they will have completed conversion to the initial modular force by fiscal year 2013 and that plans upon which the conversion is based must be flexible to reflect the changing requirements and timelines of an Army at war. Modular transformation, the Army argues, is a "process" rather than an end-state. The Army must constantly adapt to evolving threats and capture these requirement changes in structure and equipment. The Army uses the Army Force Generation (ARFORGEN) model and equipment substitution to manage the prioritization, fill, and cost of equipment and personnel to modular units. With respect to evaluation of its modular designs, the Army says that initial modeling revealed that modular units would be at least as good as the units it replaced and that comprehensive and continuous evaluations have yielded over 130 design updates since 2004.

The committee is concerned by these wide differences between the CBO, GAO, and Army and their assessments of the analytical basis, performance, and cost of the Army's modular unit transformation. Measureable, stable, and documented requirements and then unit fill for personnel and equipment are a fundamental starting point to an assessment of any unit's readiness and evaluation of its capability to conduct the missions for which it is designed. Modular BCTs have been rotating into and out of Iraq and Afghanistan since 2005. Based on this combat experience, the Army notes it has made over 130 design updates. However, none of these up-

dates appear to challenge or change the core structural design of the modular combat brigade. For example, the heavy and light modular combat brigades each have two maneuver battalions (typically infantry or armor) assigned. Yet many BCT commanders in Iraq or Afghanistan will use the reconnaissance squadron as a third maneuver unit instead of the mission for which it is designed. At a hearing on military land power in March this year, the Subcommittee on Airland received testimony from a former BCT commander in Iraq arguing that the modular heavy and light brigades should add a third maneuver battalion.

The committee notes that unresolved questions about the operational capabilities and personnel and equipment requirements of the Army's modular unit structure makes it difficult to reliably estimate requirements for end-strength and equipment modernization and procurement. Accordingly, the committee believes a comprehensive study by an independent, federally funded research and development center is merited.

## **Budget Items**

### **Army**

#### **Generation III Extended Cold Weather Clothing System**

The budget request included \$730.9 million in Operation and Maintenance, Army (OMA) for land forces readiness, but included no funds for the Generation III Extended Cold Weather Clothing System (ECWCS). The Generation III ECWCS weighs 25 percent less than previous clothing systems, uses 33 percent less space in a soldier's pack, and integrates near infrared technologies into the garments reducing detection at night. The committee recommends an increase of \$8.0 million in OMA for Generation III ECWCS.

#### **Funding for strategic planning and implementation of inter-agency training, education, and research in support of rule of law operations**

The committee recognizes that in current stability operations abroad, training, education, and implementation of methods to support adherence to the rule of law within emerging governmental systems has been a goal assigned the highest priority. Currently, there is no adequate means to facilitate training, research, and collaboration across interagency and non-governmental lines. Designation of a properly qualified and resourced site is quickly needed for the development of strategic plans and updated training in collaborative, rule of law efforts to develop an understanding of potential new, broad-based approaches. Accordingly, the committee authorizes \$0.5 million in Operation and Maintenance, Army, to support strategic planning and interagency training in rule of law efforts.

### **Navy**

#### **Naval aviation depot maintenance**

The budget request included \$35.0 billion for Operation and Maintenance, Navy (OMN) but only \$1.0 billion for aviation maintenance. The Navy identified risk and a shortage in its unfunded requirements for aviation depot maintenance for fiscal year 2010.

The Navy has stated this unfulfilled maintenance requirement is executable. The committee recommends an increase of \$195.0 million in OMN for aviation depot maintenance.

#### **Naval ship depot maintenance**

The budget request included \$35.0 billion for Operation and Maintenance, Navy (OMN) but only \$4.2 billion for ship depot maintenance. The Navy identified risk and unfunded requirements for ship depot maintenance for fiscal year 2010. The Navy has stated this unfunded maintenance requirement is executable. The committee recommends an increase of \$200.0 million in OMN for ship depot maintenance.

#### **Transfer of funding from overseas contingency operations to base budget**

The committee observed that the Navy had to cancel ship maintenance availabilities during the last fiscal year due to a shortage of Operation and Maintenance, Navy (OMN), funding. The committee believes funding needs to be transferred from overseas contingency operations (OCO) funding to the base budget to avoid underfunding ship maintenance in fiscal year 2010. Accordingly, the committee recommends a transfer of \$568.8 million to OMN from the OCO to the base budget.

#### **United States Joint Forces Command National Program for Small Unit Excellence**

The budget request included \$8.75 million in Operation and Maintenance, Navy (OMN) for the creation of the National Program for Small Unit Excellence. The committee is encouraged by the United States Joint Forces Command's (JFCOM) intent to develop a comprehensive approach to small unit excellence by drawing upon academia, lessons learned from Iraq and Afghanistan, and the conferences held to date. However, the committee is concerned that additional steps must first be taken to evaluate small unit training doctrine in order to ensure the most efficient and effective training is developed by the appropriate agencies. The committee believes training standards, established irregular warfare doctrine, and integrated requirements are currently lacking. Additionally, the committee is not yet convinced the Center's focus is not already an established training focus within the individual Services, and that the center may be duplicative rather than complementary.

Accordingly, the committee recommends a decrease of \$7.0 million in OMN and \$3.0 of Other Procurement, Navy for the National Small Unit Center for Excellence. The committee authorizes \$10.0 million in research, development, test, and evaluation for efforts related to the proposed National Program for Small Unit Excellence. The committee directs that none of these funds be used for the establishment of a center. The committee directs that the funds be used by the Commander of JFCOM to invest in initiatives that will support the development of small unit capabilities in the services, and that the priority for funding shall be initiatives that are cost-shared with a service or defense agency.



**Gun depot overhauls**

The budget request included \$448.7 million in Operation and Maintenance, Navy, (OMN) for weapons maintenance, but provided no funds for Mk 45 Mod 5" gun depot overhauls. The committee recommends an increase of \$12.0 million in OMN for Mk 45 Mod 5" gun depot overhauls.

**Naval Strike Air Warfare Center training**

The budget request included \$477.3 million in Operation and Maintenance, Navy (OMN) for specialized skill training, but provided no funds for the Naval Strike Air Warfare Center (NSAWC). Additional funding will provide equipment, survey data, simulator support, range development, curriculum development, and computer technician support to the NSAWC for direct training of joint terminal attack controllers and pilots in support of Operation Enduring Freedom and Operation Iraqi Freedom. The committee recommends an increase of \$850,000 in OMN for the NSAWC.

**Marine Corps****Advanced load bearing equipment**

The budget request included \$730.9 million in Operation and Maintenance, Marine Corps (OMMC) for operational forces, but provided no funds for the advanced load bearing equipment (ALBE). The load bearing system assists marines in carrying large amounts of equipment, ammunition, and weapons needed in training and combat. Increased operational tempo in Afghanistan often causes equipment to wear out faster than anticipated. The ALBE upgrades the load bearing system with more rugged pouches, packs, and slings. The committee recommends an increase of \$3.0 million in OMMC for ALBE.

**Marine Corps shelters**

The budget request included \$730.9 million in Operation and Maintenance, Marine Corps (OMMC) for operational forces, but provided no funds for the Family of Shelters and Tents (FST). The committee recommends an increase of \$3.0 million in OMMC for FST.

**Cold Weather Layering System**

The budget request included \$730.9 million in Operation and Maintenance, Marine Corps (OMMC) for operational forces, but included no funds for the Cold Weather Layering System (CWLS). The CWLS is a unique system, is often consumed by use during a single deployment, and is an urgent operational need in theater. The committee recommends an increase of \$5.0 million in OMMC for CWLS.

**Air Force****Mission essential airfield operations equipment**

The budget request included \$2.8 billion in Operation and Maintenance, Air Force (OMAF) for base operations, but provided no funds for the equipping and replacement of mission essential air-

field operations equipment. The committee recommends a \$3.5 million increase in OMAF to provide mission essential equipment and replacement equipment.

#### **National Security Space Institute**

The committee recommends an increase of \$3.0 million for the National Security Space Institute (NSSI) in Operation and Maintenance, Air Force (OMAF), line 090. The committee supports the National Security Space Institute as the center for space professional and educational training for all the military services. Currently the NSSI is not able to accommodate all those who need to take these classes. The committee is also concerned that the joint focus of the space education might be lost as a result of the recent decision to split up the NSSI. The committee directs the Secretary of the Air Force, in consultation with the Secretaries of the other military services, to report back to the committee on the impacts of the division of the NSSI and whether all space training and education requirements are being met. The committee will continue to review the management of the space cadres in each service.

#### **Overstatements of civilian personnel pay requirements**

Analysis performed by the Government Accountability Office based on the services' civilian personnel end strength data as of April 2009, projects that the Department of the Air Force's civilian personnel costs is overstated for fiscal year 2010 by \$588.1 million. Accordingly, the committee recommends a decrease of \$538.1 million in Operation and Maintenance, Air Force for overstatement of civilian personnel pay.

### **Defense-wide**

#### **Readiness and Environmental Protection Initiative**

The budget request included \$36.7 million in Operation and Maintenance, Defense-wide (OMDW) for the Readiness and Environmental Protection Initiative (REPI). This represents a decrease from the \$39.8 million requested for fiscal year 2009.

The committee believes the military departments should continue to pursue the voluntary agreements with other public and private entities as authorized under section 2684a of title 10, United States Code, to prevent the development or use of property that would be incompatible with the mission of an installation, and preserve habitat that is compatible with environmental requirements that might otherwise result in current or anticipated environmental restrictions on military bases.

Since Congress provided the authority in 2003, over 130 projects have been initiated conserving more than 76,000 acres at 53 military installations in 23 states. More can be done to protect important military test and training assets and to preserve the land around installations.

The committee recommends an increase of \$25.0 million in OMDW for REPI and directs that the military departments give priority to projects that benefit critical mission training sites that

have the greatest potential to prevent or reduce encroachment through the creation of compatible use buffer zones.

### **Authorization of appropriations for Director of Operational Energy**

The committee created the Director of Operational Energy Plans and Programs in the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110–417). The committee therefore authorizes \$5.0 million of Operation and Maintenance, Defense-wide, for the Director of Operational Energy Plans and Programs.

### **Defense readiness reporting system**

The budget request included \$7.4 million in Operation and Maintenance, Defense-wide, for the Defense Readiness Reporting System (DRRS). The committee recommends an increase of \$5.0 million for the acceleration of the development and deployment of DRRS. The committee remains aware of the challenges associated with the accurate, reliable, timely measurement, and reporting of the readiness of military forces. The current readiness reporting system, Global Status of Resources and Training System (GSORTS), is inadequate to meet the demands of the force rotation strategy that supports operations in Iraq, Afghanistan, and around the world. The Department of Defense (DOD), Joint Staff, and the United States Joint Forces Command continue to lack the visibility of deployed and non-deployed forces' capabilities and readiness required to manage global military commitments.

In June 2002, DOD issued a directive establishing the DRRS, a capabilities-based, adaptive, near-term readiness reporting system. The directive requires all components to align their readiness reporting processes with DRRS. Since then, we understand DOD and the services have taken a number of steps but that DRRS is not yet fully operational and aligned with the services' reporting processes.

The committee supports the Department's development of DRRS as an important management modernization and replacement for GSORTS. However, the Government Accountability Office (GAO) reports that significant shortfalls remain in the implementation of DRRS, stability of requirements, adequacy of testing, and overall management and oversight of the program. The committee remains concerned that the Department has yet to successfully plan, organize, resource, execute tests, and full deployment for DRRS within the Global Command and Control System.

Additionally, the committee is aware that GAO has not reported the technology readiness of DRRS. Accordingly, the committee directs the Director of Defense Research and Engineering, in conjunction with the Assistant Secretary of Defense (Networks & Information Integration) and the Office of the Secretary of Defense, Personnel & Readiness, to jointly undertake a review of the technological maturity of the critical technology elements and systems integration issues related to DRRS. A report to the defense committees shall be delivered no later than 120 days after enactment of this act.

**Commercial imagery acquisition**

The budget request included classified amounts in Operation and Maintenance, Defense-wide, in the National Geospatial Intelligence Agency budget to initiate the competitive acquisition through the commercial data providers (CDPs) of the equivalent capacity of two 1.1-meter electro-optical (EO) imaging satellites to augment the capacity currently under contract. This decision was made because the Department of Defense (DOD) wants to ensure that at least moderate resolution EO capability is available to the warfighter from multiple satellites with minimum risk. In deliberations within the administration on the broad national and defense reconnaissance architecture, DOD had proposed building satellites with 1.5-meter apertures, on the grounds that these would be adequate to meet DOD needs, would be more affordable, and, by buying more of them, would be more survivable and sustainable from a space protection and industrial base perspective.

The Secretary of Defense recently testified to the Senate that the Department made the decision to acquire more 1.1-meter imagery rather than higher quality 1.5-meter imagery due to concerns about schedule and technology risk with the “upper tier” of capability that the Director of National Intelligence recently decided to acquire. After careful consideration of the schedule and risks involved, the committee concludes that DOD can prudently substitute one 1.5-meter commercial-class satellite for one of the 1.1-meter satellite equivalents proposed in the budget request.

The committee believes that it is within the capacity of the commercial imagery industry to produce one or more 1.5-meter satellites before the period of risk identified by the Secretary. The committee believes furthermore that, by acquiring the capability of a 1.5-meter satellite, DOD will substantially reduce the consequences to the Nation in the event that the schedule and technical risks identified by the Secretary are realized.

The committee, therefore, directs the Director of the National Geospatial Intelligence Agency to competitively acquire the equivalent capacity of at least one 1.5-meter commercial imagery satellite on a schedule keyed to the risks identified by the Secretary. The committee will leave it to DOD to decide whether to buy the satellite outright or to acquire capacity through the CDPs. The committee recommends, however, that DOD operate the acquired satellite or capacity through one or more of the CDPs, on mutually agreeable terms. The committee encourages the Department to structure these commercial imagery acquisitions to minimize cost and technical and schedule risk.

The committee fully supports the administration’s decision to build a secure and responsive tasking, processing, and dissemination capability, enabling for the first time routine use of commercial imagery for time-sensitive operational support and intelligence analysis, as opposed to mapping, charting, and geodesy.

The committee requests that the Secretary of Defense provide to the congressional intelligence and defense committees prior to conference on the National Defense Authorization Act for Fiscal Year 2010 an estimate of any additional funds that may be required to acquire 1.5-meter imagery.

**Department of Defense Education Activity Operation & Maintenance funding**

The amount authorized to be appropriated for the Department of Defense Education Activity Operation and Maintenance account includes the following changes from the budget request. The provisions underlying these changes in funding levels are discussed in greater detail in title V of this committee report.

[Changes in millions of dollars]

Impact aid for schools with military dependent students .....	30.0
Assistance for schools with military students due to rebasing .....	10.0
Impact aid for children with severe disabilities .....	5.0
Military community support for autism .....	5.0
<hr/>	<hr/>
Total .....	50.0

**Undistributed bulk fuel savings**

Analysis performed by the Government Accountability Office shows that the Department of Defense overstated its funding requirements for refined oil for fiscal year 2010 by \$611.0 million, based on updated economic assumptions for the cost of refined oil as of May 2009. Accordingly, the committee recommends a decrease of \$596.2 million in Operation and Maintenance, Defense-wide, undistributed, for fuel savings.

**Software licenses**

The committee recommends a general reduction of \$50.0 million from Operation and Maintenance, Defense-wide, for funds intended for payment of new software license fees. Elsewhere in this report, the committee highlights a number of concerns about the Department's coordination and management of software license purchases, and directs a review of the issue.

**Army Reserve**

**Mobile corrosion protection Army Reserve**

The budget request included \$106.5 million in Operation and Maintenance, Army Reserve (OMAR) for land forces system readiness. The committee recommends an increase of \$3.6 million in OMAR for mobile corrosion protection and abatement.

**Army National Guard**

**Mobile corrosion protection Army National Guard**

The budget request included \$99.7 million in Operation and Maintenance, Army National Guard (OMARNG) for land forces systems readiness activities. The committee recommends an increase of \$3.6 million in OMARNG for mobile corrosion protection and abatement.

**Controlled humidity protection**

The budget request included \$3.3 billion in Operation and Maintenance, Air National Guard (OMANG) for air operations, but provided no funds for controlled humidity protection. The Government Accountability Office has found that the readiness and safety of

military equipment can be severely degraded by corrosion. The Department of Defense spends billions of dollars annually to address corrosion damage that could be avoided with increased prevention and mitigation technology such as controlled humidity protection. The committee recommends an increase of \$2.7 million in OMANG for controlled humidity protection.

### **Unobligated Balances**

#### **Unobligated balances decrease in funding**

The committee is aware that the challenges associated with operations in Iraq and Afghanistan create a difficult fiscal management situation, especially for the Army and Marine Corps. However, the Department of Defense continues to under-execute its Operation and Maintenance (O&M) appropriations for the active and reserve components. According to the Government Accountability Office (GAO), the military departments had \$1.2 billion in average yearly unobligated balances for fiscal years 2004 through 2008.

The committee recalls that 4 years ago the Department began to reduce the O&M portion of its annual funding request and future-years defense program before submission to Congress based, in part, on the GAO analysis of unobligated balances. The Department also underfunds important maintenance and activities in its annual request in anticipation of supplemental appropriations. Whether made available in annual or supplemental appropriations, the Department and services must ensure that taxpayer dollars are appropriately managed to provide the best possible readiness for the force and avoid the expiration of obligating authority. Therefore, the committee recommends a decrease to the Department's O&M accounts, as follows: Operation and Maintenance, Army, \$350.0 million, Operation and Maintenance, Navy, \$150.0 million, Operation and Maintenance, Air Force, \$150.0 million, and Operation and Maintenance, defense wide, \$150.0 million.

### **Items of Special Interest**

#### **Army organizational structure and personnel requirements**

The committee has over the years expressed its concern with the limited dwell time for members of the United States Armed Forces committed to Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF). The committee is especially concerned with the limited dwell time for the soldiers of the Army's active component. In hearing testimony earlier this year before the Subcommittee on Airland, witnesses raised questions about whether or not the Army was appropriately large enough or organized for the types of conflicts in which it is currently engaged or may become engaged in the future.

The Secretary of Defense recently recommended capping the growth of the active Army at 45 Brigade Combat Teams (BCTs), rather than the previously planned goal of 48 BCTs as part of the end strength growth begun in 2007. The Secretary essentially argues that the Army is over-structured and undermanned or that there are more units than there are soldiers to fill them. Rather than increase end strength beyond the 547,400 planned, the Sec-

retary has chosen to limit the growth of unit structure. The committee requires additional information from the Department of Defense in order to more comprehensively assess the manning, readiness, operational implications, and risk of this decision.

The committee therefore directs that the Secretary of the Army, not later than March 1, 2010, shall submit to the congressional defense committees an unclassified report, with a classified annex as appropriate, that provides an analysis, comparison, and projected impacts of limiting the Army's active component to 45 rather than 48 BCTs through 2012. This analysis shall include an assessment of how the decision to keep the Army's active component at 45 combat brigades would impact unit time-deployed to time-at-home ratios for the Army's BCTs, as well as the time-deployed to time-at-home ratios by officer and enlisted grade for the 30 military occupational specialties in highest demand to support OEF and OIF. In making these analyses, the report shall discuss the risks associated with these time-deployed to time-at-home ratios and requirements projections in the event that demand for U.S. forces does not significantly diminish through 2012.

The committee is also concerned that the demand for non-standard units, such as security assistance training teams and headquarters staffs, puts additional stress on standard unit readiness and high demand military skills. Accordingly, the committee directs that the report shall include an analysis and projected impacts of personnel requirements for ad hoc units and individual augmentees through 2012 to meet requirements to support OEF and OIF, including:

- Individual Army augmentees deployed to support staff requirements at higher headquarters echelons such as Multinational Forces-Iraq, Multinational Corps-Iraq, the International Security Assistance Force, U.S. Forces-Afghanistan, and other relevant echelons above brigade of U.S. forces supporting OEF and OIF.
- Specialized organizations that have been created to meet theater-specific requirements in OEF and OIF, such as Task Force ODIN, Multinational Security Transition Assistance Command, Provincial Reconstruction teams, and other ad hoc organizations created for specific theater requirements in OEF and OIF. This would also include units tasked with a security force assistance mission or other non-standard task-organized units such as military transition teams, advisory and assistance brigades, and other units uniquely organized, equipped, trained, and deployed for OEF and OIF.
- The impact on BCTs of junior and mid-grade officer and non-commissioned officers demand to fill ad hoc staff or unit requirements in theater.

Within 30 days of the completion of this report, the Secretary of Defense shall submit to the congressional defense committees a report describing steps that the Department of Defense has taken and plans to implement that will improve the time-deployed to time-at-home ratios for the Army active component.

**Continued assessment of plans for contracting support in combatant command operational plans**

The report to accompany the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110–417) directed the Government Accountability Office (GAO) to conduct an assessment of the implementation of the directives contained in the Chairman of Joint Chiefs of Staff Memorandum 3133.03C. The assessment was to evaluate the contracting support plans for combatant command operations plans as reported in the Quarterly Readiness Report to Congress (QRRC) as required by section 482 of title 10, United States Code.

However, preliminary indications from GAO suggest that combatant command planning related to contracting support for contingency operations has been slow to start and applied unevenly.

The committee continues to believe that contingency plans must have comprehensive, detailed, and realistic contracting support plans that meet the operational requirements of the force before, during, and after combat operations.

The committee directs the Secretary of Defense to include with each QRRC submitted in 2010 and 2011 an identification of the operational plans that require a contracting annex, for which plans the contracting annex has been drafted, and for which plans the contracting annex has been approved.

The GAO assessment, as originally required by the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110–417), is due to congressional defense committees not later than September 30, 2009. The committee extends the deadline to March 30, 2010. The committee expects the Department will cooperate with GAO's review of the contracting annexes of these plans.

**Cost-benefit analysis of depot maintenance workload associated with AV–8B Harrier weapons system**

The committee directs the Secretary of the Navy to submit a report to the Committees on Armed Services of the Senate and the House of Representatives identifying each alternative the Secretary is considering for the performance of AV–8B planned maintenance interval events and concurrent aircraft modifications. The report shall include a justification for the alternative selected or recommended by the Secretary, including a cost-benefit analysis and an explanation of how the alternative is consistent with the requirements of chapter 146 of title 10, United States Code (including the requirement for the Department of Defense to identify and maintain core logistics capabilities).

**Depot-level maintenance and repair**

Depot maintenance is a key part of the total Department of Defense (DOD) logistics system that helps to support the readiness and sustainability of major weapon systems. Section 2466 of title 10, United States Code, states that not more than 50 percent of the funds made available to a military department or defense agency for depot-level maintenance and repair may be used to contract for performance by the private sector.



The Under Secretary of Defense for Acquisition, Technology, and Logistics has explained the Department's interpretation and application of this requirement as follows:

“Although the current section 2460 excludes the procurement of major modifications or upgrades of weapon systems that are designed to improve program performance from the definition of depot maintenance and repair, DOD depot maintenance, repair, and modification of weapon systems are typically done in an integrated manner. Under these circumstances, it is difficult to separately account for and track individual labor elements, although there can be a clear accounting between labor and parts. For this reason, in reporting 50/50 compliance since 1998, DOD has included the installation of all modification and upgrades, while excluding the acquisition of associated parts.”

The committee directs the Department to coordinate with the committee before implementing any significant change to the interpretation and application of the requirements of section 2466.

#### **Pollution Prevention Program**

The committee believes it is important for the Department of Defense and the military departments to continue to pursue pollution prevention strategies and technologies that will further reduce waste streams, protect people and the environment, meet regulatory requirements, and, ultimately, save money in terms of conservation, compliance, and cleanup. The committee notes that the President's budget request includes a substantial decrease in pollution prevention funding in fiscal year 2010 as compared to the previous few years. While some of the costs associated with pollution prevention can be absorbed in the Department's environmental compliance program, and some of the onus for developing pollution prevention strategies can be passed to the acquisition programs through green procurement initiatives, it is important to maintain a robust pollution prevention program that will identify strategies, technologies and techniques, and that maintains clear lines of responsibility and accountability for program management. The committee urges the Department to develop appropriate mechanisms to ensure that the Department: (1) funds pollution prevention projects that are likely to result in significant savings or significantly improve the Department's environmental performance; and (2) can track investments in pollution prevention and the payback from such investments, regardless of the source of funding for such investments.



## TITLE IV—MILITARY PERSONNEL AUTHORIZATIONS

### Subtitle A—Active Forces

#### End strengths for active forces (sec. 401)

The committee recommends a provision that would authorize active-duty end strengths for fiscal year 2010, as shown below:

	Fiscal year		
	2009 authorization	2010 request	2010 recommendation
Army .....	532,400	547,400	547,400
Navy .....	326,323	328,800	328,800
Marine Corps .....	194,000	202,100	202,100
Air Force .....	317,050	331,700	331,700

The Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110–417) authorized an active-duty end strength for the Army of 532,400 and for the Marine Corps of 194,000. Additional authority was provided in section 403 of the National Defense Authorization Act for Fiscal 2008 (Public Law 110–181) to increase active-duty end strength for fiscal years 2009 and 2010 to 547,400 for the Army and 202,000 for the Marine Corps.

The committee has supported the growth in the Army and Marine Corps over the past several years, and commends those services for achieving their planned growth almost 3 years ahead of schedule. With demand for forces unlikely to lessen in 2010, the higher end strengths are essential, especially in view of the growing number of individuals who are unable to deploy due to injuries, disease, or for other reasons. The committee remains concerned about the level of stress on the force that repeated and lengthy deployments are causing. In recent years, all of the services have seen their suicide rates increase, and the Army in particular has seen a troubling rise in the number of suicides this year. Meanwhile, the Secretary of Defense announced that the Army will cease its use of stop-loss by January 2010. While the committee applauds this change in policy, it recognizes that additional personnel may be required to continue to ensure the cohesiveness and readiness of units preparing to deploy. The active component dwell time target of 2 years home for each year deployed is still not being met, even with the increased forces. The committee urges the Department of Defense to implement personnel policies that will improve dwell time and the quality-of-life of military members and their families.

Meanwhile, the Air Force and the Navy have been reducing their active-duty end strengths in recent years. Both services announced this year a halt to the planned decline of the size of their active forces, and the Administration's 2010 budget submission reflects

this decision. The committee supports the higher end strengths of the Air Force and Navy requested in the budget that more accurately reflect what those services require to accomplish their missions.

The committee supports the Administration’s request and recommends active-duty end strengths for fiscal year 2010 for the Army of 547,400, the Marine Corps of 202,100, the Navy of 328,800, and the Air Force of 331,700.

**Additional authority for increases of Army active duty end strengths for fiscal years 2011 and 2012 (sec. 402)**

The committee recommends a provision that would authorize the Secretary of Defense to increase the Army active-duty end strength by 30,000 over 2010 levels in fiscal years 2011 and 2012, provided the Secretary requests the necessary funding in the fiscal year 2011 and 2012 budget requests.

**Subtitle B—Reserve Forces**

**End strengths for Selected Reserve (sec. 411)**

The committee recommends a provision that would authorize Selected Reserve end strengths for fiscal year 2010, as shown below:

	Fiscal year		
	2009 authorization	2010 request	2010 recommendation
The Army National Guard of the United States .....	352,600	358,200	358,200
The Army Reserve .....	205,000	205,000	205,000
The Navy Reserve .....	66,700	65,500	65,500
The Marine Corps Reserve .....	39,600	39,600	39,600
The Air National Guard of the United States .....	106,756	106,700	106,700
The Air Force Reserve .....	67,400	69,500	69,500
The Coast Guard Reserve .....	10,000	10,000	10,000

**End strengths for Reserves on active duty in support of the Reserves (sec. 412)**

The committee recommends a provision that would authorize full-time support end strengths for fiscal year 2010, as shown below:

	Fiscal year		
	2009 authorization	2010 request	2010 recommendation
The Army National Guard of the United States .....	32,060	32,060	32,060
The Army Reserve .....	16,170	16,261	16,261
The Navy Reserve .....	11,099	10,818	10,818
The Marine Corps Reserve .....	2,261	2,261	2,261
The Air National Guard of the United States .....	14,360	14,555	14,555
The Air Force Reserve .....	2,733	2,896	2,896

The committee recommends Active Guard and Reserve end strength increases of 91 in the Army Reserve, 195 in the Air National Guard, and 163 in the Air Force Reserve over levels approved for fiscal year 2009. The committee supports increases in full-time support manning consistent with requested levels to increase readiness in the reserve components.

The committee also recommends a decrease of 281 from the fiscal year 2009 level in the Navy Reserve, consistent with reductions in the overall Navy Reserve end strength. The committee recommends end strengths for the Army National Guard and the Marine Corps Reserve equal to the fiscal year 2009 level, consistent with the budget request.

**End strengths for military technicians (dual status) (sec. 413)**

The committee recommends a provision that would authorize end strengths for military technicians (dual status) for fiscal year 2010, as shown below:

	Fiscal year		
	2009 authorization	2010 request	2010 recommendation
The Army Reserve .....	8,395	8,154	8,395
The Army National Guard of the United States .....	27,210	26,901	27,210
The Air Force Reserve .....	10,003	10,417	10,417
The Air National Guard of the United States .....	22,452	22,313	22,313

**Fiscal year 2010 limitation on number of non-dual status technicians (sec. 414)**

The committee recommends a provision that would establish limits on the number of non-dual status technicians who may be employed in the Department of Defense as of September 30, 2010, as shown below:

	Fiscal year		
	2009 authorization	2010 request	2010 recommendation
The Army National Guard of the United States .....	1,600	2,500	1,600
The Air National Guard of the United States .....	350	350	350
The Army Reserve .....	595	836	595
The Air Force Reserve .....	90	90	90

**Maximum number of Reserve personnel authorized to be on active duty for operational support (sec. 415)**

The committee recommends a provision that would establish limits on the number of Reserve personnel authorized to be on active duty for operational support under section 115(b) of title 10, United States Code, as of September 30, 2010, as shown below:

	Fiscal year		
	2009 authorization	2010 request	2010 recommendation
The Army National Guard of the United States .....	17,000	17,000	17,000
The Army Reserve .....	13,000	13,000	13,000
The Navy Reserve .....	6,200	6,200	6,200
The Marine Corps Reserve .....	3,000	3,000	3,000
The Air National Guard of the United States .....	16,000	16,000	16,000
The Air Force Reserve .....	14,000	14,000	14,000

**Report on trainee account for the Army National Guard  
(sec. 416)**

The committee recommends a provision that would require the Secretary of the Army to submit to the congressional defense committees a report assessing the need to establish a trainees, transients, holdees, and students account within the Army National Guard. The report would be due no later than 180 days after the date of enactment of this Act.

**Subtitle C—Authorization of Appropriations**

**Military personnel (sec. 421)**

The committee recommends a provision that would authorize funds to be appropriated for military personnel accounts of the Department of Defense for fiscal year 2010. The provision would also authorize funds to be contributed to the Medicare-Eligible Retiree Health Fund.

**Budget Item**

**Military personnel funding changes**

The amount authorized to be appropriated for military personnel programs in section 421 of this Act includes the following changes from the budget request:

[Changes in millions of dollars]

Increase in military pay raise .....	350.0
Post-Deployment/Mobilization Respite Absence program .....	59.0
Travel reimbursement for suspended training .....	5.0
Mental health assessments .....	3.0
Substance abuse study .....	1.5
Reduction of unobligated military personnel balances .....	- 818.5
Total .....	- 400.0

## **TITLE V—MILITARY PERSONNEL POLICY**

### **Subtitle A—Officer Personnel Policy**

#### **Modification of limitations on general and flag officers on active duty (sec. 501)**

The committee recommends a provision that would amend sections 525, 526, and 721 of title 10, United States Code, to implement section 506 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110–417) to modify the distribution and authorized end strengths of general and flag officers on active duty.

#### **Revisions to annual report requirement on joint officer management (sec. 502)**

The committee recommends a provision that would amend section 667 of title 10, United States Code, to align the reporting requirement on joint officer management with joint programs and policies of the Department of Defense, and delete the requirements to report on the joint qualifications of critical occupational specialty officers and the analysis of assignments of officers after designation as joint qualified officers.

#### **Grade of Legal Counsel to the Chairman of the Joint Chiefs of Staff (sec. 503)**

The committee recommends a provision that would amend section 156(c) of title 10, United States Code, to require that an officer appointed to serve as Legal Counsel to the Chairman of the Joint Chiefs of Staff be appointed in the regular grade of brigadier general or rear admiral (lower half).

#### **Chief and Deputy Chief of Chaplains of the Air Force (sec. 504)**

The committee recommends a provision that would amend chapter 805 of title 10, United States Code, to establish in statute the positions of Chief and Deputy Chief of Chaplains in the Air Force. The Chief of Chaplains will be appointed in the grade of major general, and the Deputy Chief of Chaplains will be appointed in the grade of brigadier general. Both officers will be appointed for a term of 3 years.

### **Subtitle B—Reserve Component Management**

#### **Report on requirements of the National Guard for non-dual status technicians (sec. 511)**

The committee recommends a provision that would require the Secretary of Defense to submit a report to the Committees on Armed Services of the Senate and House of Representatives regard-

ing the Department's utilization of National Guard non-dual status technicians. The report would be due no later than 180 days after the date of enactment of this Act.

### **Subtitle C—Education and Training**

#### **Grade of commissioned officers in uniformed medical accession programs (sec. 521)**

The committee recommends a provision that would amend sections 2114(b) and 2121(c) of title 10, United States Code, to authorize medical students attending the Uniformed Services University of the Health Sciences and students participating in the armed forces Health Professions Scholarship and Financial Assistance Programs who have prior commissioned service to serve, while on active duty, in pay grade O-1, or in pay grade O-2 if they meet specified promotion criteria prescribed by the service secretary. The provision would also amend section 2004a of title 10, United States Code, to provide that an officer detailed as a student at a medical school would serve on active duty in the same grade with the same entitlement to pay as specified in section 2114(b) of title 10, United States Code.

#### **Expansion of criteria for appointment as member of the Board of Regents of the Uniformed Services University of the Health Sciences (sec. 522)**

The committee recommends a provision that would amend section 2113a(b)(1) of title 10, United States Code, to authorize appointment of individuals with experience in the fields of health care, higher education administration, and public policy as members of the Board of Regents of the Uniformed Services University of the Health Sciences.

#### **Detail of commissioned officers as students at schools of psychology (sec. 523)**

The committee recommends a provision that would amend chapter 101 of title 10, United States Code, to authorize the Secretary of each military department to detail up to 25 commissioned officers each year as students at accredited schools of psychology for training leading to the degree of Doctor of Philosophy in clinical psychology. To be eligible for such training, an officer must agree to serve on active duty for 2 years or in the reserves for three years for each year of training.

The committee recommends this provision in response to testimony of senior military and civilian leaders in the Department of Defense that there is a significant shortfall in military behavioral health personnel.



**Subtitle D—Defense Dependents' Education Matters**

**Continuation of authority to assist local educational agencies that benefit dependents of members of the armed forces and Department of Defense civilian employees (sec. 531)**

The committee recommends a provision that would authorize \$30.0 million in Operation and Maintenance, Defense-wide (OMDW), for continuation of the Department of Defense assistance program to local educational agencies that are impacted by enrollment of dependent children of military members and civilian employees of the Department of Defense. The committee also recommends authorization of \$10.0 million in OMDW, for assistance to local educational agencies with significant changes in enrollment of military and civilian school-aged dependent children due to base closures, force structure changes, or force relocations.

**Impact aid for children with severe disabilities (sec. 532)**

The committee recommends a provision that would authorize \$5.0 million in Operation and Maintenance, Defense-wide, for impact aid payments for children with disabilities under section 8003(d) of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7703(d)), using the formula set forth in section 363 of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (Public Law 106–398), for continuation of the Department of Defense's assistance to local educational agencies that benefit dependents with severe disabilities.

**Two-year extension of authority for assistance to local educational agencies with enrollment changes due to base closures, force structure changes, or force relocations (sec. 533)**

The committee recommends a provision that would amend section 7703b(b)(4) of title 20, United States Code, to extend for 2 years, from September 30, 2010, to September 30, 2012, the authority of the Secretary of Defense to provide financial assistance to local educational agencies with enrollment changes due to base closures, force structure changes, or force relocations.

**Permanent authority for enrollment in defense dependents' education system of dependents of foreign military members assigned to Supreme Headquarters Allied Powers, Europe (sec. 534)**

The committee recommends a provision that would amend section 923a of title 20, United States Code, to make permanent the temporary authority provided to the Secretary of Defense in section 571 of the John Warner National Defense Authorization Act for Fiscal Year 2007 (Public Law 109–364) to enroll on a space-required, tuition-free basis a limited number of dependents of foreign military members who are assigned to the Supreme Headquarters Allied Powers, Europe, in the Department of Defense dependents' education system in Mons, Belgium.

The provision would also provide that the Secretary of Defense, in determining the methodology for the proper number of foreign

students, would do so with the advice and assistance of the geographic combatant commander with jurisdiction over Mons, Belgium.

**Study on options for educational opportunities for dependent children of members of the armed forces who do not attend Department of Defense dependents schools (sec. 535)**

The committee recommends a provision that would require the Secretary of Defense, in consultation with the Secretary of Education, to conduct a study on options for educational opportunities that are, or may be, available for dependent children of members of the armed forces who do not attend Department of Defense dependents' schools when the public elementary and secondary schools are determined to be in need of improvement pursuant to the No Child Left Behind Act of 2001 (Public Law 110–117). The study would examine such options as vouchers, education using the internet, Charter schools, and other options considered appropriate by the Secretary of Defense and Secretary of Education.

**Sense of Senate on the Interstate Compact on Educational Opportunity for Military Children (sec. 536)**

The committee recommends a provision that would express the sense of the Senate to: commend the 21 States that have successfully enacted the Interstate Compact on Educational Opportunity for Military Children; encourage all remaining States to enact the Interstate Compact; recognize the importance of the components of the Interstate Compact, such as improved transfer of educational records; recalculation of grades to consider the weights of different educational institutions; waiver of specific courses required for graduation if similar course work has been satisfactorily completed in another educational institution; recognition of an appointed guardian as a custodial parent while the child's parent or parents are deployed; and express support for States to develop a State Council to help coordinate the participation of local government agencies, local education agencies, and military installations in implementing the Interstate Compact.

The committee notes that the Interstate Compact can help ease the burdens placed on military families by permanent change of station moves, and that military personnel have stated that their children's education is a major factor in overall force readiness.

**Subtitle E—Military Justice and Legal Assistance Matters**

**Independent review of judge advocate requirements of the Department of the Navy (sec. 541)**

The committee recommends a provision that would establish an independent panel to review the judge advocate requirements for the Department of the Navy. The provision would require the Secretary of Defense to appoint a panel of five private citizens to conduct a study of judge advocate responsibilities, assignment and career development policies, and management and organizational practices of the Navy and Marine Corps, with the objective of de-

termining the required number of judge advocates needed to fulfill the Department's legal mission.

The committee has noted with concern the increasing demands being placed upon judge advocates in the Navy and Marine Corps to fulfill critically important wartime legal roles with minimal or no commensurate increases in judge advocate manning or billets. In the Navy, the committee believes that the level of risk associated with "doing more with less" has reached its limit. The committee applauds the Navy's initiative to conduct a Center for Naval Analyses study in 2008 to examine this issue and believes this study will be highly useful to the independent review panel.

The Marine Corps has not conducted a similar study, and the committee expects the independent panel to address Marine Corps manpower requirements issues. The committee has questioned the Marine Corps' decision not to create additional judge advocate billets or increase judge advocate manning as part of its overall growth in active-duty end strength of 27,000 since 2007. The committee is concerned that proposed near-term solutions, such as immediate termination of assignments of judge advocates to career enhancing, non-legal billets, will adversely affect the professional development and promotions of mid-level Marine Corps judge advocates, and urges a more deliberate response.

The committee believes that it is essential for the legal arm of the Navy-Marine Corps team, with the full support of senior line leaders, to work more cooperatively to address the legal requirements for judge advocates in the Department of the Navy. The committee will look to the independent panel, the Secretary of Defense, and Navy leadership to provide positive recommendations and planning for implementation in this regard.

#### **Subtitle F—Military Family Readiness Matters**

##### **Additional members on the Department of Defense Military Family Readiness Council (sec. 551)**

The committee recommends a provision that would amend section 1781a(b)(1) of title 10, United States Code, to mandate the addition of two members to the Department of Defense Military Family Readiness Council. One representative would be from the National Guard, and the other representative would be from a reserve component other than the National Guard. Both representatives would be appointed by the Secretary of Defense.

The committee recognizes the important roles played by members of the Guard and reserve components and their families and believes it is critical that their views be represented on the Council.

##### **Comprehensive plan on prevention, diagnosis, and treatment of substance use disorders and disposition of substance abuse offenders in the armed forces (sec. 552)**

The committee recommends a provision that would require the Secretary of Defense to conduct a comprehensive review of the programs and activities of the Department of Defense for the prevention, diagnosis, and treatment of substance use disorders and the policies of the Department relating to the disposition of substance abuse offenders and to submit a report of this review to the Com-

mittees on Armed Services of the Senate and the House of Representatives not later than 180 days after the date of enactment of this Act. After completion of this review, the provision would require a study by an independent entity on substance use disorder programs for members of the armed forces. The provision would also require the Secretary of Defense to submit a comprehensive plan to improve these programs, activities, and policies to the Committees on Armed Services of the Senate and the House of Representatives not later than 270 days after the date of enactment of this Act.

**Military community support for children with autism and their families (sec. 553)**

The committee recommends a provision that would require the Secretary of Defense to develop and implement a policy and program to provide broad-based community support to military children with autism and their families. The provision would also require the Secretary to conduct one or more pilot projects to evaluate the effectiveness of various programmatic approaches that include research, early intervention, evidence-based therapeutic services, education and training for family members, coordination with local educational programs, vocational training, and family counseling.

The committee expects this program to be carried out by the Deputy Under Secretary of Defense for Military Community and Family Policy, in collaboration with the Assistant Secretary of Defense for Health Affairs. The intent of this provision is to provide a broad base of support services to military families who face the challenge of meeting the needs of family members with autism. Medical and therapeutic services available under TRICARE represent an important part of that support, but families' needs are even greater.

To further this effort to increase military community support for children with autism and their families, the committee expects the Assistant Secretary of Defense for Health Affairs to ensure that military and civilian health care providers have access to current information on evidence-based practices for early diagnosis and treatment of autism spectrum disorders, to enable families to receive diagnoses and begin therapy, treatment, and education elements as early as possible.

**Reports on effects of deployments on military children and the availability of mental health care and counseling services for military children (sec. 554)**

The committee recommends a provision that would require the Secretary of Defense to undertake a comprehensive assessment of the impacts of military deployment on dependent children of service members, to include separate assessments on preschool-age children, elementary-school age children, and teenage or adolescent children. The Secretary would be required to submit a report of the findings and recommendations stemming from the assessment to the Committees on Armed Services of the Senate and the House of Representatives not later than 1 year after the date of enactment of this Act.

The committee notes that to date, the Department of Defense has not conducted a comprehensive assessment of the impacts of deployments on military children, and believes that the Department needs such an assessment in order to create relevant, effective counseling and resiliency programs for military children.

The committee is also concerned that military families cite lack of timely access to health care, and specifically to mental health care, for military children as a major family readiness issue. Therefore, the provision would also require the Secretary to conduct a comprehensive review of the mental health care and counseling services available to children of service members, to include: the access to, quality, and effectiveness of such services in military treatment facilities, family assistance centers, under TRICARE, and in Department of Defense dependents' schools; whether the status of a service member as active duty or reserve affects the access of a military child to such services; and whether and to what extent waiting lists, geographic distance, and other factors may obstruct military childrens' receipt of such services. The Secretary would be required to submit a report on the findings of the review to the Committees on Armed Services of the Senate and the House of Representatives not later than 1 year after the date of enactment of this Act, and to utilize those findings to develop a comprehensive plan to improve access to quality mental health care and counseling services for military children and adolescents.

**Report on child custody litigation involving service of members of the armed forces (sec. 555)**

The committee recommends a provision that would require the Secretary of Defense to submit to the Committees on Armed Services of the Senate and the House of Representatives a report on judicial cases involving child custody disputes in which the service of a deployed or deploying member of the armed forces, active or reserve, was an issue in a child custody dispute.

The committee is aware of concerns that have been raised about the vulnerability of single parent service members who have custody of minor children to litigation by non-custodial parents seeking a change in custody in connection with an operational deployment. The committee believes that comprehensive factual information regarding State courts' actual experience with this issue and an assessment of the scope and nature of this problem is essential before any federal preemption of State legislation would be warranted. This is particularly true in view of the resolution by the American Bar Association issued in February 2009, strongly recommending against federal legislation regulating child custody disputes.

A separate provision contained elsewhere in this Bill would express the sense of the Senate that a properly prepared and coordinated family care plan is necessary for members of the armed forces who have custody of a child pursuant to a court order or separation agreement.

**Sense of Senate on preparation and coordination of family care plans (sec. 556)**

The committee recommends a provision that would express the sense of the Senate that a properly prepared and coordinated family care plan is essential for service members who have custody of a child pursuant to a court order or separation agreement.

A separate provision contained elsewhere in this Bill would require the Secretary of Defense to report to the Committees on Armed Services of the Senate and the House of Representatives on reported cases involving child custody disputes in which the service of a member of the armed forces, active or reserve, was an issue in the child custody dispute.

**Subtitle G—Other Matters**

**Deadline for report on sexual assault in the armed forces by Defense Task Force on Sexual Assault in the Military Services (sec. 571)**

The committee recommends a provision that would amend section 576(e)(1) of the Ronald W. Reagan National Defense Authorization Act for Fiscal year 2005 (Public Law 108–375) to require the Defense Task Force on Sexual Assault in the Military Services to submit its report to the Secretary of Defense and the Secretaries of the Army, Navy, and Air Force not later than December 1, 2009.

Under section 576 of Public Law 108–375, the Defense Task Force on Sexual Harassment and Violence at the Military Service Academies was renamed as the Defense Task Force on Sexual Assault in the Military Services upon completion of its work on June 30, 2005. This renamed task force was required to conduct an examination of matters relating to sexual assault in cases in which members of the armed forces are either victims or commit acts of sexual assault. However, the task force did not initiate this examination until August, 2008, more than 3 years later.

While significant advances have been made by the Department in responding to the problem of sexual assaults in the armed forces, the committee remains concerned about continuing reports of lack of uniformity by the military departments in implementing Department of Defense sexual assault policies, inadequate data collection, and the inability of the Department of Defense to develop standardized reports of incidents of sexual assault which can be used to measure progress.

The committee looks forward to receipt of the report of the Defense Task Force on Sexual Assault in the Military Services and encourages expedited review of the findings and recommendations of this task force and implementation of appropriate recommendations. Further delays in completing this important work must be avoided.

**Clarification of performance policies for military musical units and musicians (sec. 572)**

The committee recommends a provision that would clarify the restrictions on performances in competition with local musicians and the authority of military musical units and musicians to support official events that are funded, in whole or in part, by appropriated

or non-appropriated funds. The provision would also authorize military musical units and musicians to provide musical requirements for official military events, including events held off a military installation, performances that foster cooperative relationships with other nations, and events sponsored by or for a military welfare society.

### **Items of Special Interest**

#### **Alaska Territorial Guard**

In the Department of Defense Appropriations Act, 2001 (Public Law 106–259), Congress appropriately recognized service by Alaska Territorial Guard members during World War II and required that service in the Alaska Territorial Guard be credited toward eligibility for veteran benefits. The committee is aware that the Defense Finance and Accounting Service credited some Alaska Territorial Guard members' service toward retired pay, only to later inform them that the service credit was contrary to law. The committee agrees with the decision of the Secretary of the Army to waive recoupment of amounts erroneously paid, and urges the Secretary to explore other ways to honor and recognize the service of members of the Alaska Territorial Guard.

#### **Cultural and language proficiency**

The committee supports efforts to improve the foreign language and cultural proficiency of our servicemen and women. Reports from the 9/11 Commission and the Government Accountability Office have found that shortages in foreign language and cultural capabilities exist across the U.S. Government. The committee believes it is critical to the missions of the Department's geographic combatant commands and intelligence components that U.S. service members and the Department's civilian employees understand the cultures in which they may operate and are capable of engaging individuals in their native language. As the Department works to increase these skill sets to meet the requirements of current and potential future engagements, the committee urges the Department to consider existing language and cultural curriculum at universities and colleges throughout the Nation as an opportunity to augment existing Department operated programs. The committee directs the Secretary of Defense to submit a report 180 days after the date of enactment of this Act on any plans to leverage these programs in a manner that compliments the Department's organic language and cultural training programs.

#### **Inspector General review of post-trial processes for court-martial record preparation and appellate review within the Department of the Navy**

The committee believes that action is long overdue to analyze and correct longstanding problems with the post-trial processes for preparation of records of courts-martial and for appellate review of court-martial convictions within the Department of the Navy. The United States Court of Appeals for the Armed Forces (C.A.A.F.) in the case of *Toohey v. United States*, 60 M.J. 100 (C.A.A.F. 2004), established standards for assessing whether convicted service mem-

bers had been denied due process under the Fifth Amendment to the Constitution as a result of denial of reasonable appellate processing of their cases. Since then, a succession of Navy and Marine Corps cases, including, but not limited to, *United States v. Jones*, 61 M.J. 80 (C.A.A.F. 2005); *United States v. Allison*, 63 M.J. 365 (C.A.A.F. 2006); *United States v. Moreno*, 63 M.J. 129 (C.A.A.F. 2006); *United States v. Dearing*, 63 M.J. 478 (C.A.A.F. 2006); and, most recently, the unpublished case of *United States v. Foster* have addressed extremely lengthy delays in appellate review. In the *Foster* case, the conviction of a Marine was set aside because his conviction for rape “could not withstand the test for legal and factual sufficiency.” This Marine had been confined for more than 9 years awaiting appellate review of his case. These cases demonstrate that cognizant legal authorities in the Department of the Navy have not taken necessary and appropriate steps to ensure that the resources, command attention, and necessary supervision have been devoted to the task of ensuring that the Navy and Marine Corps post-trial military justice system functions properly in all cases.

The committee recognizes that a series of Navy Judge Advocates General have attempted to overcome the systemic challenges associated with preparing, authenticating, tracking, and forwarding records of trial from numerous commands entrusted with court-martial convening authority and ensuring that the appellate review process comports with all legal standards. The committee is convinced, however, that intervention is needed by departmental civilian and military leaders to definitively resolve these chronic administrative problems and that action should be taken immediately to resolve these issues.

The committee directs the Inspector General of the Department of Defense, in consultation with the Secretary of the Navy, to review the systems, policies, and procedures currently in use to ensure timely and legally sufficient post-trial reviews of courts-martial within the Department of the Navy. The review shall discuss and summarize the history of problems experienced by the Navy and Marine Corps since 1990 in ensuring appropriate appellate review of general and special courts-martial and curative measures.

The principal focus of the review shall be to determine whether the resources dedicated to post-trial processes, the information and tracking systems in use, the applicable procedures and policies, and the monitoring and supervision of actions of participants in the military justice system aimed at ensuring compliance with the procedural requirements of law are adequate to accomplish the requirements for due process of law under the Uniform Code of Military Justice and applicable case law. This review should be provided to the Secretary of the Navy no later than January 1, 2010.

The committee further directs the Secretary of the Navy, in consultation with the Chief of Naval Operations and the Commandant of the Marine Corps, no later than March 1, 2010, to submit to the Committees on Armed Services of the Senate and the House of Representatives a written report on the findings and recommendations of the Department of Defense Inspector General and actions taken or planned to address these findings and recommendations. The Secretary shall include in the report his assessment of the adequacy of (1) the Department of the Navy’s processes and resources



dedicated to affording legally sufficient post-trial review of all Navy and Marine Corps cases, (2) the systems in place to track courts-martial cases, and (3) means to ensure accountability and compliance with the requirements of the Uniform Code of Military Justice and applicable case law.

### **Yellow Ribbon Reintegration Program**

The committee applauds the Department of Defense's request for funding of the Yellow Ribbon Reintegration Program for National Guard and reserve members and their families, as required by section 582 of the National Defense Authorization Act for 2008 (Public Law 110-181), in both the request for supplemental funding for fiscal year 2009 and the base budget request for fiscal year 2010.

The committee seeks assurance that the funds, although requested in multiple component accounts, support robust joint programs that provide reintegration and support services to members and their families regardless of military affiliation. The committee also seeks assurance that required activities are occurring in all phases of the deployment cycle: pre-deployment, deployment, demobilization, and post-deployment-reconstitution.

The committee directs the Secretary of Defense to report to the Committees on Armed Services of the Senate and the House of Representatives not later than October 1, 2009 on the initial implementation of the Yellow Ribbon Reintegration Program in fiscal year 2009 and plans for further implementation in fiscal year 2010.



## **TITLE VI—COMPENSATION AND OTHER PERSONNEL BENEFITS**

### **Subtitle A—Pay and Allowances**

#### **Fiscal year 2010 increase in military basic pay (sec. 601)**

The committee recommends a provision that would authorize a pay raise for members of the uniformed services of 3.4 percent, 0.5 percent above the pay raise recommended in the budget request, to become effective January 1, 2010.

#### **Comptroller General of the United States comparative assessment of military and private-sector pay and benefits (sec. 602)**

The committee recommends a provision that would direct the Comptroller General of the United States to conduct a study comparing military pay and benefits with comparable private-sector pay and benefits. The provision would also direct the Comptroller General to report to the congressional defense committees on the study by no later than April 1, 2010.

The committee remains committed to ensuring that the pay and benefits of military members provide appropriate compensation for military service recognizing the demands on military personnel in wartime and the sacrifices they and their families make. One metric for assessing the sufficiency of pay and benefits is pay comparability between military members and similarly situated private-sector employees, accounting for age, education, and experience. As the military services compete with the private sector for the most talented personnel in the workforce with unique skills and qualifications, military pay and benefits must be at levels necessary to attract and retain outstanding individuals for military service. Over the past 9 years, Congress has significantly enhanced the pay and benefits of military members, and the committee looks to the Comptroller General to provide a pay comparability analysis in light of these enhancements.

#### **Increase in maximum monthly amount of supplemental subsistence allowance for low-income members with dependents (sec. 603)**

The committee recommends a provision that would amend section 402a of title 37, United States Code, to increase the maximum monthly amount of the supplemental subsistence allowance from \$500 to \$1,100 per month. The provision would also require the Secretary of Defense to submit to the congressional defense committees by September 1, 2010, a plan, in consultation with the Secretary of Agriculture, to ensure members of the armed forces and their dependents need not rely on the Supplemental Nutrition As-

sistance Program (SNAP) under chapter 51 of title 7, United States Code, for nutritional assistance.

The committee remains concerned about reports that a number of service members and their dependents still receive assistance under SNAP to meet their basic nutritional needs. The supplemental subsistence allowance was designed to alleviate the need for service members and their households to rely on SNAP. The committee is troubled that the Department and the services do not track members receiving assistance under SNAP, even as the number of members receiving the supplemental subsistence allowance remains low. The committee hopes that the plan submitted under this section will provide a path for eliminating all service members and their households from eligibility for assistance under SNAP.

**Benefits under Post-Deployment/Mobilization Respite Absence program for certain periods before implementation of program (sec. 604)**

The committee recommends a provision that would authorize the service secretaries, under regulations prescribed by the Secretary of Defense, to provide any member or former member of the Armed Forces up to \$200 for each day of administrative absence that such member would have earned between January 19, 2007 and the date of their respective service's implementation of the Post-Deployment/Mobilization Respite Absence program, had the program been implemented during that time. The authority would expire 1 year from the date of enactment.

**Subtitle B—Bonuses and Special and Incentive Pays**

**Extension of certain bonus and special pay authorities for Reserve forces (sec. 611)**

The committee recommends a provision that would extend for 1 year the authority to pay the Selected Reserve reenlistment bonus; the Selected Reserve affiliation or enlistment bonus; the special pay for enlisted members assigned to certain high priority units; the Ready Reserve enlistment bonus for persons without prior service; the Ready Reserve enlistment and reenlistment bonus for persons with prior service; the Selected Reserve enlistment bonus for persons with prior service; and income replacement payments for certain reserve component members.

**Extension of certain bonus and special pay authorities for health care professionals (sec. 612)**

The committee recommends a provision that would extend for 1 year the authority to pay the nurse officer candidate accession bonus; the repayment of education loans for certain health professionals who serve in the Selected Reserve; accession and retention bonuses for psychologists; the accession bonus for registered nurses; incentive special pay for nurse anesthetists; special pay for Selected Reserve health professionals in critically short wartime specialties; the accession bonus for dental officers; the accession bonus for pharmacy officers; the accession bonus for medical officers in critically short wartime specialties; and the accession bonus for dental specialist officers in critically short wartime specialties.

**Extension of special pay and bonus authorities for nuclear officers (sec. 613)**

The committee recommends a provision that would extend for 1 year the authority to pay the special pay for nuclear-qualified officers extending their period of active service; the nuclear career accession bonus; and the nuclear career annual incentive bonus.

**Extension of authorities relating to title 37 consolidated special pay, incentive pay, and bonus authorities (sec. 614)**

The committee recommends a provision that would extend for 1 year the general bonus authority for enlisted members; the general bonus authority for officers; the special bonus and incentive pay authorities for nuclear officers; the special aviation incentive pay and bonus authorities; and the special health professions incentive pay and bonus authorities. The provision would also extend for 1 year the authority to pay hazardous duty pay; assignment pay or special duty pay; the skill incentive pay or proficiency bonus; and the retention bonus for members with critical military skills or assigned to high priority units.

**Extension of authorities relating to payment of other title 37 bonuses and special pays (sec. 615)**

The committee recommends a provision that would extend for 1 year the authority to pay the aviation officer retention bonus; assignment incentive pay; the reenlistment bonus for active members; the enlistment bonus; the accession bonus for new officers in critical skills; the incentive bonus for conversion to military occupational specialty to ease personnel shortage; the incentive bonus for transfer between armed forces; and the accession bonus for officer candidates.

**Extension of authorities relating to payment of referral bonuses (sec. 616)**

The committee recommends a provision that would extend for 1 year the authority to pay the health professions referral bonus and the Army referral bonus under sections 1030 and 3252 of title 10, United States Code, respectively.

**Special compensation for members of the uniformed services with combat-related catastrophic injuries or illnesses requiring assistance in everyday living (sec. 617)**

The committee recommends a provision that would add a new section 439 to title 37, United States Code, to authorize special compensation for members of the uniformed services with combat-related catastrophic injuries or illnesses who have been certified by a licensed physician to be in need of assistance from another person to perform the personal functions required in everyday living. The amount of the special compensation would not exceed the amount of aid and attendance authorized by section 1114(r) of title 38, United States Code.

The committee remains concerned about spouses and other family members who continue to shoulder an extraordinary burden in caring for catastrophically injured service members, many of whom

will survive their injuries but will require a lifetime of special care. Many spouses and family caregivers give up their jobs and careers to care for service members under these circumstances. The special monthly compensation that would be authorized by this section is intended to compensate designated family caregivers for the dedicated time and assistance they provide to catastrophically injured service members. Further, the committee recognizes that caregivers who leave employment to care for a wounded or ill service member may as a result forgo health care coverage, and encourages the secretaries of the military departments to utilize existing legal authority under the Secretarial Designee program to provide urgent medical and dental care for caregivers during any period in which the service member is receiving special compensation authorized by this section.

**Temporary authority for monthly special pay for members of the armed forces subject to continuing active duty or service under stop-loss authorities (sec. 618)**

The committee recommends a provision that would authorize the service secretaries to pay, until June 30, 2011, stop-loss special pay in an amount not to exceed \$500 per month for service members on active-duty whose enlistment or period of obligated service is extended, or whose retirement is suspended, pursuant to sections 123 or 12305 of title 10, United States Code, or any other authority that permits the involuntary extension of an enlistment period or period of obligated service, or the suspension of retirement eligibility.

**Subtitle C—Travel and Transportation Allowances**

**Travel and transportation allowances for designated individuals of wounded, ill, or injured members of the uniformed services for duration of inpatient treatment (sec. 631)**

The committee recommends a provision that would amend section 411h of title 37, United States Code, to authorize travel and transportation allowances for up to three designated individuals to be provided, at government expense, up to three roundtrips in any 60-day period to visit certain wounded, ill, or injured service members for the duration of their inpatient treatment. The provision would also clarify the definition of “seriously injured” to include serious mental disorders.

**Travel and transportation allowances for non-medical attendants of seriously wounded, ill, or injured members of the uniformed services (sec. 632)**

The committee recommends a provision that would add a new section 411h–1 to title 37, United States Code, to authorize travel and transportation allowances for designated non-medical attendants of very seriously wounded, ill, or injured service members.

**Travel and transportation allowances for members of the Reserve components of the armed forces on leave for suspension of training (sec. 633)**

The committee recommends a provision that would add a new section 411k to title 37, United States Code, to authorize travel and transportation allowances for reserve component service members on active duty for more than 30 days to travel from a temporary duty station to their permanent duty station and back again during times when training is suspended at the temporary duty station for a period of 5 days or more under circumstances where training of reserve component members is suspended.

The committee believes that this authority is necessary to provide flexibility to service leaders responsible for mobilization training of reservists when circumstances call for suspension of training for the benefit of all military personnel involved.

**Reimbursement of travel expenses of members of the armed forces on active duty and their dependents for travel for specialty care under exceptional circumstances (sec. 634)**

The committee recommends a provision that would amend section 1074i of title 10, United States Code, to authorize the Secretary of Defense to provide, in exceptional circumstances, reimbursement for the travel expenses of active-duty beneficiaries and their dependents otherwise ineligible for reimbursement.

**Subtitle D—Other Matters**

**Authority to continue provision of incentives after termination of temporary Army authority to provide additional recruitment incentives (sec. 651)**

The committee recommends a provision that would amend subsection (i) of section 681 of the National Defense Authorization Act for Fiscal Year 2006 (Public Law 109–163) to authorize the continuation of payment of a recruitment incentive for 3 years from the date the recruitment incentive is first provided under the temporary Army authority to provide additional recruitment incentives.

**Items of Special Interest**

**Patriot Express**

The committee commends Transportation Command (TRANSCOM) for its continued commitment to the Patriot Express charter flight program. Patriot Express provides a predictable and cost effective travel option for official travel to the United States from overseas locations, and also supports and raises the morale of service members and their dependents by providing space available seats for non-official travel at nominal cost. The committee believes that the program should continue to be run on a cost-neutral basis at the programmatic level, and encourages TRANSCOM to continue to explore ways to improve the program, including by adding routes, that can further improve the service and the morale of serv-

ice members and their dependents while ensuring overall programmatic cost-neutrality.

**Travel for active-duty personnel receiving treatment at Department of Veteran Affairs facilities**

The committee remains committed to ensuring that active-duty service members receive the very best health care available, including receiving care at medical facilities under the control of the Department of Veteran Affairs (VA). The committee strongly urges the Department of Defense to ensure that active-duty service members receiving treatment at VA medical facilities are provided adequate access to care, including necessary transportation, when treatment at a VA facility is required or in the best interests of the service member. The committee believes the Department of Defense is responsible for ensuring injured service members unable to transport themselves receive transportation for medical appointments even when they are receiving care at a VA medical facility.



## TITLE VII—HEALTH CARE PROVISIONS

### Subtitle A—TRICARE Program

#### **TRICARE Standard coverage for certain members of the Retired Reserve, and family members, who are qualified for a non-regular retirement but are not yet age 60 (sec. 701)**

The committee recommends a provision that would add a new section 1076e to chapter 55 of title 10, United States Code, to extend eligibility for TRICARE Standard to members of the Retired Reserve, who are qualified for non-regular retirement but who are not yet age 60 and their dependents. Eligibility would terminate when the member becomes eligible for TRICARE coverage as a retiree at age 60. Members would be responsible for paying a premium equal to the total cost of coverage as determined by the Secretary of Defense based on actual program costs.

#### **Expansion of eligibility of survivors under the TRICARE Dental Program (sec. 702)**

The committee recommends a provision that would amend section 1076a(k)(3) of title 10, United States Code, to expand the eligibility of surviving children under the TRICARE Dental Program. Current law allows survivors to keep this dental coverage for a period of 3 years after the service member's death. The provision would increase the eligibility for surviving dependent children from 3 years to the longer of the following periods: (1) 3 years; (2) until they reach age 21; or (3) until age 23 if the dependent is a full-time student at age 21 and is or was dependent on the member for at least half of their support. The provision would make the dental benefit provided to surviving children consistent with the medical benefit for which they are already eligible.

#### **Constructive eligibility for TRICARE benefits of certain persons otherwise ineligible under retroactive determination of entitlement to Medicare Part A hospital insurance benefits (sec. 703)**

The committee recommends a provision that would amend section 1086(d) of title 10, United States Code, to exempt TRICARE beneficiaries under the age of 65 who become disabled from the requirement to enroll in Medicare Part B for the retroactive months of entitlement to Medicare Part A in order to maintain TRICARE coverage.

Eligible beneficiaries would still be required to enroll in Medicare Part B in order to maintain TRICARE coverage for future months, but would be considered to have coverage under the TRICARE program for the months retroactive to their entitlement to Medicare

Part A. TRICARE would remain the first payer for any claims filed during these retroactive months.

Under current law, if a disabled beneficiary under the age of 65 receives a determination from the Social Security Administration (SSA) that they are retroactively eligible for Medicare Part A, the beneficiary is also awarded eligibility for Medicare Part B in the month of the SSA's determination, unless they opt out. The beneficiary is then given the option to retroactively enroll and pay the applicable premiums for Medicare Part B back to the Medicare Part A effective date in order to obtain an effective Part B eligibility as of the retroactive date. Failure of the eligible TRICARE beneficiary to enroll in and pay the premiums for Medicare Part B retroactively to the Medicare Part A effective date results in loss of TRICARE eligibility as of the Medicare Part A effective date, leaving the beneficiary liable for any health care costs paid by the Department of Defense for care received during the retroactive months.

The committee is concerned that inadequate communication with disabled service members has led to circumstances in which some have lost health care coverage under TRICARE as a result of declining coverage under Medicare Part B. The committee hopes that this provision, coupled with improved communication efforts by the Centers for Medicare and Medicaid Services, the Social Security Administration, and TRICARE will mitigate the risk of any beneficiary opting out of Medicare Part B without a full appreciation of the consequences of such action.

#### **Reform and improvement of the TRICARE program (sec. 704)**

The committee recommends a provision that would require the Department of Defense to initiate a process of reform and improvement of the TRICARE health care system.

The committee is aware that the cost of the Defense Health Program will be a focus of the 2010 Quadrennial Defense Review and believes that such focus is appropriate. However, of greater concern is testimony received from key military and civilian leaders which indicates that satisfaction with TRICARE is declining. Too much attention has been paid to increasing out-of-pocket payments by retirees, and not enough to repairing persistent operational problems that prevent beneficiaries from getting the care that they need, such as the lack of availability of TRICARE providers and cumbersome requirements for preauthorization and referral to specialty care. Moreover, the fundamental goal of TRICARE to maximize use of military hospitals and clinics is not being achieved, as more and more care is being purchased in the private sector. Problems with access to care in both military facilities and from civilian providers needlessly compound the difficulties that military families face during extended periods of deployment.

The committee believes that Department of Defense beneficiaries should receive care that achieves the highest possible levels of quality and access, and that the administration of these benefits should be on a path of continuous improvement.

The intent of this provision is to ensure that the Department's focus is not on cost alone, but also achieves the goals of quality and access so critical to military personnel and their families.

In addition, the committee directs the Department to examine the costs and levels of coverage available to active-duty and reserve members and their families under the TRICARE Dental Program, and to consult with beneficiary organizations on needed improvements to the plan. The Secretary of Defense shall submit a report to the Committees on Armed Services of the Senate and the House of Representatives not later than April 1, 2010 on any prospective changes to coverage under the dental plan, and in particular, coverage for orthodontics.

**Comptroller General of the United States report on implementation of requirements on the relationship between the TRICARE program and employer-sponsored group health plans (sec. 705)**

The committee recommends a provision that requires the Comptroller General to submit a report to the Committees on Armed Services of the Senate and the House of Representatives not later than March 31, 2010, on the implementation of the requirements of section 1097c of title 10, United States Code, relating to the relationship between the TRICARE program and employer-sponsored group health plans.

Section 1097c of title 10, United States Code, prohibits employers or other entities from offering financial or other incentives to retired TRICARE beneficiaries to discourage enrollment in employer-sponsored group health plans. This provision is intended to assess the effectiveness of this prohibition in reducing TRICARE costs.

**Subtitle B—Other Health Care Benefits**

**Mental health assessments for members of the armed forces deployed in connection with a contingency operation (sec. 711)**

The committee recommends a provision that would require the Secretary of Defense to issue guidance for the provision of a person-to-person mental health assessment for each service member deployed in connection with a contingency operation during the 60-day period before deployment, between 90 and 180 days after deployment, and not later than 6 months, 12 months, and 24 months after return from deployment. A mental health assessment would not be required by this provision for service members who are not subjected or exposed to operational risk factors during deployment.

**Enhancement of transitional dental care for members of the reserve components on active duty for more than 30 days in support of a contingency operation (sec. 712)**

The committee recommends a provision that would amend section 1145(a) of title 10, United States Code, to modify the transitional health care benefit for reservists who separate after more than 30 days of active duty in support of a contingency operation, giving them the same priority for dental care in a military treatment facility as an active-duty member.

While dental care is currently authorized under the transitional benefit, the priority for reservists is that of a dependent. In the case of dental care, dependents have access to military dental care only on a space available basis. The provision would address the concern that many who have served in a contingency operation for a year or more have received little or no dental treatment, and ensure that the Department of Defense provides any needed dental care that was not provided during deployment prior to their separation.

### **Subtitle C—Health Care Administration**

#### **Comprehensive policy on pain management by the military health care system (sec. 721)**

The committee recommends a provision that would require the Secretary of Defense to develop and implement a comprehensive policy on pain management.

The committee recognizes that chronic pain, whether as a result of war-related injury or other physical and neurological condition, can significantly impact the quality-of-life of service members and other military health system beneficiaries. Broader access to high quality, evidence-based pain management is needed, based on a comprehensive policy which incorporates standards of care, research, outcome measures, technology, and patient and health care provider education.

The committee expects the Secretary to consult with the Secretary of Veterans Affairs in the development of the policy required by this section and to build on the work of the Surgeon General of the Army's initiative on pain management.

#### **Plan to increase the behavioral health capabilities of the Department of Defense (sec. 722)**

The committee recommends a provision that would require the Secretary of Defense to develop and implement a plan to significantly increase the number of military and civilian behavioral health personnel of the Department of Defense by September 30, 2013. The provision would also require the Secretary to submit to the congressional defense committees not later than 120 days after the date of enactment of this Act, a report setting forth an assessment of the feasibility and advisability of establishing one or more military specialties for officers or enlisted members of the armed forces as counselors with behavioral health expertise.

The committee recommends this provision in response to testimony of senior military and civilian leaders in the Department of Defense that there is a significant shortfall in behavioral health personnel available to meet the mental health care needs of service members and their families. The significant increase in the number of military and civilian behavioral health personnel should be based on a realistic assessment of the actual requirements for such personnel.

**Department of Defense study on management of medications for physically and psychologically wounded members of the armed forces (sec. 723)**

The committee recommends a provision that would require the Secretary of Defense to conduct a study on the management of medications for physically and psychologically wounded service members, and to submit to the Committees on Armed Services of the Senate and the House of Representatives a report on the study by April 1, 2010.

**Subtitle D—Wounded Warrior Matters**

**Report on cognitive rehabilitation for members of the armed forces with traumatic brain injury (sec. 731)**

The committee recommends a provision that would require the Secretary of Defense to submit to the Committees on Armed Services of the Senate and the House of Representatives a report setting forth the evidence to be required from a long-term, integrated study on treatment strategies for cognitive rehabilitation for service members who have sustained traumatic brain injuries (TBI) in order to permit the Department of Defense to determine how receipt of cognitive rehabilitation for TBI of a service member could be reimbursed as a health care benefit.

The committee notes that the Brain Injury Association of America has recognized the benefits of cognitive rehabilitation therapy for brain injuries, and that there is a growing body of scientific evidence to support its efficacy. Additionally, cognitive behavioral therapy is provided by the Department of Veterans Affairs. Because of the potentially large and continuing demand for services for moderate to severe TBI for wounded warriors, research on the evidence necessary for the Department of Defense to determine whether cognitive rehabilitation should be covered under the TRICARE benefit is justified and necessary.

**Department of Defense task force on the care, management, and transition of recovering wounded, ill, and injured members of the armed forces (sec. 732)**

The committee recommends a provision that would require the Secretary of Defense to establish a task force to assess the effectiveness of the policies and programs developed and implemented by the Department of Defense and each of the military departments to assist and support the care, management, and transition of recovering wounded, ill, and injured service members.

The task force would submit a report to the Secretary of Defense on its findings, conclusions, and recommendations, to include identification of ways in which the Department and the services may more effectively address matters relating to the care, management, and transition of wounded warriors, and support for their families. Elements of the report would include review and assessment of: case management; effectiveness of the Interagency Program Office in achieving fully interoperable electronic health records; staffing of wounded warrior transition units; support and assistance to navigate the disability evaluation system; effectiveness of the Senior Oversight Committee; effectiveness of various centers of excellence;

support for family caregivers; availability of vocational training to aid in transition to civilian life; availability of services for traumatic brain injury and post traumatic stress disorder; and overall coordination between the Departments of Defense and Veterans Affairs in these efforts.

The Secretary of Defense would be required to submit the task force report, together with an evaluation of the report, to the Committees on Armed Services of the Senate and the House of Representatives within 90 days after receiving it.

Finally, the provision would require the Secretary of Defense, in consultation with the secretaries of the military departments, to develop a plan to implement the recommendations of the task force and to submit the plan to the Committees on Armed Services of the Senate and the House of Representatives not later than 6 months after receipt of the task force report.

The committee urges the task force to examine the unique characteristics of the United States Special Operations Command's Care Coalition as well as similar programs to identify best practices that can be shared throughout the Department, and to examine the extent to which the Department of Defense, in collaboration with the Department of Veterans Affairs, has established public and private partnerships to assist in the training of medical case management personnel needed to support returning wounded, ill, and injured service members, as noted in Senate Report 110-335 of the National Defense Authorization Act for Fiscal Year 2009.

#### **Items of Special Interest**

##### **Comptroller General study on Department of Defense efforts to minimize and track military service hearing loss**

The committee notes with concern that according to the National Center for Rehabilitative Auditory Research, hearing loss is the single most common individual disability among the veteran population, and tinnitus is the third most common. While the nature of military service can make exposure to excessive noise unavoidable, hearing loss that may result from such exposure is preventable.

Therefore, the committee directs the Comptroller General to conduct a study on Department of Defense (DOD) efforts to minimize and track hearing loss that occurs, or may occur, as a result of military service. The study shall include an assessment of:

(1) DOD efforts to protect service members against disabling hearing loss, including efforts to identify service members' exposure levels; provide service members with hearing loss protection devices and provide the training and oversight of their use; and monitor for potential hearing loss;

(2) DOD efforts to analyze its hearing-related injury and illness data to detect whether, and where, better prevention is needed;

(3) the role of the DOD Hearing Conservation Program in these efforts;

(4) the status of DOD's compliance with section 721 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110-417), which required the Secretary of Defense to establish a center of excellence in the prevention,

diagnosis, mitigation, treatment, and rehabilitation of hearing loss and auditory system injury; and  
(5) the nature and extent of information sharing between DOD and the Department of Veterans Affairs to help inform DOD's hearing loss prevention efforts.

The Comptroller General shall submit a report on the findings of the study to the Committees on Armed Services of the Senate and the House of Representatives not later than September 30, 2010.

### **Continued Department of Defense and military department support for suicide prevention**

At its Subcommittee on Personnel hearing on March 18, 2009, the committee received testimony from senior military leaders from each of the services on efforts to prevent military suicides. The committee commends the leadership of the Department of Defense (DOD) and the military departments for their efforts to increase awareness of the risks of suicide by military members. Despite these efforts, however, rates of military suicide do not appear to be decreasing. The number of soldiers who have committed suicide through May 2009 surpasses the Army's numbers at this same point last year.

The committee understands that it will take time to see results from these programs, but maintains that DOD and the services must intensify their efforts, especially those aimed at reducing the stigma associated with seeking mental health care. Elsewhere in this bill, the committee recommends a provision that would require DOD to substantially increase the number of behavioral health personnel available to treat mental health conditions using both existing and new authority for accession and retention of mental health personnel. The Department must continue to consider and explore new ideas and approaches to prevent military suicides. In doing so, the committee encourages DOD and the services to continue their work with national and other federal partners in order to mitigate this national public health problem.

Congress has been supportive of national suicide prevention efforts for many years, establishing the national Suicide Prevention Resource Center, providing federal funding for youth suicide prevention programs and early intervention, and establishing the National Suicide Prevention Lifeline. A witness from the Department of Health and Human Services (HHS) testified to the Subcommittee on Personnel that the Lifeline is being utilized by veterans and service members alike.

The committee urges DOD and the services to continue to work with these congressionally funded suicide prevention initiatives to assist in their efforts to prevent suicide and suicidal behavior in the military. The committee also encourages continued, and if appropriate, increased, collaboration with other federal agencies engaged in suicide prevention activities, such as the National Institute of Mental Health, the Centers for Disease Control, the Substance Abuse and Mental Health Services Administration of HHS, and the Department of Veterans Affairs.

**Help for wounded, ill, and injured service members**

More than a year ago, Congress enacted changes in law to improve care and support for America's wounded, ill, and injured service members. The Wounded Warrior Act (title XVI of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 110-181)) provided broad new authorities for treatment of and research in traumatic brain injury and post traumatic stress disorder, support for families, and improvements to the decades-old disability evaluation system. The legislation sought to ensure that the Department of Defense (DOD) and the Department of Veterans Affairs (VA) worked collaboratively to support wounded service members in their transition to civilian life.

The committee commends the President and the Secretary of Defense for including funding for wounded warrior programs in the base budget request for fiscal year 2010 and believes that while much progress has been achieved since enactment of the Wounded Warrior Act, more needs to be done.

The committee has received testimony from extraordinary American heroes who have suffered wounds such as multiple amputations and severe traumatic brain injury, and from their spouses. We have learned that multiple programs created to manage health care and benefits for the wounded often lead to frustration for those they are intended to help, and to diffusion of responsibility for results. It is clear that for the seriously ill and injured, the continuum of care remains difficult to navigate, the disability evaluation system remains an intimidating and at times adversarial process, and treatment options for traumatic brain injury, post traumatic stress disorder, and other psychological health conditions remain limited.

Elsewhere in this bill the committee recommends the establishment of a Department of Defense task force to assess the effectiveness of DOD, VA, and service policies and programs now in place to assist and support the wounded. The committee has also recommended legislation requested by the President to provide supplemental income to service members to assist caregivers of seriously injured and ill service members, and to enhance transportation for those supporting wounded warriors, as well as provisions to increase the number of military and civilian behavioral health providers.

The committee expects the DOD/VA Strategic Oversight Committee to immediately address other issues identified by wounded service members and their families:

- (1) Establish performance and accountability standards for warrior transition units;
- (2) Streamline the assignment of case managers so that there is clear accountability and a single point of contact for the complex needs of the seriously ill and injured;
- (3) Provide temporary internship programs for wounded warriors similar to the Operation Warfighter Program in non-federal entities to assist in learning new skills for future civilian employment;
- (4) Ensure equitable access to veterans benefits for seriously injured service members who remain on active duty;



- (5) Expand or combine screening for traumatic brain injury and post traumatic stress disorder prior to deployment;
- (6) Ensure that VA medical facilities have access to electronic medical and demographic data for service members who transition to the VA for care;
- (7) Modernize the antiquated disability evaluation system;
- (8) Increase combat-related medical research and rapidly apply its findings to life-saving diagnosis, treatment, and rehabilitation;
- (9) Rapidly implement the programs and research mandated for the Vision Center of Excellence;
- (10) Examine and make recommendations on means to facilitate in-vitro fertilization services for severely wounded service members, including how such services may fall under Department of Defense regulations implementing section 1631 of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 110–181); and
- (11) Examine the feasibility of ensuring bi-directional sharing between DOD and the VA of clinical information regarding mental health screenings.

The committee directs the Secretary of Defense to report no later than September 30, 2009 on the status of completion of these actions, and to identify any area in which additional legislation would be required in order to effect these or additional improvements in the care, management, and transition of wounded, ill, and injured service members. The committee further directs the Secretary to report by September 30, 2009, on the capabilities for electronic exchange of medical data, identifying each DOD and VA facility that has such capability as of that date and the types of data that are electronically shared.

#### **Report on case management services for TRICARE beneficiaries with severe mental health conditions**

The committee is aware that case managers can play an important role in the coordination of complex medical and dental care for TRICARE beneficiaries. Case management is a feature in public mental health systems, typically involving coordination of client services by a professional case manager to ensure continuity of care and accountability for service provision. The committee recognizes that case management may improve the effectiveness of mental health care in terms of: reduced cost of care; fewer crisis and hospital admissions; reduced length of hospital stay; improved mental health symptoms; better continuity of care from hospitalization to community services; improved ability of patients to function in the community; and increased patient and family satisfaction with care. The committee notes that for behavioral health patients, case management is in many cases not a covered TRICARE benefit.

The committee directs the Secretary of Defense to assess the efficacy and cost of case management services for TRICARE behavioral health clients with serious mental health problems, and to examine such variables as cost of care, crisis and hospital admissions, length of stay for hospitalizations, change in mental health symptoms and functioning, use of community behavioral health services, community service drop-out rate, and patient and family satisfac-

tion with care. The committee directs the Department of Defense to submit a report on this assessment to the Committees on Armed Services of the Senate and the House of Representatives not later than April 1, 2010.

**TITLE VIII—ACQUISITION POLICY, ACQUISITION  
MANAGEMENT, AND RELATED MATTERS**

**Subtitle A—Amendments to General Contracting  
Authorities, Procedures, and Limitations**

**Contract authority for advanced development of prototype  
units (sec. 801)**

The committee recommends a provision that would authorize the Department of Defense (DOD) to include a contract line item or an option to extend a contract for advanced research for a limited period of time, or for the production of a limited number of prototype units. This authority, which was requested by DOD, would provide a temporary “bridge” between the time that a program is no longer eligible to receive science and technology funding and the time that a new contract can be awarded for advanced component development, or production, on the basis of full and open competition.

**Justification and approval of sole-source contracts (sec. 802)**

The committee recommends a provision that prohibits the Department of Defense (DOD) from awarding a sole-source contract for an amount exceeding \$20.0 million, unless the contracting officer has determined in writing that the use of a sole-source contract is in the best interest of DOD and the written justification on which such determination is based has been approved by an appropriate reviewing official.

**Subtitle B—Acquisition Policy and Management**

**Reporting requirements for programs that qualify as both  
major automated information system programs and  
major defense acquisition programs (sec. 811)**

The committee recommends a provision that would give the Department of Defense flexibility to address programs that qualify as both major defense acquisition programs (MDAPs) under chapter 144 of title 10, United States Code, and as major automated information system (MAIS) programs under chapter 144A of title 10, United States Code.

Under the provision recommended by the committee, the Secretary of Defense could designate such a program to be treated only as a MDAP or only as a MAIS program. As a general rule, programs that require the development of customized hardware would be designated as MDAPs, while programs that do not require the development of such hardware would be designated as MAIS programs.

**Funding of Department of Defense Acquisition Workforce Development Fund (sec. 812)**

The committee recommends a provision that would amend the funding mechanism established for the Defense Acquisition Workforce Development Fund (DAWDF) in section 1705 of title 10, United States Code, to: (1) require that credits to the DAWDF be based on amounts expended for contract services from amounts available for operation and maintenance funds; (2) authorize the transfer of certain unobligated balances to the DAWDF, to the extent provided in appropriations Acts; (3) reduce the amount of required credits to the DAWDF by the amount of any direct appropriations or unobligated balances transferred to the DAWDF; (4) make the remittance of amounts to the DAWDF subject to the availability of appropriations for that purpose; and (5) adjust the amounts required to be credited to the DAWDF to reflect the funding requirements of the hiring plan announced by the Secretary of Defense.

**Enhancement of expedited hiring authority for defense acquisition workforce positions (sec. 813)**

The committee recommends a provision that would: (1) clarify the expedited hiring authority for defense acquisition workforce positions enacted in section 833 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110–417), as requested by the Department of Defense; and (2) extend the expedited hiring authority through 2015, to help meet the goal announced by the Secretary of Defense to increase the size of the acquisition workforce by 20,000 government acquisition professionals by 2015.

**Treatment of non-defense agency procurements under joint programs with the Department of Defense under limitations on non-defense agency procurements on behalf of the Department of Defense (sec. 814)**

The committee recommends a provision that would clarify that a contract entered by a non-defense agency for the performance of a joint program conducted to meet the needs of the Department of Defense (DOD) and the non-defense agency shall not be considered a procurement of property or services for the Department of Defense through a non-defense agency, for the purposes of section 801(b) of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 101–181), which limits the authority for such procurements. Section 801(b) of Public Law 101–181 is intended to address DOD use of contracts entered by other agencies to place orders for products or services needed by DOD. It is not intended to address cases in which DOD and another agency engage in joint programs to achieve purposes common to both agencies.

**Comptroller General of the United States report on training of acquisition and audit personnel of the Department of Defense (sec. 815)**

The committee recommends a provision that would require the Comptroller General to report to Congress on the effectiveness of

Department of Defense training for acquisition and audit personnel.

### **Subtitle C—Contractor Matters**

#### **Authority for government support contractors to have access to technical data belonging to prime contractors (sec. 821)**

The committee recommends a provision that would authorize the Department of Defense (DOD) to provide access to technical data delivered under a DOD contract to a support contractor, to enable the support contractor to furnish independent and impartial advice or technical assistance to DOD in support of DOD's management and oversight of the contract. The provision requires the support contractor to make a series of commitments, including exposure to criminal, civil, administrative, and contractual penalties, to ensure that such access is not abused.

#### **Extension and enhancement of authorities on the Commission on Wartime Contracting in Iraq and Afghanistan (sec. 822)**

The committee recommends a provision that would provide a 1-year extension for the Commission on Wartime Contracting in Iraq and Afghanistan, established pursuant to section 841 of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 110–181), in order to achieve expanded review and investigation into wartime contracting consistent with the Commission's charter.

The Commission shall continue to receive administrative support from the Washington Headquarters Service of the Department of Defense and may continue to receive support from other federal agencies to facilitate its work. The Department of Defense is directed to provide support to the Commission, on a non-reimbursable basis, for its investigatory work conducted in combat theaters including travel and lodging.

#### **Prohibition on interrogation of detainees by contractor personnel (sec. 823)**

The committee recommends a provision that would require the Secretary of Defense to issue regulations providing that the interrogation of detainees during or in the aftermath of hostilities is an inherently governmental function that cannot be transferred to private sector contractors. The regulations would become effective 1 year after the date of the enactment of this Act, to provide the Department of Defense time to comply.

The interrogation of detainees entails the exercise of substantial discretion in applying government authority and has frequently had a significant impact on the life and liberty of the individuals questioned. The committee concludes that the conduct of such interrogations is an inherently governmental function that should be performed exclusively by military or civilian employees of the Department.

**Subtitle D—Other Matters****Enhanced authority to acquire products and services produced in Central Asia, Pakistan, and the South Caucasus (sec. 831)**

The committee recommends a provision that would authorize the Secretary of Defense to establish a preference for the acquisition of products and services that are produced in Central Asia, Pakistan, and the South Caucasus. The provision would require that to exercise the authority the Secretary must determine that: (1) the product or service is to be used by military forces, police, or other security personnel of Afghanistan; or (2) the preference is in the U.S. national interest because it is necessary to improve the local market and transportation infrastructure or encourage the states of Central Asia, Pakistan, or the South Caucasus to cooperate in expanding supply routes to Afghanistan, and will not adversely affect U.S. military operations or the U.S. industrial base.

**Small arms production industrial base matters (sec. 832)**

The committee recommends a provision that would require the Secretary of Defense to review the manufacturing capability and capacity of the small arms industrial base and make a determination whether or not to add, modify, or eliminate covered small arms makers or weapons as identified in section 2473 of title 10, United States Code. The provision would also require the Secretary to provide to the congressional defense committees by March 31, 2010 a report on the Department's findings and recommendations.

The committee notes that small arms makers and weapons covered by section 2473 of title 10, United States Code, were based upon a 1994 Army Science Board plan entitled "Preservation of Critical Elements of the Small Arms Industrial Base." The industrial conditions and capabilities related to the manufacture and parts supply for military small arms have strengthened since 1994, meriting a review by the Secretary of Defense.

**Extension of SBIR and STTR programs of the Department of Defense (sec. 833)**

The committee recommends a provision that would extend the authority of the Department of Defense to execute the Small Business Innovation Research (SBIR), Small Business Technology Transfer (STTR), and other associated programs until September 30, 2023. The committee notes that the SBIR and STTR programs have successfully invested in a number of innovative small businesses and funded research and technologies that have contributed significantly to the development and deployment of new military systems and capabilities.

The committee believes that a long-term extension of these programs will provide program stability and enable participants in both the government and the small business community to better plan budgets and programs and enhance overall program effectiveness and efficiency.

**Expansion and permanent authority for small business innovation research commercialization program (sec. 834)**

The committee recommends a provision that would make the Small Business Innovation Research program (SBIR) Commercialization Pilot Program permanent and expand its activities to include the Small Business Technology Transfer program. The committee notes that this program was originally established by section 252 of the National Defense Authorization Act for Fiscal Year 2006 (Public Law 109–163) and has successfully accelerated the transition of a number of SBIR technologies into programs of record and deployed systems.

**Measures to ensure the safety of facilities, infrastructure, and equipment for military operations (sec. 835)**

The committee recommends a provision that would require the Department of Defense (DOD) to establish appropriate safety standards for incorporation into contracts for the construction, installation, repair, maintenance, and operation of expeditionary facilities for use by military or civilian personnel of the Department in current and future military operations overseas.

Over the last 5 years a number of service members have died as a result of faulty electrical wiring in facilities in Iraq. In January 2008, this problem came to the public's attention when a staff sergeant was electrocuted in the shower. Since that time, the committee has learned of extensive problems with electrical wiring in contractor-provided facilities in Iraq. Some of these problems are the result of DOD's failure to conform to a single standard in wiring buildings; some are the result of poor workmanship; and others are the result of the use of flawed pre-war electrical systems.

The Army is working to address these problems by developing a common standard for wiring in U.S. facilities in Iraq; bringing on a new team of inspectors, master electricians, and fire safety specialists to help assess the scope of the problem with existing wiring; and directing the contractor to correct the deficiencies identified.

The committee believes that many of the electrical hazards that the U.S. military has experienced in Iraq could have been avoided if the Department had addressed this issue more systematically from the outset.

**Repeal of requirements relating to the military system essential item breakout list (sec. 836)**

The committee recommends a provision that would repeal section 813 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108–136), which requires the Secretary of Defense to submit an annual report to the congressional defense committees listing essential items, assemblies, and components of military systems and identifying where they are produced. The committee has been unable to identify a purpose for this reporting requirement.

**Defense Science Board report on rare earth materials in the defense supply chain (sec. 837)**

The committee recommends a provision that would require the Defense Science Board to report to Congress on the usage of rare

earth materials in the supply chain of the Department of Defense. The report would address the extent to which weapon systems may become dependent on rare earth materials supplied by sources that could be interrupted.

### **Items of Special Interest**

#### **Contractor reimbursement for environmental remediation costs**

The committee is aware that certain Department of Defense (DOD) contractors are reimbursed for the remediation of environmental damage resulting from Cold-War era programs through indirect cost accounts (such as overhead accounts). The contractors contend that this funding approach results in substantially higher indirect cost rates for some contractors than for others, undermining the ability of contractors with substantial clean-up obligations to compete for future contracts.

The committee directs the Under Secretary of Defense for Acquisition, Logistics, and Technology to review this issue and report to the congressional defense committees by no later than 180 days after the date of the enactment of this Act on whether the current reimbursement approach is in the best interest of DOD, or whether the Department would be better served by direct funding of allowable environmental remediation costs.

#### **Knowledge management and decision support systems**

Section 851 of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 110–181) required the Department of Defense (DOD) to develop a human capital plan for the acquisition workforce. Section 852 of that Act established the Acquisition Workforce Development Fund to provide funding needed to implement this plan.

The committee has received testimony on many of the challenges that DOD faces in restoring the acquisition workforce to the levels that will be required to conduct effective implementation and oversight of DOD acquisition programs. Just as it is said that the services cannot hire a seasoned non-commissioned officer off the street, DOD will be similarly challenged to either hire an experienced workforce or grow entry level personnel into journeymen acquisition professionals.

That challenge places a premium on doing business as intelligently as we can and relying on available technologies to enable personnel to operate as efficiently and effectively as possible, and to train new personnel in the operations of the DOD acquisition system.

Knowledge management is a discipline of management science that comprises a range of practices used in an organization to identify, create, represent, distribute, and enable adoption of insights and experiences. Such insights and experiences comprise knowledge, either embodied in individuals or embedded in organizational processes or practice. Knowledge management improvements typically focus on organizational objectives such as improved performance, competitive advantage, innovation, the sharing of lessons learned, and continuous improvement of the organization. Knowl-



edge management efforts can help individuals and groups to: (1) share valuable organizational insights; (2) reduce redundant work; (3) reduce training time for new employees; and (4) retain intellectual capital as employees turnover in an organization.

The committee is aware that there are commercial providers who can support such organizational challenges as DOD is facing in rebuilding the acquisition workforce. The committee does not see such systems as replacing workforce personnel, but as a potential complement to and enhancement of DOD's implementation of its human capital plan.

Therefore, the committee directs the Secretary of Defense to report to the congressional defense committees with the submission of the fiscal year 2011 budget request on how such knowledge management and decision support systems could contribute to implementing DOD's human capital plan and improving the effectiveness of the acquisition workforce.

#### **Licensing fees for enterprise resource planning software**

The committee is aware that the Department of Defense (DOD) is currently acquiring enterprise resource planning (ERP) software and other software programs for numerous business applications. DOD's operation and maintenance accounts reflect the expenditure of hundreds of millions of dollars in licensing fees for the use of such software programs. The committee is concerned that the Department may be acquiring the rights to the use of this software on a piecemeal basis, paying for the same software over and over again.

In other similar circumstances, DOD and its components have negotiated enterprise-wide agreements to ensure that the Department leverages its purchasing power to reduce costs and achieve better results for the taxpayers. A similar approach may be appropriate in the case of licensing fees for ERP software and other software programs for business applications.

The committee directs the Under Secretary of Defense for Acquisition, Technology, and Logistics to review this issue in consultation with the Director of the Business Transformation Agency and to report the findings and results of the review, including any steps that the Department plans to take to negotiate enterprise-wide agreements, by no later than March 1, 2010.

#### **Performance by private security contractors of certain functions in an area of combat operations**

In April 30, 2009, testimony before the Armed Services Committee, the Executive Director of the Center for Strategic and Budgetary Assessments explained the problems that may be caused by the use of contractors to perform security functions in a combat environment as follows:

“There's . . . a principle in the business world that you don't outsource your core capabilities. . . . What's concerned me most is the outsourcing to some of these security firms of core military capabilities, which is the providing of security, the conducting of security operations. . . . [Contractor personnel] weren't under the Uniform Code of Military Justice. They move around the battlefield.

You're obligated to share intelligence with them on where the enemy might be. If they run into trouble, should you take your rapid response force and dedicate [it] to their support, when some of your uniformed people could be getting in trouble?

"They don't operate under the same standards of discipline that soldiers do. Obviously, there have been a number of very unpleasant incidents that are associated with contractors sort of operating in poor discipline. If the goal is to save money, it's not clear, over the long term that we do save money. . . . In a sense . . . the U.S. government was competing against itself for the services of these people . . . engaging in bidding wars with Blackwater, up to \$150,000 to get a Special Forces NCO [noncommissioned officer] to reenlist. . . . It's not like their motives are the same as the U.S. military's.

"[F]inally, a lot of the people who seem to be recruited for these sorts of positions . . . are people that were rejected by the military. . . . Or foreigners. And these are not draftees that . . . once the job's over, they go back home, whether it's a fellow from Chile or Ukraine or somewhere else. These people, in a sense, are mercenaries, and they're looking for the next war. And, again, it's not clear to me that that's the sort of capability that we want to have after a war is over . . . looking for something else. So it was done . . . out of the stress of the moment, the necessity of the moment, but I really have grave questions about whether this is an approach you want to take when it comes to core military capabilities and functions."

The committee directs the Secretary of Defense to review these issues and report to the Armed Services Committees of the Senate and the House of Representatives within 120 days after the date of the enactment of this Act on the steps the Department has taken and plans to take to address these issues.

#### **Requirements management for weapon system acquisitions before milestone B**

Section 201 of the Weapon Systems Acquisition Reform Act of 2009 requires the Department of Defense (DOD) to make trade-offs among cost, schedule, and performance objectives at the time that requirements are first established for DOD acquisition programs. Section 814 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 requires the Department to establish Configuration Steering Boards to prevent unnecessary and costly changes to program requirements for Major Defense Acquisition Programs.

The committee is aware that there may be a gap between the time when program requirements are first established and the time when those program requirements are formally incorporated into a Major Defense Acquisition Program. For this reason, the committee directs the Under Secretary of Defense for Acquisition, Technology, and Logistics to take appropriate steps to monitor and manage changes to requirements during this period to ensure that changes are not made without appropriate consideration of cost impact. The

committee further directs the Under Secretary to report to the Committees on Armed Services of the Senate and the House of Representatives on the steps taken or to be taken in this regard not later than 180 days after the date of the enactment of this Act.



## **TITLE IX—DEPARTMENT OF DEFENSE ORGANIZATION AND MANAGEMENT**

### **Subtitle A—Department of Defense Management**

#### **Deputy Under Secretaries of Defense and Assistant Secretaries of Defense (sec. 901)**

The committee recommends a provision that would authorize five Deputy Under Secretaries of Defense (DUSDs), each of whom would serve as the first assistant to an Under Secretary of Defense, and each of whom would be subject to confirmation by the Senate. These would be the only DUSDs. The provision would also authorize six new Assistant Secretaries of Defense, subject to Senate confirmation, to fill positions currently filled by other DUSDs.

At present, there are 28 DUSDs in the Department of Defense. Only four DUSDs are Senate confirmed, and only two serve as first assistants to their respective Under Secretaries. The remaining DUSDs serve in Tier 2 or Tier 3 of the Senior Executive Service. The Department's organizational charts even show multiple layers of DUSDs reporting to each other. The committee does not believe that the Department is well served by the proliferation of DUSD positions or by inconsistency in the reporting relationships, pay, precedence, and succession among personnel occupying such positions.

#### **Repeal of certain limitations on personnel and consolidation of reports on major Department of Defense headquarters activities (sec. 902)**

The committee recommends a provision that would repeal caps on the number of personnel employed in headquarters activities of the military departments and defense agencies, as requested by the Department of Defense (DOD). The Department has determined that these caps have prevented it from managing its workforce based on workload requirements and considerations of cost-effectiveness and have resulted in the use of contractor personnel to perform functions that would be more appropriately performed by DOD employees.

#### **Sense of Senate on the Western Hemisphere Institute for Security Cooperation (sec. 903)**

This committee recommends a provision that would express the sense of Senate that the Western Hemispheric Institute for Security Cooperation (WHINSEC): (1) offers professional military bilingual instruction that promotes democracy, subordination to civilian authority, and respect for human rights; (2) builds partner capacity which enhances regional and global security while encouraging respect for human rights and promoting democratic principles among eligible military personnel, law enforcement officials, and civilians

of nations in the western hemisphere; (3) provides a valuable education and training facility whose curriculum is not duplicated in any of the military departments; and (4) is an essential tool to educate future Latin American leaders and improve relationships with partner nations that are working with the United States to promote democracy, prosperity, and stability in the western hemisphere.

### **Subtitle B—Space Matters**

#### **Provision of space situational awareness services and information to non-United States Government entities (sec. 911)**

The committee recommends a provision that would modify section 2274 of title 10, United States Code, to make the program known as the commercial and foreign entities (CFE) program a permanent program. The CFE program was originally started as a pilot program to allow the Department of Defense (DOD), working through the Air Force, to provide non-United States Government entities, including commercial entities, State and local government, and foreign governments and entities, space situational awareness data so that damage to satellites in space could be avoided. This program, which also allows participants to supply data for their satellites to DOD, has proved to be very useful to all aspects of the space community.

The recent collision of an Iridium communications satellite and a non-functioning Russian satellite has once again brought home the consequences of such collisions. The thousands of debris generated by this collision together with the debris generated when China shot down an old weather satellite, and the debris already in orbit, has increased the risk of damage to satellites and to manned space flight. Increasing space situational awareness is a high priority program for DOD and the Air Force. The committee commends the Air Force for providing additional attention and money in the fiscal year 2010 budget to improve space situational awareness.

#### **Plan for management and funding of National Polar-Orbiting Operational Environmental satellite system program (sec. 912)**

The committee recommends a provision that would direct the Secretaries of Defense and Commerce, and the Administrator of the National Aeronautics and Space Administration (NASA) to jointly develop a plan for the management and funding of the National Polar-Orbiting Operational Environmental satellite system (NPOESS). The plan would include the NPOESS requirements, the management structure, and the funding profile for each participating agency.

The provision would also prohibit the Secretary of Defense from spending more than 50 percent of the Air Force funds available for the NPOESS program until the plan has been submitted.

The provision would also set forth a sense of the Senate that the NPOESS program should be maintained. This includes all the sensors and satellites included as part of the program, and as included

on each satellite, following the Nunn-McCurdy breach and recertification in June 2006. In addition, all agreed to orbits for satellites C1-4 should be maintained as planned as well as the NPOESS Preparatory Project (NPP).

It is also the sense of the Senate that the NPP should be managed and treated as an operational satellite; that the milestone decision authority for the Department of Defense (DOD) should be delegated to the DOD Executive Agent (EA) for space; that the EA for space should be the DOD member of the NPOESS Tri-Agency Executive Committee (EXCOM); that the Program Executive Office (PEO) should report directly to and take direction exclusively from the EXCOM; that the Administrator of NASA and the Secretary of the Air Force should take support from the Goddard Space Flight Center and the Space and Missile Systems Center, respectively; that the budget for NPOESS should not be less than the estimate of the DOD Cost Analysis Improvement Group (CAIG); that NPOESS should continue to be managed by a single manager; that NPOESS should be managed as a long-term operational program; and that all requirements should be agreed to by the Secretaries of Defense and Commerce and the NASA Administrator and that the program should be executed with no modifications to those agreed-upon requirements that would increase the cost of schedule.

The committee is deeply concerned about the current status of the NPOESS program, a technically complex expensive program that is behind schedule and over budget, with a complicated management structure and funding split between two agencies, DOD and the Department of Commerce. The EXCOM recognized these many difficulties and chartered an independent review team (IRT) to look at the program. As expected, the IRT found NPOESS to be a disjointed, barely functioning program with little chance of meeting its goals.

The committee agrees with many of the findings of the June 2009 IRT report. Key among the findings is that “the current NPOESS program has an extraordinarily low probability of success”, that “NPOESS is being managed with cost as the most important parameter and not Mission Success” and that the current EXCOM process is “ineffective and must be fixed.”

The committee also notes that the IRT believes that the NPOESS program will need additional funding in fiscal year 2010 and over the future-years defense program (FYDP). The committee agrees with this finding as well and recommends additional funding for NPOESS in the Air Force elsewhere in this report, which the committee expects the Department of Commerce to match.

In December 2008, the three parties to the NPOESS program signed a memorandum of agreement (MOA) that set out their respective roles and responsibilities to implement the President’s directive for the NPOESS program. This MOA modifies an earlier MOA and was put in place to address the problems that led to the June 2006 Nunn-McCurdy breach. It is not at all clear that any of the three parties have followed the MOA, even though it took 18 months to negotiate. It would appear that the various disagreements that have been ongoing in this program have continued unabated. At best the MOA may have been a speed bump.

The IRT observed the discord in the program and noted that because the priorities of the parties are misaligned “the differences are straining interagency relationships and are impacting how people do their jobs, even down to the lowest levels of the IPO [Integrated Program Office].” The IRT concluded that “this program will not survive if this particular problem is not addressed immediately.”

Unfortunately, NPOESS is a critically important national priority for national security, space weather, weather forecasting, climate research, and emergency response. Given the age of the satellites that the five NPOESS program satellites will replace and the limited options available to the parties, there is no alternative but to proceed with the program.

The committee believes that the NPOESS program is in such chaos that the President needs to assist the parties with the resolution of their differences. Once this happens, the committee is adamant that the parties stick with the resolution of their disagreements and execute the program, without changing requirements, without constantly seeking changes to the sensors, without trying to add sensors, or interfering with the agreed upon management structure. In other words—agree upon the program and stick with it.

One additional problem not addressed in the IRT is the role of the European Space Agency. The Department of Commerce was obligated to enter into an agreement with the European Space Agency to provide for the mid-morning orbit. So far no such agreement has been arranged. If an agreement is not forthcoming, the parties must build into the management plan a contingency for the mid-morning orbit.

### **Subtitle C—Intelligence Matters**

#### **Inclusion of Defense Intelligence Agency in authority to use proceeds from counterintelligence operations (sec. 921)**

The committee recommends a provision that would provide the Defense Intelligence Agency (DIA) the same authority accorded the Military Departments to use proceeds from counterintelligence operations to offset necessary and reasonable expenses incurred in such operations under Section 423 of title 10, United States Code. When the Secretary of Defense directed the establishment of the Defense Counterintelligence and Human Intelligence Center (DCHC) within the DIA, he authorized the DCHC to conduct offensive counterintelligence operations. Since existing statute limits the authority to use proceeds from counterintelligence operations to the Military Departments, the DCHC would have to return such proceeds to the Treasury. The committee therefore recommends extending this authority to DIA in light of its new mission.

### **Subtitle D—Other Matters**

#### **United States Military Cancer Institute (sec. 931)**

The committee recommends a provision that would require the Secretary of Defense to establish a United States Military Cancer Institute in the Uniformed Services University of the Health



Sciences. The Institute would be authorized to establish a data clearinghouse on the incidence of cancer among members and former members of the armed forces, and to conduct research that contributes to early detection or treatment of cancer among military personnel. The committee recognizes that the United States Military Cancer Institute is currently operated and funded by the Department of Defense. In the committee's view, this institution should be authorized in statute in order to ensure its continued viability and service to military members and their families.

**Instruction of private sector employees in cyber security courses of the Defense Cyber Investigations Training Academy (sec. 932)**

The committee recommends a provision that would authorize the Secretary of Defense to permit eligible private-sector employees to receive instruction at the Defense Cyber Crime Investigations Training Academy, operating under the direction of the Defense Cyber Crime Center (DC3), on a reimbursable basis.

The DC3 Training Academy provides computer investigation training to forensic examiners, investigators, systems administrators, or any other Department of Defense (DOD) members who ensure Defense information systems are secure. DOD conducts a Defense Industrial Base (DIB) Cyber Security/Information Assurance Program with DIB partners to improve the security of DOD information resident in private networks. For this effort to be successful, DOD needs to make training available to industrial partners.

**Items of Special Interest**

**Commercial communications anti-jamming study**

The committee notes that substantial portions of military communications utilize commercial communication satellites, which have no anti-jam capability. There is generally no requirement among regular commercial users for this capability; as a result, commercial satellite providers have not included this capability in their systems. While there have been only a few incidents of intentional jamming of commercial satellites, the committee is nevertheless concerned about this potential vulnerability, particularly as the military's dependence on commercial satellites continues to grow even as new military communications satellites with anti-jam capability become available. The committee also notes that there has been an increase in the availability of jammers that could jam the commercial satellites. Commercial communication satellites take 2 to 3 years to design, manufacture, and launch. Because anti-jam capabilities must be included in the design of a commercial satellite from the outset, this is not a capability that can be added after a satellite is in orbit.

The committee directs the Secretary of Defense, in consultation with the Secretary of the Air Force, to review the benefits and feasibility, including cost, schedule and technical risk, of adding anti-jam capabilities to commercial communication satellites and to submit a report that would set forth the results of the review to the congressional defense committees. The review should also include an assessment of the government investment required to support

a viable business case for commercial providers to provide protected communication links for long-term lease by the Department of Defense as well as other customers; a cost analysis of commercial lease costs with and without protected communications, including any appropriate incentive structures; and an assessment of when the first commercial satellite with anti-jam capabilities could be launched. This review should also include an assessment of the jamming threats to commercial satellites that are used for military communications that such anti-jam capability would address. The report should be submitted no later than March 1, 2010.

### **Deep Space Climate Observatory**

The committee is aware of a satellite that the National Aeronautics and Space Administration (NASA) built in 2000 but was never launched. The satellite, the Deep Space Climate Observatory (DSCOVR), was put into storage in 2001. The satellite would measure solar wind data, important to the National Oceanic and Atmospheric Administration (NOAA), the Air Force, and other agencies including the Department of Homeland Security. The satellite was stored with two of the three sensors that would be needed for solar wind measurements. NOAA is also looking at the possibility of adding additional earth observation sensors. There is a critical need for the geomagnetic storm information that the DSCOVR could provide as the current satellite that provides this information was built in 1997, and has long ago exceeded its design life. The geomagnetic storm information is particularly useful to provide sufficient warning to utility companies and satellite operators to execute timely procedures to protect their assets. A sudden magnetic storm in 1989 caused the collapse of the electrical distribution grid over the entire province of Quebec, Canada.

DSCOVR was removed from storage at the end of last year, and went through a series of tests to determine its status and condition. NOAA and NASA have recently determined that although there were some concerns the condition was generally good. NOAA and NASA believe that DSCOVR, with some upgrading and modification, would be suitable to fly.

The Air Force is very interested in the space weather information and is part of an interagency team looking at the possibility of refurbishing DSCOVR and launching it to an orbit referred to as L1, about one million miles from Earth on a line with the Sun. If the team determines that the satellite can be refurbished and launched, they will make a recommendation to the President. Notionally, NOAA and NASA would pay for refurbishing the satellite, the Air Force would pay for the launch, and all agencies would receive the data.

The committee supports this effort to ensure that there is no gap in the critical national need for space weather information and directs the Air Force to inform the congressional defense committees, the Senate Committee on Commerce, Science, and Transportation, the Senate Committee on Homeland Security and Government Affairs, the House of Representatives Committee on Science and Technology, and the House of Representatives Committee on Energy and Commerce of the outcome of the study along with the cost of the launch as soon as the study is completed.

**Intelligence, surveillance, and reconnaissance task force**

Secretary Gates established the Intelligence, Surveillance, and Reconnaissance (ISR) Task Force to meet critical intelligence requirements of deployed forces that the military departments and the Office of the Secretary of Defense had failed to address. The initial unmet requirements that led the Secretary to establish the Task Force had been known and validated for some time, but remained unaddressed because existing programs of record could not be accelerated. The Task Force was created to find alternative solutions, outside of the established programs of record and acquisition processes, and succeeded in doing so. Secretary Gates and his predecessor have had to take such extraordinary actions previously, to address the improvised explosive device (IED) threat through the Joint IED Defeat Organization and through the massive Mine-Resistant Ambush-Protected (MRAP) vehicle program. As with those programs, the ISR Task Force has reallocated billions of dollars.

Secretary Gates and Chairman of the Joint Chiefs of Staff, Admiral Mullen, recently testified that the ISR Task Force could be phased out. The committee is skeptical that the need for the ISR Task Force has run its course and that it should be disbanded entirely and immediately. Indeed, the Department of Defense (DOD) is entering a critical phase of the war effort in Afghanistan, where the ISR needs are different from, and more challenging than, those of Iraq. Moreover, thus far, the Task Force has focused on rapidly deploying large quantities of off-the-shelf systems and capabilities; there is now a need for more sophisticated capabilities that will require the Task Force, backed by the Secretary and the Chairman of the Joint Chiefs, to organize and field. A prominent example is multi-sensor, cross-platform networking, tipping, and cueing, as well as networked communications for collection management and data dissemination.

The Task Force is also the focal point for data-driven analyses, sponsored by the Joint Staff and the Office of the Secretary of Defense (OSD), that have been instrumental in determining what ISR equipment and procedures are working in theater and which are not. The Defense Science Board Task Force Report on Operations Research Applications for Intelligence, Surveillance, and Reconnaissance lauded the value and role of this analysis. These studies would not have been produced without top-level sponsorship.

The committee requests that the Secretary of Defense and the Chairman of the Joint Chiefs clarify their plans for the Task Force and provide a clear recommendation to the congressional defense committees prior to conference on the National Defense Authorization Act for Fiscal Year 2010.

The committee requests further that the Secretary assess whether certain rules and authorities under which the Task Force operates are appropriate for the next phase of the conflict in Afghanistan. Under current procedures, the Task Force is required to find a service willing to volunteer to sponsor an initiative to respond to a theater requirement as a condition for recommending funding for a project. The problem has been that, too often, the services have not volunteered to solve these problems. The Secretary should determine whether the Task Force should be authorized and given

the authority to propose a solution to a need that could be assigned to an appropriate organization for execution.

Finally, the committee notes that the Task Force, with Joint Staff and OSD support, is examining the ISR needs of forces engaged in the irregular warfare missions of population protection and foreign internal defense that will dominate operations in Afghanistan. The committee is concerned that previous analyses focused on the “find, fix, finish” methodology pioneered by special forces in direct action operations in Iraq and elsewhere. The success of these operations, and their measureable outcomes, contributed to widespread adoption of the tactics and equipment used by special forces. It may be that the same methods and resources are applicable to the operational requirements in Afghanistan, but it is important to purposefully find out.

## TITLE X—GENERAL PROVISIONS

### Subtitle A—Financial Matters

#### **General transfer authority (sec. 1001)**

The committee recommends a provision that would authorize the transfer of up to \$4.0 billion of funds authorized in Division A of this Act to unforeseen higher priority needs in accordance with normal reprogramming procedures. Transfers of funds between military personnel authorizations would not be counted toward the dollar limitation in this provision.

#### **Audit readiness of financial statements of the Department of Defense (sec. 1002)**

The committee recommends a provision that would establish statutory objectives for the Department of Defense to achieve by a certain date financial statements that are validated as ready for audit. The provision would require the Department of Defense to develop and maintain a Financial Improvement and Audit Readiness (FIAR) plan that describes specific actions to be taken to correct financial management deficiencies and meet audit readiness objectives. The FIAR plan would be required to tie such actions to process and control improvements and business systems modernization efforts described in the business enterprise architecture and transition plan required by section 2222 of title 10, United States Code.

### Subtitle B—Naval Vessels and Shipyards

#### **Temporary reduction in minimum number of aircraft carriers in active service (sec. 1011)**

The committee recommends a provision that would temporarily waive the requirement that the Navy maintain 11 active aircraft carriers in inventory. This provision would only apply to the time between the planned retirement of the USS *Enterprise* (CVN-65) and the delivery of the USS *Gerald R. Ford* (CVN-78). The committee has reluctantly concluded that the expense of extending the *Enterprise* beyond her planned retirement date to cover this gap is not worth the \$1.0 billion to \$2.0 billion the Navy would have to divert from other important programs to get one extra deployment from that ship.

The committee is taking no position at this time on the recommendation of the Secretary of Defense that the long-term carrier force structure should be 10 rather than 11.

**Repeal of policy relating to the major combatant vessels of the strike forces of the United States Navy (sec. 1012)**

The committee recommends a provision that would repeal section 1012 of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 110–181).

Section 1012 of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 110–181), as amended by section 1015 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110–417), would require that all new classes of surface combatants and all new amphibious assault ships larger than 15,000 deadweight ton light ship displacement have integrated nuclear power systems, unless the Secretary of Defense determines that the inclusion of an integrated nuclear power system in such vessel is not in the national interest.

The committee believes that the Navy is already having too much difficulty in achieving the goal of a 313-ship fleet without adding a substantial increment to the acquisition price of a significant portion of the fleet. Moreover, current acquisition law and the Weapon System Acquisition Reform Act of 2009 (Public Law 111–23) emphasize the need to start acquisition programs on a sure footing as a central mechanism by which the Department of Defense (DOD) can get control of cost growth and schedule slippage on major defense acquisition programs. Therefore, Congress should be loathe to dictate a particular outcome of a requirements process before the Department has conducted the normal requirements review.

The committee expects that the Navy will continue to evaluate the integrated nuclear power alternative for any new class of major surface combatants, but would prefer that any Navy requirements analysis not be skewed toward a particular outcome.

**Sense of Senate on the maintenance of a 313-ship Navy (sec. 1013)**

The committee recommends a provision that would express the sense of the Senate regarding achieving and maintaining the goal of having a 313-ship fleet.

The committee believes that the Navy can implement certain actions that would help achieve and maintain that goal, including:

- (1) when procuring new classes of ships, avoiding the temptation to move too quickly into production before the technologies and designs are mature enough;
- (2) doing a much better job of achieving the full planned service lives of ships and perhaps extending other vessels beyond their expected service lives to keep their unique capabilities in the fleet while the Navy takes the time necessary to develop and field next-generation capability under a low risk program;
- (3) reducing and controlling the total costs of ownership, by emphasizing common hull designs, open architecture combat systems, and other common ship systems in order to achieve efficiency in acquiring and supporting various classes of ships; and
- (4) managing the acquisition process better to increase use of fixed price-type contracts, maximize competition (or the op-

tion of competition) throughout the life cycle of its ships, enter into multiyear contracts when warranted, and employ an incremental approach to developing new technologies.

### **Designation of USS Constitution as America's ship of state (sec. 1014)**

The committee recommends a provision that would designate the USS *Constitution* as America's "Ship of State," because of this vessel's representation of our important naval history and maritime traditions.

## **Subtitle C—Counter-Drug Activities**

### **Summary**

The budget request for drug interdiction and counterdrug activities of the Department of Defense totaled approximately \$1.1 billion for fiscal year 2010: \$537.6 million for international support; \$212.5 million for domestic support; \$169.8 million for intelligence, technology, and other activities; and \$139.2 million for demand reduction programs. The committee recommends the following fiscal year 2010 budget for the Department's counterdrug activities.

#### **DRUG INTERDICTION AND COUNTERDRUG ACTIVITIES, OFFICE OF NATIONAL DRUG CONTROL POLICY FUNCTION AREAS**

[In millions of dollars; may not add due to rounding]

Fiscal Year 2010 Counterdrug Request .....	\$1,059.0
Intelligence: Domestic Law Enforcement .....	35.5
Intelligence: Interdiction .....	56.6
Intelligence: International .....	101.6
Interdiction .....	335.9
International .....	205.9
Investigative .....	45.2
Prevention .....	130.7
Research and Development: Interdiction .....	19.8
Research and Development: International .....	4.0
State and Local Assistance: .....	115.5
Treatment .....	8.5
Increases:	
High Priority National Guard Counterdrug Programs .....	30.0
Mobile Sensor Barrier .....	5.0
Decreases:	
United States European (EUCOM) Command Counternarcotics Support (Project Code (PC) 9205) .....	8.0
EUCOM Headquarters Support (PC2346) .....	0.8
EUCOM Interagency Fusion Centers (PC2365) .....	1.0
Relocatable Over-the Horizon-Radar (PC3217) .....	5.0
U.S. Special Operations Command Support to Combatant Commanders (PC6505) ..	0.2
EUCOM Counternarcotics Reserve Support (PC9215) .....	1.2
Fiscal Year 2010 Counterdrug Funding Authorized .....	1,077.8

### **High priority National Guard counterdrug programs**

The committee values the contribution that the National Guard makes to the national counterdrug effort. Therefore, the committee recommends an increase in \$30.0 million for the National Guard Bureau's highest priority counterdrug activities.

**Mobile sensor barrier**

The committee is aware of the growing use of Self Propelled Semi-Submersibles (SPSS) by drug trafficking organizations operating out of South and Central America. According to United States Southern Command (SOUTHCOM), SPSS are responsible for at least one-third of all cocaine movement in the transit zone. SOUTHCOM and the United States Coast Guard consider SPSS a serious threat to U.S. and regional security. As such, the committee recommends an increase of \$5.0 million for the Department to develop, test, and demonstrate a system of autonomous surface vehicles to detect, monitor, and support interdiction of SPSS. SOUTHCOM has assigned the SPSS a high priority in its most recent Integrated Priority List submission to the Chairman of the Joint Chiefs of Staff.

**United States European Command counterdrug activities**

The committee notes that in previous fiscal years the Department has provided robust counterdrug-related funding to United States European Command (EUCOM) on the basis of the burgeoning illegal narcotics trafficking trade emanating from West Africa. However, as of the stand up of United States Africa Command (AFRICOM) in October 2008 (i.e. fiscal year 2009), AFRICOM is provided funding within the budget request for counterdrug activities in West Africa and across the continent. As such, the committee recommends a series of five decreases within the counterdrug budget request totaling \$11.2 million. Specific project code reductions are reflected above and in Title XIV. Moving forward, the committee directs the Department to adjust the funding levels for counterdrug related funding dedicated to EUCOM downward significantly to reflect the change in the Unified Command Plan, which moved the African continent into the area of responsibility for AFRICOM, and to reflect the greater capacity of our European partners to combat illegal narcotics trafficking.

**Relocatable over-the-horizon radar**

The committee recommends a decrease of \$5.0 for the Relocatable Over-the-Horizon Radar. The committee is aware of the important role this aerial detection asset plays in the western hemisphere and believes this asset is critical to situational awareness on the eastern and southern coasts of the United States; however, the committee believes the deployment of this asset is more appropriately funded by the military services operations and maintenance budget activities.

**Fiscal year 2011 congressional budget justification documents**

According to the budget justification materials, \$537.6 million is dedicated to international support, but the budget justification books for fiscal year 2010 provide little or no specific information as to the level of assistance to be provided to partner nations. In preparing congressional budget justification books for fiscal year 2011, the committee directs the Department to provide information relating to partner nations receiving assistance under section 1004 of the National Defense Authorization Act (NDAA) for Fiscal Year



(FY) 1991 (Public Law 101–510), as amended, and section 1033 of the NDAA for FY 1998 (Public Law 105–85), as amended. At a minimum, the committee believes this should include: recipient partner nation and recipient within the partner nation’s government; type and amount of support provided; expected duration; and U.S. agency executing support.

**Extension and modification of authority to provide additional support for counter-drug activities of certain foreign governments (sec. 1021)**

The committee recommends a provision that would extend by 1 fiscal year the duration of authority for assistance under section 1033 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 1998 (Public Law 105–85), as amended by section 1021 of the NDAA for FY 2004 (Public Law 108–136), section 1022 of the John Warner NDAA for FY 2007 (Public Law 109–364), section 1022 of the NDAA for FY 2008 (Public Law 110–181), section 1024 of the Duncan Hunter NDAA for FY 2009 (Public Law 110–417); would increase the funding limitation under section 1033 of Public Law 105–85, as amended, from \$75.0 million to \$100.0 million for fiscal year 2010; and would make technical changes to the reporting requirements to include requiring the Secretary of Defense to report to the congressional defense committees on an annual basis.

The committee is aware of the Department’s request to expand the list of countries that could qualify for assistance under section 1033 of Public Law 105–85, as amended, to include Indonesia, Philippines, Nicaragua, Ghana, Nigeria, and Sierra Leone. However, given the Department’s failure to utilize section 1033 of Public Law 105–85, as amended, vis-à-vis the additional four countries provided under the Duncan Hunter NDAA for FY 2009 (Public Law 110–417), the committee has decided not to expand the list of eligible countries. The committee, however, shares the Department’s concerns about the burgeoning illegal narcotics trade in West Africa and urges the Department to expand its authorized activities with Guinea-Bissau and Senegal.

For the first time, the committee has recommended a significant increase in the authorized maximum amount the Department can expend under this authority without expanding the list of eligible countries. The committee has opted to take this action in part as a response to the Department’s repeated attempts to leverage other authorities (e.g., section 1206 of the NDAA for FY 2006 (Public Law 109–163), as amended) that are designated for counterterrorism purposes or stability operations in which the United States is a participant. The committee believes that some of the projects put forward by the Department under section 1206 of Public Law 109–163 over the past 2 fiscal years (e.g., Operation Enduring Freedom—Caribbean and Central America and the Mexico counterterrorism capabilities) would have been more appropriately funded under section 1033 of Public Law 105–85, as amended.

Further, the committee reminds the Department that joint task forces of the Department that provide support to law enforcement agencies conducting counterdrug activities may provide similar support to law enforcement agencies conducting counterterrorism activities on the condition that any support provided under this

section is consistent with all applicable laws and regulations; that the support may only be provided in the geographic area of responsibility of the joint task force; and that a verifiable nexus exists between the individuals involved in the illegal narcotics trade and individuals involved in terrorist-related activities. This authority was provided under section 1022 of Public Law 108–136 as amended.

The committee is aware of commanders' concerns about current constraints to the types of support authorized to be provided under this authority (e.g. certain types of lethal assistance). As such, the committee directs the Under Secretary of Defense-Policy to report to the committee 180 days after enactment of this Act on what constraints commanders executing funding under this authority are confronting and whether changes to this authority should be considered.

**One-year extension of authority for joint task forces support to law enforcement agencies conducting counter-terrorism activities (sec. 1022)**

The committee recommends a provision that would extend the authority provided in section 1022 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108–136), which expires at the end of fiscal year 2009, through fiscal year 2010. The authority granted under this provision provides that a joint task force of the Department of Defense, which is providing support to law enforcement agencies conducting counterdrug activities (e.g., Joint Interagency Task Force—South, Joint Interagency Task Force—West, and Joint Task Force—North), may also provide these law enforcement agencies with support for their counterterrorism activities.

This provision also includes an amendment which would require the Secretary of Defense to submit to the congressional defense committees, no later than December 31st of each year, a report evaluating the effect on counterdrug and counterterrorism activities and objectives of using counterdrug funds of a joint task force to provide counterterrorism support, a description of the type of support and recipient(s) of support provided, and a list of current joint task forces conducting counterdrug operations.

**One-year extension of authority to support unified counterdrug and counterterrorism campaign in Colombia (sec. 1023)**

The committee recommends a provision that would extend for 1 fiscal year the continuation of the authorities provided in section 1021 of the Ronald W. Reagan National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2005 (Public Law 108–375), as amended by the John Warner NDAA for FY 2007 (Public Law 109–364), which allows the Department of Defense to support a unified campaign against narcotics trafficking and activities by the Revolutionary Armed Forces of Colombia; the United Self-Defense Forces of Colombia; and the National Liberation Army. Each of these organizations is designated as foreign terrorist organizations by the U.S. Department of State under section 219 of the Immigration and Nationality Act of 1965 (Public Law 89–236).

This provision would also extend the limitation on the number of U.S. military and federally funded civilian contractor personnel in the Republic of Colombia through fiscal year 2010. Section 1021 of Public Law 108–375, as amended, limits the number of military personnel in Colombia to 800 people and the number of federally funded civilian contractors to 600 people.

Given the success of Operation Willing Spirit, which successfully rescued three American hostages in July 2008, the ongoing negotiations with the Republic of Colombia regarding U.S. military access to Palanquero, Apiay, and Baranquilla air bases, and the scheduled loss of access to Manta Air Base in Ecuador, the committee directs the Secretary of Defense to perform an assessment of the numerical limitations included in section 1021 of Public Law 108–375, as amended, and report to the congressional defense committees 180 days after enactment of this Act on whether these numeric limitations should be changed, upward or downward, or repealed.

#### **Subtitle D—Military Commissions**

##### **Military commissions (sec. 1031)**

The committee recommends a provision that would amend chapter 47A of title 10, United States Code, to ensure that military commissions meet standards of fairness established by the Supreme Court in *Hamdan v. Rumsfeld*, 548 U.S. 557 (2006).

In the *Hamdan* case, the Supreme Court held that Common Article 3 of the Geneva Conventions prohibits the trial of detainees for violations of the law of war, unless the trial is conducted “by a regularly constituted court affording all the judicial guarantees which are recognized as indispensable by civilized peoples.”

The Court concluded that “[t]he regular military courts in our system are the courts-martial established by congressional statutes” and that “procedures governing trials by military commission historically have been the same as those governing courts-martial.” Consequently, a military commission “can be ‘regularly constituted’ by the standards of our military justice system only if some practical need explains deviations from court-martial practice.”

Similarly, the Court found that the Common Article 3 provision for “judicial guarantees which are recognized as indispensable by civilized peoples” requires, at a minimum, that any deviation from the procedures governing courts-martial be justified by “evident practical need”. According to the Court, “The uniformity principle is not an inflexible one; it does not preclude all departures from the procedures dictated for use by courts-martial. But any departure must be tailored to the exigency that necessitates it.”

The provision recommended by the committee is designed to meet this test by bringing procedures for military commissions in line with procedures governing trials by courts-martial, except in cases where deviations are justified by practical needs.

The committee notes that the definition of the term “unprivileged enemy belligerent” in the provision makes no specific reference to al Qaeda, the Taliban, or associated forces. The committee acknowledges that the United States and its coalition partners are and have been engaged in hostilities pursuant to the Authorization for Use of Military Force, Public Law 107–40. The definition used

by the committee encompasses these hostilities, as well as future hostilities, while providing for jurisdictional determinations to be made case-by-case, on the basis of the actions of each individual.

The committee is aware of concerns that the defense teams in some military commission cases may have been under-resourced to conduct investigations, obtain expert witnesses, and perform other necessary tasks. Many of these concerns are set forth in a June 9, 2009, memorandum from the Chief Defense Counsel for military commissions to the Attorney General of the United States and the General Counsel of the Department of Defense. The committee expects the Department of Defense to review and address these concerns, as appropriate.

### **Subtitle E—Medical Facility Matters**

#### **Medical Facility Matters (sec. 1041–1047)**

The committee recommends a provision that would require the Secretary of Defense, in consultation with the Secretary of the Navy and the Secretary of Veterans Affairs, to execute an executive agreement for the joint use by the Department of Defense and the Department of Veterans Affairs of a new Navy ambulatory care center, parking structure, and supporting structures and facilities in North Chicago, Illinois, and Great Lakes, Illinois, as well as medical personal property and equipment relating to the center, structures, and facilities. The provision would authorize the Secretary of Defense to transfer, without reimbursement, to the Secretary of Veterans Affairs' jurisdiction over the center, structures, facilities, and property and equipment covered by the agreement not earlier than 5 years after execution of the agreement or upon completion of benchmarks established by the Secretary of Defense and the Secretary of Veterans Affairs relating to the joint use of the facility. The provision would also authorize the transfer of functions, including civilian employee positions of the Department of Defense to the Department of Veterans Affairs. The transfer of civilian employee positions would not result in a reduction in an employee's pay, and would continue collective bargaining rights under title 5, United States Code, for a 2-year period. The transfer would not result in any non-bargaining unit employees becoming members of the bargaining unit. The center, structures, and facilities transferred to the Secretary of Veterans Affairs would be designated as the Captain James A. Lovell Federal Health Care Center.

The committee is aware that on April 22, 2009, testimony presented by the Veterans Administration (VA) to the Senate Committee on Veterans Affairs was in opposition to proposed legislation that would make matters relating to direct patient care and the clinical competence of clinical health care providers subject to collective bargaining, the same matters proposed for 2 years under section 1604 of this bill. In that testimony, concern was expressed that such an expansion of collective bargaining rights would be an "anathema to patient centered medicine" and would "adversely impact VA's ability to deliver quality patient care." The committee will observe with active interest the implementation of section 1604 to see if, in fact, VA's concerns were well founded. In any case, the

committee will not tolerate anything less than the highest quality of care for those treated at this federal health center.

The committee directs the Comptroller General to review the planning and implementation of the electronic medical record system or systems to be used at this federal health center as part of the assessment of the implementation of the joint Department of Defense and Department of Veterans Affairs fully interoperable electronic health records required by section 1635 of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 109–364).

**Subtitle F—Miscellaneous Requirements, Authorities, and Limitations**

**Congressional earmarks relating to the Department of Defense (sec. 1051)**

The committee recommends a provision that would direct the Secretary of Defense to submit to the congressional defense committees a report on the procedures used to award funding for congressionally directed spending items that have been included in National Defense Authorization Acts for 3 or more consecutive years. The provision would also direct the Department of Defense Inspector General to conduct an audit to determine whether recipients of congressionally directed spending items are in compliance with laws pertaining to use of federal funds to influence congressional action.

**National strategic five-year plan for improving the nuclear forensic and attribution capabilities of the United States (sec. 1052)**

The committee recommends a provision that would direct the President to develop a strategic plan for improving over a 5 year period the nuclear forensic and attribution capability of the United States and the methods, capabilities, and capacity for nuclear materials forensics and attribution. The Department of Homeland Security is the agency currently tasked with responsibility to coordinate the actions of the federal agencies. The plan would be conducted with the participation of the Secretaries of Homeland Security, Defense, Energy and State, the Attorney General, the Director of National Intelligence, and other such officials as the President considers appropriate.

The committee shares the larger congressional concern that the U.S. ability to attribute accurately the origins of the material and manufacturers of a nuclear or radiological device, including a dirty bomb, is adequate but is neither as robust as it should be nor sustainable over the long-term. While each of the named agencies has a role in the attribution chain, there is currently no fully coordinated and resourced forensics and attribution plan to guide government-wide strategy and investment. This is of particular concern to the committee as the research and development capabilities of the Department of Energy laboratories underpin all of the activities of each of the responsible agencies.

The plan would be provided to Congress and would be due 180 days after enactment of this Act.

**One-year extension of authority to offer and make rewards for assistance in combating terrorism through government personnel of allied forces (sec. 1053)**

The committee recommends a provision that would extend for 1 year the authority provided in section 127b(c)(3)(C) of title 10, United States Code, to offer and make rewards through government personnel of allied forces to persons who provide information or nonlethal assistance that is beneficial to operations against international terrorism conducted by U.S. Armed Forces or allied forces operating in combination with U.S. Armed Forces, or is beneficial to force protection.

**Business process reengineering (sec. 1054)**

The committee recommends a provision that would amend section 2222 of title 10, United States Code, to require the appropriate chief management officer of the Department of Defense (DOD) to determine whether or not appropriate business process reengineering efforts have been undertaken before DOD approves a new business system modernization program.

**Responsibility for preparation of biennial Global Positioning System report (sec. 1055)**

The committee recommends a provision that would shift responsibility for preparing the biennial Global Positioning System (GPS) report from the Secretary of Defense to the Secretary of Commerce. The Secretary of Defense would retain responsibility for certain aspects of the report, which at a minimum would include that portion of the report dealing with the current status of the GPS system.

**Additional subpoena authority for the Inspector General of the Department of Defense (sec. 1056)**

The committee recommends a provision that would authorize the Inspector General of the Department of Defense (DOD) to subpoena the attendance and testimony of witnesses necessary to carry out an audit or investigation. The DOD Inspector General would be required to notify the Attorney General in advance of the issuance of any subpoena, and would not be permitted to issue a subpoena if the Attorney General objects.

The DOD Inspector General recently notified the committee that he was unable to complete an investigation requested by the committee because former senior DOD officials who engaged in the activities to be reviewed refused the Inspector General's requests for an interview. The committee concludes that the DOD Inspector General needs the authority to compel testimony in appropriate cases.

**Reports on bandwidth requirements for major defense acquisition programs and major system acquisition programs (sec. 1057)**

The committee recommends a provision that would amend section 1047(d) of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110-417) to require a report on the bandwidth determinations made each year by the Secretary of Defense and the Director of National Intelligence for each major

defense acquisition program and each major systems acquisitions program respectively.

**Multiyear contracts under pilot program on commercial fee-for-service air refueling support for the Air Force (sec. 1058)**

The committee recommends a provision that would provide an exemption to the 5-year limitation on multiyear contracts and make other minor changes to enable the Air Force to implement a fee-for-service air refueling support pilot program.

Section 1081 of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 110–181) directed the Secretary of the Air Force to conduct a pilot program to assess the feasibility and advisability of utilizing commercial fee-for-service air refueling tanker aircraft for Air Force operations.

The Air Force has been working with the private sector to implement this pilot program. The Air Force has informed the committee that results from their formal request for information process indicate that a multiyear contract that exceeds the current 5-year limit would be necessary to promote adequate competition and reduce program costs. The Air Force needs to have authority to make commitments for the 8-year pilot program in order to issue a request for proposal. The Air Force also needs to be able to offer carriers insurance coverage similar to that provided to civil reserve air fleet (CRAF) program partners. This provision would provide the Air Force with those authorities.

**Subtitle G—Reports**

**National intelligence estimate on nuclear aspirations of non-state entities and nuclear weapons and related programs in non-nuclear-weapons states and countries not parties to the Nuclear Non-Proliferation Treaty (sec. 1071)**

The committee recommends a provision that would direct the Director of National Intelligence (DNI) to prepare a national intelligence estimate (NIE) on nuclear weapons and related programs of non-nuclear weapons state parties to the Treaty on the Non-Proliferation of Nuclear Weapons and the weapons aspirations of such non-state actors as the DNI considers appropriate to include in the estimate. The NIE would be due on September 1, 2010. If the DNI determines that it is not possible to complete the NIE by such date then the DNI shall provide notification not later than August 1 2010, that the NIE will be late and the date that the NIE will be submitted. The completed NIE would be submitted to the congressional defense committees and the Intelligence Committees of the Senate and the House of Representatives.

While the committee recognizes that the intelligence community prepares numerous reports that bear on certain aspects of the material that would be contained in the NIE, there is benefit to having a comprehensive report on this subject.

**Comptroller General of the United States assessment of military whistleblower protections (sec. 1072)**

The committee recommends a provision that would require the Government Accountability Office to review the implementation by the Department of Defense of military whistleblower protections afforded to members of the armed services.

**Subtitle H—Other Matters****Transfer of Navy aircraft N40VT (sec. 1081)**

The committee recommends a provision that would allow the Secretary of the Navy to transfer a Navy helicopter to a private corporation, the Piasecki Aircraft Corporation, at no cost to the Government. This provision would require that the transfer be: (1) at no cost to the Government; (2) subject to such terms and conditions as the Secretary may deem appropriate to protect the interests of the Government; and (3) conditioned upon receiving adequate consideration in the use of any technologies proven during testing of new technology on the aircraft.

The Navy has been developing a concept to employ different propulsion approaches for helicopters. This program is known as the vectored thrust ducted propeller (VTDP) program. The testing on this concept has completed exploring the flight envelope for which the Naval Air Systems Command (NAVAIR) will certify the aircraft. The whole point of the development program, however, is to demonstrate whether the VTDP concept can expand the flying envelope for helicopters beyond their normal limits.

The Navy has determined that: (1) the Navy has no further use for the aircraft to be transferred; (2) while the Navy owns the aircraft, they cannot permit the aircraft to fly outside the limits of the NAVAIR certification; (3) the Navy would incur substantial additional expense to expand the certification of this single aircraft; (4) the Navy and others within the Department of Defense would like to have the results of the testing; and (5) transferring ownership to the Piasecki Aircraft Corporation is the least expensive means of obtaining those results.

**Conveyance of Big Crow aircraft (sec. 1082)**

The committee recommends a provision that would permit the Secretary of the Air Force to transfer two Big Crow aircraft to an appropriate private entity, if it is determined to be in the best interests of the Air Force and the Department of Defense to do so. The committee notes that the Big Crow aircraft have been used for a number of test and evaluation and operational missions related to electronic warfare and other areas for a variety of joint customers. The committee understands that the Air Force must fund large sustainment and refurbishment costs for the aircraft, but believes that the capabilities provided by the systems are of high value to the Department of Defense. The committee believes that it may be possible to give the Department of Defense access to these critical test assets by transferring them to a private sector entity, who would then be responsible for their maintenance and operation in order to keep them in service to potential defense customers. The committee believes that this transfer should only occur



if there is no liability and limited cost incurred by the Department of Defense in the transaction.

### **Items of Special Interest**

#### **National cyber security initiative**

The budget request included large but classified amounts for the national cyber security initiative, mostly in the national intelligence program budget, but also in the Department of Defense, the Department of Homeland Security, and elsewhere in the Federal Government. The new administration recently completed a significant policy review of the initiative, which began in the last years of the previous administration.

The new review appears to have made considerable progress in at least framing many of the important issues that must be addressed. However, it is impossible for the public to come to this conclusion because all the fundamental aspects of the program, and the issues associated with it, remain classified. The administration realizes that it is imperative to engage in a public dialogue about the legal and policy issues affecting privacy and civil liberties, but has not indicated how or when it plans to achieve this objective. Likewise, the administration recognizes that it is essential to develop and publicly present a national strategy and doctrine for cyber security and operations for deterring aggression, establishing norms of behavior, and the like, that depends upon a level of public analysis and discourse about activities, vulnerabilities, and capabilities in cyberspace that is not possible today.

There is another important problem with the cyber initiative, which the administration review did not address, that also cannot be rectified without substantial progress in declassifying basic information about the program. For a number of years, the government has invested large sums developing cyber security capabilities through the intelligence agencies. These capabilities are being developed inside the government on a classified basis, with very little commercial industry participation or even awareness. Some defense contractors are working on the technology, but under government engineering and technical direction.

The committee is concerned that this government solution, even if it is superior technically now to what the private sector could provide, will before long be surpassed by commercial technology and systems and will become an expensive albatross. In addition, if the government believes what it says about the cyber threat, and believes that its technical solutions are substantially better than what is commercially available, it is incumbent on the government to make as much of that technology available to the private sector as possible, especially the owners and operators of critical infrastructure. Furthermore, privacy and civil liberties concerns will diminish the more the commercial information technology industry is involved in designing, engineering, and implementing cyber security solutions.

The committee concludes, after extensive review, that commercial companies do have highly relevant technology for intrusion prevention at high speeds and volumes, and for recognizing anomalous activities and managing a rapid response across a large, com-

plex network. Some of these industry sectors are not even aware that their capabilities are relevant to cyber security because the government has provided no insight into the capabilities it requires, or the architecture and concept of operations it has designed for the cyber security initiative.

The committee urges the President to declassify the cyber security initiative to the level where industry can understand how it may contribute to solutions, and to invite U.S. industry to propose comprehensive solutions to the government's cyber security needs.

The committee directs the Under Secretary of Defense for Acquisition, Technology, and Logistics to task the Defense Science Board (DSB) to assess the capability of U.S. industry to design and build capabilities to defend government networks and critical infrastructure consistent with the government's classified architecture and concept of operations. The committee directs that the DSB report be forwarded to Congress by April 1, 2010.

### **Ship decommissioning**

Section 231 of title 10, United States Code, requires the Secretary of Defense to submit an annual long-range plan for the construction of naval vessels, and to certify that the current budget and the future-years defense program (FYDP) funds that plan.

The Senate report accompanying S. 1547 (S. Rept. 110-77) of the National Defense Authorization Act for Fiscal Year 2008 included direction that the Secretary include an addendum providing the hull numbers and planned disposition of ships that were to be dismantled, sunk, or decommissioned during the FYDP and the resultant gaps in capability upon the decommissioning of each ship.

The committee finds these reports very helpful, but believes that they could be even more useful if there were better fidelity in projections of long-term force structure in this report. Specifically, one can infer from notional delivery schedules when a ship in the ship-building plan will deliver. What is much less clear for data beyond the FYDP is what assumptions are being made for decommissionings of ships.

Therefore, the committee directs the Secretary of Defense to include in each annual report submitted in accordance with section 231 of title 10, United States Code, specific ship-by-ship decommissionings that are projected over the full-time period of the plan. That information shall be in addition to the more specific data on decommissionings within the period of the FYDP mentioned above.

### **Strategic communications and public diplomacy**

The committee continues to monitor closely the Department of Defense's (DOD) funding for counter support for terrorism and counter-radicalization strategic communication programs and other public diplomacy programs. Since the September 11, 2001, terrorist attacks, the U.S. Government, according to the Government Accountability Office (GAO), has spent at least \$10.0 billion on communication efforts designed to advance the strategic interests of the United States. DOD does not have a separate budget covering its strategic communication activities, but the GAO reports that

DOD “spends hundreds of millions of dollars each year” to support its information operations outreach activities.

The committee is aware of initiatives undertaken and funded by the joint improvised explosive device defeat organization and geographical combatant commands for strategic communications programs directed at counter-support for terrorism and counter-radicalization. Many ongoing programs are in support of operations in Iraq and Afghanistan, but military information support teams (MISTs) from United States Special Operations Command are also deploying to United States embassies in countries of particular interest around the globe to bolster the efforts of the Department of State and the U.S. Agency for International Development. These efforts are in addition to many of other small public diplomacy programs. Strategic communications and public diplomacy programs are important activities and the committee supports them, but the committee is not able to determine whether these efforts are integrated within DOD or with the broader U.S. Government, nor is the committee able to oversee adequately the funding for the multitude of programs.

While Congress awaits delivery of the report on strategic communication and public diplomacy activities of the Federal Government required under section 1055 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110–417), the committee directs the Under Secretary of Defense—Policy and Under Secretary of Defense—Comptroller to develop budget documentation materials for fiscal year 2011 that clearly articulate and document DOD’s objectives and funding levels for strategic communications and public diplomacy.



## **TITLE XI—CIVILIAN PERSONNEL MATTERS**

### **Repeal of National Security Personnel System; Department of Defense personnel authorities (sec. 1101)**

The committee recommends a provision that would freeze the expansion of the National Security Personnel System (NSPS) and terminate NSPS unless the Secretary of Defense certifies that termination would not be in the best interest of the Department of Defense and provides a specific schedule for making changes to improve the fairness, credibility, and transparency of the system. In the event that NSPS is terminated, the provision would provide a 1-year period for the transition of NSPS employees back into the General Schedule system. In addition, the provision would authorize the Secretary to develop fair, credible, and transparent methods for hiring and assigning personnel, and for appraising employee performance.

The committee believes that the Department of Defense (DOD) needs continuing flexibility to efficiently hire qualified new employees and to manage its workforce in a manner that promotes superior performance. However, the committee has received many complaints from DOD employees during the 5 years during which the Department has sought to implement NSPS, to the detriment of needed human capital planning and workforce management initiatives. The committee acknowledges the review of NSPS initiated by the Deputy Secretary of Defense under the auspices of the Defense Business Board and remains open to consideration of its forthcoming findings and recommendations.

### **Extension and modification of experimental personnel management program for scientific and technical personnel (sec. 1102)**

The committee recommends a provision that would extend the experimental personnel management program at the Defense Advanced Research Projects Agency (DARPA), the services, and a number of defense agencies for an additional 3 years. The provision would also equalize the compensation that employees under the program could receive above their base pay to the levels established for the Department's Highly Qualified Experts program. The committee notes that DARPA has used this authority successfully to hire the specialized, world-class, technical talent they need to perform their unique defense mission.

### **One-year extension of authority to waive annual limitation on premium pay and aggregate limitation on pay for federal civilian employees working overseas (sec. 1103)**

The committee recommends a provision that would authorize the head of an executive agency to waive limitations on the aggregate of basic and premium pay payable during calendar years 2009 and

2010 to an employee who performs work in an overseas location that is in the area of responsibility of the Commander, United States Central Command, or an overseas location that was formerly in the area of responsibility of the Commander, United States Central Command but has been moved to the area of responsibility of the Commander, United States Africa Command, in support of a contingency operation or an operation in response to a declared emergency.

The total amount payable may not exceed the total annual compensation payable to the Vice President under section 104 of title 3, United States Code.

**Availability of funds for compensation of certain civilian employees of the Department of Defense (sec. 1104)**

The committee recommends a provision that would authorize the Department of Defense (DOD) to use funds available for the purchase of contract services to instead provide compensation for civilian employees to meet the same requirement.

The Secretary of Defense has announced plans to hire up to 30,000 new civil servants over the next 5 years, to replace contractor employees and restore needed expertise and authority to the DOD workforce. In the past, the Department has been impeded in efforts to achieve a rational balance between civilian employees and contractor employees by funding decisions that preclude trade-offs between the two workforces. The committee believes that the Secretary should have the funding flexibility needed to make such trade-offs.

**Department of Defense Civilian Leadership Program (sec. 1105)**

The committee recommends a provision that would authorize the Secretary of Defense to establish a program of leadership recruitment and development for civilian employees of the Department of Defense, to be known as the Department of Defense Civilian Leadership Program (DCLP).

The Secretary of Defense has announced plans to increase the size of the acquisition workforce by 20,000 government acquisition professionals by 2015 to address the Department's long-standing problems in the acquisition of products and services. Acquisition experts have informed the committee that the Department's needs extend beyond contracting officials to system engineers, development planners, software engineers, cost estimators, developmental testers, and other highly skilled professionals. They have emphasized that the quality of the new employees is at least as important as the quantity. The committee believes that the DCLP will provide the Department with an important new tool to recruit individuals with the academic merit, work experience, and demonstrated leadership skills necessary to build the most effective acquisition workforce possible.

**Review of defense laboratories for participation in defense laboratory personnel demonstration projects (sec. 1106)**

The committee recommends a provision that would require the Secretary of Defense to undertake a review of defense laboratories

that are not currently operating under the successful laboratory personnel demonstration system, originally authorized by Congress in the National Defense Authorization Act for Fiscal Year 1995 (Public Law 103-337). The committee notes that the personnel system flexibilities within this program support laboratory directors' efforts to hire and retain top quality in order to support the execution of their designated research and technology development missions.

The committee notes that there are still a number of laboratories that have not been allowed to participate in the program and recommends that the Department quickly review the costs and benefits to allowing them to operate using the greater flexibilities inherent in the lab personnel demonstration program. The committee expects that in the interests of allowing the laboratories to optimally execute their designated missions, the laboratories will be delegated the maximum flexibility possible to shape their technical workforces.

#### **Item of Special Interest**

##### **Utilization of hiring authorities for civilian health care professionals**

The committee notes that Congress provided enhanced and expedited personnel hiring authorities for civilian health care professionals to the Department of Defense in section 1636 of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 110-181), as well as in section 1107 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110-417). These direct hire provisions authorized the Secretary of Defense to exercise any authority for the appointment and pay of health care personnel under chapter 74 of title 38, United States Code, for purposes of recruitment, employment, and retention of civilian health care professionals; and to recruit and appoint certain health care professionals directly to designated positions, respectively.

The committee continues to hear complaints from the Department and from the services about the onerous nature of the civilian hiring process and that highly qualified professionals are lost to other agencies or to the private sector as a result. The hiring authorities provided to the Department by Congress were meant to alleviate those difficulties in order to enable the Department and the services to recruit and retain much needed health care support.

The committee directs the Secretary of Defense to submit a report to the Committees on Armed Services of the Senate and the House of Representatives not later than 30 days after enactment of this bill on the implementation and utilization of these hiring authorities to date, and whether the Department needs any additional legislative authorities in order to obtain necessary civilian health care professionals.





## **TITLE XII—MATTERS RELATING TO FOREIGN NATIONS**

### **Subtitle A—Assistance and Training**

#### **Increase in unit cost threshold for purchases using certain funds under the Combatant Commander Initiative Fund (sec. 1201)**

The committee recommends a provision that would change the unit cost threshold for items whose purchase is subject to the limitation of subparagraph (e)(1)(A) of section 166a of title 10, United States Code, from \$15,000 to the unit cost threshold in effect under section 2245a of this title, currently \$250,000.

#### **Authority to provide administrative services and support to coalition liaison officers of certain foreign nations assigned to Joint Forces Command (sec. 1202)**

The committee recommends a provision that would amend section 1051a of title 10, United States Code, to allow the Secretary of Defense to provide administrative services and support, and to pay travel and subsistence expenses, for certain coalition liaison officers assigned temporarily to U.S. Joint Forces Command, as is currently authorized for certain coalition liaison officers to the headquarters of a combatant command in connection with the planning for, or conduct of, a coalition operation.

#### **Modification of authorities relating to program to build the capacity of foreign military forces (sec. 1203)**

The committee recommends a provision that would provide that no more than \$75.0 million of the \$350.0 million authorized annually for fiscal years 2010 and 2011 for a program under section 1206 of the John Warner National Defense Authorization Act for Fiscal Year 2007 (Public Law 109–364; 120 Stat. 2418), as amended, may be used to build the capacity of foreign military forces to participate in or support military and stability operations in which the United States Armed Forces are a participant.

The committee notes the request by the Department for new authorities to: (1) build the capacity of a foreign country's national military forces preparing to support a coalition operation conducted as part of Operation Iraqi Freedom (OIF) or Operation Enduring Freedom (OEF) in Afghanistan, or by the North Atlantic Treaty Organization (NATO) International Security Assistance Force (ISAF); and (2) build the capacity of NATO and partner special operations forces to support NATO or coalition special operations conducted as part of OIF or OEF in Afghanistan, or by the NATO ISAF. The committee believes that both these activities can be conducted within the existing authority of section 1206 of Public Law 109–364, as amended.

The authority provided in section 1206 of Public Law 109–364, as amended, has been developed through a process of close consultation between the Department of Defense and Congress, resulting in both a number of legislative changes and informal policy guidance intended to ensure that the program is conducted consistent with the legislative intent. For example, the committee has made clear its desire that section 1206 funds not be used to build the capacity of foreign military forces of countries for which designated funds for training and equipping security forces have been established, such as in Iraq and Afghanistan. The committee would be open to considering proposals to use the authority under this section to help build the capacity of NATO and other coalition partners whose ability to contribute to ongoing military or stability operations in Iraq and Afghanistan would otherwise be limited.

The committee has repeatedly stated that the authority of section 1206 of Public Law 109–364, as amended, is intended to address emerging needs and should not duplicate or become a substitute for security assistance under Foreign Military Financing (FMF) authorities. To this end, the committee has emphasized the need for 1206 programs to develop plans to transition to FMF funding if longer-term assistance is required. The Department's stated desire to conduct sustained capacity building to prepare special operations to deploy for coalition operations suggests that it intends to establish multi-year programs with respect to certain recipient countries. To reduce the potential impact of such multi-year programs on the section 1206 program as a whole, the committee would establish the \$75.0 million funding limit provided in this section.

The committee reiterates its view that the authority of section 1206 of Public Law 109–364, as amended, is temporary and encourages the Administration to review the existing security assistance authorities of the Department of Defense and Department of State to reconcile, de-conflict, and improve the effectiveness of these authorities.

**Modification of notification and reporting requirements for use of authority for support of special operations to combat terrorism (sec. 1204)**

The committee recommends a provision that would establish two distinct notification requirements under section 1208 of the Ronald Reagan National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2005 (Public Law 108–375), as amended by the Duncan Hunter NDAA for FY 2009 (Public Law 110–417). In the event the Department is providing assistance under this authority to irregular forces, groups, or individuals supporting or facilitating military operations by U.S. special operations forces to combat terrorism, the Secretary of Defense shall notify the congressional defense committees at least 72 hours prior to the use of such authority, and in the event the Department is providing assistance under this authority to foreign forces supporting or facilitating military operations by U.S. special operations forces to combat terrorism, the Secretary of Defense shall notify the congressional defense committees no later than 48 hours following the use of such authority. This provision would also require the Department to notify the con-

gressional defense committees again should there be any change in the scope or funding level of the operation.

The committee has reviewed the most recent notifications and the annual report submitted by the Department and believes the level of information provided by the Department is inadequate, particularly on issues of the type of support provided to U.S. special operations forces; type of support provided to the recipient; intended duration of the support (i.e. duration of the program); amount obligated under the authority to provide support; and an after-action assessment of the operational support. Therefore, this provision also amends the notification and reporting requirements established in section 1208 (c) and (f) respectively of the Ronald Reagan NDAA for FY 2005 (Public Law 108-375) to reflect these unaddressed matters.

The committee is concerned that U.S. Special Operations Command (SOCOM) may be leveraging this authority for long-term engagement with partner nations, rather than exclusively for support of or facilitating of military operations by U.S. special operations forces to combat terrorism, particularly in countries other than Iraq and Afghanistan. The committee recommends that SOCOM review the current programs to ensure that they are being executed in a manner consistent with the original intent.

**Modification of authority for reimbursement of certain coalition nations for support provided to United States military operations (sec. 1205)**

The committee recommends a provision that would extend for fiscal year 2010 the authority provided in section 1233 of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 110-181; 122 Stat. 393) for the Secretary of Defense to reimburse key cooperating nations for logistical and military support provided by that nation to, or in connection with, U.S. military operations in Operation Iraqi Freedom (OIF) or Operation Enduring Freedom (OEF). This provision would also modify section 1233 of Public Law 110-181 to allow funds under section 1233 of Public Law 110-181 for fiscal year 2010 to be used to assist key cooperating nations supporting U.S. military operations in OIF and OEF by providing specialized training and supplies, or loaning specialized equipment. The total amount of reimbursements and other support authorized for fiscal year 2010 would not exceed \$1.6 billion. The provision would also extend until September 30, 2011, the requirements of section 1232 of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 110-181; 122 Stat. 393) applicable to notifications of reimbursements of Pakistan for support it provided.

The committee understands from the Department of Defense that the Pakistan Government has agreed to establish within the Pakistan Ministry of Finance an account, to be funded with \$25.0 million from the next reimbursement to Pakistan under Coalition Support Funds, to cover the costs of helicopter spare parts. Under this arrangement, the United States would deposit this amount directly into Pakistan's U.S.-administered Foreign Military Sales (FMS) trust fund, and the procurement of helicopter spare parts would be financed using those funds under the FMS program. The committee welcomes this arrangement as a positive step in improving trans-

parency for how Pakistan uses reimbursements provided from Coalition Support Funds.

**One-year extension and expansion of Commanders' Emergency Response Program (sec. 1206)**

The committee recommends a provision that would extend for 1 year the authority for the Commanders' Emergency Response Program (CERP), which enables commanders in Iraq and Afghanistan to fund humanitarian relief and reconstruction projects in their areas of responsibility that provide immediate benefit to the local people. The provision would authorize the Secretary of Defense to use up to \$1.4 billion in Operation and Maintenance funding in fiscal year 2010 for CERP. The provision would also provide that the Secretary may transfer up to \$100.0 million of CERP funds to the Department of State to support the Afghanistan National Solidarity Program if the Secretary determines that doing so would enhance counterinsurgency or stability operations in Afghanistan.

The committee notes that the budget request included \$1.5 billion for CERP for fiscal year 2010, consisting of \$300.0 million for CERP in Iraq and \$1.2 billion for CERP in Afghanistan. The committee welcomes the reduction in CERP expenditures for Iraq which is consistent with the drawdown of U.S. forces and the end of the U.S. combat mission in Iraq by no later than the end of August 2010. The committee has concerns related to the rapid growth of CERP funding in Afghanistan and would reduce CERP funding for Afghanistan by \$100.0 million to \$1.1 billion for fiscal year 2010. This reduced funding level for CERP in Afghanistan would still exceed the level of CERP spending by U.S. forces in Iraq at the height of the surge in 2007–2008, when the U.S. troop level in Iraq exceeded 160,000 soldiers, more than twice the 68,000 U.S. soldiers expected to be deployed in Afghanistan by late summer 2009. Also, concerns have been raised about the capacity of Afghanistan, with its lack of infrastructure and low literacy rates, to absorb such a large influx of CERP funds. In addition, the committee has concerns about the Department of Defense's capacity to manage and oversee large amounts of CERP funds in Afghanistan. A report by the Government Accountability Office (GAO) earlier this year found a lack of training for personnel responsible for executing CERP, and a shortage in the number of personnel needed to effectively execute CERP. As a result, oversight of CERP projects in Afghanistan has been conducted inconsistently or not at all. The committee strongly supports the GAO recommendations that the Secretary direct the Commander of U.S. Central Command to: 1) conduct an evaluation of workforce requirements for CERP in Afghanistan and ensure adequate staffing for its administration; and 2) establish training requirements for personnel executing CERP.

The committee notes the valuable contribution that the National Solidarity Program (NSP) is making to reconstruction and local governance in Afghanistan. The NSP funds thousands of small development projects in nearly every corner of Afghanistan, providing modest grants of money directly to locally-elected community development councils which plan and oversee projects that meet local needs. As of the first quarter of 2009, the NSP has established over 21,500 development councils in villages and localities in every prov-

ince. The program provides grants averaging \$27,000 with a cap of \$60,000 per community, and has disbursed approximately \$600.0 million in international contributions, primarily from World Bank grants and the Afghanistan Reconstruction Trust Fund. In addition, communities must take ownership of the projects by contributing at least 10 percent of the total project costs in either labor, materials, or funds. The Afghan Ministry of Rural Rehabilitation and Development, which manages the program, has plans to expand the NSP to all districts in the country, including less secure areas in Regional Command South where the U.S. troop presence is increasing. The committee believes that increased funding for the NSP would support key counterinsurgency objectives of in areas at risk of insurgent influence and strengthening ties between local political entities and the Afghan Government.

**One-year extension of authority for security and stabilization assistance (sec. 1207)**

The committee recommends a provision that would extend for 1 year the authority for the Secretary of Defense to transfer up to \$100.0 million in services or funds to the Department of State to support Department of State programs of security and stabilization assistance under section 1207 of the National Defense Authorization Act for Fiscal Year 2006 (Public Law 109–163), as amended by section 1210 of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 110–181).

The committee believes that one valuable aspect of the section 1207 authority is the increased coordination between the Department of Defense (DOD) and the Department of State (DOS) in the formulation and implementation of reconstruction, security, and stabilization assistance projects under this authority. At the same time, the committee reaffirms its view that section 1207 is a temporary authority. Should a section 1207–type authority be established within the DOS, the committee would urge that it be adequately resourced within the DOS budget and that authority be designed to institutionalize the expanded coordination between the DOD and DOS achieved under section 1207.

**Authority for non-reciprocal exchanges of defense personnel between the United States and foreign countries (sec. 1208)**

The committee recommends a provision which would permit the Department of Defense (DOD) to accept, on a non-reciprocal basis, defense personnel of the defense ministry of an ally or friendly foreign government. This provision would not permit the DOD to pay the salary, per diem, cost of living, travel costs, cost of language or other training, and other costs for the personnel of such government. This authority will expire at the end of 2011.

The committee understands that the Department has been approached by allies and friendly foreign nations that would like to assign defense personnel, civilian and military, to counterpart organizations in the Department, but has only had a limited capability to do so when the United States cannot provide reciprocal personnel.

The Secretary of Defense is directed to report to the congressional defense committees annually, not later than March 1, the costs of this program to the United States; the agencies and positions that are involved in the program; and an assessment of the benefits to the Department.

**Defense cooperation between the United States and Iraq (sec. 1209)**

The committee recommends a provision that would encourage the Secretary of Defense to increase the number of positions in professional military education courses at command and general staff colleges, war colleges, and the service academies available annually to personnel of the security forces of the Government of Iraq. The committee notes that the long-term security of Iraq is in the interest of the United States and that military education can foster enduring relationships with the security forces of the Government of Iraq.

**Report on alternatives to use of acquisition and cross-servicing agreements to lend military equipment for personnel protection and survivability (sec. 1210)**

The committee recommends a provision that would require the Secretary of Defense to assess and report on alternatives to the temporary authority provided under section 1202 of the John Warner National Defense Authorization Act for Fiscal Year 2007 (Public Law 109–364; 120 Stat. 2412), as amended, which allows for the use of acquisition and cross-servicing agreements for the purposes of lending or leasing certain military equipment to military forces participating in combined operations with the United States in Iraq, Afghanistan, or as part of peacekeeping operations under the United Nations Charter or another international agreement.

The committee notes that the temporary authority provided by section 1202 of Public Law 109–364, as amended, expires September 30, 2011. The committee reiterates its concern that acquisition and cross-servicing agreements are not intended for the loan or lease of significant military equipment and emphasizes the need to find alternatives to this authority prior to its expiration.

**Subtitle B—Reports**

**Report on United States engagement with Iran (sec. 1221)**

The committee recommends a provision that would require the President, no later than January 31, 2010, to deliver a report to Congress on U.S. engagement with the Islamic Republic of Iran. The report would describe the status of U.S. efforts to engage with the Government of Iran, including an assessment of the progress of negotiations; the seriousness with which the Government of Iran is engaging in negotiations; and an assessment of the extent to which the Government of Iran has complied with United Nations Security Council Resolutions, and cooperated with the International Atomic Energy Agency. The report would also include an assessment of the extent to which Iran continues past practices or has expressed a willingness to change its behavior, with regard to the following areas: diplomatic engagement; support for terrorism

and extremism; nuclear weapons-related and other nuclear activities; and missile development activities. The report would also require an assessment of the Government of Iran's involvement in the illegal narcotics networks in Afghanistan. And, finally, the report would also require the President to identify all sanctions against the Islamic Republic of Iran and provide an assessment of the effectiveness of these sanctions.

The committee hopes the Government of Iran will seize the opportunity offered by President Barack Obama to engage in direct diplomacy with the United States to discuss areas of mutual interest and to engage in a good faith effort to resolve all outstanding issues related to its support for terrorism and extremism, and illicit nuclear and missile development activities.

### **Subtitle C—Other Matters**

#### **Sense of Congress on establishment of measures of progress to evaluate United States strategic objectives in Afghanistan and Pakistan (sec. 1231)**

The committee recommends a provision that would express the Sense of the Congress that the Administration should review any previously established measures of progress for Afghanistan as required by section 1230(d) of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 110–181) and modify, add, or further establish applicable measures of progress for both Afghanistan and Pakistan, as part of the report on Afghanistan required by section 1230 of Public Law 110–181 and the report on Pakistan required by section 1232 of Public Law 110–181, consistent with the Administration's new strategy for the region as announced on March 27, 2009, and thereafter.

### **Items of Special Interest**

#### **China's use of nonmilitary warfare concepts**

The Department of Defense's Annual Report to Congress on the Military Power of the People's Republic of China (PRC) has included a brief description of the PRC concept of the "three warfares", generally identified as psychological warfare, media warfare, and legal warfare. These concepts, also referred to as "nonmilitary warfare concepts", have also been the subject of hearings before the United States-China Economic and Security Review Commission and were discussed in some detail in the Commission's 2008 report to Congress. The March 2009 harassment of the USNS *Impeccable* by Chinese ships in the South China Sea stands as a recent example of how the PRC may be using the concept of "legal warfare", for instance, to influence regional events. The committee urges the Secretary of Defense to examine the implications of the "three warfares" on United States military affairs in the region and requests the Secretary to provide additional detail on each of them, including examples and trends, in the 2010 report to Congress.

#### **Recent surge in piracy off the coast of Somalia**

The committee is concerned about the recent surge in piracy off the coast of Somalia and in the Gulf of Aden and believes that pi-

racy must be an urgent part of our national security dialogue. The April 2009 pirate attack on the U.S.-flag ship Maersk Alabama, and the ensuing rescue operation of Captain Richard Philips orchestrated by our Nation's military, particularly the United States Navy and Navy SEALs, underscores the value of the armed forces in confronting piracy. While it is widely agreed that the naval forces of the world have a critical role to play in deterring and combating pirates, the problem is more complex and requires a holistic approach combining military efforts with industry efforts, diplomatic outreach, and robust prosecutions.

Today, policymakers are searching for solutions to combat piracy and, more broadly, to address the situation in Somalia—a failed state that lacks a functioning government capable of enforcing its laws, or policing and securing its territory, including its territorial sea and exclusive economic zone. The committee believes that it is imperative that the international community come together to confront and solve this growing problem of piracy. Ultimately, the most durable, long-term solution will be achieved ashore, not on the high seas. While a more permanent solution involves engaging broadly on Somalia's myriad issues ashore, near-term coordinated international action is necessary to protect ships, cargos, and, most importantly, seafarers from the proliferation of piracy in the region.

Currently, the primary mechanism for U.S. military involvement is Combined Task Force-151, which consists of naval forces of the U.S. and several of our allies while cooperating and coordinating with the navies of a broad array of other nations, including Pakistan, Russia, India, and China. We cannot, however, expect the armed forces to secure completely a vast maritime expanse roughly equivalent to the distance of the U.S. coastline from Maine to Florida. The global commercial shipping industry, to include the shipping companies and their insurers, must also take necessary steps to protect their ships and crews.

The committee believes that the U.S. military must remain proactively involved in the issue, but that the industry must develop effective piracy countermeasures, including the employment of private armed shipboard security teams capable of responding to and preventing pirate attacks. Although this alone will not lead to a permanent solution to the problem it is a necessary step that must be taken while we pursue such a solution.



## **TITLE XIII—COOPERATIVE THREAT REDUCTION**

### **Specification of Cooperative Threat Reduction programs and funds (sec. 1301)**

The committee recommends a provision that would define the Cooperative Threat Reduction (CTR) programs, define the funds as authorized to be appropriated in section 301 of this bill, and authorize CTR funds to be available for obligation for 3 fiscal years.

### **Funding allocations (sec. 1302)**

The committee recommends a provision that would authorize \$424.2 million, an increase of \$20.0 million above the budget request, for the Cooperative Threat Reduction (CTR) program. This provision would also authorize specific amounts for each CTR program element, require notification to Congress 30 days before the Secretary of Defense obligates and expends fiscal year 2010 funds for a purpose other than a purpose listed in the provision, and require notification to Congress 15 days before the Secretary of Defense obligates and expends fiscal year 2010 funds in excess of the specific amount authorized for each CTR program element.

The committee recommends an additional \$10.0 million for new Cooperative Threat Reduction initiatives for states outside of the former Soviet Union, \$7.0 million for strategic offensive arms elimination and \$3.0 million for additional expenses associated with the Russian and other chemical weapons destruction activities.

The committee continues to believe that one of the highest priorities of the CTR program is destroying Russian chemical weapons munitions at the destruction facility in Shchuch'ye, Russia. The CTR program has entered into an arrangement with the Russian Government that assigns responsibility to Russia to complete the U.S. funded destruction facility and begin operations. Timely start-up and safe operation of the facility is essential and continues to be a matter of concern to the committee. As a result, the committee directs the Secretary to notify the congressional defense committees immediately if there is any delay or other problem in the startup of either the Russian funded destruction facility or the U.S. funded destruction facility. The committee notes that the formal dedication ceremony for the Shchuch'ye facility was conducted in May.

The additional \$3.0 million for chemical weapons destruction shall be available for sustainment of the community outreach efforts and to provide technical or other assistance to assist with the Shchuch'ye facility startup, or other chemical weapons destruction activity.

The committee notes that there are other countries with stockpiles of bulk chemical agent and chemical munitions outside of the former Soviet Union for which the Department of Defense (DOD) could provide destruction assistance. The committee urges DOD to

explore assisting other countries with chemical weapons destruction requirements.

**Authority to enter into agreements to receive contributions for Biological Threat Reduction program (sec. 1303)**

The committee recommends a provision that would authorize the Secretary of Defense, with the concurrence of the Secretary of State, to receive contributions from any person the Secretary of Defense deems appropriate for purposes of the biological threat reduction program (BTRP) at the Department of Defense. The BTRP is a program carried out under the Cooperative Threat Reduction (CTR) program. Any funds accepted would be retained by the Secretary of Defense in a separate account in the Treasury, but would be available for obligation and expenditure without further appropriation. If the funds contributed have not been obligated or expended within 3 years from the date received they shall be returned to the original donor. This authority would expire on December 31, 2015.

The provision would also direct the Secretary of Defense to notify the congressional defense committees within 30 days after receiving any contributions. The notification shall include the person who made the contribution and the value and purpose of the contribution. The Secretary of Defense may not obligate the funds accepted until 15 days after the notice is submitted. In addition, the provision would direct the Secretary of Defense to submit to the congressional defense committees an annual report for each fiscal year in which funds are accepted describing the contributions received in that fiscal year. This annual report would be due no later than October 31 of each year and would describe the contributions for the previous fiscal year.

The committee notes that the Secretary of Energy has successfully utilized similar authority for several of the Department of Energy nonproliferation programs. The committee urges the Secretary of Defense to utilize this authority to the maximum extent practical to allow other countries, organizations, and individuals to contribute to the important BTRP programs. If the Secretary of Defense determines that the authority is useful, the committee would welcome suggestions for any additional CTR programs that could utilize this type of authority.

**Authorization of use of Cooperative Threat Reduction program funds for bilateral and multilateral nonproliferation and disarmament activities (sec. 1304)**

The committee recommends a provision that would authorize the Secretary of Defense to obligate not more than 10 percent of the funds authorized to be appropriated for the Cooperative Threat Reduction (CTR) program for any bilateral or multilateral activities relating to nonproliferation or disarmament, notwithstanding any other provision of law. The Secretary may exercise this authority after notifying the appropriate congressional committees 15 days in advance of the intent to exercise this authority and if the President certifies the action is necessary to support the national security objectives of the United States.

The committee believes that additional flexibility is needed to ensure there are adequate funds available to address urgent immediate requirements for which funds might not otherwise be available or are inadequate. Similar authority has been provided to the Secretary of Energy elsewhere in this bill.



## **TITLE XIV—OTHER AUTHORIZATIONS**

### **Subtitle A—Military Programs**

#### **Subtitle B—National Defense Stockpile**

##### **Extension of previously authorized disposal of cobalt from National Defense Stockpile (sec. 1411)**

The committee recognizes the volatility of the cobalt market and the current economic downturn, which has reduced demand for cobalt material. The committee authorizes that cobalt sales authority to be extended 2 years through fiscal year 2011.

##### **Authorization for actions to correct the industrial resource shortfall for high-purity beryllium metal in amounts not in excess of \$80,000,000 (sec. 1412)**

Subsection 303(a)(6)(c) of the Defense Production Act of 1950 (Public Law 81–774) requires a specific authorization from Congress for any action or actions taken to correct an industrial resources shortfall, that would cause the aggregate outstanding amount of all such actions to exceed \$50.0 million. The budget request has \$19.5 million which the Department estimates will complete the project; however, this amount of funding will place them over the current \$50.0 million limit by statute.

The committee is aware of the Department's concern that unanticipated cost growth may occur. Accordingly, the committee authorizes an increase not in excess of \$80.0 million.

#### **Subtitle C—Armed Forces Retirement Home**

##### **Authorization of appropriations for Armed Forces Retirement Home (sec. 1421)**

The committee recommends a provision that would authorize \$134.0 million to be appropriated for fiscal year 2010 from the Armed Forces Retirement Home Trust Fund. Of the amount requested, \$62.0 million would be used for the operation and maintenance of the Armed Forces Retirement Home, and \$72.0 million would remain available for construction and renovation of physical plants.

The committee notes that in accordance with section 418 of title 24, United States Code, the Inspector General of the Department of Defense will inspect the Retirement Home's Washington D.C. location this year. Because committee staff continues to hear concerns expressed about issues with staffing and health care services at the Retirement Home, the committee looks forward to the Inspector General's report and its continued oversight of the operations of the Retirement Home.

## **Budget Items**

### **T-AKE dry cargo/ammunition ship**

The fiscal year 2010 budget request included \$940.1 million within the National Defense Sealift Fund (NDSF) for building two T-AKE dry cargo/ammunition ships.

These next two vessels are intended to support the Maritime Prepositioning Force (Future), or MPF(F), concept. At this time last year, the future-years defense program (FYDP) included several ships in the plan to support the MPF(F) concept. However, the FYDP did not include any T-AKE vessels after 2009.

The other MPF(F) vessels that were in that FYDP last year have been delayed in this budget, on the basis that the Quadrennial Defense Review (QDR) needs to review this concept before implementing it.

The committee notes that the Navy's acquisition strategy for these two T-AKE vessels includes exercising options on existing contracts that would remain in force until after fiscal year 2010. In other words, the contract options would be available to exercise, at the Navy's discretion, until fiscal year 2011 for one ship and fiscal year 2012 for the other ship.

In the face of the pending QDR review, it would make sense to hedge our bets on moving forward as rapidly as this on one part of the program, when the Department has delayed other parts of the program pending that review.

The committee believes that continued production of only one of these vessels is sufficient to hedge against a positive outcome for the MPF(F) concept in the QDR, while avoiding a production break in the shipyard. The Navy could use available funds to contract for some advanced procurement to protect shipbuilding schedules, but need not award the full contract for the second ship to do that.

Therefore, the committee recommends a decrease of \$400.0 million to reflect delaying exercising the option for the second of the two ships at least until fiscal year 2011, after the Department completes the QDR reviews of the MPF(F) concept.

### **Defense Coalition Support Fund**

The budget request included \$22.0 million in Operation and Maintenance, Defense-wide (OMDW), for the Defense Coalition Support Fund. The legislative authority for this fund, which would require an amendment to title 22, United States Code, does not currently exist. The committee recommends a decrease of \$22.0 million in OMDW for the Defense Coalition Support Fund.

### **Defense Health Program Operation & Maintenance funding**

The amount authorized to be appropriated for the Defense Health Program Operation and Maintenance account includes the following changes from the budget request. The provisions underlying these changes in funding levels are discussed in greater detail in title VII of this committee report.

[Changes in millions of dollars]

TRICARE continuation pending MEDICARE eligibility .....	4.0
Reimbursement for exceptional travel .....	10.0
TRICARE eligibility for Retired Reservists under the age of 60 ....	10.0
Expansion of survivor eligibility for the TRICARE dental program .....	2.0
Total .....	26.0

### **Medical products sustainment**

The budget request included \$20.0 million in PE 67100HP for medical products and capabilities enhancement activities. The committee recommends a reduction of \$10.0 million for this account. The committee believes that this activity needs to be better justified, with specific sustainment activities related to specific medical products or technologies identified to justify requested funds.

### **Breast Cancer Center of Excellence**

The budget request included \$113.3 million in PE 63115HP for medical technology development. The committee recommends a reduction of \$5.3 million for the Breast Cancer Center of Excellence. The committee believes there are higher medical research priorities for the Department of Defense, including addressing critical infectious disease, combat casualty care, and warfighter psychological health issues. The committee further notes that the National Institutes of Health's National Cancer Institute has requested a fiscal year 2010 budget of over \$5.0 billion. The committee believes that the Department of Defense should leverage those funds to address any identified military cancer research priorities.

### **Department of Defense Inspector General**

The budget request included \$272.4 million in Operation and Maintenance, Defense-wide (OMDW) for the Office of the Inspector General (OIG). The committee is concerned that funding levels for independent audit and investigative functions should keep pace with the demand for these services. Therefore, the committee recommends a total increase of \$16.0 million in OMDW for the OIG, of which \$15.0 million is for operation and maintenance and \$1.0 million is for procurement.

The OIG audits, investigates, inspects, and evaluates the programs and operations of the Department of Defense (DOD), and recommends policies and process improvements that promote economy, efficiency, effectiveness, and integrity in DOD programs and operations. The committee notes the dramatic growth in the number and cost of Department contracts for operations, procurement, research, and construction within the United States and around the world. The increase recommended by the committee should enable the OIG to conduct oversight related military operations in Iraq and Afghanistan, contract management and acquisitions, and support audits to identify potential waste, fraud, and abuse.





## **TITLE XV—OVERSEAS CONTINGENCY OPERATIONS**

### **Purpose (sec. 1501)**

This section states the purpose of this title which is to authorize additional appropriations for overseas contingency operations.

### **Army procurement (sec. 1502)**

This section would authorize additional appropriations for overseas contingency operations in fiscal year 2010 for Army procurement.

### **Navy and Marine Corps procurement (sec. 1503)**

This section would authorize additional appropriations for overseas contingency operations in fiscal year 2010 for Navy and Marine Corps procurement.

### **Air Force procurement (sec. 1504)**

This section would authorize additional appropriations for overseas contingency operations in fiscal year 2010 for Air Force procurement.

### **Defense-wide activities procurement (sec. 1505)**

This section would authorize additional appropriations for overseas contingency operations in fiscal year 2010 for Defense-wide activities procurement.

### **Research, development, test, and evaluation (sec. 1506)**

This section would authorize additional appropriations for overseas contingency operations in fiscal year 2010 for research, development, test, and evaluation expenses.

### **Operation and maintenance (sec. 1507)**

This section would authorize additional appropriations for overseas contingency operations in fiscal year 2010 for operation and maintenance expenses.

### **Military personnel (sec. 1508)**

This section would authorize additional appropriations for overseas contingency operations in fiscal year 2010 for military personnel expenses.

### **Working capital funds (sec. 1509)**

This section would authorize additional appropriations for overseas contingency operations in fiscal year 2010 for defense working capital funds.

**Defense Health Program (sec. 1510)**

This section would authorize additional appropriations for overseas contingency operations in fiscal year 2010 for the Defense Health Program.

**Drug Interdiction and Counter-drug Activities, Defense-wide (sec. 1511)**

This section would authorize additional appropriations for overseas contingency operations in fiscal year 2010 for drug interdiction and counterdrug activities, defense-wide.

**Defense Inspector General (sec. 1512)**

This section would authorize additional appropriations for overseas contingency operations in fiscal year 2010 for the Office of the Inspector General of the Department of Defense.

**Treatment as additional authorizations (sec. 1513)**

This section would provide that the amounts authorized for overseas contingency operations in this title are in addition to the amounts otherwise authorized in this Act.

**Funding tables (sec. 1514)**

This section would provide that the amounts authorized for overseas contingency operations in this title are to be available for the projects, programs, or activities in the dollar amounts indicated by funding tables in Division D of this Act.

**Special transfer authority (sec. 1515)**

The committee recommends a provision that would authorize the transfer of up to \$3.0 billion of overseas contingency operations funding authorizations in this title among the accounts in this title. The committee also recommends a provision that would authorize the transfer of up to \$1.5 billion of overseas contingency operations funding authorizations in this title to the Mine Resistant Ambush Protected Vehicle Fund. These special transfer authorities are in addition to the general transfer authority contained in section 1001 of this Act, but the same reprogramming procedures applicable to transfers under section 1001 would also apply to transfers under this section.

**Limitations on availability of funds in Afghanistan Security Forces Fund (sec. 1516)**

The committee recommends a provision that would require that the use of funds authorized to be appropriated for the Afghanistan Security Forces Fund in fiscal year 2010 will comply with the conditions in subsections (b) through (g) of section 1513 of the National Defense Authorization Act of Fiscal Year 2008 (Public Law 110–181; 122 Stat. 428).

**Availability of funds in Pakistan Counterinsurgency Fund (sec. 1517)**

The committee recommends a provision that would specify the uses of funds transferred by the Secretary of State to the Secretary of Defense during fiscal year 2010 for the Pakistan Counterinsur-

gency Fund (PCF) to provide assistance to the security forces of Pakistan to build the counterinsurgency capability of the Pakistan military forces and the Pakistan Frontier Corps. The provision would require prior to the expenditure of PCF funds that the Secretary of Defense provide an assessment as to whether the Government of Pakistan is committed to confronting the threat posed by Al Qaeda, the Taliban, and other militant extremists based on a determination by the Government of Pakistan that these extremist groups pose a threat to Pakistan's national interest and confronting this threat is critical to Pakistan's own national interest. The provision would also authorize the transfer of funds from the PCF account to other accounts of the Department of Defense, provide for prior notice to Congress before the transfer of these funds, and require quarterly reports on the specific uses of these funds.

### **Budget Items**

#### **Single channel ground to air radio systems family**

The budget request for overseas contingency operations includes \$128.2 million in Other Procurement, Army (OPA) for the procurement of single channel ground to air radio systems (SINGARS). The committee understands that the Army bases this request on anticipated battle losses for which there appears to be no record or documentation of actual loss over time upon which to base a projection. Further, if funded fully, the budget request would procure radios at a level beyond the Army's validated acquisition objective. It also remains unclear to the committee how the Army is accounting for the more than 64,000 SINGARS-like radios the Army procured in fiscal year 2005 against its acquisition objective.

Therefore, the committee recommends a decrease of \$75.0 million in OPA for SINGARS radios due to unjustified program growth. The funding that remains in the budget request should be used to cover the installation cost of systems already procured and sustainment of existing systems. The committee also directs the Army to request funds for SINGARS sustainment transitions in the appropriate Operation and Maintenance, Army budget activity in fiscal year 2012 and beyond.

#### **Force XXI battle command brigade and below**

The budget request for overseas contingency operations includes \$242.9 million in other procurement, Army (OPA), for Force XXI Battle Command Brigade and Below (FBCB2). The Army's Chief of Staff's unfunded priorities list included a request for an additional \$179.0 million in FBCB2 funding. FBCB2, used in conjunction with the Blue Force Tracking System, has proven its value in combat operations in Iraq and Afghanistan by increasing the ability of commanders to control the conduct of small unit operations while at the same time reducing the risk of fratricide. The committee recommends an increase of \$179.0 million in OPA for FBCB2.

#### **Joint Improvised Explosive Device Defeat Fund**

The budget request for overseas contingency operations (OCO) includes \$1,535.0 million for the Joint Improvised Explosive Device Defeat Fund. In title I of this act, the committee recommended a

transfer of \$564.9 million to title XV of this Act, including \$203.1 million for the joint improvised explosive device defeat organization's (JIEDDO) attack the network line of operation; \$199.1 million for JIEDDO's defeat the device operation; \$41.1 million for JIEDDO's train the force operation; and \$121.6 million for JIEDDO's staff and infrastructure line of operation. These adjustments are reflected in the appropriate tables.

Despite the Department's decision to institutionalize JIEDDO, the committee believes that JIEDDO's funding should remain in the OCO portion of the budget request because JIEDDO was organized in response to threats confronted by U.S. forces in Iraq and Afghanistan. The committee continues to be concerned that the Department cannot adequately oversee JIEDDO's budget, manpower, and activities in a manner that ensures the most efficient and effective delivery of equipment and capabilities to U.S. forces. The committee urges that the Department consider reexamining JIEDDO's oversight structure to determine whether a principal staff assistant could devote time and attention to JIEDDO's activities commensurate with the size of its activities.

The committee recognizes that improvised explosive devices (IED) will likely remain the weapon of choice for extremists operating in Iraq and Afghanistan. The committee commends JIEDDO for its ongoing efforts to counter the threat posed by IEDs to U.S. forces, and supports the Department's request to maintain JIEDDO's robust funding levels.

JIEDDO has executed over \$300.0 million for the construction of training lanes and other IED-specific training devices over the past few fiscal years. While the committee believes JIEDDO has an important role to play in coordinating the dissemination of information about tactics, techniques, and procedures being used by extremists and developing recommendations on how to counter IED threats and train U.S. forces, the committee believes the military departments have primary responsibility for training of their respective forces. Therefore, the committee directs JIEDDO to fund neither additional training lanes nor support and sustainment thereof after fiscal year 2010. The committee feels strongly that funding the sustainment and upgrade of training lanes is the sole responsibility of the appropriate military department, defense agency, or combatant command.

The committee supports the direction provided to JIEDDO by the appropriations committees relating to the future of the counter-improvised explosive device operations integration center (COIC). The committee believes COIC contributes to the Department provision of reach-back capabilities for conventional forces, and the committee commends JIEDDO's focus on these efforts. The committee is, however, concerned that the COIC may be duplicative and/or insufficiently coordinated with other similar organizations within the military departments, defense agencies, and intelligence community. The committee understands that the Office of the Secretary of Defense, in coordination with United States Central Command, and the Joint Staff, is undertaking an assessment of the relative contributions of various entities that provide reach-back support, and looks forward to the results of this analysis.

The committee notes that the Department has taken inconsistent positions on the disposition of ad hoc, but critical, entities created to respond to the urgent needs of combat forces in Iraq and Afghanistan. As noted elsewhere in this report, the Secretary of Defense has stated in testimony before the Senate Appropriations Committee, Subcommittee on Defense, that the intelligence, surveillance, and reconnaissance (ISR) task force should be phased out, while at the same time, the Department has decided to institutionalize JIEDDO. Just as the committee is concerned about the possible hasty demise of the ISR task force, so too the committee is concerned about the premature decision to make JIEDDO permanent. The committee urges the Department to clarify the criteria it is using to determine which institutions should become permanent and which should not, and to demonstrate how these criteria are being consistently applied across organizations.

#### **MQ-9 Reaper modifications**

The committee recommends a reduction of \$40.0 million in line 66, Air Force Aircraft Procurement, for MQ-9 modifications. The budget request included funds for procurement and integration of a long-range camera that the Air Force has decided not to buy.

#### **Commanders' Emergency Response Program**

The budget request included \$1.5 billion in Operation and Maintenance, Army (OMA), Overseas Contingency Operations (OCO), for the Commanders' Emergency Response Program (CERP) in Iraq and Afghanistan, consisting of \$300.0 million for CERP in Iraq and \$1.2 billion for CERP in Afghanistan. The committee's concerns regarding the level of CERP funding for Afghanistan, which has grown rapidly in recent years, are discussed in title XII. Accordingly, the committee recommends a decrease of \$100.0 million in OMA, OCO, for CERP.

#### **Human terrain teams**

The budget request included \$1.4 billion for security programs in Operations and Maintenance, Army (OMA), Overseas Contingency Operations (OCO), including funds for Human Terrain Teams (HTT). The committee supports the HTT program but expects that the reduction in troop levels in Iraq will result in a reduction in the requirement for additional HTTs. The committee recommends a reduction of \$20.0 million in OMA OCO from the request.

#### **Information Dominance Center**

The budget request included \$1.4 billion for security programs in Operations and Maintenance, Army (OMA), Overseas Contingency Operations (OCO), including funds for the Information Dominance Center (IDC) within the Intelligence and Security Command. The IDC has performed pioneering work in data mining, analytic collaboration, information sharing technology, and concepts of operation before and after the events of September 11, 2001, including direct support for deployed forces. The committee believes, however, that the IDC activities can be pared back as other organizations and activities now provide similar support and capabilities.

The committee recommends a reduction of \$30.0 million in OMA OCO to the request.

**Pakistan Counterinsurgency Fund**

The budget request included \$700.0 million in Operation and Maintenance, Army (OMA), Overseas Contingency Operations (OCO), for the Pakistan Counterinsurgency Fund (PCF). Following the submission of the budget request, the Secretary of Defense and the Secretary of State reached an agreement that for fiscal year 2010 funds for the PCF would be transferred from funds appropriated to the Department of State. Therefore, the committee recommends a decrease of \$700.0 million in OMA, OCO, for the PCF.

## **DIVISION B—MILITARY CONSTRUCTION AUTHORIZATIONS**

### **Summary**

Division B of this Act authorizes funding for military construction projects of the Department of Defense (DOD). It includes funding authorizations for the construction and operation of military family housing as well as military construction for the reserve components, the defense agencies, and the North Atlantic Treaty Organization (NATO) Security Investment Program. It also provides authorization for the base closure accounts that fund military construction, environmental cleanup, and other activities required to implement the decisions in base closure rounds.

The tables in Division B of the bill provide the project-level authorizations for the military construction funding authorized in Division B of this Act, other than the overseas contingency operations projects authorized in title XXIX, and summarize that funding by account. Funding for base closure projects is summarized in the table that follows, and is explained in additional detail in the table included in title XXVII of this report.

The fiscal year 2010 budget requested \$22.95 billion for military construction and housing programs. Of this amount, \$13.1 billion was requested for military construction, \$1.96 billion for the construction and operation of family housing, and \$7.9 billion for base closure activities, including \$7.5 billion to implement the results of the 2005 Base Realignment and Closure round.

Excluding the overseas contingency operations projects in title XXIX, the committee recommends authorization of appropriations for military construction and housing programs totaling \$22.92 billion. The total amount authorized for appropriations reflects the committee's continuing commitment to invest in the recapitalization of DOD facilities and infrastructure. The committee recommends an increase of \$1.08 billion for additional construction projects, and a reduction of \$1.06 billion in unjustified or lower priority projects, for a net increase of \$22.0 million to the amount requested for military construction and family housing. Additionally, the committee recommends the rescission of \$112.5 million in prior year funding no longer required.

### **Short title (sec. 2001)**

The committee recommends a provision that would designate Division B of this Act as the Military Construction Authorization Act for Fiscal Year 2010.

### **Expiration of authorizations and amounts required to be specified by law (sec. 2002)**

The committee recommends a provision that would establish the expiration date for authorizations in this Act for military construc-

tion projects, land acquisition, family housing projects, and contributions to the North Atlantic Treaty Organization infrastructure program as October 1, 2012, or the date of enactment of an act authorizing funds for military construction for fiscal year 2013, whichever is later.

**Effective date (sec. 2003)**

The committee recommends a provision that would provide that titles XXI, XXII, XXIII, XXIV, XXV, XXVI, XXVII, and XXIX of this Act take effect on October 1, 2009, or the date of enactment of this Act, whichever is later.

**Funding tables (sec. 2004)**

The committee recommends a provision that directs that the funding authorized for appropriations in sections 2104, 2204, 2304, 2404, 2411, 2502, and 2606 shall be available, in accordance with requirements of sections 4001 for projects, programs, and activities, and in the amounts, specified in the funding table in sections 4501, 4502, 4503, and 4504.



## TITLE XXI—ARMY

### Summary

The budget request included authorization of appropriations of \$3.66 billion for military construction and \$796.65 million for family housing for the Army for fiscal year 2010.

The committee recommends authorization of appropriations of \$3.47 billion for military construction and \$796.65 million for family housing for fiscal year 2010.

In December 2007, the Army announced its specific force structure and stationing strategy to accommodate active end strength growth of 65,000 personnel. As part of that strategy the Army indicated that it would increase its number of brigade combat teams (BCTs) by six, from 42 to 48. In fiscal year 2009 the Army was authorized and had appropriated more than \$1.1 billion in military construction funding and \$333.0 million in Army Family Housing for BCTs 46, 47, and 48 at Forts Stewart, Carson, and Bliss. In the fiscal year 2010 budget request, the Army has decided to limit future growth to 45 BCTs. The committee, rather than rescind the fiscal year 2009 funding for the three BCTs which will not be activated, expects that the Army will come forth expeditiously with alternative plans and project reprogramming requests where necessary to meet its other long standing barracks, vehicle maintenance, troop dining facility, and company operations facility shortfalls. However, the committee also notes that the fiscal year 2010 request included funding for other BCT construction and range facilities which are in excess of the new requirements. Funding for those projects have been reduced or eliminated. Additionally, \$53.0 million in fiscal year 2009 funding for Army Family Housing at Fort Carson, Colorado is rescinded. The Army has indicated to the committee that because of the elimination of one BCT, Fort Carson has adequate housing for the number of soldiers and their families assigned. At Fort Bliss, Texas the committee notes that the Army proposes to continue construction of facilities for an Infantry Brigade Combat Team (IBCT) which will not now be activated. The Committee is also aware that the Army awarded contracts at Fort Stewart, Georgia and Fort Carson, Colorado even after the Secretary of Defense announced plans to reduce the number of Army BCTs. The continued construction of those facilities, along with the marginal justification for occupancy by existing units for the project at Fort Bliss, would appear to be presumptuous given that some of these decisions are well in advance of Quadrennial Defense Review (QDR) decisions.

The committee also eliminated without prejudice \$20.0 million funding requested for site preparation for the National Museum of the U.S. Army at Fort Belvoir, Virginia. The status of fundraising for the museum will not permit construction to begin immediately after the site preparation is completed. Each military construction

project must result in a complete and usable facility and the current construction plan and timeline will build segments of the museum, but not a complete facility.

In fiscal year 2009 the committee fully authorized, but incrementally funded a Command and Battle Facility at Wiesbaden, Germany intended for the 7th Army Headquarters. The Army did not fund the second increment in its fiscal year 2010 request. It also did not fund a number of other companion facilities which had been planned. This puts into question the entire Wiesbaden relocation plan. The committee understands the decision on relocation has been deferred pending the QDR. While the full authorization remains, the committee rescinds the fiscal year 2009 authorization for appropriations of \$59.5 million.

Finally, the committee eliminated funding for the Warrior Transition Complex at Landstuhl, Germany pending a decision on the final location of a hospital replacement facility for the Landstuhl Regional Medical Center.

**Authorized Army construction and land acquisition projects (sec. 2101)**

The committee recommends a provision that would authorize military construction projects for the active component of the Army for fiscal year 2010. The authorized amounts are listed on an installation-by-installation basis.

**Family housing (sec. 2102)**

The committee recommends a provision that would authorize new construction, planning, and design of family housing units for the Army for fiscal year 2010. It would also authorize funds for facilities that support family housing, including housing management offices, housing maintenance, and storage facilities.

**Improvements to military family housing units (sec. 2103)**

The committee recommends a provision that would authorize funding for fiscal year 2010 to improve existing Army family housing units.

**Authorization of appropriations, Army (sec. 2104)**

The committee recommends a provision that would authorize appropriations for the active component military construction and family housing projects of the Army authorized for construction for fiscal year 2010 in this Act. This provision would also provide an overall limit on the amount authorized for military construction and family housing projects for the active-duty component of the Army. The State list contained in this bill is the binding list of the specific projects authorized at each location.

**Extension of authorizations of certain fiscal year 2006 projects (sec. 2105)**

The committee recommends a provision that would extend the authorization for two Army fiscal year 2006 military construction projects at the Pohakuloa Training Area, Hawaii, until October 1, 2010, or the date of enactment of an act authorizing funds for mili-

tary construction for fiscal year 2011, whichever is later. This extension was requested by the Department of Defense.

### **Item of Special Interest**

#### **Cooperative security location in Manta, Ecuador**

The committee continues to monitor closely the Ecuadorian Government's decision not to renew the lease of the United States Government at Manta Air Base, which is used by the United States Southern Command (SOUTHCOM) for intelligence, surveillance, and reconnaissance operations against illegal narcotics trafficking in the Eastern Pacific. In 1999, the United States signed a 10-year agreement with then Ecuadorean President Jamil Mahuad. The Government of Ecuador fulfilled its agreement allowing the United States to conduct counter-narcotics operations out of Manta through 2009.

The committee notes that the Manta Air Base provided a unique set of capabilities that are difficult to replace in a single location and that SOUTHCOM is looking at several options to mitigate the loss of Manta. However, the loss of Manta will impact the operational reach of detection and monitoring missions in the Eastern Pacific region, and while some operations can be conducted from other locations in the region to mitigate some of the loss of Manta, operating from different locations increases transit times and operational costs.

The committee understands that SOUTHCOM is currently preparing a mitigation plan for the loss of Manta Air Base. With this in mind, the committee directs the Commander of SOUTHCOM to provide a report to the committee 60-days after enactment of this Act which would include SOUTHCOM's mitigation plan, as well as explain how the Command specifically intends to mitigate this loss to its detecting and monitoring operations in the Eastern Pacific; what, if any, replacement options within the region are being explored; and the potential for future negotiations with the Government in Ecuador.



## TITLE XXII—NAVY

### **Summary**

The budget request included authorization of appropriations of \$3.76 billion for military construction and \$515.11 million for family housing for the Department of the Navy for fiscal year 2010.

The committee recommends authorization of appropriations of \$3.53 billion for military construction and \$515.11 million for family housing for fiscal year 2010.

The committee notes with particular interest that the fiscal year 2010 budget request contains the first increment of funding for the relocation of Marines from Okinawa to Guam. An item of special interest later in this title reflects the committee's view on this critical program.

The committee fully authorized, but incrementally funded the Ship Repair Pier Replacement Facility at Norfolk, Virginia as well as the Apra Harbor Wharves Improvement project on Guam. These are large projects, projected for late fiscal year 2010 award, and will take several years to complete construction.

The committee reduced funding for the Military Working Dog facility on Guam, which appears to be overstated. It should be noted that United States Special Operations Command is building a number of similar sized facilities in this budget request at an average cost of slightly more than \$3.0 million each. Finally, the committee eliminated funding for the Andersen Air Force Base North Ramp Utilities for the reasons cited in the items of special interest on Guam.

### **Authorized Navy construction and land acquisition projects (sec. 2201)**

The committee recommends a provision that would authorize Navy and Marine Corps military construction projects for fiscal year 2010. The authorized amounts are listed on an installation-by-installation basis.

### **Family housing (sec. 2202)**

The committee recommends a provision that would authorize new construction and planning and design of family housing units for the Navy for fiscal year 2010. It would also authorize funds for facilities that support family housing, including housing management offices, housing maintenance, and storage facilities.

### **Improvements to military family housing units (sec. 2203)**

The committee recommends a provision that would authorize funding for fiscal year 2010 to improve existing Navy family housing units.

**Authorization of appropriations, Navy (sec. 2204)**

The committee recommends a provision that would authorize appropriations for the active component military construction and family housing projects of the Department of the Navy authorized for construction for fiscal year 2010 in this Act. This provision would also provide an overall limit on the amount authorized for military construction and family housing projects for the active-duty components of the Navy and the Marine Corps. The State list contained in this bill is the binding list of the specific projects authorized at each location.

**Modification and extension of authority to carry out certain fiscal year 2006 project (sec. 2205)**

The committee recommends a provision that would amend section 2201 of the Military Construction Authorization Act for Fiscal Year 2006 (Division B of Public Law 109-163) to increase the project authorization for a waterfront security enclave at Bangor, Washington, by \$67.0 million, as well as extend the authorization until October 1, 2012. This increase and extension were requested by the Department of Defense.

**Budget Item****Combined Joint Task Force-Horn of Africa**

The budget request includes \$41.6 million in military construction funds for four separate projects at Camp Lemonier in Djibouti. The projects include \$21.7 million for an ammunition supply point, \$8.1 million for security fencing around the perimeter of the base, \$7.2 million to pave several internal base roads, and \$4.8 million to construct a fire station. The committee recommends funding all four of these military construction projects.

The committee notes that the facilities of the Combined Joint Task Force-Horn of Africa (CJTF-HOA) at Camp Lemonier, Djibouti, have been largely funded to date by supplemental appropriations for expeditionary infrastructure. CJTF-HOA staffing has likewise been expeditionary in nature, with personnel and officers serving rotations of 1 year or less. Prior to United States Africa Command's (AFRICOM) status as a fully operational combatant command, the committee expressed concern over the lack of guidance on the future presence of U.S. military forces on the African continent. Since that time, however, AFRICOM officials have referred to CJTF-HOA as an enduring forward operating site providing a persistent, rather than an episodic, presence for building regional security capacity. The committee recognizes the importance of CJTF-HOA, particularly given the continuing counter-piracy mission off the coast of Somalia, and the importance of regional persistent engagement opportunities, but the committee requires further clarification on the future of CJTF-HOA on the continent. As such, the committee directs the Secretary of Defense to report to the congressional defense committees, 180 days after enactment of this Act on specific responsibilities of CJTF-HOA within AFRICOM and the relationship between AFRICOM, CJTF-HOA, the Offices of Security Cooperation (OSC) in the Task Force's area of operations, and OSCs on the continent but outside the CJTF-

HOA's Operations Area. The committee further expresses concern as to whether AFRICOM resources will be able to sustain the current level of operations in future years.

### **Items of Special Interest**

#### **Military realignments in Japan and on the Island of Guam**

The committee notes that on February 17, 2009, The United States Government reaffirmed its support of an agreement with the Government of Japan concerning the implementation of the relocation of 8,000 Marines and their families from Okinawa to Guam by 2014 in a manner that maintains unit integrity. This realignment is a key element of the transformation of the alliance with Japan and secures the enduring presence of remaining U.S. forces in Japan. The committee is aware that the success of this agreement depends on many factors including tangible progress towards completion of the Futenma Replacement Facility, successful completion of the environmental impact statement for Guam, and the coordinated funding of over \$10.0 billion by both countries to complete construction of all operational requirements, housing, as well as the upgrade to infrastructure and utilities on Guam.

Regarding the Futenma Replacement Facility, the committee notes that "tangible progress" is currently considered by the Department of Defense (DOD) to be a signature by the Governor of Okinawa on a landfill permit required to commence construction. This action is currently planned to take place in mid to late 2010 and would allow the U.S. Government to gain flexibility to make adjustments in the timeline and determination of units to be moved to Camp Schwabb, Okinawa.

The environmental impact statement (EIS) currently underway is a statutory requirement that must be completed prior to commencement of construction in order to allow military planners to mitigate any significant negative impact to the environment on the Island. The Record of Decision for the EIS is scheduled to be completed in 2010. The EIS will also serve as the opportunity to develop firm requirements to ensure adequate individual training of Marines on Guam and collective training in the region. Several concerns were brought to the attention of this committee during testimony in recent months. To date, projects to support these training requirements have not been identified or planned.

Investments in Guam's infrastructure for port upgrades, roads, and utilities are the essential first steps to ensure that significant construction efforts can be supported without detrimental impact to the local community. The committee notes that no funding is included in the President's budget for fiscal year 2010 to address Guam's port and utility infrastructure requirements, despite the fact that \$378.0 million has been requested to start construction of a new ramp at Anderson Air Base, to upgrade military piers at Apra Harbor, and to relocate a military working dog facility.

In addition, Congress has repeatedly requested from the DOD a master plan that details the facilities to be constructed and validates the estimates of funding required to complete the move to Guam. To date, the Department has not provided any details of a masterplan or an investment strategy. This omission is of critical

concern to the committee absent the submission of a future-years defense plan (FYDP) to accompany the budget request for fiscal year 2010. An FYDP would go a long way toward illustrating to the committee that the total U.S. investment required for the initiative can be supported in future budget requests. The FYDP is currently being assessed as part of the Quadrennial Defense Review, and is likely to be affected by major program changes in a potentially constrained fiscal environment.

The committee also notes that the authorization of the construction requested for the ramp and utilities at Anderson Air Force Base will not result in a complete and useable facility as required by section 2801 of title 10, United States Code. This could preclude its use for the requirement identified in the justification data that accompanies the budget unless further construction is also authorized and appropriated in future years. This partial construction has the risk of becoming a “bridge to nowhere” without a firm indication of future funding to complete the requirement.

In consideration of these facts, the committee recommends that authorizations for the partial construction of certain projects unique to the movement of Marines to Guam be deferred until the DOD provides Congress with: (1) a master plan detailing construction efforts and the total costs; (2) a FYDP that provides Congress with an understanding of the impact of this initiative on future defense budgets; 3) a final environmental impact statement with a firm mitigation plan to minimize the negative impact to the local community; 4) a firm plan to address Marine training requirements; and 5) confirmation of tangible progress towards completion of the Futenma Relocation Facility.

#### **Secretary of the Navy report on an outlying landing field**

The committee notes the requirement for the Department of the Navy to establish an outlying landing field (OLF) to support the stationing and operation of carrier-based fixed-wing aircraft on the east coast of the United States within a suitable range of both Naval Air Station Oceana, Virginia, and Naval Station Norfolk/Chambers Field, Virginia. The OLF will also support training requirements of transient carrier-based aircraft to be stationed at Marine Corps Air Station Cherry Point, North Carolina. The OLF serves as a critical training facility for pilots to practice aircraft carrier landings with lower risk and under more controlled conditions before conducting highly demanding day and night carrier landings at sea. A new OLF will afford the Department increased scheduling capacity to mitigate current capacity shortfalls, greater operational flexibility, improved safety, and higher training fidelity in operational flight training on the east coast. The committee is aware that public opposition has been expressed to the Department of the Navy during the preparation of an environmental impact statement evaluating sites for a future OLF in North Carolina and Virginia. The committee expects the Secretary of the Navy to take into consideration the impact on local communities of the placement and operation of an OLF and to examine means to mitigate the impact on those communities. As part of that consideration, the committee directs the Secretary of the Navy to engage and consult with the State of North Carolina and the Commonwealth of Vir-



ginia, as well as local governments and other public stakeholders, prior to the issuance of a final environmental impact statement and record of decision, to identify ways to mitigate impacts, to evaluate opportunities for economic assistance, and to minimize the land removed from the state tax base. The committee further directs the Secretary of the Navy, prior to the issuance of a final environmental impact statement and record of decision, to provide to the congressional defense committees a report containing a review of the aforementioned engagement and consultations, as well as the results of those engagements. The report shall include a description of the measures taken by the Department of the Navy to identify all suitable options for the location of an outlying landing field.



## TITLE XXIII—AIR FORCE

### Summary

The budget request included authorization of appropriations of \$1.15 billion for military construction and \$569.04 million for family housing for the Air Force in fiscal year 2010.

The committee recommends authorization of appropriations of \$1.18 billion for military construction and \$569.04 million for family housing for fiscal year 2010.

The committee does not recommend authorization of appropriations at this time for the War Reserve Material Compound and the Airlift Ramp and Fuel Facilities at Al Musannah Air Base in Oman. The projects were proposed as a result of a Government of Oman request to U.S. Central Command to relocate existing U.S. military facilities from Seeb International Airport, Oman, in order to facilitate commercial development. The committee is concerned that projects have been requested for Al Musannah Air Base, without a base master plan, without the appropriate long-term agreements in place with the Omani Government, and without consideration of contributions from the host nation. Furthermore, the committee notes that an additional \$350 million would need to be included in U.S. defense future budgets in order to ensure these projects could be used for their intended purpose. Absent a future-years defense plan to accompany the budget request for fiscal year 2010, the committee is unable to confirm the commitment of funds in future budgets to complete this requirement.

The committee does not recommend authorization of appropriations at this time for a new hangar facility at Naval Air Station (NAS) Sigonella, Italy, to support the Global Hawk unmanned aerial vehicle. The committee notes that Navy flight-line facilities at Sigonella are currently underutilized and can accommodate this requirement in the near-term, starting with the arrival of the first Global Hawk system in October, 2009. The committee recommends deferring the investment in additional flightline facilities at NAS Sigonella until the Quadrennial Defense Review results inform future Navy P-8 and unmanned systems programs, as well as subsequent basing decisions for these programs at NAS Sigonella.

The budget request included an authorization of appropriation of \$33.75 million to upgrade electrical infrastructure at Anderson Air Force Base, Guam, intended to support the establishment of power hub for intelligence, surveillance, reconnaissance, strike, and aerial refueling assets. The committee notes that an additional \$500.0 million would need to be included in U.S. defense future budgets in order to ensure this project can be used for its intended purpose. Absent a future-years defense plan to accompany the budget request for fiscal year 2010, the committee is unable to confirm the commitment of funds in future budgets to complete this requirement. The committee has been briefed that the project will also cor-

rect power distribution deficiencies for current mission operations at Anderson Air Force Base. Therefore, the committee directs the Secretary of the Air Force to ensure that the authorization of appropriations for this project are expended to only carry out the scope of work in the construction data provided with the budget request that addresses current requirements regarding power distribution on the south side of Anderson Air Force Base.

**Authorized Air Force construction and land acquisition projects (sec. 2301)**

The committee recommends a provision that would authorize Air Force military construction projects for fiscal year 2010. The authorized amounts are listed on an installation-by-installation basis.

**Family housing (sec. 2302)**

The committee recommends a provision that would authorize new construction and planning and design of family housing units for the Air Force for fiscal year 2010. It would also authorize funds for facilities that support family housing, including housing management offices, housing maintenance, and storage facilities.

**Improvements to military family housing units (sec. 2303)**

The committee recommends a provision that would authorize funding for fiscal year 2010 to improve existing Air Force family housing units.

**Authorization of appropriations, Air Force (sec. 2304)**

The committee recommends a provision that would authorize appropriations for the active component military construction and family housing projects of the Air Force authorized for construction for fiscal year 2010 in this Act. This provision would also provide an overall limit on the amount authorized for military construction and family housing projects for the active-duty component of the Air Force. The State list contained in this bill is the binding list of the specific projects authorized at each location.

**Extension of authorizations of certain fiscal year 2007 projects (sec. 2305)**

The committee recommends a provision that would extend the authorizations for certain Air Force fiscal year 2007 military construction projects until October 1, 2010, or the date of enactment of an act authorizing funds for military construction for fiscal year 2011, whichever is later. These extensions were requested by the Department of Defense.

**Extension of authorizations of certain fiscal year 2006 projects (sec. 2306)**

The committee recommends a provision that would extend the authorizations for certain Air Force fiscal year 2006 military construction projects until October 1, 2010, or the date of enactment of an act authorizing funds for military construction for fiscal year 2011, whichever is later. These extensions were requested by the Department of Defense.

**Temporary prohibition on use of funds for military construction improvements, Palanquero Air Base, Colombia (sec. 2307)**

The committee recommends a provision which would fence the funding for military construction improvements at Palanquero Air Base, Colombia until the Secretary of Defense, in consultation with the Secretary of State, certifies to the congressional defense committees and the military construction appropriations committees that the negotiations with the Republic of Colombia have resulted in long-term access rights that will permit United States Southern Command (SOUTHCOM) to adequately perform its mission.

The Air Force budget request includes \$46.0 million for military construction improvements at Palanquero Air Base, Colombia, including funding for runway, apron expansion, and various other facilities improvements. The committee is aware of the not yet completed negotiations between the United States Government and the Republic of Colombia regarding access rights for American equipment and personnel. As a result, the committee believes these funds should not be expended until the Commander of SOUTHCOM has secured terms that will permit the Command to perform its mission over a period of time that justifies the investment in military construction.

Further, the committee is aware of the Department's expected loss of Cooperative Security Location Manta, Ecuador later this calendar year, and the Department's ongoing requirement for air base facilities from which to operate counter-narcotics aerial detection and reconnaissance operations. As such, the committee has approved the Air Force request for \$46.0 million in funding for military construction projects at Palanquero Air Base, Colombia.

Finally, the committee is aware of concerns raised and the perception that this expanded U.S. military presence in the region, particularly for Colombia's neighbors (e.g., Venezuela, Ecuador, and Bolivia) will give rise to increased skepticism about American military intentions in the region. Given these concerns, the committee directs the Commander of SOUTHCOM to consult partner nations in the region to ensure they are aware of ongoing U.S. requirements for robust counter-narcotics aerial detection and reconnaissance operations.



## TITLE XXIV—DEFENSE AGENCIES

### Summary

The budget request included authorization of appropriations of \$3.1 billion for military construction for the defense agencies, \$146.54 million for chemical demilitarization construction, and \$75.04 million for family housing for the defense agencies, the Family Housing Improvement Fund, and the Homeowners Assistance Program for fiscal year 2010.

The committee recommends authorization of appropriations of \$2.86 billion for military construction, \$151.54 million for chemical demilitarization construction, and \$425.04 million for family housing programs for fiscal year 2010 including a significant increase to the Homeowners Assistance Program.

The committee reduced funding for the fiscal year 2010 increment of the National Security Agency's Utah Data Center. This \$1.59 billion facility was recently fully authorized as a military construction project, but the level of funding requested cannot be reasonably executed in this fiscal year.

The committee fully authorized, but incrementally funded the hospital replacement projects in Guam and at Lackland Air Force Base, Texas.

The committee made small reductions in funding for Health and Dental Clinics at Forts Carson, Stewart, and Bliss in order to right size to account for the elimination of three brigade combat teams from the Army at those installations. In addition, the Hospital Replacement Facility at Fort Bliss, Texas is a conjunctively funded project which is split between the military construction account and the Base Realignment and Closure (BRAC) account. The committee reduced the military construction portion of the funding for this project by \$27.6 million and expects the Department to use \$24.0 million of BRAC funding, no longer required for the Hospital Alteration Project PN 72865, to fund the project at a slightly reduced scope. The committee also eliminated funding for one of two elementary schools requested for Fort Stewart, Georgia which the Department of Defense Educational Activity has indicated is now in excess of requirements given the projected reduction in soldiers and dependents to be assigned. Although a brigade will no longer be activated there is enough other growth at Fort Stewart to warrant another elementary school. The committee added \$50.0 million for construction of an elementary school at Boeblingen, Germany. The current facility is located in a converted troop barracks and has significant life, health, and safety concerns. The committee fully authorized the Hospital Replacement project on Guam for \$446.45 million, but incrementally funded the authorization for appropriations for fiscal year 2010 at \$200.0 million. Similarly, the committee fully authorized the Ambulatory Care Center at Lackland

Air Force Base for \$441.0 million but authorized for appropriation the first increment of \$70.0 million.

### **Subtitle A—Defense Agency Authorizations**

#### **Authorized defense agencies construction and land acquisition projects (sec. 2401)**

The committee recommends a provision that would authorize military construction projects for the defense agencies for fiscal year 2010. The authorized amounts are listed on an installation-by-installation basis.

#### **Family housing (sec. 2402)**

The committee recommends a provision that would authorize funding for fiscal year 2010 for architectural and engineering services and construction design activities for construction or improvement of existing family housing units.

#### **Energy conservation projects (sec. 2403)**

The committee recommends a provision that would authorize the Secretary of Defense to carry out energy conservation projects.

#### **Authorization of appropriations, defense agencies (sec. 2404)**

The committee recommends a provision that would authorize appropriations for the military construction and family housing projects of the defense agencies authorized for construction for fiscal year 2010 in this Act. This provision would also provide an overall limit on the amount authorized for military construction and family housing projects for the defense agencies. The State list contained in this bill is the binding list of the specific projects authorized at each location.

#### **Modification of authority to carry out certain fiscal year 2008 project (sec. 2405)**

The committee recommends a provision that would amend the table relating to the Defense Logistics Agency section 2401 of the Military Construction Authorization Act for Fiscal Year 2008 (Division B of Public Law 110–181) in the item related to Point Loma Annex, California. This increase was requested by the Department of Defense.

#### **Modification of authority to carry out certain fiscal year 2009 project (sec. 2406)**

The committee recommends a provision that would amend the table relating to the Defense Logistics Agency section 2401 of the Military Construction Authorization Act for Fiscal Year 2009 (Division B of Public Law 110–417) in the item related to Souda Bay Greece. This increase was requested by the Department of Defense.

#### **Extension of authorizations of certain fiscal year 2007 project (sec. 2407)**

The committee recommends a provision that would extend the authorization for one Defense Logistics Agency fiscal year 2007



military construction project at Richmond, Virginia until October 1, 2010, or the date of enactment of an act authorizing funds for military construction for fiscal year 2011, whichever is later. This extension was requested by the Department of Defense.

**Subtitle B—Chemical Demilitarization Authorizations**

**Authorization of appropriations, chemical demilitarization construction, Defense-wide (sec. 2411)**

The committee recommends a provision that would authorize military construction projects for the chemical demilitarization program for fiscal year 2010. The authorized amounts are listed on an installation-by-installation basis.



**TITLE XXV—NORTH ATLANTIC TREATY ORGANIZATION  
SECURITY INVESTMENT PROGRAM**

**Summary**

The Department of Defense requested authorization of appropriation of \$276.3 million for the North Atlantic Treaty Organization Security Investment Program for fiscal year 2010. The committee recommends an authorization of appropriation of \$276.3 million for this program.

**Authorized NATO construction and land acquisition projects (sec. 2501)**

The committee recommends a provision that would authorize the Secretary of Defense to make contributions to the North Atlantic Treaty Organization Security Investment Program in an amount equal to the sum of the amount specifically authorized in section 2502 of this title and the amount of recoupment due to the United States for construction previously financed by the United States.

**Authorization of appropriations, NATO (sec. 2502)**

The committee recommends a provision that would authorize appropriations of \$276.3 million for the United States' contribution to the North Atlantic Treaty Organization Security Investment Program for fiscal year 2010.



## **TITLE XXVI—GUARD AND RESERVE FORCES FACILITIES**

### **Summary**

The Department of Defense requested authorization of appropriations of \$1.02 billion for military construction in fiscal year 2010 for National Guard and Reserve facilities. The committee recommends a total of \$1.27 billion for military construction for the reserve components. The detailed funding recommendations are contained in the State list table included in this report.

### **Authorized Army National Guard construction and land acquisition projects (sec. 2601)**

The committee recommends a provision that would authorize military construction projects for the Army National Guard for fiscal year 2010. The authorized amounts are listed on a location-by-location basis.

### **Authorized Army Reserve construction and land acquisition projects (sec. 2602)**

The committee recommends a provision that would authorize military construction projects for the Army Reserve for fiscal year 2010. The authorized amounts are listed on a location-by-location basis.

### **Authorized Navy Reserve and Marine Corps Reserve construction and land acquisition projects (sec. 2603)**

The committee recommends a provision that would authorize military construction projects for the Navy Reserve and Marine Corps Reserve for fiscal year 2010. The authorized amounts are listed on a location-by-location basis.

### **Authorized Air National Guard construction and land acquisition projects (sec. 2604)**

The committee recommends a provision that would authorize military construction projects for the Air National Guard for fiscal year 2010. The authorized amounts are listed on a location-by-location basis.

### **Authorized Air Force Reserve construction and land acquisition projects (sec. 2605)**

The committee recommends a provision that would authorize military construction projects for the Air Force Reserve for fiscal year 2010. The authorized amounts are listed on a location-by-location basis.

**Authorization of appropriations, Guard and Reserve (sec. 2606)**

The committee recommends a provision that would authorize appropriations for the reserve component military construction projects authorized for construction for fiscal year 2010 in this Act. This provision would also provide an overall limit on the amount authorized for military construction projects for each of the reserve components of the military departments. The State list contained in this bill is the binding list of the specific projects authorized at each location.

**Extension of authorizations of certain fiscal year 2007 projects (sec. 2607)**

The committee recommends a provision that would extend the authorizations for certain Guard and Reserve fiscal year 2007 military construction projects until October 1, 2010, or the date of enactment of an act authorizing funds for military construction for fiscal year 2011, whichever is later. These extensions were requested by the Department of Defense.

**Extension of authorizations of certain fiscal year 2006 project (sec. 2608)**

The committee recommends a provision that would extend the authorizations for Army National Guard fiscal year 2006 military construction projects until October 1, 2010, or the date of enactment of an act authorizing funds for military construction for fiscal year 2011, whichever is later. This extension was requested by the Department of Defense.

## **TITLE XXVII—BASE CLOSURE AND REALIGNMENT ACTIVITIES**

### **Summary**

The budget request included \$396.8 million for the ongoing cost of environmental remediation and other activities necessary to continue implementation of the 1988, 1991, 1993, and 1995 Base Realignment and Closure (BRAC) rounds. The committee has authorized the amount requested for these activities in section 2701 of this Act.

In addition, the budget requested an authorization of appropriations of \$7.5 billion for implementation of the 2005 BRAC round. Section 2702 of this Act would authorize the full \$7.5 billion requested for BRAC activities in fiscal year 2010. Included in the \$7.5 billion requested for BRAC is an authorization for appropriations for \$5.9 billion in military construction projects that would be initiated in fiscal year 2010. Section 2702 of this Act provides authorization for these projects.

The table in Title XXVII of Division B of the bill provides the specific amount authorized for each BRAC military construction project as well as the amount authorized for appropriations for all BRAC activities, including military construction, environmental costs, relocation and other operation and maintenance costs, permanent change of station costs for military personnel, and other BRAC costs.

### **Authorization of appropriations for base closure and realignment activities funded through Department of Defense base closure account 1990 (sec. 2701)**

The committee recommends a provision that would authorize appropriations for fiscal year 2010 for ongoing activities that are required to implement the decisions of the 1988, 1991, 1993, and 1995 Base Realignment and Closure rounds.

### **Authorized base closure and realignment activities funded through Department of Defense base closure account 2005 (sec. 2702)**

The committee recommends a provision that would authorize military construction projects for fiscal year 2010 that are required to implement the decisions of the 2005 Base Realignment and Closure round. The table included in this title of the bill lists the specific amounts authorized at each location.

### **Authorization of appropriations for base closure and realignment activities funded through Department of Defense base closure account 2005 (sec. 2703)**

The committee recommends a provision that would authorize appropriations for military construction projects for fiscal year 2010

that are required to implement the decisions of the 2005 Base Realignment and Closure (BRAC) round. This provision would also provide an overall limit on the amount authorized for BRAC military construction projects. The State list contained in this bill is the binding list of the specific projects authorized at each location.

**Report on global defense posture realignment and inter-agency review (sec. 2704)**

The committee recommends a provision that would require the Secretary of Defense to submit to the congressional defense committees an annual report on the status of overseas base closure and realignment actions undertaken as part of a global defense posture realignment strategy and the status of development and execution of comprehensive master plans for overseas military main operating bases, forward operating sites, and cooperative security locations. In addition, the report would require the Secretary of Defense to include in the report a review by the Department of State and other federal departments and agencies deemed necessary to national security. The provision would also amend section 118 of title 10, United States Code, to direct the Secretary of Defense to submit a report to the congressional defense committees 90 days after completing a Quadrennial Defense Review (QDR) on the impact of that review on the global posture of United States military forces.

The committee notes that in 2004, the President released an Integrated Global Posture and Basing Strategy which subsequently was known as the Global Defense Posture Realignment Strategy. This strategy, planned for implementation over 8 to 10 years, calls for roughly 70,000 military personnel and 100,000 dependents to return from overseas locations from Europe and Asia to bases in the continental United States. Other overseas forces were to be redistributed within current host nations such as Germany and South Korea, while new sites would be established in the nations of Eastern Europe, Central Asia, and Africa. The committee is aware that these realignment plans may have a major impact across many aspects of U.S. foreign and security policy. As such the committee has an ongoing interest in ensuring that the Global Defense Posture Realignment is closely aligned with an overarching strategic framework agreed upon by key government agencies in the national security strategy formulation process.

The committee is aware that the Department of Defense's 2010 QDR will provide an important opportunity to formulate a strategic framework that may affect the U.S. global defense posture. Therefore, the committee expects that a report assessing the impact of the QDR on global basing plans should also be shared with other federal agencies responsible for national security.

**Sense of the Senate on need for community assistance related to base closures and realignments and force repositioning (sec. 2705)**

The committee recommends a provision that would express the sense of the Senate that, as the Federal Government implements base closures and realignments, global repositioning, and initiatives to increase the end strength of the Army and the Marine



Corps, it is necessary to assist local communities coping with these programs and to comprehensively assess the needs and degree of assistance to communities to effectively implement the various initiatives of the Department of Defense while aiding communities to either recover quickly from closures or to accommodate growth associated with troop influxes.

The committee notes that Subsection (b)(4) of section 2905 of the Defense Base Closure and Realignment Act of 1990 (part A of title XXIX of Public Law 101–510; section 2687 of title 10, United States Code note) states “that Secretary shall seek to obtain consideration in connection with any transfer under this paragraph of property located at the installation in an amount equal to the fair market value of the property, as determined by the Secretary.” The same section also authorizes the Secretary to convey property at no cost if the redevelopment authority with respect to the installation agrees that the proceeds from any sale or lease of the property received by the redevelopment authority during at least the first seven years after the date of the initial transfer of property shall be used to support the economic redevelopment of the installation.

The committee encourages the Department’s use of a full range of opportunities to assist local communities, including the use of no-cost economic development conveyances (EDCs) to facilitate economic development during tough economic time. In testimony on June 17, 2009 before the Readiness and Management Support Subcommittee by Department of Defense representatives, the committee recognizes that “since 2002 the Army has granted 68 Cost and No-Cost EDCs for 32,000 acres (23 No-Cost EDC parcels covering 31,000 acres and 45 “Cost” EDC parcels covering 1,000 acres), the Navy eight (8) for 4,000 acres with zero “Cost” EDCs, and the Air Force 19 No-Cost EDCs covering just under 24,000 acres.”

The committee is also aware that the proceeds gained from consideration received as a result of a property disposed under BRAC authorities are used to supplement appropriated funds to accelerate environmental clean-up, remediation, and compliance actions for other BRAC property. Therefore, funds received for properties have a direct impact on the Department’s ability to address other military requirements.

#### **Relocation of certain Army Reserve units in Connecticut (sec. 2706)**

The committee recommends a provision that authorizes the Secretary of the Army to locate an Army Reserve Center and Maintenance Facility in the vicinity of Newtown, Connecticut, at a location to be determined by the Secretary.



**TITLE XXVIII—MILITARY CONSTRUCTION GENERAL PROVISIONS**

**Military construction and land acquisition projects authorized by American Recovery and Reinvestment Act of 2009 (sec. 2801)**

The committee recommends a provision that would authorize military construction and land acquisition projects for the American Recovery and Reinvestment Act of 2009. The authorized amounts are listed on an installation-by-installation basis.

**Subtitle A—Military Construction Program and Military Family Housing Changes**

**Extension of authority to use operation and maintenance funds for construction projects inside the United States Central Command and United States Africa Command areas of responsibility (sec. 2811)**

The committee recommends a provision that would further amend section 2808 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108–136), as amended, to extend for 1 additional year, through the end of fiscal year 2010, the temporary authority provided to the Secretary of Defense to use funds appropriated for operation and maintenance to carry out construction projects intended to satisfy certain operational requirements in support of a declaration of war, national emergency, or other contingency.

**Modification of authority for scope of work variations (sec. 2812)**

The committee recommends a provision that would amend section 2853 of title 10, United States Code, to prohibit the Department of Defense from carrying out military construction projects or the construction, improvement, or acquisition of a military family housing project in which the scope of work exceeds the amount specifically authorized by Congress.

**Modification of conveyance authority at military installations (sec. 2813)**

The committee recommends a provision that would amend section 2869 of title 10, United States Code, to authorize the secretary concerned to enter into an agreement to convey real property, including any improvements thereon, to any person who agrees, in exchange for the real property, to carry out a land acquisition to limit encroachment around Department of Defense installations and ranges. This provision would also require the authority to sunset on September 20, 2013.

**Two-year extension of authority for pilot projects for acquisition or construction of military unaccompanied housing (sec. 2814)**

The committee recommends a provision that would extend the Navy's authority for unaccompanied housing for 2 years.

**Subtitle B—Energy Security**

**Report on Department of Defense efforts toward installation of solar panels and other renewable energy projects on military installations (sec. 2821)**

The committee recommends a provision that would require a report no later than 180 days after enactment of this Act on the Department's efforts to place solar panels and other renewable energy projects on military installations. The committee is aware of the efforts of individual services to place renewable energy projects on military installations as part of an overall effort to achieve partial independence from the commercial electrical grid during periods of emergency and natural disaster. The committee is also aware that the services are adapting existing statutes, particularly section 2667 of title 10, United States Code, in order to have commercial entities construct and operate these projects. The report directed by this statute should describe all ongoing efforts, legislative and regulatory obstacles, recommended changes to current statute which will enhance this effort, and the Department's renewable energy goals by 2025.

**Subtitle C—Land Conveyances**

**Land conveyance, Naval Air Station Oceana, Virginia (sec. 2831)**

The committee recommends a provision that would authorize the Secretary of the Navy to transfer 2.4 acres at Naval Air Station, Oceana, Virginia to the city of Virginia Beach, Virginia. This would be for the purpose of permitting the City to expand services to support the Marine Animal Care Center.

**Items of Special Interest**

**Incrementally funded programs**

The Department has consistently resisted the funding of large complex multiyear construction projects incrementally, i.e. seeking full authority for the project in the annual budget request, and then an authorization for appropriation on a yearly basis until completion. The Department has instead chosen to fund these projects by using a phasing strategy. Since section 2801(b) of title 10, United States Code 2801(b), requires that each phase result in a complete and useable facility, this strategy can lead to inefficient designs, complex construction difficulties brought on by multiple contractors on a single site, repeated contractor mobilizations, and inefficient ordering of construction materials. This phasing strategy often leads to higher overall costs to the government and longer construction times from start to finish. The committee has authorized incremental funding for several large complex military con-

struction (MILCON) projects in fiscal year 2010. These projects include two hospitals, a ship repair pier, and a Wharf Improvement Project. For the two hospitals alone it is estimated that the government will save over \$165.0 million using this method as opposed to a phased strategy. While the vast majority of MILCON projects should adhere to the principal of yearly full funding, there are a few large and complex projects that warrant incremental funding. This strategy has been used to great efficiency in the BRAC account. The Department is strongly encouraged to consider incremental funding for those few and finite projects where the government is able to achieve substantial savings and efficiencies.

**Report on long-term strategy to accommodate force structure initiative implementation at military installations**

The committee finds that the simultaneous implementation of force structure initiatives in the United States has exceeded capacity of existing infrastructure at military installations. In order to provide enough living and working space for service members, the Department of Defense (DOD) has acquired relocatable facilities that are used as barracks, administrative offices, dining halls, and equipment maintenance facilities. In addition, existing barracks at military installations are in deteriorating conditions, due to lack of facilities sustainment, restoration, modernization (SRM), and necessary military construction investments by the Department.

To date, DOD has not provided the committee a comprehensive and detailed plan for replacing relocatable facilities with permanent facilities, or a long-term strategy to invest in or replace existing deteriorating infrastructure. Additionally, DOD continues to delay funding of anticipated permanent facilities, SRM and necessary military construction required to accommodate force structure initiatives already being implemented. The committee believes that providing permanent adequate facilities for our service members, especially housing, is essential to the health of the force.

Therefore, the committee directs the Secretary of Defense to submit a report to the congressional defense committees no later than January 30, 2010, outlining a strategy to replace relocatable housing with permanent facilities, and investments or replacement military construction required to provide adequate housing for service members at installations affected by force structure initiatives. The report shall include: (1) how many relocatable facilities are currently being used, (2) what installations have relocatable facilities, (3) an installation-by-installation plan to replace relocatable facilities with permanent facilities, (4) a plan to replace, sustain, restore or modernize deteriorating and outdated barracks, and (5) investment details associated with the plan.



**TITLE XXIX—OVERSEAS CONTINGENCY OPERATIONS  
MILITARY CONSTRUCTION AUTHORIZATIONS**

**Summary**

The President's Overseas Contingency Operations budget request for fiscal year 2010 included \$1.4 billion for military construction projects in Iraq and Afghanistan. The table in section 4504 describes the specific projects and recommended adjustments for fiscal year 2010. The committee removed from those fiscal year 2010 Overseas Contingency Operations military construction tables' projects for which funds have already been appropriated. The committee then substituted similar projects for Bagram Air Base, Afghanistan from the regular fiscal year 2010 military construction authorization request. The committee added \$20 million for a facility in Mons Belgium for the North Atlantic Treaty Organization Special Operations Coordination Center.

**Authorized Army construction and land acquisition projects  
(sec. 2901)**

The committee recommends a provision that would authorize \$930.49 million in overseas contingency military construction projects for the Army for fiscal year 2010.

**Authorized Air Force construction and land acquisition  
projects (sec. 2902)**

The committee recommends a provision that would authorize \$474.8 million in Overseas Contingency Operations military construction projects for the Air Force for fiscal year 2010.





**DIVISION C—DEPARTMENT OF ENERGY NATIONAL SECURITY AUTHORIZATIONS AND OTHER AUTHORIZATIONS**

**TITLE XXXI—DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS**

**Subtitle A—National Security Programs Authorizations**

**Overview**

Title XXXI authorizes appropriations for atomic energy defense activities of the Department of Energy for fiscal year 2010, including: the purchase, construction, and acquisition of plant and capital equipment; research and development; nuclear weapons; naval nuclear propulsion; environmental restoration and waste management; operating expenses; and other expenses necessary to carry out the purposes of the Department of Energy Organization Act (Public Law 95–91). This title authorizes appropriations in four categories: (1) National Nuclear Security Administration (NNSA); (2) defense environmental cleanup; (3) other defense activities; and (4) defense nuclear waste disposal.

The budget request for atomic energy defense activities at the Department totaled \$16.4 billion, a 1 percent increase above the fiscal year 2009 regular appropriated level. Of the total amount suggested:

- (1) \$9.9 billion is for NNSA, of which:
  - (a) \$6.4 billion is for weapons activities;
  - (b) \$2.1 billion is for defense nuclear nonproliferation activities;
  - (c) \$1.0 billion is for naval reactors; and
  - (d) \$420.8 million is for the Office of the Administrator;
- (2) \$5.5 billion is for defense environmental cleanup;
- (3) \$852.5 million is for other defense activities; and
- (4) \$98.4 million is for defense nuclear waste disposal.

The budget request also included \$6.2 million within energy supply.

The committee recommends \$16.4 billion for atomic energy defense activities, the amount of the budget request.

Of the amounts authorized, the committee recommends:

- (1) \$10.2 billion for NNSA, of which:
  - (a) \$6.5 billion is for weapons activities, an increase of \$106.2 million above the budget request;
  - (b) \$2.1 billion is for defense nuclear nonproliferation activities, the amount of the amount of the budget request;
  - (c) \$1.0 billion is for naval reactors, the amount of the budget request; and
  - (d) \$420.8 million is for the Office of the Administrator, the amount of the budget request;

(2) \$5.4 billion for defense environmental cleanup activities, a decrease of \$100.0 million below the amount of the budget request;

(3) \$852.5 million for other defense activities, the amount of the budget request; and

(4) \$98.4 million for defense nuclear waste disposal, the amount of the budget request.

The committee recommends no funds for energy supply, a reduction of \$6.2 million.

#### **National Nuclear Security Administration (sec. 3101)**

The committee recommends a provision that would authorize a total of \$10.0 billion for the Department of Energy in fiscal year 2010 for the National Nuclear Security Administration to carry out programs necessary to national security, an increase of \$106.2 million above the budget request.

#### **Weapons activities**

The committee recommends \$6.5 billion for weapons activities, an increase of \$106.2 million above the budget request. The committee authorizes the following activities: \$1.6 billion for directed stockpile work; \$1.6 billion for campaigns; \$1.7 billion for readiness in the technical base and facilities; \$234.9 million for the secure transportation asset; \$227.6 million for nuclear counterterrorism incident response; \$90.4 million for site stewardship; \$871.6 million for safeguards and security; \$154.9 million for facilities and infrastructure recapitalization; and \$30.0 million for support to intelligence.

#### **Directed stockpile work**

The committee recommends \$1.6 billion for directed stockpile work, an increase of \$45.0 million above the amount of the budget request. The directed stockpile account supports work directly related to weapons in the stockpile, including day-to-day maintenance as well as research, development, engineering, and certification activities to support planned life extension programs. This account also includes fabrication and assembly of weapons components, feasibility studies, weapons dismantlement and disposal, training, and support equipment.

The committee recommends an increase of \$15.0 million in weapons dismantlement and disposition to position Pantex to support additional dismantlements and to explore potential dismantlement scenarios for the Device Assembly Facility to augment or support Pantex. The committee recommends an increase of \$30.0 million for research and development for certification and safety. The committee is concerned that sufficient attention be paid to more collaborative certification activities and that there is a need to ensure that methods to improve surety and safety in nuclear weapons are further explored.

#### **Campaigns**

The committee recommends \$1.6 billion for campaigns, an increase of \$15.5 million above the amount of the budget request. The campaigns focus on science and engineering efforts involving

the three nuclear weapons laboratories, the Nevada Test Site, and the weapons production plants. Each campaign is focused on a specific activity to support and maintain the nuclear stockpile without underground nuclear weapons testing. These efforts form the scientific underpinning of the Department of Energy's annual certification that the stockpile remains safe, secure, and reliable without nuclear weapons testing.

The committee recommends an increase of \$5.0 million for advanced certification to further support the committee's concern that increased attention be paid to surveillance activities. The committee recommends an increase of \$5.0 million for enhanced surety and \$10.0 million for enhanced surveillance in engineering campaigns to continue to support efforts to further enhance the knowledge of the health of the stockpile and addressed surety concerns. The committee recommends an increase of \$6.5 million in the inertial confinement fusion campaign for Omega operations to ensure that the Omega facility can fully support work at the National Ignition Facility to achieve ignition in 2010. To support the increase in certification and surveillance activities the committee recommends an increase in the advanced simulation and computing campaign of \$9.0 million. The committee recommends a reduction of \$20.0 million in the readiness campaign for tritium readiness. The reduction for tritium readiness takes into account a large carryover balance resulting from contracting delays and problems with the tritium producing bars.

### **Readiness in the technical base**

The committee recommends \$1.7 billion for readiness in the technical base, an increase of \$10.0 million above the budget request. This account funds facilities and infrastructure in the nuclear weapons complex and includes construction funding for new facilities.

The committee recommends a decrease of \$20.0 million in the Chemistry and Metallurgy Facility Replacement project (CMRR), Project 04-D-125, at the Los Alamos National Laboratory as a result of uncertainty in the design of the CMRR. The committee notes that the certification required to be made by the Defense Nuclear Facility Safety Board (DNFSB) and the National Nuclear Security Administration has not been made. The committee continues to believe that replacing the existing facility is essential but the CMRR has significant unresolved issues including the appropriate size of the facility. Some of these decisions will not be made until the Nuclear Posture Review is completed at the end of the year. The CMRR is one of two projects that the DNFSB has identified as having significant unresolved safety issues. These issues are associated with the project's safety-related systems. Until such time as the safety basis documents are completed, the outstanding issues cannot be resolved. CMRR will be a category I facility supporting pit operations in building PF-4 and has a preliminary cost estimate of \$2.6 billion. As stated last year the committee continues to support reconstitution of the pit manufacturing capability in PF-4 but urges that all safety issues with CMRR be resolved as soon as possible. If there is any change in the planned mission at

CMRR, the committee directs the Secretary of Energy to notify the congressional defense committees.

The committee recommends an increase of \$30.0 million for the Los Alamos Neutron Science Center (LANSCE) refurbishment, Project 09-D-007. The LANSCE is the only machine capable of performing nuclear cross section measurements of weapons materials to support the resolution of significant findings investigations. LANSCE refurbishment would also further enhance the ability of the NNSA to perform surveillance on the stockpile.

#### **Secure transportation asset**

The committee recommends \$234.9 million for the secure transportation asset (STA), the amount of the budget request. The secure transportation asset is responsible for the transportation of nuclear weapons, weapons materials, and components, and other materials requiring safe and secure transport. Last year the committee directed the STA to include in its budget submittal for fiscal year 2010 a break out of the lease expenses for each leased facility and the expenses for each minor construction project. The committee has been notified that this third-party financing option is no longer being pursued. If the STA resumes consideration of any third-party option, the committee expects STA to fully notify Congress of any third-party financing arrangements in advance of executing any leases.

#### **Nuclear counterterrorism incident response**

The committee recommends \$227.6 million for nuclear counterterrorism incident response, an increase of \$5.7 million above the amount of the budget request. This increase supports the committee's efforts to improve U.S. capability for nuclear forensics and attribution. Additional funds are also provided in the Defense Nuclear Nonproliferation account.

#### **Safeguards and security**

The committee recommends \$871.6 million for safeguards and security, the amount of the budget request.

#### **Facilities and infrastructure**

The committee recommends \$154.9 million for the facilities and infrastructure program (FIRP), the amount of the budget request. FIRP was established to address the backlog of deferred maintenance at NNSA facilities. While the FIRP has been successful, the committee continues to be concerned that as the FIRP comes to a close, routine maintenance of facilities, utilities and infrastructure upgrades, such as electrical system and road improvement, will once again be deferred to address programmatic demands.

#### **Site stewardship**

The committee recommends \$90.4 million for site stewardship, the amount of the budget request.

#### **Support to intelligence**

The committee recommends an increase to weapons activities generally of \$30.0 million to ensure that the National Nuclear Se-

curity Administration Laboratories can continue to support the intelligence community with specialized analysis particularly in the areas of nuclear weapons issues and nuclear weapons related proliferation activities as well support for biological and chemical weapons proliferation issues.

#### **Defense Nuclear Nonproliferation programs**

The committee recommends \$2.1 billion for the Defense Nuclear Nonproliferation program, the same as the budget request. The National Nuclear Security Administration (NNSA) has management and oversight responsibility for the nuclear nonproliferation programs at the Department of Energy (DOE).

The committee recommends funding for these programs as follows: \$347.3 million for nonproliferation and verification research and development, an increase of \$50.0 million; \$193.2 million for nonproliferation and international security, a decrease of \$14.0 million; \$552.3 million for international nuclear materials protection and cooperation, the amount of the budget request; \$24.5 million for elimination of weapons-grade plutonium production, the amount of the budget request; \$705.9 million for fissile materials disposition, an increase of \$4.0 million; and \$313.5 million for the global threat reduction initiative, a decrease of \$40.0 million.

#### **Nonproliferation and verification research and development**

The committee recommends \$347.3 million for nonproliferation and verification research and development, an increase of \$50.0 million for increased forensics capabilities, international safeguards technologies, nuclear detonation systems, seismic monitoring, proliferation detection technologies, and support to joint DOE Air Force space situational awareness activities.

The committee is particularly concerned about the long-term ability of the United States to monitor and detect clandestine nuclear weapons development activity, and to attribute nuclear weapons, improvised nuclear devices, and radiological dispersal devices. Currently, the fragile U.S. forensic research and development capabilities of DOE and its laboratories underpin the capabilities of all the federal agencies dealing with nuclear forensics and attribution.

The Department of Homeland Security (DHS) has been assigned responsibility to work with the various Executive Branch agencies to coordinate technical nuclear forensics and attribution responsibilities. As part of that responsibility DHS, working with the other agencies, must develop requirements and identify the capabilities needed to detect, locate, render safe, and attribute any nuclear event, and to identify gaps in the necessary capabilities. While some work has started, much remains to be done. In order to more fully integrate and coordinate these actions, the committee recommends a provision elsewhere in this Act to develop a nuclear forensics and attribution plan.

#### **Nonproliferation and international security**

The committee recommends \$193.2 million for nonproliferation and international security, a decrease of \$14.0 million, including a reduction of \$2.0 million for Global Initiatives for Proliferation Prevention (GIPP), and a reduction of \$12.0 million for nuclear non-

compliance verification, as a result of the failure of the North Koreans to support the Six-Party Talks.

Last year, when the committee was working on the National Defense Authorization Act for Fiscal Year 2009 (Public Law 110-417), there was great hope that the Six-Party Talks, which were making progress at the time, would result in the permanent dismantlement and disablement of the North Korean nuclear weapons program. Unfortunately the talks have come to a complete stop since the North Koreans conducted another nuclear test, ejected the International Atomic Energy Agency (IAEA) inspectors, reversed most of the initial disablement work, started to reprocess the irradiated fuel previously under the IAEA seal, and have repeatedly tested cruise and ballistic missiles. Other provocative actions, such as the detention of the U.S. journalists, have further aggravated an already tense situation. As a result the committee, reluctantly, has not authorized any of the funds requested to support future disablement and disarmament actions. In the event that there is any change in the current situation and the North Koreans return to the negotiating table, sign a binding verifiable agreement to disclose fully and to dismantle permanently their nuclear weapons program, the committee would welcome an amended or supplemental budget request, or reprogramming action, to implement such an agreement.

#### **Fissile materials disposition**

The committee recommends \$705.9 million for fissile materials, an increase of \$4.0 million. The committee notes that the United States and Russia have made considerable progress in formulating a new plan for each country to disposition 34 metric tons of excess weapons grade plutonium and that the protocol to the Plutonium Management and Disposition Agreement (PMDA) could be signed in the near future. The committee continues to support the fissile disposition program as an important part of the overall nuclear nonproliferation program. The committee recommends a \$2.0 million reduction in the U.S. uranium disposition program. The committee notes that the program office intends to buy depleted uranium to blend-down U.S. highly enriched uranium. The committee believes that other programs in DOE, notably the Environmental Management (EM) program, has material that could be used as blend-down stock and that this material should be transferred to the uranium blend-down program at no charge.

The committee recommends an additional \$6.0 million for the Russian fissile materials disposition program to continue the joint gas reactor technology demonstration program. The gas reactor is a more efficient burner of excess plutonium than either conventional nuclear power reactors or fast reactors, which Russia currently plans to use to disposition plutonium. The committee notes that Russia and the United States jointly fund this effort and that Russian support for the program generally exceeds the U.S. contribution.

The Russian fissile material program has supported the gas reactor design and technology risk reduction program for many years and the committee believes that the time has come for a decision to be made with respect to the future of the gas reactor. As a re-

sult, the committee directs DOE to enter into discussions with Russia and establish a plan, no later than December 1, 2011, to either build a gas reactor or close the U.S. portion of the gas reactor technology program.

#### **Global threat reduction initiative**

The committee recommends \$313.5 million for the global threat reduction initiative, a decrease of \$40.0 million. These funds were requested to support disablement and dismantlement of the North Korean nuclear weapons program.

#### **International nuclear fuel bank**

The committee is pleased to note that international support for the IAEA international fuel bank continued to grow and over \$100.0 million has now been raised so that the Nuclear Threat Initiative challenge to provide \$50.0 million for the fuel bank has been met. With the required funding in hand the IAEA has taken the first initial steps to formulate plans to implement the fuel bank. The committee directs the Secretary of Energy to provide to the congressional defense committees, brief quarterly updates on the progress implementing the fuel bank over the course of the next 2 years. The first quarterly report shall be due April 1, 2010 and the last quarterly update shall be due December 31, 2012.

#### **Naval reactors**

The committee recommends \$1.0 billion for naval reactors, the amount of the budget request. The committee notes that the Office of Naval Reactors has begun design work to support a new strategic ballistic missile submarine, in advance of the Nuclear Posture Review (NPR). While this work is premature from a policy perspective, the committee understands that the work must start this year to support the replacement schedule for the current SSBN fleet should the NPR determine that a follow-on ballistic missile submarine is needed.

#### **Office of the Administrator**

The committee recommends \$420.8 million for the Office of the Administrator, the amount of the budget request.

#### **Defense environmental cleanup (sec. 3102)**

The committee recommends a provision that would authorize \$5.4 billion for the Department of Energy (DOE) in fiscal year 2010 for defense environmental cleanup, a decrease of \$100.0 million below the amount of the budget request. Without the approximately \$6.0 billion in funds received under the American Recovery and Reinvestment Act of 2009 (ARRA)(Public Law 111-5) the DOE office of Environmental Management (EM) would be at risk of not meeting a number of milestones in various compliance agreements. With these funds, however, EM will be able to not only reduce its backlog of projects but in many instances will be able to accelerate projects, particularly decommissioning projects. EM plans to obligate and expend the ARRA funds over fiscal years 2009 and 2010. As a result, the effective EM annual budget is approximately \$8.0

billion for each of fiscal years 2009 and 2010, a substantial increase from prior years.

While the committee recognizes that need for additional funds for the EM program generally, the committee is concerned about the ability of the EM program to manage and oversee this substantial increase, particularly in light of the fact that the EM office is understaffed to manage the regular budget request. As a result, the committee recommends a reduction of \$100.0 million in the fiscal year 2010 budget request as the committee believes there is a low probability that all of the AARA funds and the amount included in the budget request could be obligated and expended by the end of fiscal year 2010 or a reasonable period of time thereafter.

### **Waste Treatment Plant**

The committee is aware of a design review that EM is carrying out at the Waste Treatment Plant (WTP) at the Department of Energy Hanford Site in Richland, Washington. The purpose of this review is to simplify the operations of the pretreatment facility. One aspect of the review is a reassessment of the material at risk (MAR), to determine if the level of radioactivity in the waste to be treated is in fact as high as was previously assumed. This review will also look at the application of the integrated safety management process and determine if certain of the safety systems could be downgraded, if the MAR is modified. The EM office is currently developing a schedule to review, modify, and approve: the MAR, the pre-treatment plant design revision, the equipment design modification, and a plan for procurement, fabrication, and installation of equipment. Simplification of operations is a laudable goal but the committee is very concerned about this entire process and the possibility that in the long run the changes made could reduce operational or environmental safety, complicate long term operations, and possibly increase the overall cost of the WTP or delay the schedule for the waste treatment plant.

The committee notes that EM has recently committed to take a more cautious approach than originally planned and will use an independent review panel to look at the technical, safety, near- and long-term operational effects, and cost and schedule implications of any changes or revisions.

The Defense Nuclear Facility Safety Board (DNFSB), as the statutory review body for operational nuclear safety at DOE defense nuclear facilities, must also have adequate time to review fully all aspects of this process, including all documents and the results of all studies, including the results of the independent review before any changes are adopted or implemented. Only after complete review will the DNFSB be in a position to make a recommendation on the advisability of any proposed changes or modifications.

The committee expects this whole process to be carried out expeditiously but also thoroughly and expects to be kept informed by both DOE and the DNFSB as the effort progresses.

### **Other defense activities (sec. 3103)**

The committee recommends a provision that would authorize \$852.5 million for other defense activities, the amount of the budget request. The committee recommends \$449.9 million for health,



safety and security, the amount of the budget request; \$189.8 million for Legacy Management, the amount of the budget request; \$6.4 million for the Office of Hearings and Appeals, the amount of the budget request; \$83.4 million for the Office of Nuclear Energy, the amount of the budget request; \$123.0 million for departmental administration, the amount of the budget request.

**Defense nuclear waste disposal (sec. 3104)**

The committee recommends a provision that would authorize \$98.4 million to the Office of Civilian Radioactive Waste Management for the defense contribution to the effort to permanently dispose of high level nuclear waste.

**Funding table (sec. 3105)**

The committee recommends a provision that would provide that the amounts authorized for the Department of Energy in this title are available for the projects, programs, or activities and in the dollar amounts indicated by the funding tables in Division D of the Act.

**Subtitle B—Program Authorizations, Restrictions, and Limitations**

**Nuclear weapons stockpile life extension program (sec. 3111)**

The committee recommends a provision that would direct the Secretary of Energy to carry out a life extension program, to develop a life extension program plan and direct the manner in which funds for the life extension programs should be requested in the annual Department of Energy budget request. This provision recognizes that the nuclear weapons stockpile is aging and that the existing efforts to extend or repair weapons will need to continue. The provision also directs the Secretary to establish mechanisms to ensure the appropriate assignment of roles and missions for each laboratory plant. Clear lines of responsibility should be established to avoid duplication and overlap of activity. The committee is concerned that there is unneeded duplication of effort and not enough true peer review. Finally to ensure that there is true and rigorous peer review the provision would direct that each lab has full access to all data and information about each nuclear weapon available.

The committee believes that as the stockpile draws down the National Nuclear Security Administration (NNSA) should increase the level of intensity of surveillance activities to improve the knowledge of the aging stockpile. The committee is also concerned that there may be missed opportunities to make the stockpile more secure through surety improvements in the weapons themselves. As a result the committee recommends increases in various weapons activities accounts that deal with surveillance, certification, and surety. Other elements of work that should be included in the life extension program include efforts to reduce the complexity of the weapons and change as possible the use of exotic and toxic materials.

**Elimination of nuclear weapons life extension program from exception to requirement to request funds in budget of the President (sec. 3112)**

The committee recommends a provision that would amend section 4209 of the Atomic Energy Defense Act (50 U.S.C. 2529) to eliminate the nuclear weapons life extension program exception in the budget request. This provision would have relieved the President from specifically requesting funds for life extension programs. In recent years, the Appropriations Committees of the Senate and the House of Representatives have in fact required that the funds be specifically requested, as a result this provision is no longer necessary.

**Repeal of reliable replacement warhead program (sec. 3113)**

The committee recommends a provision that would repeal section 4204A of the Atomic Energy Defense Act (50 U.S.C. 2524a) directing the Department of Energy to establish a reliable replacement warhead program.

**Authorization of use of International Nuclear Materials Protection and Cooperation program funds for bilateral and multilateral nonproliferation and disarmament activities (sec. 3114)**

The committee recommends a provision that would authorize the Secretary of Energy to obligate not more than 10 percent of the funds authorized to be appropriated for the international nuclear materials protection and cooperation program for any bilateral or multilateral activities relating to nonproliferation or disarmament, notwithstanding any other provision of law. The Secretary may exercise this authority after notifying the congressional defense committees 15 days in advance of the intent to exercise this authority and if the President certifies the action is necessary to support the national security objectives of the United States.

The committee believes that additional flexibility is needed to ensure there are adequate funds available to address urgent immediate requirements for which funds might not otherwise be available or are inadequate. Similar authority has been provided to the Secretary of Defense elsewhere in this bill.

**Repeal of prohibition on funding activities associated with international cooperative stockpile stewardship (sec. 3115)**

The committee recommends a provision that would repeal section 4301 of the Atomic Energy Defense Act (50 U.S.C. 2561). This provision repeals a prohibition on a program that no longer exists.

**Modification of minor construction threshold for plant projects (sec. 3116)**

The committee recommends a provision that would amend section 4701(3) of the Atomic Energy Defense Act (50 U.S.C. 2741(3)) to modify permanently the threshold for general plant projects from \$5.0 million to \$7.0 million. The committee notes that for fiscal year 2009 this threshold was temporarily increased to \$10.0 million.

**Two-year extension of authority for appointment of certain scientific, engineering, and technical personnel (sec. 3117)**

The committee recommends a provision that would extend until September 30, 2011, the authority for the Secretary of Energy to hire, establish, and set rates of pay for not more than 200 positions in the Department of Energy for scientific, engineering, and technical personnel whose duties will relate to safety at defense nuclear facilities.

**Repeal of sunset date for consolidation of counterintelligence programs of Department of Energy and National Nuclear Security Administration (sec. 3118)**

The committee recommends a provision that would repeal section 3117 of the John Warner National Defense Authorization Act for Fiscal Year 2007 (Public Law 109–364). When the National Nuclear Security Administration (NNSA) was created there was a separate office of counterintelligence established in the NNSA and another office of counterintelligence for the Department of Energy (DOE). In 2006, DOE and NNSA determined that it would be more efficient to combine these offices into one office of counterintelligence that served the entire DOE. Congress agreed to the consolidation in Section 3117 of Public Law 109–364, but to ensure that the new single office would effectively serve all of the DOE entities, the authority for the consolidated office would expire at the end of fiscal year 2010.

The committee believes that the consolidated office has been effective and understands that both the Secretary of Energy and the Administrator of the NNSA support the integrated counterintelligence office.

**Subtitle C—Other Matters**

**Ten-year plan for utilization and funding of certain Department of Energy facilities (sec. 3131)**

The committee recommends a provision that would direct the Administrator of the National Nuclear Security Administration (NNSA) and the Under Secretary of Science (USS) at the Department of Energy to jointly develop a plan to use and fund, over a 10-year period, the National Ignition Facility at the Livermore National Laboratory, the Los Alamos Neutron Science Center at the Los Alamos National Laboratory, and the “Z” Machine at the Sandia National Laboratory. The committee notes that these three facilities are primarily funded and maintained by NNSA, but each of these has significant contributions to the science and energy research communities. The committee believes that the NNSA Administrator and the USS should explore how these unique facilities could be used and supported collaboratively to ensure that the capabilities of the facilities are fully utilized.

**Review of management and operation of certain national laboratories (sec. 3132)**

The committee recommends a provision that would direct the Secretary of Energy, in consultation with the Armed Services Com-

mittees of the Senate and the House of Representatives, to appoint an independent panel of experts to conduct a review of the management and operation of the Lawrence Livermore National Laboratory, the Los Alamos National Laboratory, and the Sandia National Laboratory.

The committee notes that several recent studies have focused on the organizational location of the three labs but not on their actual management and operations. The committee believes that the labs should remain under the Department of Energy, National Nuclear Security Administration, but believes that a review of the lab operations is timely.

**Inclusion in 2010 stockpile stewardship plan of certain information relating to stockpile stewardship criteria (sec. 3133)**

The committee recommends a provision that would direct the Secretary of Energy to include, in the annual stockpile stewardship plan for fiscal year 2010, an update on the stewardship criteria used to assess the safety, security, and reliability of the nuclear weapons stockpile. The last update of the criteria was completed in 2005. The 2010 plan would also include a review of each science-based tool, such as experimental facilities, developed or modified in the last 5 years.

The committee believes that as the stockpile ages and the total number of nuclear weapons in the stockpile decreases, the Department of Energy should articulate clear criteria for the stockpile stewardship program going forward.

**Comptroller General of the United States review of projects carried out by the Office of Environmental Management of the Department of Energy pursuant to the American Recovery and Reinvestment Act of 2009 (sec. 3134)**

The committee recommends a provision that would direct the Comptroller General to review and report on the efforts of the Department of Energy's (DOE) Office of Environmental Management (EM) to identify and implement cleanup projects using the funds received pursuant to the American Recovery and Reinvestment Act of 2009 (Public Law 111-5). The review would occur in three phases. The first phase is an initial review focused on the criteria used for project selection and the process to develop cost and schedules for the projects. The second phase would be an ongoing review of the project implementation with quarterly reports on the ongoing work. The committee expects these quarterly reports to be short letter reports that give a very brief status of the projects, including jobs generated and preserved. The third and final phase of the review would be a recap of the entire effort that would look at areas such as cost and schedule compliance and how the overall effort has led to an accelerated cleanup schedule. The committee wants to ensure that the funds are used to generate both jobs and necessary cleanup work.

The committee supports the work of the EM Office to accelerate the cleanup effort and utilize the funds to reduce the overall footprint of the DOE complex, thus reducing maintenance costs and providing for worker health and safety. The committee notes that

the majority of on-the-job injuries in the DOE complex occur as a result of work being done in and around old buildings that are no longer used and no longer maintained.

**Identification in budget materials of amounts for certain Department of Energy pension obligations (sec. 3135)**

The committee recommends a provision that would require the funding needed to meet pension obligations of contractor employees at each Department of Energy (DOE) facility operated using funds authorized in the National Defense Authorization Acts for environmental management be included in the DOE budget materials.

DOE is continuing a process, started approximately 3 years ago, to no longer provide defined benefit pension plans for newly hired contractor employees at DOE contractor operated sites and facilities. As the workforce in the older defined benefit plans age and retire the defined benefit plans will require more funds as the ratio of retirees to active workers continues to shift toward retirees. Already at the Savannah River Site there are more retirees than active employees. With the downturn in the economy, the situation has gotten worse as the investments that support these plans have lost value. As a result of this situation, these defined benefit plans will continue to be more expensive as the amount of new contributions decreases and more of the workforce retires. In the long run, DOE believes that the shift to defined contribution plans will be less costly.

To understand and manage the costs of the pension obligations, particularly the defined benefit plans, the committee directs that the amount of the projected pension obligations be spelled out in the budget justification materials for each environmental management funded site.

**Item of Special Interest**

**W-76**

The committee notes that the W-76 warhead for the submarine launched Trident D-5 missile recently started a major life extension effort. Planning for the life-extension took over 5 years and cost in excess of a billion dollars. The first production unit was late as a result of the delay in replicating a legacy material known as fogbank. A decision was made to use this material although the National Nuclear Security Administration (NNSA) developed a substitute for the fogbank that would have simplified future life extensions and long-term maintenance. The committee directs that the Administrator of the NNSA review this decision and report to the committee no later than August 1, 2009, on the results of the review.



## **TITLE XXXII—DEFENSE NUCLEAR FACILITIES SAFETY BOARD**

### **Authorization (sec. 3201)**

The committee recommends a provision that would authorize \$26.1 million for the Defense Nuclear Facilities Safety Board (DNFSB) the amount of the budget request.

The committee continues to support the work of the DNFSB and the rigorous oversight that the DNFSB brings to the operational nuclear safety of defense nuclear facilities. The funds requested will allow the DNFSB to increase its staff by approximately 10 positions, still well below the statutory personnel cap of 150. DNFSB brings a consultative, interactive, technically competent approach to oversight that is well suited to the work at Department of Energy (DOE) defense nuclear facilities. Most of the DOE defense nuclear facilities are one of a kind with unique and technically complex operations. On the other hand, facilities that are more commercial-like, such as the Mixed Oxide Fuel Fabrication Facility, have been statutorily directed to be regulated by the Nuclear Regulatory Commission. As a result, the committee does not support a new regulatory oversight regime for defense nuclear facilities absent extensive and careful review, consideration, and discussion.





**TITLE XXXIII—MARITIME ADMINISTRATION**

**Maritime Administration (sec. 3301)**

The committee recommends a provision that would re-authorize certain aspects of the Maritime Administration.



## **DIVISION D—FUNDING TABLES**

### **Authorization of amounts in funding tables (sec. 4001)**

The committee recommends a provision that would provide for the allocation of funds among programs, projects, and activities in accordance with the tables in Division D of the bill, subject to re-programming in accordance with established procedures.

Consistent with the previously expressed views of the committee, the provision would also require that decisions by agency heads to commit, obligate, or expend funds to a specific entity on the basis of such funding tables be based on authorized, transparent, statutory criteria, or merit-based selection procedures in accordance with the requirements of sections 2304(k) and 2374 of title 10, United States Code, and other applicable provisions of law.

### **Item of Special Interest**

#### **Compliance with Rule XLIV of the Standing Rules of the Senate**

In accordance with the requirements of Rule XLIV of the Standing Rules of the Senate, this report includes a table listing additional funding for items requested by Senators, along with the intended recipient and intended location of performance identified in connection with each such request. This information is provided as an indication of the intention of the requesting Senator, not the intention of the committee. The information in this table will be posted on the website of the Committee on Armed Services after the committee votes to report the bill.

In addition, the committee has requested that each member requesting additional funding for items in this bill provide a certification that neither the Senator nor the Senator's immediate family has a pecuniary interest in the item, as required by Rule XLIV of the Standing Rules of the Senate. The committee has received the requested certification from each Senator requesting funding for items that is provided in this bill. These certifications will also be posted on the website of the Committee on Armed Services after the committee votes to report the bill.

By including a table of requested funding items at the end of the report and posting Member certifications relative to such funding items on the committee website, the committee takes no position as to which of these items, if any, meet the definition of a congressionally directed spending item, limited tax benefit, or limited tariff benefit in Rule XLIV of the Standing Rules of the Senate. The committee directs the Department of Defense to use all applicable competitive, merit-based procedures in the award of any new contract, grant, or other agreement entered into with funds authorized to be appropriated by this bill. No provision in the bill or report shall be

construed to direct funds to any particular location or entity unless the provision expressly so provides.

## **TITLE XLI—PROCUREMENT**

### **Procurement (sec. 4101)**

The committee recommends a provision that would provide the program-level detailed guidance for the funding authorized in title I of this Act, in accordance with the requirements of sections 105 and 4001. The provision also displays the funding requested by the administration in the fiscal year 2010 budget request for procurement programs and indicates those programs for which the committee either increased or decreased the requested amounts.

The Department of Defense (DOD) may not exceed the authorized amounts (as set forth in the provision or, if unchanged from the administration request, as set forth in budget justification documents of the DOD) without a reprogramming action in accordance with established procedures. Unless noted in this report, funding changes to the budget request are made without prejudice.

### **Procurement for overseas contingency operations (sec. 4102)**

The committee recommends a provision that would provide the program-level detailed guidance for the funding authorized in title XV of this Act, in accordance with the requirements of sections 1514 and 4001. The provision also displays the funding requested by the administration in the fiscal year 2010 budget request for procurement for overseas contingency operations programs and indicates those programs for which the committee either increased or decreased the requested amounts.

The Department of Defense (DOD) may not exceed the authorized amounts (as set forth in the provision or, if unchanged from the administration request, as set forth in budget justification documents of the DOD) without a reprogramming action in accordance with established procedures. Unless noted in this report, funding changes to the budget request are made without prejudice.



## **TITLE XLII—RESEARCH, DEVELOPMENT, TEST, AND EVALUATION**

### **Research, development, test, and evaluation (sec. 4201)**

The committee recommends a provision that would provide the program-level detailed guidance for the funding authorized in title II of this Act, in accordance with the requirements of sections 201 and 4001. The provision also displays the funding requested by the administration in the fiscal year 2010 budget request for research, development, test, and evaluation programs and indicates those programs for which the committee either increased or decreased the requested amounts.

The Department of Defense (DOD) may not exceed the authorized amounts (as set forth in the provision or, if unchanged from the administration request, as set forth in budget justification documents of the DOD) without a reprogramming action in accordance with established procedures. Unless noted in this report, funding changes to the budget request are made without prejudice.

### **Research, development, test, and evaluation for overseas contingency operations (sec. 4202)**

The committee recommends a provision that would provide the program-level detailed guidance for the funding authorized in title XV of this Act, in accordance with the requirements of sections 1514 and 4001. The provision also displays the funding requested by the administration in the fiscal year 2010 budget request for research, development, test, and evaluation for overseas contingency operations programs and indicates those programs for which the committee either increased or decreased the requested amounts.

The Department of Defense (DOD) may not exceed the authorized amounts (as set forth in the provision or, if unchanged from the administration request, as set forth in budget justification documents of the DOD) without a reprogramming action in accordance with established procedures. Unless noted in this report, funding changes to the budget request are made without prejudice.





## **TITLE XLIII—OPERATION AND MAINTENANCE**

### **Operation and maintenance (sec. 4301)**

The committee recommends a provision that would provide the program-level detailed guidance for the funding authorized in title III of this Act, in accordance with the requirements of sections 301 and 4001. The provision also displays the funding requested by the administration in the fiscal year 2010 budget request for operation and maintenance programs and indicates those programs for which the committee either increased or decreased the requested amounts.

The Department of Defense (DOD) may not exceed the authorized amounts (as set forth in the provision or, if unchanged from the administration request, as set forth in budget justification documents of the DOD) without a reprogramming action in accordance with established procedures. Unless noted in this report, funding changes to the budget request are made without prejudice.

### **Operation and maintenance for overseas contingency operations (sec. 4302)**

The committee recommends a provision that would provide the program-level detailed guidance for the funding authorized in title XV of this Act, in accordance with the requirements of sections 1514 and 4001. The provision also displays the funding requested by the administration in the fiscal year 2010 budget request for operation and maintenance for overseas contingency operations programs and indicates those programs for which the committee either increased or decreased the requested amounts.

The Department of Defense (DOD) may not exceed the authorized amounts (as set forth in the provision or, if unchanged from the administration request, as set forth in budget justification documents of the DOD) without a reprogramming action in accordance with established procedures. Unless noted in this report, funding changes to the budget request are made without prejudice.



## **TITLE XLIV—OTHER AUTHORIZATIONS**

### **Other authorizations (sec. 4401)**

The committee recommends a provision that would provide the program-level detailed guidance for the funding authorized in title XIV of this Act, in accordance with the requirements of sections 1407 and 4001. The provision also displays the funding requested by the administration in the fiscal year 2010 budget request for other authorizations programs and indicates those programs for which the committee either increased or decreased the requested amounts.

The Department of Defense (DOD) may not exceed the authorized amounts (as set forth in the provision or, if unchanged from the administration request, as set forth in budget justification documents of the DOD) without a reprogramming action in accordance with established procedures. Unless noted in this report, funding changes to the budget request are made without prejudice.

### **Other authorizations for overseas contingency operations (sec. 4402)**

The committee recommends a provision that would provide the program-level detailed guidance for the funding authorized in title XV of this Act, in accordance with the requirements of sections 1514 and 4001. The provision also displays the funding requested by the administration in the fiscal year 2010 budget request for other authorizations for overseas contingency operations programs and indicates those programs for which the committee either increased or decreased the requested amounts.

The Department of Defense (DOD) may not exceed the authorized amounts (as set forth in the provision or, if unchanged from the administration request, as set forth in budget justification documents of the DOD) without a reprogramming action in accordance with established procedures. Unless noted in this report, funding changes to the budget request are made without prejudice.



## **TITLE XLV—MILITARY CONSTRUCTION**

### **Military construction (sec. 4501)**

The committee recommends a provision that would provide the program-level detailed guidance for the funding authorized in titles XXI, XXII, XXIII, XXIV, XXV, and XXVI of this Act, in accordance with the requirements of sections 2004 and 4001. The provision also displays the funding requested by the administration in the fiscal year 2010 budget request for military construction programs and indicates those programs for which the committee either increased or decreased the requested amounts.

The Department of Defense (DOD) may not exceed the authorized amounts (as set forth in the provision or, if unchanged from the administration request, as set forth in budget justification documents of the DOD) without a reprogramming action in accordance with established procedures. Unless noted in this report, funding changes to the budget request are made without prejudice.

### **2005 base realignment and closure round FY 2010 project listing (sec. 4502)**

The committee recommends a provision that would provide the program-level detailed guidance for the funding authorized in title XXVII of this Act, in accordance with the requirements of sections 2004 and 4001. The provision also displays the funding requested by the administration in the fiscal year 2010 budget request for 2005 base realignment and closure round fiscal year 2010 project listing programs and indicates those programs for which the committee either increased or decreased the requested amounts.

The Department of Defense (DOD) may not exceed the authorized amounts (as set forth in the provision or, if unchanged from the administration request, as set forth in budget justification documents of the DOD) without a reprogramming action in accordance with established procedures. Unless noted in this report, funding changes to the budget request are made without prejudice.

### **American Recovery and Reinvestment Act military construction (sec. 4503)**

The committee recommends a provision that would provide the program-level detailed guidance for the funding authorized by the American Recovery and Reinvestment Act of 2009 (Public Law 111–5) in accordance with the requirements of sections 2004 and 4001.

The Department of Defense (DOD) may not exceed the authorized amounts (as set forth in the provision or, if unchanged from the administration request, as set forth in budget justification documents of the DOD) without a reprogramming action in accordance with established procedures. Unless noted in this report, funding changes to the budget request are made without prejudice.

**Military construction for overseas contingency operations  
(sec. 4504)**

The committee recommends a provision that would provide the program-level detailed guidance for the funding authorized in title XIX of this Act, in accordance with the requirements of sections 2004 and 4001. The provision also displays the funding requested by the administration in the fiscal year 2010 budget request for military construction programs and indicates those programs for which the committee either increased or decreased the requested amounts.

The Department of Defense (DOD) may not exceed the authorized amounts (as set forth in the provision or, if unchanged from the administration request, as set forth in budget justification documents of the DOD) without a reprogramming action in accordance with established procedures. Unless noted in this report, funding changes to the budget request are made without prejudice.

## **TITLE XLVI—DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS**

### **Department of Energy national security programs (sec. 4601)**

The committee recommends a provision that would provide the program-level detailed guidance for the funding authorized in title XXXI of this Act, in accordance with the requirements of sections 3105 and 4001. The provision also displays the funding requested by the administration in the fiscal year 2010 budget request for Department of Energy national security programs and indicates those programs for which the committee either increased or decreased the requested amounts.

The Department of Defense (DOD) may not exceed the authorized amounts (as set forth in the provision or, if unchanged from the administration request, as set forth in budget justification documents of the DOD) without a reprogramming action in accordance with established procedures. Unless noted in this report, funding changes to the budget request are made without prejudice.

### **LEGISLATIVE REQUIREMENTS**

#### **Departmental Recommendations**

By letter dated May 13, 2009, the General Counsel of the Department of Defense forwarded to the President of the Senate proposed legislation “To authorize appropriations for fiscal year 2010 for military activities of the Department of Defense, to prescribe military personnel strengths for fiscal year 2010, and for other purposes.” The transmittal letter and proposed legislation were officially referred as Executive Communication 1673 to the Committee on Armed Services on May 20, 2009.

Executive Communication 1673 is available for review at the committee.

#### **Committee Action**

The committee ordered reported a comprehensive original bill and a series of original bills for the Department of Defense, military construction and Department of Energy authorizations by voice vote.

The committee vote to report the National Defense Authorization Act for Fiscal Year 2010 passed unanimously by roll call vote, 26–0, as follows: In favor: Senators Levin, Kennedy, Byrd, Lieberman, Reed, Akaka, Nelson of Florida, Nelson of Nebraska, Bayh, Webb, McCaskill, Udall of Colorado, Hagan, Begich, Burris, McCain, Inhofe, Sessions, Chambliss, Graham, Thune, Martinez, Wicker, Burr, Vitter and Collins. Opposed: None.

The 5 other roll call votes on motions and amendments to the bill which were considered during the course of the markup are as follows:

1. MOTION: To conduct Full Committee markups in closed session because classified information will be discussed.

VOTE: Passed on a roll call vote, 20–5.

In Favor: Senators Levin, Kennedy, Byrd, Lieberman, Reed, Akaka, Nelson of Florida, Nelson of Nebraska, Bayh, Webb, Udall of Colorado, Begich, Burris, Inhofe, Sessions, Chambliss, Thune, Martinez, Wicker, and Burr.

Opposed: Senators McCaskill, McCain, Graham, Vitter, and Collins.

2. MOTION: To fully fund 7 additional F–22 aircraft.

VOTE: Passed on a roll call vote, 13–11.

In Favor: Senators Kennedy, Byrd, Lieberman, Begich, Inhofe, Sessions, Chambliss, Thune, Martinez, Wicker, Burr, Vitter and Collins.

Opposed: Senators Levin, Reed, Akaka, Nelson of Florida, Nelson of Nebraska, Bayh, Webb, McCaskill, Udall of Colorado, Hagan, and McCain.

3. MOTION: To include additional funds in Navy and Air Force research, development, test and evaluation accounts for alternate engine development of the Joint Strike Fighter.

VOTE: Passed on a roll call vote, 12–10.

In Favor: Senators Levin, Kennedy, Byrd, Nelson of Florida, Bayh, Webb, McCaskill, Hagan, Begich, Thune, Wicker, and Vitter.

Opposed: Senators Lieberman, Reed, Akaka, Nelson of Nebraska, Udall of Colorado, Inhofe, Sessions, Chambliss, Martinez, and Collins.

4. MOTION: To restore the \$45 million reduction for construction of the Brigade Complex at Fort Stewart, Georgia.

VOTE: Failed on a roll call vote, 9–14.

In Favor: Senators McCain, Inhofe, Sessions, Chambliss, Thune, Martinez, Wicker, Vitter, and Collins.

Opposed: Senators Levin, Kennedy, Byrd, Lieberman, Reed, Akaka, Nelson of Florida, Nelson of Nebraska, Bayh, Webb, Udall of Colorado, Hagan, Begich and Burris.

5. MOTION: To prohibit the establishment of an outlying landing field at Sandbanks or Hale's Lake, North Carolina.

VOTE: Failed on a roll call vote, 6–19.

In Favor: Senators Udall of Colorado, Hagan, Begich, Burris, Chambliss, and Burr.

Opposed: Senators Levin, Kennedy, Byrd, Lieberman, Reed, Akaka, Nelson of Florida, Nelson of Nebraska, Bayh, Webb, McCaskill, McCain, Inhofe, Sessions, Graham, Thune, Martinez, Vitter, and Collins.

### **Congressional Budget Office Cost Estimate**

It was not possible to include the Congressional Budget Office cost estimate on this legislation because it was not available at the time the report was filed. It will be included in material presented during floor debate on the legislation.



**Regulatory Impact**

Paragraph 11(b) of rule XXVI of the Standing Rules of the Senate requires that a report on the regulatory impact of the bill be included in the report on the bill. The committee finds that there is no regulatory impact in the case of the National Defense Authorization Bill for Fiscal Year 2010.

**Changes in Existing Law**

Pursuant to the provisions of paragraph 12 of rule XXVI of the Standing Rules of the Senate, the changes in existing law made by certain portions of the bill have not been shown in this section of the report because, in the opinion of the committee, it is necessary to dispense with showing such changes in order to expedite the business of the Senate and reduce the expenditure of funds.

**COMPLIANCE WITH RULE XLIV OF THE STANDING RULES OF THE SENATE**

LINE	PE	DESCRIPTION	CHANGE MEMBER (thousands)	SUGGESTED MEMBER RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
<b>TITLE 1</b>					
Aircraft procurement, Army					
13		Multiyear procurement execution	22,000	NMR	n/a
20		Fuselage manufacturing	5,500	Science and Engineering Services, Inc.	Huntsville, AL
26		UH-60A to UH-60L Conversion	20,400	Sessions	Troy, AL
26		UH-60A to UH-60L Conversion	20,400	United Technologies Corporation	
26		UH-60A to UH-60L Conversion	20,400	Lincoln	
26		UH-60A to UH-60L Conversion	20,400	Boxer	
26		UH-60A to UH-60L Conversion	20,400	Dodd	
26		UH-60A to UH-60L Conversion	20,400	Lieberman	United Technologies Stratford, CT
26		UH-60A to UH-60L Conversion	20,400	Martinez	United Technologies West Palm Beach, FL
26		UH-60A to UH-60L Conversion	20,400	Chambliss	United Technologies Corporation - Sikorsky Aircraft
26		UH-60A to UH-60L Conversion	20,400	Isakson	
26		UH-60A to UH-60L Conversion	20,400	Burriss	
26		UH-60A to UH-60L Conversion	20,400	Landrieu	
26		UH-60A to UH-60L Conversion	20,400	Kennedy	
26		UH-60A to UH-60L Conversion	20,400	Bond	
26		UH-60A to UH-60L Conversion	20,400	Johanns	
26		UH-60A to UH-60L Conversion	20,400	Bingaman	
26		UH-60A to UH-60L Conversion	20,400	Gillibrand	

NMR = no member request

**COMPLIANCE WITH RULE XLIV OF THE STANDING RULES OF THE SENATE**

LINE	PE	DESCRIPTION	CHANGE (thousands)	MEMBER SUGGESTED RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
<b>Aircraft procurement, Army</b>					
26		UH-60A to UH-60L Conversion	20,400	Schumer	
26		UH-60A to UH-60L Conversion	20,400	Inhofe	
26		UH-60A to UH-60L Conversion	20,400	Wyden	
26		UH-60A to UH-60L Conversion	20,400	Reed	
26		UH-60A to UH-60L Conversion	20,400	Whitehouse	
26		UH-60A to UH-60L Conversion	20,400	Leahy	
36		Air warrior ensemble generation III	3,000	Warner	Vesta, VA
36		Air warrior ensemble generation III	3,000	Webb	Vesta, VA
<b>Missile procurement, Army</b>					
12		Command & control modifications	5,000	Sessions	Huntsville, AL
8		Additional ammunition	3,000	Lincoln	Pine Bluff, AR
8		Additional ammunition	3,000	Pryor	Pine Bluff, AR
36		Bomb line modernization	5,000	Inhofe	McAlester, OK
<b>Other procurement, Army</b>					
94		UFR - Additional Force XXI battle command brigade and below (FECB2)	179,000	NMR	n/a
135		FIDO explosive detector	7,000	Inhofe	Stillwater and Norman, OK
154		Combat casualty care equipment upgrade program	8,300	Graham	North American Rescue Greer, SC

NMR = no member request

**COMPLIANCE WITH RULE XLIV OF THE STANDING RULES OF THE SENATE**

LINE	PE	DESCRIPTION	CHANGE (thousands)	MEMBER	SUGGESTED RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
<b>Other procurement, Army</b>						
177		Immersive group simulation virtual training system	5,500	Akaka	Atlantis Cyberspace	Honolulu, HI
177		Joint fires & effects trainer systems (JFETS)	5,000	Inhofe	Stanley Associates	Fort Sill, OK
177		Operator driving simulator	5,000	Levin	FAAC, Inc	Ann Arbor, MI
177		Operator driving simulator	5,000	Stabenow	FAAC Inc	Ann Arbor, MI
177		Operator driving simulator	5,000	Corker	TN National Guard	Nashville, TN
177		Urban training instrumentation	2,000	Lugar	Indiana Army National Guard and General Dynamics Information Technology	Butlerville, IN
177		Virtual Interactive Combat Environment (VICE)	4,940	Chambliss	Dynamic Animation Systems, Inc.	Fort Benning Infantry School
177		Virtual Interactive Combat Environment (VICE)	4,940	Wicker	Dynamic Animation Systems, Inc	Hattiesburg, MS
177		Virtual Interactive Combat Environment (VICE)	4,940	Warner	Dynamic Animation Systems, Inc.	Fairfax, VA
177		Virtual Interactive Combat Environment (VICE)	4,940	Webb	Dynamic Animation Systems, Inc.	Fairfax, VA
<b>Aircraft procurement, Navy</b>						
4		F/A-18E/F additional aircraft	560,000	NMR	n/a	n/a
<b>Weapons procurement, Navy</b>						
16		Accelerate facility restoration program	30,000	Byrd	NavSea	ABL, Rocket Center, WV
<b>Other procurement, Navy</b>						
7		Smart valves for fire suppression	4,000	Collins	Portland Valve	S. Portland, ME
7		Smart valves for fire suppression	4,000	Snowe	Portland Valve, Inc	South Portland, ME

NMR = no member request

LINE	PE	DESCRIPTION	CHANGE (thousands)	MEMBER	SUGGESTED RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
<b>Other procurement, Navy</b>						
34		TB-33 thinline towed array	4,000	Dodd	L-3 Chesapeake Sciences Corporation	Stonington, CT
34		TB-33 thinline towed array	4,000	Lieberman	L-3 Chesapeake Sciences Corporation	Stonington, CT
34		TB-33 thinline towed array	4,000	Reed	L-3 Chesapeake Sciences Corporation	Ashaway, RI
134		Man overboard indicators	4,000	Warner	BriarTek, Inc.	Alexandria & Norfolk, VA
134		Man overboard indicators	4,000	Webb	BriarTek, Inc.	Alexandria & Norfolk, VA
<b>Aircraft procurement, Air Force</b>						
3		Other F-22A program requirements	64,000	NMR	n/a	n/a
3		Purchase additional F-22A aircraft	1,750,000	Dodd	Pratt & Whitney	Middletown, CT
3		Purchase additional F-22A aircraft	1,750,000	Chambliss	United Technologies / Lockheed Martin	Various
3		Purchase additional F-22A aircraft	1,750,000	Collins	United Technologies Corporation - Pratt & Whitney	N. Berwick, ME
3		Purchase additional F-22A aircraft	1,750,000	Snowe	United Technologies	North Berwick
64		Litening ATP upgrade kits	24,000	Nelson, Bill	Northrop Grumman	Arlington, VA
64		Litening ATP upgrade kits	24,000	Landrieu	Northrop Grumman Corporation	Bossier City, LA
64		Litening ATP upgrade kits	24,000	Thune	Northrop Grumman Corporation	Rolling Meadows, IL
<b>Other procurement, Air Force</b>						
6		Procure additional loaders	12,000	Nelson, Bill	John Bean Technologies Corporation	Orlando, FL

NMR = no member request

**COMPLIANCE WITH RULE XLIV OF THE STANDING RULES OF THE SENATE**

LINE	PE	DESCRIPTION	CHANGE MEMBER (thousands)	SUGGESTED RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
<b>Other procurement, Air Force</b>					
6		Procure additional loaders	12,000	Wicker	John Bean Technologies Tupelo, MS
24		Joint threat emitter (JTE)	3,200	Crapo	Mountain Home AFB Mountain Home, ID
24		Joint threat emitter (JTE)	3,200	Risch	Mountain Home AFB Mountain Home, ID
24		Joint threat emitter (JTE)	3,200	Levin	Michigan Air National Guard Lansing, MI
24		Unmanned modular threat emitter mod	3,000	Reid	98th Range Wing Nellis AFB
37		Application software assurance	9,000	Sessions	Telos Corporation Montgomery, AL
<b>Mine Resistant Ambush Prot Veh Fund</b>					
		Additional MRAP/ATVs to meet new requirement	1,200,000	NMR	n/a
<b>Procurement, Defense-wide</b>					
63		MC-130W multi-mission modifications	85,000	NMR	n/a
71		Advanced lightweight grenade launcher	5,000	Collins	General Dynamics/ATP Saco, ME
71		Advanced lightweight grenade launcher	5,000	Snowe	General Dynamics - SACO Saco, ME
85		Special operations visual augmentation systems	15,400	Kennedy	FLIR Systems Inc. North Billerica, MA
85		Special operations visual augmentation systems	15,400	Kerry	FLIR Systems, Inc North Billerica, MA
86		Special operations forces multi-band inter/intra team radio	31,300	NMR	n/a
93		M53 joint chemical biological protective mask	4,000	Levin	Avon Protection Systems Cadillac, MI
<b>TITLE 2</b>					
<b>Research, development, test and evaluation, Army</b>					
2	0601102A	Ballistic materials research	3,500	Collins	Tex Tech Industries N. Monmouth, ME
2	0601102A	Military operating environments research	2,000	Reid	Desert Research Inst (DRI) Reno, NV
3	0601103A	Nanocomposite materials research	2,000	Martinez	Florida State University Tallahassee, FL

NMR = no member request

**COMPLIANCE WITH RULE XLIV OF THE STANDING RULES OF THE SENATE**

LINE	PE	DESCRIPTION	CHANGE MEMBER (thousands)	SUGGESTED RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
<b>Research, development, test and evaluation, Army</b>					
3	0601103A	Nanocomposite materials research	2,000	Nelson, Bill Florida State University	Tallahassee, FL
3	0601103A	Open source intelligence research	2,000	Dodd University of New Haven	West Haven, CT
3	0601103A	Open source intelligence research	2,000	Brown Advanced Technical Intelligence Center for Human Capital Development	Beavercreek, Ohio
3	0601103A	Open source intelligence research	2,000	Bennett Attensity, INC	Salt Lake City, UT
3	0601103A	Open source intelligence research	2,000	Hatch Attensity Corporation	Salt Lake City, UT
4	0601104A	Advanced nanomaterials design	2,000	Wicker Mississippi State University	Starkville, MS
4	0601104A	Electrolyte research for batteries	1,000	Burris 3M Company, Electronic Materials and Manufacturing Division	Cordova, IL
4	0601104A	Immersive simulation research	1,200	McConnell University of Kentucky	Lexington, KY
4	0601104A	Materials processing research	2,000	Sessions University of Alabama at Birmingham (UAB)	Birmingham, AL
4	0601104A	Structural modeling and analysis	1,500	Wicker ES3, Inc. (headquarters)	Vicksburg, MS
5	0602105A	Advanced manufacturing technologies	2,000	Burris Alion Science and Technology	Chicago, IL
5	0602105A	Advanced renewable jet fuels	4,000	Thune SDSU	Brookings, SD
5	0602105A	Applied composite materials research	3,000	Carper University of Delaware	Newark, DE
5	0602105A	Applied composite materials research	3,000	Kaufman University of Delaware	Newark, DE
5	0602105A	High strength fibers for ballistic armor applications	3,000	Graham AGY Holding Corp	Aiken, SC
5	0602105A	Moldable fabric armor	2,500	Graham Milliken & Company	Spartanburg, SC

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<b>Research, development, test and evaluation, Army</b>						
5	0602105A	Nanosensor manufacturing research	4,000	Kennedy	UMass Lowell's Center for High-rate Nanomanufacturing	Lowell, MA
5	0602105A	Nanosensor manufacturing research	4,000	Kerry	University of Massachusetts - Lowell	Lowell, MA
5	0602105A	Smart materials and structures	4,500	Thune	SDSM&T	Rapid City, SD
6	0602120A	Nanoelectronic memory, sensor and energy devices	2,500	Nelson, Ben	University of Nebraska - Lincoln	Lincoln, NE
8	0602211A	Manned-unmanned aerial system teaming technologies	2,000	Sessions	University of Alabama at Huntsville (UAH)	Huntsville, AL
12	0602308A	Cognitive modeling and simulation research	2,000	Chambliss	Columbus State University	CSU in cooperation with Fort Benning
12	0602308A	Cognitive modeling and simulation research	2,000	Isakson	Columbus State University	Columbus, GA
13	0602601A	Advanced composite materials research	4,000	Levin	Michigan State University	East Lansing, MI
13	0602601A	Advanced composite materials research	4,000	Stabenow	Michigan State University	East Lansing, MI
13	0602601A	Army vehicle modernization research	25,000	NMR	n/a	n/a
13	0602601A	Composite vehicle shelters	2,500	Begich	Alkan Shelter, LLC	Fairbanks, AK
13	0602601A	Fuel cell APU systems	3,000	Levin	Energy Technology Components	Ann Arbor, MI
13	0602601A	Hybrid electric vehicle reliability research	2,000	Levin	Western Michigan University	Kalamazoo, MI
13	0602601A	Materials research for alternative energy and transportation	1,500	Levin	Central Michigan University	Mount Pleasant, MI
13	0602601A	Tactical metal fabrication program	3,000	Kennedy	Thermo Fisher Scientific	Billerica, MA
13	0602601A	Tactical metal fabrication program	3,000	Kerry	Thermo Fisher Scientific	Billerica, MA

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Research, development, test and evaluation, Army						
13	0602601A	Tactical metal fabrication program	3,000	Inhofe	IMTEC	Ardmore, OK
13	0602601A	Tribology research	2,000	Levin	Oakland University	Rochester, MI
13	0602601A	Tribology research	2,000	Stabenow	Oakland University	Rochester, MI
13	0602601A	Vehicle systems engineering and integration activities	20,000	Levin	U.S. Army Tank-Automotive Research, Development and Engineering Center	Warren, MI
14	0602618A	Army vehicle survivability research	25,000	NMR	n/a	n/a
14	0602618A	Reactive armor research	3,000	Dodd	Ensign Bickford Aerospace and Defense	Simsbury, CT
14	0602618A	Reactive armor research	3,000	Lieberman	Ensign Bickford Aerospace and Defense	Simsbury, CT
14	0602618A	Reactive armor research	3,000	McConnell	Ensign-Bickford Industries	Graham, KY
17	0602624A	Acoustic gun detection systems	2,000	Kennedy	BBN Technologies	Cambridge, MA
17	0602624A	Acoustic gun detection systems	2,000	Kerry	BBN Technologies	Cambridge, MA
17	0602624A	Acoustic research	3,000	Wicker	University of Mississippi - National Center for Physical Acoustics	University, MS
17	0602624A	UGV weaponization	4,000	Collins	Howe and Howe Technologies, Inc.	N. Berwick, ME
17	0602624A	UGV weaponization	4,000	Snowe	Howe and Howe Technologies	N. Berwick, ME
18	0602705A	Hybrid battery systems	2,500	Reed	Modular Energy Devices	Warwick, RI
18	0602705A	Hybrid portable power program	3,500	Kennedy	Protonex Technology Corporation	Southborough, MA

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Research, development, test and evaluation, Army						
18	0602705A	Hybrid portable power program	3,500	Kerry	Protonex Technology, LLC	Southborough, MA
18	0602705A	Hybrid portable power program	3,500	Wicker	Ultralife	West Point, MS
25	0602784A	Ballistic materials for force protection	3,000	Collins	University of Maine	Orono, ME
25	0602784A	Ballistic materials for force protection	3,000	Snowe	University of Maine	Orono, ME
25	0602784A	Critical infrastructure monitoring and protection research	3,500	Reed	Naval Undersea Warfare Center and Kelly Aerospace	Newport and Warwick, RI
25	0602784A	Geosciences research	2,000	Bennet	Colorado State University	Fort Collins, CO
25	0602784A	Geosciences research	2,000	Udall, Mark	Colorado State University	Fort Collins, CO
27	0602786A	Airbeam shelter protection systems	3,000	Collins	University of Maine	Orono, ME
27	0602786A	Airbeam shelter protection systems	3,000	Snowe	University of Maine	Orono, ME
27	0602786A	Enhanced ballistic protection research	3,000	Kennedy	Honeywell	Natick, MA
27	0602786A	Enhanced ballistic protection research	3,000	Reed	Kelly Aerospace	Newport and Warwick, RI
27	0602786A	Enhanced ballistic protection research	3,000	Graham	Applied Research Development Institute	Anderson, SC
27	0622786A	Thermal resistant fiber research	2,500	Carper	INVISTA S.a.r.l.	Seaford, DE
27	0622786A	Thermal resistant fiber research	2,500	Kaufman	INVISTA S.a. r.l.	Seaford, DE
27	0602786A	Thermal resistant fiber research	2,500	Graham	Greenwood Mills	Greenwood, SC
28	0602787A	Bioengineering research	2,500	Chambliss	Georgia Tech	Atlanta, GA
28	0602787A	Biomechanics research	3,500	Warner	Virginia Polytechnic Institute and State University	Blacksburg, VA

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<b>Research, development, test and evaluation, Army</b>						
28	0602787A	Biomechanics research	3,500	Webb	Virginia Polytechnic Institute and State University	Blacksburg, VA
28	0602787A	Blast protection for ground soldiers	2,000	Sessions	CFD Research Corporation	Fort Rucker, AL
28	0602787A	Blast wave modeling	3,000	Wicker	Diversified Technology	Ridgeland, MS
28	0602787A	Blast wave modeling	3,000	Nelson, Ben	University of Nebraska - Lincoln	Lincoln, NE
28	0602787A	Dengue fever research	2,000	Dodd	NanoViricides, Inc.	West Haven, CT
28	0602787A	Dengue fever research	2,000	Lieberman	NanoViricides Inc.	West Haven, CT
28	0602787A	Hemorrhage research	3,000	Nelson, Ben	University of Nebraska Medical Center	Omaha, NE
28	0602787A	Malaria vaccine development	2,500	Schumer	SUNY Upstate	Syracuse, NY
28	0602787A	Malaria vaccine development	2,500	Cantwell	Seattle Biomedical Research Institute (SBR)	Seattle, WA
28	0602787A	Nanomaterials for biological processes	2,000	Lincoln	University of Arkansas Little Rock	Little Rock, AR
28	0602787A	Nanomaterials for biological processes	2,000	Pryor	University of Arkansas Little Rock	Little Rock, AR
28	0602787A	Neurotrauma research	3,500	Lugar	Purdue University	West Lafayette, IN
28	0602787A	Neurotrauma research	3,500	Gillbrand	University of Rochester	Rochester, NY
28	0602787A	Secondary trauma research	2,500	Udall, Mark	University of Colorado, Colorado Springs	Colorado Springs, CO
30	0603002A	Biosensor controller systems development	2,000	Reid	Eye-Com Corporation	Reno, NV

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<b>Research, development, test and evaluation, Army</b>						
30	0603002A	Body temperature conditioner systems	2,500	Reid	University of NV School of Medicine	Las Vegas, NV
30	0603002A	Gulf War illness research	12,000	Feinstein		
30	0603002A	Gulf War illness research	12,000	Dodd		
30	0603002A	Gulf War illness research	12,000	Akaka		
30	0603002A	Gulf War illness research	12,000	Burr		
30	0603002A	Gulf War illness research	12,000	Kennedy	ALS Therapy Development Institute	Cambridge, MA
30	0603002A	Gulf War illness research	12,000	Kerry	ALS Therapy Development Institute	Cambridge, MA
30	0603002A	Gulf War illness research	12,000	Snowe		
30	0603002A	Gulf War illness research	12,000	Bond		
30	0603002A	Gulf War illness research	12,000	Tester		
30	0603002A	Gulf War illness research	12,000	Brown		
30	0603002A	Gulf War illness research	12,000	Sanders	US Army Medical Research and Materiel Command	Fort Detrick, MD
30	0603002A	Gulf War illness research	12,000	Murray		
30	0603002A	Gulf War illness research	12,000	Kohl		
30	0603002A	Gulf War illness research	12,000	Rockefeller		
30	0603002A	Integrated medical technology program	7,500	Kennedy	Center for Integration of Medicine and Innovative Technology	Boston, MA

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<b>Research, development, test and evaluation, Army</b>					
30	0603002A	Integrated medical technology program	7,500	Kerry Center for Integration of Medicine and Innovative Technology	Boston, MA
30	0603002A	Lower limb prosthetics research	2,000	Kennedy Foster-Miller, Inc. and Liberating Technologies	Waltham and Holliston, MA
30	0603002A	Lower limb prosthetics research	2,000	Kerry Foster-Miller, Inc.	Waltham, MA
30	0603002A	Prosthetics technology transition	8,000	Cardin OrthoCare Innovations Foundation	Columbia, MD
30	0603002A	Prosthetics technology transition	8,000	Inhofe OrthoCare Innovations Foundation	Oklahoma City, OK
30	0603002A	Prosthetics technology transition	8,000	Warner New World Associates, OrthoCare Innovations, Johns Hopkins Applied Physics Lab	Fredericksburg, VA; Oklahoma City, OK; Columbia, MD
30	0603002A	Prosthetics technology transition	8,000	Webb New World Associates, OrthoCare Innovations, Johns Hopkins Applied Physics Lab	Fredericksburg, VA; Oklahoma City, OK; Columbia, MD
30	0603002A	Regenerative medical research	4,000	Collins Mount Desert Island Biological Laboratory	Salisbury Cove, ME
30	0603002A	Regenerative medical research	4,000	Snowe Mount Desert Island Biological Laboratory	Salisbury Cove
30	0603002A	Regenerative medical research	4,000	Hagan Institute for Regenerative Medicine at Wake Forest University	Winston-Salem, NC
31	0603003A	Advanced affordable turbine engine program	4,000	Dodd Pratt & Whitney	Middletown, CT
31	0603003A	Advanced affordable turbine engine program	4,000	Lieberman United Technologies	Hartford, CT

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<b>Research, development, test and evaluation, Army</b>					
31	0603003A	Advanced ultrasonic inspections	2,000	Inhofe Veracity Technology Solutions, LLC	Tulsa, OK
31	0603003A	Aviation weapons technology integration	2,000	Sessions Torch Technologies	Huntsville, AL
31	0603003A	Full authority digital engine control systems	5,000	Dodd Goodrich Pump and Engine Control Systems	West Hartford, CT
31	0603003A	Full authority digital engine control systems	5,000	Lieberman Goodrich Engine Controls	West Hartford, CT
31	0603003A	Heavy fuel UAV propulsion systems	3,000	Schumer Rotary Power	Glen Cove, NY
31	0603003A	Heavy fuel UAV propulsion systems	3,000	Graham XRD Inc.	Beaufort, SC
31	0603003A	Integration facility enterprise resource planning system	3,750	Sessions Strata-G Solutions	Huntsville, AL
32	0603004A	Lightweight advanced metals program	3,000	Levin General Motors Corporation	Detroit, MI
32	0603004A	Nanotechnology manufacturing research	4,000	Chambliss National Nanotechnology Manufacturing Center	Swainsboro, GA
33	0603005A	Advanced APU development	6,000	Martinez Florida Institute of Technology	Rockledge, FL
33	0603005A	Advanced APU development	6,000	Nelson, Bill Advent Power Systems, Inc.	Coconut Creek, FL
33	0603005A	Advanced APU development	6,000	Nelson, Bill Mainstream Engineering Corporation	Rockledge, FL
33	0603005A	Advanced battery development program	20,000	Levin U.S. Army Tank-Automotive Research, Development and Engineering Center	Warren, MI
33	0603005A	Advanced lithium ion battery systems	3,000	Levin A123 Systems, Inc	Ann Arbor, MI
33	0603005A	Advanced lithium ion battery systems	3,000	Stabenow A123 Systems	Ann Arbor, MI

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<b>Research, development, test and evaluation, Army</b>						
33	0603005A	Advanced suspension systems for heavy vehicles	3,500	Reid	Advanced Materials and Devices, Inc.	Reno, NV
33	0603005A	Advanced thermal management systems	5,500	Levin	Engineered Machined Products, Inc.	Escanaba, MI
33	0603005A	Advanced thermal management systems	5,500	Stabenow	Engineered Machined Products Inc.	Escanaba, MI
33	0603005A	Alternative energy research	20,000	NMR	n/a	n/a
33	0603005A	Applied power management controls	3,000	Levin	Global Embedded Technologies	Farmington Hills, MI
33	0603005A	Applied power management controls	3,000	Stabenow	Global Embedded Technologies, Inc.	Farmington Hills, MI
33	0603005A	Army vehicle modernization technologies	50,000	NMR	n/a	n/a
33	0603005A	Dynamometer facility upgrade	4,000	Levin	AVL Americas	Plymouth, MI
33	0603005A	Dynamometer facility upgrade	4,000	Stabenow	AVL Instrumentation and Test Systems, Inc.	Plymouth, MI
33	0603005A	Electric drive advanced tactical wheeled armored vehicle system	5,500	Levin	Advanced Defense Vehicle Systems	Lake Orion, MI
33	0603005A	Fuel cell unmanned robotic system	4,500	Levin	Adaptive Materials	Ann Arbor, MI
33	0603005A	Fuel cell unmanned robotic system	4,500	Stabenow	Adaptive Materials, Inc.	Ann Arbor, MI
33	0603005A	Ground robotics reliability research	2,000	Levin	National Center for Manufacturing Sciences	Ann Arbor, MI
33	0603005A	Ground robotics reliability research	2,000	Stabenow	National Center for Manufacturing Sciences (NCMS)	Ann Arbor, MI

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<b>Research, development, test and evaluation, Army</b>					
33	0603005A	Heavy fuel engines for unmanned ground vehicles	2,500	Levin	L-3 Communications CPS Muskegon, MI
33	0603005A	Heavy fuel engines for unmanned ground vehicles	2,500	Stabenow	L-3 Communications Combat Propulsion Systems Muskegon, MI
33	0603005A	Hybrid blast protected vehicle technologies	4,000	Kennedy	Force Protection/Satcon Applied Tech Ladson, SC and Boston, MA
33	0603005A	Hybrid blast protected vehicle technologies	4,000	Kerry	Satcon Technology Corporation Boston, MA
33	0603005A	Hybrid blast protected vehicle technologies	4,000	Cardin	Satcon Technology / Force Protection Linthicum, MD
33	0603005A	Hybrid blast protected vehicle technologies	4,000	Graham	Force Protection Industries, Inc. Ladson, SC
33	0603005A	Hybrid engine development program	8,000	Levin	U.S. Army Tank-Automotive Research, Development and Engineering Center Warren, MI
33	0603005A	Hybrid truck development	4,000	Boxer	National Automotive Center Pasadena, CA
33	0603005A	Hybrid truck development	4,000	Cardin	Volvo Powertrain of North America Hagerstown, MD
33	0603005A	Hydraulic hybrid vehicles for the tactical wheeled fleet	3,000	Lugar	Navistar, Inc. Truck Group Fort Wayne, IN
33	0603005A	Hydraulic hybrid vehicles for the tactical wheeled fleet	3,000	Levin	Bosch Rexroth Corporation Rochester Hills, MI
33	0603005A	Hydraulic hybrid vehicles for the tactical wheeled fleet	3,000	Stabenow	Bosch Rexroth Corporation Rochester Hills, MI
33	0603005A	Next generation superchargers for military engines	3,000	Levin	Eaton Automotive Marshall, MI
33	0603005A	Next generation superchargers for military engines	3,000	Stabenow	Eaton Automotive Marshall, MI
33	0603005A	Silicon carbide electronics for ground vehicles	2,500	Levin	Dow Corning Corporation Midland, MI

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<b>Research, development, test and evaluation, Army</b>						
33	0603005A	Silicon carbide electronics for ground vehicles	2,500	Stabenow	Dow Corning Corporation	Midland, MI
33	0603005A	Simulations for vehicle reliability and performance	2,000	Levin	LMS North America	Troy, MI
33	0603005A	Smart plug-in hybrid electric vehicle program	4,100	Levin	NextEnergy	Detroit, MI
33	0603005A	Smart plug-in hybrid electric vehicle program	4,100	Stabenow	NextEnergy	Detroit, MI
33	0603005A	Threat cue research	2,000	Levin	Michigan Tech University	Houghton, MI
33	0603005A	Threat cue research	2,000	Stabenow	Michigan Technological University	Houghton, MI
33	0603005A	Tire development for Joint Light Tactical Vehicle program	1,500	Voinovich	Goodyear Tire and Rubber Company	Akron, OH
33	0603005A	Tire development for Joint Light Tactical Vehicle program	1,500	Warner	Goodyear Tire and Rubber Company	Danville, VA
33	0603005A	Tire development for Joint Light Tactical Vehicle program	1,500	Webb	Goodyear Tire and Rubber Company	Danville, VA
33	0603005A	Unmanned ground vehicle initiative	12,000	Levin	U.S. Army Tank-Automotive Research, Development and Engineering Center	Warren, MI
33	0603005A	Vehicle autonomy research	1,500	Levin	iRobot Corporation	Troy, MI
33	0603005A	Vehicle autonomy research	1,500	Stabenow	iRobot Corporation	Troy, MI
33	0603005A	Vehicle prognostics technologies	4,000	Wicker	HBM-nCode Products	Starkville, MS
33	0603005A	Water analysis technologies	2,000	Levin	Translume, Inc.	Ann Arbor, MI
33	0603005A	Water analysis technologies	2,000	Stabenow	Translume	Ann Arbor, MI
38	0603015A	Combat medic training systems	2,500	Martinez	University of Central Florida	Orlando, FL

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<b>Research, development, test and evaluation, Army</b>						
38	0603015A	Combat medic training systems	2,500	Nelson, Bill	Chi Systems, Inc.	Orlando, FL
38	0603015A	Joint fires & effects trainer system enhancements	4,500	Inhofe	Creative Technologies, Inc.	Los Angeles, CA
42	0603125A	Mid-sized unmanned ground vehicle	3,500	Kennedy	Black-I Robotics, Inc.	Tyngsborough, MA
43	0603270A	Laser systems for light aircraft missile defense	2,000	Levin	Omni Sciences, Inc.	Ann Arbor, MI
43	0603270A	Laser systems for light aircraft missile defense	2,000	Stabenow	Omni Sciences, Inc.	Ann Arbor, MI
44	0603313A	Discriminatory imaging research	3,000	McConnell	University of Kentucky	Lexington, KY
48	0603710A	Bradley third generation FLIR	5,000	Nelson, Bill	DRS Technologies Optronics	Palm Bay, FL
50	0603734A	Permafrost tunnel	500	Begich	Cold Regions Research and Engineering Laboratory, US Army Corps of Engineers	Fox, AK
50	0603734A	Photovoltaic technology development	8,000	Levin	United Solar Ovonic	Auburn Hills, MI
51	0603772A	Wideband digital airborne electronic sensing array	4,000	Kennedy	Applied Radar, Inc.	Burlington, MA
51	0603772A	Wideband digital airborne electronic sensing array	4,000	Kerry	Applied Radar, Inc.	Burlington, MA
51	0603772A	Wideband digital airborne electronic sensing array	4,000	Reed	Applied Radar	Quonset Point and North Kingstown, RI
55	0603327A	Adaptive robotic technology	3,500	Sessions	Calhoun Community College	Decatur, AL
55	0603327A	Advanced electronics integration	4,000	Thune	Rosebud Sioux Tribe	Rosebud, SD
55	0603327A	Advanced environmental controls	5,000	Reid	Rocky Research	Boulder City, NV
60	0603653A	Advanced tank armament systems	50,000	NMR	n/a	n/a
67	0603801A	Joint Future Theater Lift	50,000	NMR	n/a	n/a
78	0604601A	Lightweight caliber .50 machine gun	5,000	Collins	General Dynamics/ATP	Saco, ME

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<b>Research, development, test and evaluation, Army</b>						
78	0604601A	Lightweight caliber .50 machine gun	5,000	Snowe	General Dynamics - SACO	Saco, ME
78	0604601A	Next generation helmet ballistic materials technology	3,000	Hagan	DSM Dyneema	Stanley, NC
79	0604604A	Medium tactical vehicle development	10,000	NMR	n/a	n/a
81	0604622A	Heavy tactical vehicle development	10,000	NMR	n/a	n/a
94	0604715A	Urban training development	3,000	Nelson, Bill	National Center for Simulation	Orlando, FL
102	0604802A	Common guidance control module	7,500	Inhofe	ATK	Plymouth, MN
114	0604854A	Accelerate Paladin integration management	58,216	NMR	n/a	n/a
127	0605601A	Program increase	25,600	NMR	n/a	n/a
128	0605602A	Common regional operational systems	3,000	Bingaman	White Sands Missile Range	White Sands Missile Range, NM
128	0605602A	Common regional operational systems	3,000	Udall, Tom	White Sands Missile Range	White Sands Missile Range, NM
128	0605602A	Data fusion systems	2,500	Bennett	ITT Advanced Engineering and Sciences	Dugway, UT
128	0605602A	Data fusion systems	2,500	Hatch	Dugway Proving Ground, Utah; Utah State University's Space Dynamics Laboratory; and ITT	Logan, UT
128	0605602A	Dugway field test improvements	4,500	Bennett	ITT Advanced Engineering and Sciences	Dugway, UT
128	0605602A	Dugway field test improvements	4,500	Hatch	Dugway Proving Ground, Utah State University's Space Dynamics Laboratory, ITT	Logan, UT
130	0605605A	Program increase	6,000	Bingaman	Northrop Grumman	White Sands Missile Range, NM

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<b>Research, development, test and evaluation, Army</b>						
130	0605605A	Program increase	6,000	Udall, Tom	Northrop Grumman	White Sands Missile Range, NM
140	0605805A	3D woven preform technology for Army munitions	2,200	Reed	Textile Engineering & Manufacturing	Woonsocket, RI
155	0203802A	TOW LBS	5,000	Bingaman	Raytheon	Farmington, NM
155	0203802A	TOW LBS	5,000	Udall, Tom	Raytheon Company	Farmington, NM
161	0303028A	Collection management tools	5,000	Sessions	DESE Research, Inc	Huntsville, AL
167	0305204A	A160 Afghanistan deployment	86,000	NMR	n/a	n/a
172	0708045A	Combat vehicle manufacturing technology	30,000	NMR	n/a	n/a
172	0708045A	Manufacturing metrology research	2,750	Reed	Independent Quality Labs	Rockville, RI
172	0708045A	Smart machine platform initiative	2,000	Brown	TechSolve	Cincinnati, OH
172	0708045A	Smart machine platform initiative	2,000	Voinovich	TechSolve, Inc	Cincinnati, OH
172	0708045A	Weapon systems repair technologies	2,500	Thune	H.F. Webster Inc.	Rapid City, SD
<b>Research, development, test and evaluation, Navy</b>						
1	0601103N	Blast and impact resistant structures	2,000	Wicker	University of Mississippi - Departments of Civil and Mechanical Engineering	University, MS
2	0601152N	S&T educational outreach	1,000	Cardin	Office of Naval Research (ONR) - NSTAR	St. Mary's/Charles/Calvert County, MD
3	0601153N	Nanoscale research program	2,000	Martinez	University of Florida	Gainesville, FL
4	0602114N	Energetics research	3,000	Cardin	Indian Head Division / Naval Surface Warfare Center	Indian Head, MD
4	0602114N	Energetics research	3,000	Bingaman	Applied Research Associates	Albuquerque, NM

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<b>Research, development, test and evaluation, Navy</b>					
4	0602114N	Energetics research	3,000	Udall, Tom	Applied Research Associates Albuquerque, NM
5	0602123N	Alternative energy research	20,000	NMR	n/a
5	0602123N	Energy systems integration research	4,000	Martinez	Florida State University Tallahassee, FL
5	0602123N	Energy systems integration research	4,000	Nelson, Bill	Florida State University Tallahassee, FL
5	0602123N	Port security technologies	3,500	Voinovich	Battelle Memorial Institute Columbus, OH
5	0602123N	Port security technologies	3,500	Reed	Naval Undersea Warfare Center and Battelle Newport, RI
5	0602123N	Reconfigurable shipboard power systems	2,500	Levin	Nove Technologies, Inc. Metamora, MI
5	0602123N	Reconfigurable shipboard power systems	2,500	Stabenow	Nove Technologies Inc. Metamora, MI
5	0602123N	SOF combatant research	2,000	Collins	Hogden Defense Composites Portland, ME
5	0602123N	SOF combatant research	2,000	Snowe	Hogden Defense Composites E. Boothbay, ME
9	0602366N	Anti-reverse engineering technologies	1,000	Lincoln	Space Photonics Fayetteville, AR
9	0602366N	Anti-reverse engineering technologies	1,000	Pryor	Space Photonics Fayetteville, AR
9	0602366N	Asset lifecycle program	4,000	Akaka	Referentia Systems Honolulu, HI
10	0602271N	Photonic digital radar systems	3,000	NMR	n/a
11	0602435N	Advanced unmanned underwater vehicle research	3,500	Landrieu	C&C Technologies Inc Lafayette, LA
11	0602435N	Advanced unmanned underwater vehicle research	3,500	Cardin	Phoenix International Holdings Largo, MD Inc.
11	0602435N	Advanced unmanned underwater vehicle research	3,500	Reed	Allion Science and Technology Middletown, RI

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<b>Research, development, test and evaluation, Navy</b>						
11	0602435N	Laser underwater imaging and communications research	2,000	Martinez	Harbor Branch Oceanographic Institute at Florida Atlantic University	Fort Pierce, FL
11	0602435N	Laser underwater imaging and communications research	2,000	Nelson, Bill	Florida Atlantic University (Harbor Branch Oceanographic Institution)	Fort Pierce, FL
13	0602747N	Littoral glider systems	3,000	Begich	Alaska Native Technologies, LLC	Anchorage, AK
13	0602747N	Quiet power technologies	750	Reed	Naval Undersea Warfare Center and Electro Standard Laboratories (ESL)	Newport and Cranston, RI
14	0602782N	Electromagnetic signature assessment system	2,000	Crapo	University of Idaho	Moscow, ID
14	0602782N	Electromagnetic signature assessment system	2,000	Risch	University of Idaho	Moscow, ID
15	0603114N	Mobile target tracking technologies	4,000	Akaka	Pukoa Scientific	Honolulu, HI
16	0603123N	Advanced coatings for aviation components	3,000	Levin	Focus: HOPE	Detroit, MI
16	0603123N	Advanced coatings for aviation components	3,000	Stabenow	Focus: Hope	Detroit, MI
16	0603123N	Single Generator Operations Lithium Ion Battery	5,000	Lugar	Altair Nanotechnologies	Anderson, IN
16	0603123N	Single Generator Operations Lithium Ion Battery	5,000	Reid	Altair Nanotechnologies Inc.	Reno, NV
20	0603640M	Acoustic combat sensors	7,500	Inhofe	GWACS Defense, Inc.	Tulsa, OK
20	0603640M	Unmanned vehicle conversion kits	2,000	Warner	TORC Technologies, LLC	Blacksburg, VA
20	0603640M	Unmanned vehicle conversion kits	2,000	Webb	TORC Technologies, LLC	Blacksburg, VA
26	0603207N	Semi-submersible for UUV sensor developments	1,400	Vitter	C&C Technologies	Lafayette, LA

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<b>Research, development, test and evaluation, Navy</b>						
29	0603254N	Sonobuoy wave energy module	4,000	Landrieu	QinetiQ North America	Slidell, LA
29	0603254N	Sonobuoy wave energy module	4,000	Vitter	QinetiQ-North America, Technology Solutions Group	Slidell, LA
35	0603513N	DDG-51 hybrid propulsion system	9,300	Kennedy	DRS Power Technology, Inc.	Fitchburg, MA
35	0603513N	DDG-51 hybrid propulsion system	9,300	Wicker	General Atomics EMS Tupelo Facility	Shannon, MS
43	0603563N	Remote monitoring & troubleshooting project	5,820	Sessions	Intergraph Corporation	Madison, AL
53	0603635M	Model-based management decision tools	4,500	Levin	Ricardo, Inc.	Van Buren Township, MI
53	0603635M	Model-based management decision tools	4,500	Stabenow	Ricardo, Inc.	Belleville, MI
58	0603724N	Fuel cell and hydrogen generation technologies	2,500	Hagan	Microcell Corporation	Raleigh, NC
58	0603724N	Molten carbonate fuel cell demonstrator	3,000	Dodd	FuelCell Energy	Torrington, CT
58	0603724N	Molten carbonate fuel cell demonstrator	3,000	Lieberman	Fuel Cell Energy	Danbury, CT
58	0603724N	Solar heat reflective film development	4,750	Sessions	3M Company	Decatur, AL
61	0603739N	Highly integrated optical interconnects for advanced air vehicles	4,000	Levin	Calumet Electronics Corporation	Calumet, MI
61	0603739N	Highly integrated optical interconnects for advanced air vehicles	4,000	Stabenow	Calumet Electronics Corporation	Calumet, MI
61	0603739N	RFID technology exploitation	1,000	McConnell	University of Louisville	Louisville, KY
105	0604501F	Mobile maritime sensor technology development	50,000	Kennedy	Raytheon, Integrated Defense Systems	Tewksbury, MA
106	0604503N	SSN Communications	5,000	Kennedy	Lockheed Martin, Sippican, Inc.	Marion, MA
110	0604558N	Common command & control system module	9,000	Dodd	Electric Boat	Groton, CT

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<b>Research, development, test and evaluation, Navy</b>						
110	0604558N	Common command & control system module	9,000	Lieberman	General Dynamics	Groton, CT
110	0604558N	Common command & control system module	9,000	Reed	Electric Boat	Groton, CT and Quonset Point, RI
110	0604558N	Mold-in-place coating development	2,000	Wicker	Seeman Composites, Inc	Guilford, MS
112	0604562N	Artificial Intelligence-based combat system kernel	5,000	Reed	Rite Solutions	Middletown, RI
112	0604562N	Submarine environment for evaluation & development	4,000	Reed	Advanced Solutions for Tomorrow	Newport, RI
112	0604562N	Weapon acquisition & firing system	4,000	Reed	Naval Undersea Warfare Center and MIKEL	Newport and Middletown, RI
113	0604567N	Automated fiber optic manufacturing	2,000	Kennedy	kSaria	Lawrence, MA and Virginia Beach, VA
113	0604567N	Automated fiber optic manufacturing	2,000	Kerry	Ksaria	Lawrence, MA
113	0604567N	Automated fiber optic manufacturing	2,000	Warner	Kitco Fiber Optics	Virginia Beach, VA
113	0604567N	Automated fiber optic manufacturing	2,000	Webb	Kitco Fiber Optics	Virginia Beach, VA
120	0604755N	AUSV	5,000	Akaka	Harbor Wing Technologies	Pearl Harbor, Hawaii
121	0604756N	Phalanx Next Generation	12,000	McConnell	Raytheon Missile Systems	Louisville, KY
121	0604756N	Phalanx Next Generation	12,000	Bennett	Colmek Systems Engineering	Salt Lake City, UT
121	0604756N	Phalanx Next Generation	12,000	Hatch	Coda Octopus Colemek Systems Engineering, Raytheon	Salt Lake City, UT
122	0604757N	NULKA decoy R&D	9,000	Kennedy	Lockheed Martin, Sippican, Inc.	Marion, MA
124	0604771N	Composite tissue transplantation research	2,000	Chambliss	Emory	Emory

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Research, development, test and evaluation, Navy						
124	0604771N	Custom body implant development	2,000	Levin	University of Michigan- Dearborn	Dearborn, MI
124	0604771N	Custom body implant development	2,000	Stabenow	University of Michigan- Dearborn	Dearborn, MI
124	0604771N	Multivalent dengue vaccine program	3,500	Graham	GenPhar, Inc.	Mount Pleasant, SC
124	0604771N	Orthopedic surgery instrumentation	3,000	Nelson, Ben	University of Nebraska Medical Center	Omaha, NE
127	0604800N	F136 development	219,450	Bayh	Rolls-Royce GE	Indianapolis, IN
127	0604800N	F136 development	219,450	McConnell	General Electric	Lynn, MA; Evendale, OH; Madisonville, KY
127	0604800N	F136 development	219,450	Kennedy	n/a	n/a
129	0605013N	Information systems research	7,000	Landrieu	New Orleans IT Companies, UNO/ Business Council	Orleans
129	0605013N	Information systems research	7,000	Vitter	SSC Atlantic New Orleans Office (Formerly SSC/ITC New Orleans)	New Orleans, LA
129	0605013N	Integrated network-centric technology systems	5,000	Landrieu	SPAWAR Systems Center, Atlantic, New Orleans office	Statewide
129	0605013N	Integrated network-centric technology systems	5,000	Vitter	SPAWAR Systems Center, Atlantic, New Orleans Office	New Orleans, LA
139	0604759N	Aviation enterprise interoperability upgrades	5,000	Cardin	Patuxent River Naval Air Station	Lexington Park, MD
160	0101221N	LINAC	1,170	Lugar	Indiana University	Crane, IN
182	0206623M	Expandable rigid wall composite shelters	1,300	Begich	Alkan Shelter, LLC	Fairbanks, AK

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<b>Research, development, test and evaluation, Navy</b>					
182	0206623M	Marine personnel carrier support system	3,000	Reed Group 81, Inc.	Newport, RI
182	0206623M	Ultrasonic armor consolidation	3,900	Levin Solidica, Inc.	Ann Arbor, MI
182	0206623M	Ultrasonic armor consolidation	3,900	Stabenow Solidica, Inc.	Ann Arbor, MI
183	0206624M	High performance capabilities for military vehicles	1,000	Hagan Institute for Defense and Business	Chapel Hill, NC
194	0303140N	Policy decision point for CANES	3,500	Levin Infotech Solutions for Business Inc.	Inkster, MI
216	0708011N	Integrated manufacturing enterprise	5,000	Landrieu Louisiana Center for Manufacturing Sciences (LCMS)	Shreveport, LA
216	0708011N	Integrated manufacturing enterprise	5,000	Vitter Louisiana Center for Manufacturing Sciences	Shreveport, LA
216	0708011N	Life extension of weapon system structures research	2,500	Thune SDSM&T	Rapid City, SD
217	0708730N	National Shipbuilding Research Program	20,000	Sessions National Shipbuilding Research Program	Mobile, AL
217	0708730N	National Shipbuilding Research Program	20,000	Wicker VT Halter Marine	Pascagoula, MS
<b>Research, development, test and evaluation, Air Force</b>					
1	0601102F	Coal transformation research	1,000	Lugar Purdue University	West Lafayette, IN
1	0601102F	Nanotechnology for portable power research	1,500	Gillibrand Stony Brook University	Stony Brook, NY
1	0601102F	Nanotechnology for portable power research	1,500	Schumer SUNY Stonybrook	Stony Brook, NY
2	0601103F	Cybersecurity for control networks research	4,000	Landrieu Louisiana Tech University	Ruston, LA
2	0601103F	Cybersecurity for control networks research	4,000	Nelson, Ben University of Nebraska - Omaha	Omaha, NE

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<b>Research, development, test and evaluation, Air Force</b>						
2	0601103F	Cybersecurity for control networks research	4,000	Gillibrand	SUNY Institute of Technology	Utica, NY
2	0601102F	End-user software safeguard research	2,000	Nelson, Ben	University of Nebraska - Lincoln	Lincoln, NE
2	0601103F	Informatics research	1,500	Schumer	SUNY Buffalo	Buffalo, NY
2	0601103F	Information security research	4,000	Inhofe	University of Tulsa	Tulsa, OK
2	0601103F	Integrated design and manufacturing research	2,000	Chambliss	Georgia Tech	Atlanta, GA
7	0602102F	Advanced aerospace heat exchangers	3,000	Voinovich	Ohio Aerospace Institute	Cleveland, OH
7	0602102F	Aircraft active corrosion protection systems	2,000	Wicker	Rite-Kem Incorporated	Tupelo, MS
7	0602102F	Energy and automation technologies	4,000	Bingaman	Univ. N.M.	Albuquerque, N.M.
7	0602102F	Energy and automation technologies	4,000	Udall, Tom	University of New Mexico	Albuquerque, NM
7	0602102F	Energy and automation technologies	4,000	Corker	Competitive Program	n/a
7	0602102F	Energy efficiency, recovery, and generation systems	4,000	Thune	SDSM&T	Rapid City, SD
7	0602102F	Health monitoring sensors for aerospace components	2,000	Collins	University of Maine	Orono, ME
7	0602102F	Health monitoring sensors for aerospace components	2,000	Snowe	University of Maine	Orono, ME
7	0602102F	Intelligent manufacturing research	1,000	Brown	The Ohio State University	Columbus, OH
7	0602102F	Intelligent manufacturing research	1,000	Voinovich	The Ohio State University	Columbus, OH
7	0602102F	Light alloy aerospace and automotive parts development	1,000	Dodd	Consortium comprised of Sikorsky, Deformation Control Technology, Boeing, Metal Improvement Company, Allison Transmission and Bell Helicopter.	Various locations in CT, OH, PA, IN, CA, TX

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<b>Research, development, test and evaluation, Air Force</b>						
7	0602102F	Light alloy aerospace and automotive parts development	1,000	Lieberman	Sikorsky Aircraft	Stratford, CT
7	0602102F	Light alloy aerospace and automotive parts development	1,000	Lugar	HDLAAAP Coalition	Indianapolis, IN
7	0602102F	Mid-infrared laser source research	2,750	Sessions	Photonics, Inc.	Birmingham, AL
8	0602201F	Unmanned aerial system collaboration technologies	2,500	Voinovich	University of Dayton Research Institute	Dayton, OH
10	0602203F	Hybrid bearing development	1,000	Dodd	Timken Company	Manchester, CT
10	0602203F	Hybrid bearing development	1,000	Lieberman	Timken Company	Manchester, CT
10	0602203F	Hybrid bearing development	1,000	Hagan	Timken Company	Randleman, NC
10	0602203F	Hybrid bearing development	1,000	Shaheen	The Timken Company	Lebanon, NH
10	0602203F	Integrated electrical starter/generator systems	2,500	Brown	GE Aviation Systems, Electrical Power	Vandalia, OH
10	0602203F	Integrated electrical starter/generator systems	2,500	Voinovich	GE Aviation Systems, Electrical Power	Vandalia, OH
10	0602203F	Lithium battery manufacturing	5,000	Chambliss	Excellatron Solid State	Decatur, GA
10	0602203F	Lithium ion Technologies for aviation batteries	2,000	Chambliss	Soft America Inc	Valdosta, GA
10	0602203F	Lithium ion technologies for aviation batteries	2,000	Isakson	Soft America	Valdosta, GA
10	0602203F	Scramjet research	3,500	Corker	Competitive Program	n/a
10	0602203F	Thermally efficient engine pumping system	4,000	Dodd	Goodrich Pump and Engine Control Systems	West Hartford, CT
10	0602203F	Thermally efficient engine pumping system	4,000	Lieberman	Goodrich Engine Controls	West Hartford, CT
12	0602601F	Reconfigurable electronics research	2,000	Crapo	Boise State University	Boise, ID

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<b>Research, development, test and evaluation, Air Force</b>						
12	0602601F	Reconfigurable electronics research	2,000	Risch	Boise State University	Boise, ID
12	0602601F	Seismic research program	7,500	Kennedy	Weston Geophysical Corp.	Hanscom AFB
12	0602601F	Seismic research program	7,500	Kerry	Weston Geophysical Corp	Lexington, MA
17	0602890F	Advanced deformable mirrors for high energy laser weapons	2,000	Bingaman	MZA Associates	Albuquerque, NM
17	0602890F	Advanced deformable mirrors for high energy laser weapons	2,000	Udall, Tom	MZA Associates	Albuquerque, NM
18	0603112F	Metals Affordability Initiative	7,000	Dodd	Competitive	n/a
18	0603112F	Metals Affordability Initiative	7,000	Lieberman	Competitive	n/a
18	0603112F	Metals Affordability Initiative	7,000	Reid	TIMET Global	Toronto, OH
18	0603112F	Metals Affordability Initiative	7,000	Brown	Competitive	n/a
18	0603112F	Metals Affordability Initiative	7,000	Wyden	Competitive	n/a
18	0603112F	Metals Affordability Initiative	7,000	Reed	Competitive	n/a
18	0603112F	Metals Affordability Initiative	7,000	Bennett	Metals Affordability Initiative Consortium	Dayton, OH
18	0603112F	Metals Affordability Initiative	7,000	Kohl	Competitive	n/a
18	0603112F	Sewage-derived biofuels program	5,000	Wicker	General Atomics	Starkville, MS
18	0603112F	Sonic infrared imaging technology development	2,000	Levin	Wayne State University	Detroit, MI
18	0603112F	Sonic infrared imaging technology development	2,000	Stabenow	Wayne State University	Detroit, MI
20	0602030F	Reconfigurable secure computing technologies	4,000	Warner	Curtiss-Wright Controls Embedded Computing	Leesburg, VA

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<b>Research, development, test and evaluation, Air Force</b>						
20	0603203F	Reconfigurable secure computing technologies	4,000	Webb	Curtiss-Wright Controls Embedded Computing	Leesburg, VA
22	0603216F	Alternative energy research	20,000	NMR	n/a	n/a
22	0603216F	Long range supersonic engine for high speed strike	10,000	Levin	Williams International Co.	Walled Lake, MI
22	0603216F	Long range supersonic engine for high speed strike	10,000	Stabenow	Williams International Co., LLC	Commerce Township, MI
22	0603216F	Long range supersonic engine for high speed strike	10,000	Bennett	Williams International Co., LLC	Ogden, UT
22	0603216F	Long range supersonic engine for high speed strike	10,000	Hatch	Williams International Company	Ogden, UT
22	0603216F	Scalable UAV engines	3,500	Lieberman	United Technologies	Hartford, CT
22	0603216F	Silicon carbide power electronics research	6,000	Lincoln	Arkansas Power Electronics International, Inc.	Fayetteville, AR
22	0603216F	Silicon carbide power electronics research	6,000	Pryor	Arkansas Power Electronics International, Inc.	Fayetteville, AR
22	0603216F	Silicon carbide power electronics research	6,000	Wicker	SemiSouth Laboratories, Inc	Starkville, MS
30	0603680F	Next generation casting initiative	3,250	Levin	Alcoa Howmet	Whitehall, MI
30	0603680F	Next generation casting initiative	3,250	Stabenow	Alcoa Howmet	Whitehall, MI
30	0603680F	Next generation casting initiative	3,250	Reid	PCC Structural Inc.	Carson City, NV
31	0603788F	Optical interconnects research	2,500	Reid	OptiComp Corporation	Zephyr Cove, NV
40	0603438F	Space protection program	6,500	NMR	n/a	n/a
40	0603438F	Space situational awareness	6,000	Kennedy	Raytheon, Integrated Defense Systems	Tewksbury, MA
40	0603438F	Space situational awareness	6,000	Kerry	Raytheon Company	Tewksbury, MA

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<i>Research, development, test and evaluation, Air Force</i>						
59	0604857F	ORS smallsat image prototyping	115,000	NMR	n/a	n/a
59	0604857F	ORS-1	40,000	Dodd	Goodrich Electro-Optical Systems	Danbury, CT
59	0604857F	RSLV	15,000	Sessions	KT Engineering	Madison, AL
61	0604xxxxF	IRIS	3,000	Nelson, Bill	Intelsat General Corporation	Cape Canaveral, FL
61	0604xxxxF	Next generation MILSATCOM technology development	50,000	NMR	n/a	n/a
61	0305178F	Program increase	80,000	NMR	n/a	n/a
64	0604226F	B-1B AESA radar	2,000	Thune	The Boeing Company	Long Beach, CA
75	0604441F	HEO ground and data exploitation	15,000	NMR	n/a	n/a
84	0604800F	F136 development	219,450	Bayh	Rolls-Royce GE	Indianapolis, IN
84	0604800F	F136 development	219,450	McConnell	General Electric	Lynn, MA; Evendale, OH; Madisonville, KY
84	0604800F	F136 development	219,450	Kennedy	n/a	n/a
86	0604853F	EELV metric tracking	12,000	NMR	n/a	n/a
101	0604759F	Holloman high speed test track	5,000	Bingaman	General Atomics	White Sands Missile Range, NM
101	0604759F	Holloman high speed test track	5,000	Udall, Tom	General Atomics	Holloman AFB, NM
105	0605807F	Program increase	20,000	NMR	n/a	n/a
157	0207581F	MP-RTIP integration & test on JSTARS aircraft	92,000	Lieberman	Northrop Grumman Norden Systems	Norwalk, CT
157	0207581F	MP-RTIP integration & test on JSTARS aircraft	92,000	Nelson, Bill	Northrop Grumman Corporation	Melbourne, FL

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<b>Research, development, test and evaluation, Air Force</b>						
206	0305219F	Sense and avoid	4,000	Reid	Sierra Nevada Corp	Sparks, NV
210	0305614F	Karnac	6,000	NMR	n/a	n/a
238	0901202F	Biometric signature and passive physiological monitoring	5,000	Reid	Noninvasive Medical Technologies, Inc.	Las Vegas, NV
999	999999	Classified programs	140,000	NMR	n/a	n/a
<b>Research, development, test and evaluation, Defense-wide</b>						
4	0601114D8Z	Program Increase	8,000	Inhofe	Coalition of EPSCoR/IdeA States	Washington, DC
4	0601114D8Z	Program Increase	8,000	Reed	DEPSCoR	Rhode Island universities
6	06013848P	In-vitro models for bio-defense vaccines	2,000	Martinez	University Central Florida	Orlando, FL
6	06013848P	In-vitro models for bio-defense vaccines	2,000	Nelson, Bill	University Of Central Florida	Orlando, FL
14	06023848P	Biological decontamination research	1,000	Levin	Eastern Michigan University	Ypsilanti, MI
14	06023848P	Biological decontamination research	1,000	Stabenow	Eastern Michigan University	Ypsilanti, MI
14	06023848P	Chemical and biological infrared detector	3,000	Collins	Orono Spectral Solutions	Old Town, ME
14	06023848P	Funding for meritorious unfunded TMTI projects	9,878	NMR	n/a	n/a
20	06027188R	Blast mitigation and protection	2,000	Warner	George Mason University	Fairfax, VA
20	06027188R	Blast mitigation and protection	2,000	Webb	George Mason University	Fairfax, VA
25	0603122D8Z	Impact and blast loading laboratory testing program	2,500	Boxer	University of California, San Diego	San Diego, CA
25	0603122D8Z	Reconnaissance and data exploitation systems	3,500	Akaka	NovaSol	Honolulu, HI
28	0603200D8Z	Joint Future Theater Lift joint advanced concepts	3,000	NMR	n/a	n/a

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<b>Research, development, test and evaluation, Defense-wide</b>						
39	0603680D8Z	High performance defense manufacturing technology	10,000	NMR	n/a	n/a
40	0603711D8Z	Robotics training systems	2,000	Graham	Florence Darlington Technical College	Florence, SC
40	0603711D8Z	Robotics training systems	2,000	Warner	Hampton Roads Military and Federal Facilities Alliance	Norfolk, VA
40	0603711D8Z	Robotics training systems	2,000	Webb	Hampton Roads Military and Federal Facilities Alliance	Norfolk, VA
41	0603712S	Alternative energy research	20,000	NMR	n/a	n/a
41	0603712S	Biofuels program	4,000	Levin	Defense Logistics Agency	Fort Belvoir, VA
41	0603712S	Biomass conversion research	2,500	Collins	University of Maine	Orono, ME
41	0603712S	Biomass conversion research	2,500	Snowe	University of Maine	Orono, ME
41	0603712S	Fuel cell manufacturing research	3,750	Cardin	Ballard Power Systems	College Park, MD
41	0603712S	Fuel cell manufacturing research	3,750	Reid	Scheelite Technologies	Reno, NV
41	0603712S	Fuel cell manufacturing research	3,750	Graham	South Carolina Research Authority	Charleston, SC
41	0603712S	Renewable power for forward operating bases	3,000	Bingaman	Honeywell	Albuquerque, NM
41	0603712S	Renewable power for forward operating bases	3,000	Corker	Competitive Program	n/a
41	0603712S	Vehicle fuel cell and hydrogen logistics program	8,000	Levin	Defense Logistics Agency	Fort Belvoir, VA
49	0603755D8Z	Computational design of novel materials	3,000	Wicker	Jackson State University	Jackson, MS
59	0603826D8Z	Special warfare domain awareness	1,800	Collins	Technology Systems Inc. (TSI)	Brunswick, ME
59	0603826D8Z	Special warfare domain awareness	1,800	Snowe	Technology Systems Inc	Brunswick, ME

NMR = no member request

**COMPLIANCE WITH RULE XLIV OF THE STANDING RULES OF THE SENATE**

LINE	PE	DESCRIPTION	CHANGE (thousands)	MEMBER	SUGGESTED RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
<b>Research, development, test and evaluation, Defense-wide</b>						
65	1160402BB	Lithium ion battery safety research	1,600	Lugar	Indiana University	Indianapolis, IN
77	0603884BP	Real-time non-specific viral agent detector	2,000	Collins	Sensor Research & Development, Inc.	Orono, ME
78	0603884C	Airborne infrared surveillance technology	5,000	Inhofe	L-3 Com/Aeromet	Tulsa, OK
97	0603913C	Short-range ballistic missile defense	25,000	Nelson, Bill	Honeywell	Various
97	0603913C	Short-range ballistic missile defense	25,000	Wicker	ATK	Luka, MS
100	0604016D8Z	Corrosion control research	3,500	Wicker	The University of Southern Mississippi	Hattiesburg, MS
100	0604016D8Z	Corrosion control research	3,500	Brown	The University of Akron	Akron, OH
104	0604787D8Z	Systems engineering and prototyping program	50,000	NMR	n/a	n/a
129	0604940D8Z	SAM hardware simulators	4,000	Chambliss	GTRI	Atlanta and Smyrna, GA
129	0604940D8Z	SAM hardware simulators	4,000	Isakson	Georgia Institute of Technology, Georgia Tech Research Institute	Atlanta, GA
147	0605790D8Z	Anti-tamper software systems	3,000	Collins	ANGEL Secure Networks, Inc.	Orono, ME
147	0605790D8Z	Anti-tamper software systems	3,000	Snowe	Angel Technologies	Orono, ME
194	0303140G	Software assurance courseware	1,800	Levin	University of Detroit Mercy	Detroit, MI
194	0303140G	Software assurance courseware	1,800	Stabenow	University of Detroit Mercy	Detroit, MI
233	0305884L	Technology applications for security enhancement	4,000	Inhofe	Oklahoma State University	Stillwater, OK
238	0708011S	Advanced microcircuit emulation	4,500	Brown	Sarnoff Corporation	Columbus, OH
238	0708011S	Castings for improved defense readiness	3,000	Lugar	Bremen Castings	Bremen, IN

NMR = no member request

**COMPLIANCE WITH RULE XLIV OF THE STANDING RULES OF THE SENATE**

LINE	PE	DESCRIPTION	CHANGE (thousands)	MEMBER	SUGGESTED RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
Research, development, test and evaluation, Defense-wide						
238	07080115	Castings for improved defense readiness	3,000	Reed	American Metalcasting Consortium/Cumberland Foundry	Cumberland, RI
238	07080115	Industrial base innovation fund	30,000	NMR	n/a	n/a
238	07080115	Insensitive munitions manufacturing	2,500	Warner	ATK (Alliant Techsystems, Inc)	Radford, VA
238	07080115	Insensitive munitions manufacturing	2,500	Webb	ATK (Alliant Techsystems, Inc)	Radford, VA
247	116040588	Long endurance unattended ground sensor technologies	5,000	Wicker	Mississippi State University	Starkville, MS
999		Classified programs	4,000	NMR	n/a	n/a
<b>TITLE 3</b>						
Operation and maintenance, Army						
70		Generation III extended cold weather clothing system	8,000	Reed	Kenyon Industries	Kenyon, RI
250		Rule of law increase	500	Graham	University of South Carolina	Columbia, SC
Operation and maintenance, Navy						
60		Aviation depot maintenance increase	195,000	NMR	n/a	n/a
100		Ship depot maintenance increase	200,000	NMR	n/a	n/a
250		Gun depot overhauls	12,000	McConnell	BAE Systems	Louisville, KY
390		Naval strike air warfare training center	850	Reid	Naval Strike and Air Warfare Center (NSAWC)	Fallon, NV
Operation and maintenance, Marine Corps						
10		Advanced load bearing equipment	3,000	Reed	American Cord and Webbing	Woonsocket, RI
10		Cold weather layering system	5,000	Kennedy	Polartec, LLC	Lawrence, MA
10		Cold weather layering system	5,000	Kerry	Polartec, LLC	Lawrence, MA

NMR = no member request

**COMPLIANCE WITH RULE XLIV OF THE STANDING RULES OF THE SENATE**

LINE	PE	DESCRIPTION	CHANGE AMOUNT (thousands)	MEMBER	SUGGESTED RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
<b>Operation and maintenance, Marine Corps</b>						
10		Cold weather layering system	5,000	Stabenow	Peckham Industries	Lansing, MI
10		Cold weather layering system	5,000	Shaheen	Polartec, LLC	Hudson, NH
10		Cold weather layering system	5,000	Warner	ADS	Virginia Beach, VA
10		Cold weather layering system	5,000	Webb	ADS	Virginia Beach, VA
10		Family of shelters and tents	3,000	Warner	Base-X, Inc.	Rockbridge, Pulaski, Salem, Verona, VA
10		Family of shelters and tents	3,000	Webb	Base-X, Inc.	Rockbridge, Pulaski, Salem, Verona, VA
<b>Operation and maintenance, Air Force</b>						
70		Mission essential airfield operations equipment	3,500	Reid	98th Range Wing	Nellis AFB
90		National security space institute	3,000	NMR	n/a	n/a
<b>Operation and maintenance, Defense-wide</b>						
210		Family support for military children with autism	5,000	NMR	n/a	n/a
270		Acceleration of Defense Readiness Reporting System	5,000	NMR	n/a	n/a
270		Director of operational energy plans and programs	5,000	NMR	n/a	n/a
270		Readiness and environmental protection initiative	25,000	Boxer	n/a	n/a
270		Readiness and environmental protection initiative	25,000	Bennet	n/a	n/a
270		Readiness and environmental protection initiative	25,000	Udall, Mark	n/a	n/a
270		Readiness and environmental protection initiative	25,000	Dodd	n/a	n/a
270		Readiness and environmental protection initiative	25,000	Martinez	Department of Defense	Multiple, nationwide
270		Readiness and environmental protection initiative	25,000	Nelson, Bill	n/a	n/a

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**COMPLIANCE WITH RULE XLIV OF THE STANDING RULES OF THE SENATE**

LINE	PE	DESCRIPTION	CHANGE (thousands)	MEMBER	SUGGESTED RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
<b>Operation and maintenance, Defense-wide</b>						
270		Readiness and environmental protection initiative	25,000	Akaka	Military installations nationwide	Various
270		Readiness and environmental protection initiative	25,000	Landrieu	The Nature Conservancy (TNC), Louisiana Field Office (LAFO)	Nationwide
270		Readiness and environmental protection initiative	25,000	Cardin	n/a	n/a
270		Readiness and environmental protection initiative	25,000	Burr	n/a	n/a
270		Readiness and environmental protection initiative	25,000	Hagan	n/a	n/a
270		Readiness and environmental protection initiative	25,000	Inhofe	Land Legacy	Tulsa, OK
270		Readiness and environmental protection initiative	25,000	Cantwell	n/a	n/a
998		Special assistance to local education agencies	10,000	NMR	n/a	n/a
999		Impact aid	35,000	Burr	Department of Defense Education Agency	Arlington, VA
999		Impact aid for children with severe disabilities	5,000	Akaka	n/a	n/a
999		Impact aid for children with severe disabilities	5,000	Roberts	n/a	n/a
999		Impact aid for children with severe disabilities	5,000	Conrad	n/a	n/a
999		Impact aid for children with severe disabilities	5,000	Menendez	n/a	n/a
999		Impact aid for children with severe disabilities	5,000	Schumer	n/a	n/a
999		Impact aid for children with severe disabilities	5,000	Inhofe	n/a	n/a
999		Impact aid for children with severe disabilities	5,000	Reed	n/a	n/a
999		Impact aid for children with severe disabilities	5,000	Whitehouse	n/a	n/a

**COMPLIANCE WITH RULE XLIV OF THE STANDING RULES OF THE SENATE**

LINE	PE	DESCRIPTION	CHANGE (thousands)	SUGGESTED MEMBER	SUGGESTED RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
<b>Operation and maintenance, Army Reserve</b>						
80		Mobile corrosion protection	3,600	Akaka	Carwell Products, Inc	Nationwide
<b>Operation and maintenance, Army National Guard</b>						
80		Mobile corrosion protection	3,600	Akaka	Carwell Products, Inc	Nationwide
<b>Operation and maintenance, Air National Guard</b>						
10		Controlled humidity protection	2,700	Graham	South Carolina Air National Guard	Columbia, SC
<b>TITLE 4</b>						
<b>Military personnel</b>						
		Mental health assessments	3,000	Kennedy	n/a	n/a
		Pay raise	350,000	NMR	n/a	n/a
		PDMRA	59,000	Grassley	n/a	n/a
		PDMRA	59,000	Harkin	n/a	n/a
		PDMRA	59,000	Roberts	n/a	n/a
		PDMRA	59,000	Klobuchar	n/a	n/a
		PDMRA	59,000	Lautenberg	n/a	n/a
		PDMRA	59,000	Menendez	n/a	n/a
		PDMRA	59,000	Wyden	n/a	n/a
		PDMRA	59,000	Murray	n/a	n/a
		Substance abuse study	1,500	NMR	n/a	n/a
		Travel reimbursement for suspended training	5,000	NMR	n/a	n/a
<b>TITLE 13</b>						

NMR = no member request

**COMPLIANCE WITH RULE XLIV OF THE STANDING RULES OF THE SENATE**

LINE	PE	DESCRIPTION	CHANGE (thousands)	MEMBER	SUGGESTED RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
Former Soviet Union threat reduction						
10		Program increase	20,000	NMR	n/a	n/a
<b>TITLE 14</b>						
Defense Health Program						
10		Expansion of survivor eligibility TRICARE dental prog	2,000	NMR	n/a	n/a
10		Reimbursement for exceptional travel	10,000	NMR	n/a	n/a
10		TRICARE continuation pending MEDICARE eligibility	4,000	NMR	n/a	n/a
10		TRICARE eligibility for Retired Reservists under age 60	10,000	NMR	n/a	n/a
Drug interdiction and counter-drug activities, Defense						
10		High priority National Guard counterdrug programs	30,000	Begich	Alaska National Guard	Alaska
10		High priority National Guard counterdrug programs	30,000	Carper	Delaware National Guard	Wilmington, DE
10		High priority National Guard counterdrug programs	30,000	Kaufman	Delaware National Guard	Wilmington, DE
10		High priority National Guard counterdrug programs	30,000	Nelson, Bill	Florida National Guard	St. Augustine, FL
10		High priority National Guard counterdrug programs	30,000	McConnell	Kentucky National Guard	Kentucky
10		High priority National Guard counterdrug programs	30,000	Wicker	Regional Counter Drug Training Academy	Meridian, MS
10		High priority National Guard counterdrug programs	30,000	Hagan	North Carolina National Guard	Raleigh, NC
10		High priority National Guard counterdrug programs	30,000	Bingaman	TAG MG Kenny Montoya	Santa Fe, NM
10		High priority National Guard counterdrug programs	30,000	Udall, Tom	New Mexico Army National Guard	Santa Fe, NM
10		High priority National Guard counterdrug programs	30,000	Reid	Nevada National Guard	Carson City, NV
10		High priority National Guard counterdrug programs	30,000	Corker	Tennessee National Guard Counterdrug Task Force	Nashville, TN

**COMPLIANCE WITH RULE XLIV OF THE STANDING RULES OF THE SENATE**

LINE	PE	DESCRIPTION	CHANGE CHARGE (thousands)	MEMBER	SUGGESTED RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
<b>Drug interdiction and counter-drug activities, Defense</b>						
10		High priority National Guard counterdrug programs	30,000	Bennett	Utah National Guard	Draper, UT
10		High priority National Guard counterdrug programs	30,000	Hatch	Utah National Guard	Utah
10		High priority National Guard counterdrug programs	30,000	Cantwell	Washington State National Guard	Camp Murray, WA
10		High priority National Guard counterdrug programs	30,000	Murray	Washington State Military Department	Camp Murray, WA
10		Mobile sensor barrier	5,000	Kennedy	Scientific Systems Company Inc.	Woburn, MA
10		Mobile sensor barrier	5,000	Reed	Scientific Systems	University of Rhode Island
<b>Office of the Inspector General</b>						
10		Second year growth plan	15,000	NMR	n/a	n/a
30		Second year growth plan	1,000	NMR	n/a	n/a
<b>TITLE 21</b>						
<b>Military construction, Army</b>						
		Combat pistol range	4,900	Begich		Fort Richardson
		Gate 7 access control point	3,550	Sessions		Redstone Arsenal
		Elevated water storage tank	1,200	Nelson, Bill		Camp Rudder, Eglin AFB
		Aviation readiness center	8,967	Chambliss		Hunter Army Air Field, Savannah, GA
		Aviation readiness center	8,967	Isakson		Hunter Army Aviation Facility
		Estes Road access control point	6,100	Brownback		Fort Riley
		Estes Road access control point	6,100	Roberts		Fort Riley

NMR = no member request



**COMPLIANCE WITH RULE XLIV OF THE STANDING RULES OF THE SENATE**

LINE	PE	DESCRIPTION	CHANGE (thousands)	MEMBER	SUGGESTED RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
<b>Military construction, Army</b>						
		5th Special Forces Group language sustainment training facility	5,800	Alexander		Fort Campbell, KY
		5th Special Forces Group language sustainment training facility	5,800	Corker		Fort Campbell, KY
		Installation chapel center	14,400	Bunning		Fort Campbell
		Installation chapel center	14,400	McConnell		Fort Campbell
		Analytical chemistry wing - advanced chemistry laboratory	15,500	Cardin		Aberdeen Proving Ground
		Analytical chemistry wing - advanced chemistry laboratory	15,500	Mikulski		Aberdeen Proving Ground
		Automated sniper field fire range	2,500	NMR		Fort Bragg, NC
<b>TITLE 22</b>						
<b>Military construction, Navy</b>						
		Production services support facility	30,360	Akaka		NAVSTA Pearl Harbor
		Production services support facility	30,360	Inouye		NAVSTA Pearl Harbor
		Strategic weapons systems engineering facility	13,710	Lugar		Naval Support Activity Crane
		Gate #2 security improvements	7,100	Collins		Portsmouth Naval Shipyard
		Gate #2 security improvements	7,100	Snowe		Portsmouth Naval Shipyard
		Warrior physical training facility	11,450	Ensign		NAS Fallon
		Warrior physical training facility	11,450	Reid		NAS Fallon
		Renovation of senior enlisted academy	10,550	Reed		NAVSTA Newport
		Electromagnetic research & engineering facility	3,660	Warner		NSCW Dalghren, CA
		Electromagnetic research & engineering facility	3,660	Webb		NSCW Dalghren, CA

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**COMPLIANCE WITH RULE XLIV OF THE STANDING RULES OF THE SENATE**

LINE	PE	DESCRIPTION	CHANGE (thousands)	MEMBER	SUGGESTED RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
<b>Military construction, Navy</b>						
		Emergency services center	9,560	Byrd		Naval Security Group Activity, Sugar Grove
<b>TITLE 23</b>						
<b>Military construction, Air Force</b>						
		Arctic utilidors - phase 11	9,900	Murkowski		Eielson AFB
		Taxiway lighting	3,450	Murkowski		Eielson AFB
		Security forces operations facility	10,400	Lincoln		Little Rock AFB
		Security forces operations facility	10,400	Pryor		Little Rock AFB
		Chapel center	7,500	Carper		Dover AFB
		Chapel center	7,500	Kaufman		Dover AFB
		Combat weapons training facility	8,400	Nelson, Bill		Patrick AFB
		Rescue operations/maintenance headquarters facility	8,900	Chambliss		Moody AFB
		Rescue operations/maintenance headquarters facility	8,900	Isakson		Moody AFB
		Aeromedical evacuation facility	7,400	Durbin		Scott AFB
		Phase five ramp replacement - aircraft apron pavement	12,800	Landrieu		Barksdale AFB
		Phase five ramp replacement - aircraft apron pavement	12,800	Vitter		Barksdale AFB
		Air traffic control tower	7,700	NMR		Pope AFB
		Consolidated security forces facility	12,000	Conrad		Grand Forks AFB
		Consolidated security forces facility	12,000	Dorgan		Grand Forks AFB
		STRATCOM gate	10,400	Neison, Ben		Offutt AFB

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**COMPLIANCE WITH RULE XLIV OF THE STANDING RULES OF THE SENATE**

LINE	PE	DESCRIPTION	CHANGE (thousands)	MEMBER	SUGGESTED RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
<b>Military construction, Air Force</b>						
		Fire-crash rescue station	10,400	Bingaman		Holloman AFB
		Fire-crash rescue station	10,400	Udall, Tom		Holloman AFB
		Replace west ramp, phase two	10,600	Brown		Wright-Patterson AFB
		Replace west ramp, phase two	10,600	Voinovich		Wright-Patterson AFB
		Control tower	10,700	Inhofe		Vance AFB
		Addition/alteration to deployment center	14,500	Johnson		Ellsworth AFB
		Addition/alteration to deployment center	14,500	Thune		Ellsworth AFB
		Consolidated learning center	12,000	Cornyn		Goodfellow AFB
		Consolidated learning center	12,000	Hutchison		Goodfellow AFB
		ENJPT operations complex, phase one	11,600	Cornyn		Sheppard AFB
		ENJPT operations complex, phase one	11,600	Hutchison		Sheppard AFB
		SERE force support complex, phase one	11,000	Cantwell		Fairchild AFB
		SERE force support complex, phase one	11,000	Murray		Fairchild AFB
<b>TITLE 24</b>						
<b>Military construction, Defense-wide</b>						
		Missile and Space Intelligence Center Explosive Ordnance Exploitation Complex	12,000	Shelby		Redstone Arsenal
		Energy conservation improvement program	33,013	NMR		Unspecified worldwide locations
		New elementary school	50,000	NMR		Boeblingen, Germany
<b>Homeowners assistance program</b>						

NMR = no member request

**COMPLIANCE WITH RULE XLIV OF THE STANDING RULES OF THE SENATE**

LINE	PE	DESCRIPTION	CHANGE MEMBER SUGGESTED RECIPIENT (thousands)	SUGGESTED MEMBER RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
<b>Homeowners assistance program</b>					
		Homeowners assistance program	350,000	NMR	Unspecified worldwide locations
<b>Chemical agents and munitions destruction</b>					
		Blue Grass Army Depot chemical demilitarization project	5,000	McConnell	Blue Grass Army Depot
<b>TITLE 26</b>					
<b>Military construction, Army National Guard</b>					
		144th Squadron operations facility	9,900	Boxer	Fresno-Yosemite Intl ANG
		144th Squadron operations facility	9,900	Feinstein	Fresno-Yosemite Intl ANG
		United States Property and Fiscal Office	4,000	NMR	Johnston, IA
		Readiness center expansion	5,600	Durbin	Milan Readiness Center
		Taxiway alterations, ARNG aviation support facility	2,227	Brownback	Army National Guard Aviation Support Facility, Salina, KS
		Taxiway alterations, ARNG aviation support facility	2,227	Roberts	Salina Aviation Facility, Kansas
		Monticello National Guard readiness center	14,350	Cochran	Monticello
		Monticello National Guard readiness center	14,350	Wicker	Monticello
		National Guard renewable energy sustainable projects	2,000	Reid	NV National Guard
		Camp Rilea infrastructure (water supply system)	3,369	Merkley	Clatsop County, Warrenton
		Camp Rilea infrastructure (water supply system)	3,369	Wyden	Clatsop County, Warrenton
		Joint force headquarters readiness center supplement	7,890	Johnson	Camp Rapid
		Joint force headquarters readiness center supplement	7,890	Thune	Camp Rapid
		Troop medical clinic addition/alteration	1,950	Thune	Camp Rapid

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**COMPLIANCE WITH RULE XLIV OF THE STANDING RULES OF THE SENATE**

LINE	PE	DESCRIPTION	CHANGE (thousands)	MEMBER	SUGGESTED RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
<b>Military construction, Army National Guard</b>						
		Upgrade marshalling area	8,900	Warner		Fort Eustis
		Upgrade marshalling area	8,900	Webb		Fort Eustis
		BOQ additions and improvements	1,996	Leahy		Ethan Allen Firing Range
		BOQ additions and improvements	1,996	Sanders		Ethan Allen Firing Range
		Life safety upgrade	2,000	NMR		St. Albans Armory, WV
<b>Military construction, Army Reserves</b>						
		Range utility upgrade	3,850	Kohl		Fort McCoy
<b>Military construction, Air National Guard</b>						
		Add/alter weapons release	4,500	Bennet		Buckley ANG Base
		Add/alter weapons release	4,500	Udall, Mark		Buckley ANG Base
		CNAF beddown upgrade facilities	9,100	Dodd		Bradley National Airport
		CNAF beddown upgrade facilities	9,100	Lieberman		Bradley National Airport
		Des Moines alteration to security forces facility	4,600	Grassley		Des Moines
		Des Moines alteration to security forces facility	4,600	Harkin		Des Moines
		Composite operations and training facility	12,800	Kennedy		Otis ANG Base
		Composite operations and training facility	12,800	Kerry		Otis ANG Base
		A-10 squad operations facility	7,100	Levin		Selfridge ANG Base
		A-10 squad operations facility	7,100	Stabenow		Selfridge ANG Base
		CNAF beddown facilities	14,000	Levin		Battle Creek ANG Base
		CNAF beddown facilities	14,000	Stabenow		Battle Creek ANG Base

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COMPLIANCE WITH RULE XLIV OF THE STANDING RULES OF THE SENATE

LINE	PE	DESCRIPTION	CHANGE MEMBER (thousands)	SUGGESTED RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
<b>Military construction, Air National Guard</b>					
		Replace troop headquarters	8,900	Levin	Alpena Combat Readiness Training Center
		Replace troop headquarters	8,900	Stabenow	Alpena Combat Readiness Training Center
		Minnesota STARBASE facility alteration	1,900	Klobuchar	Minneapolis/St. Paul IAP 133rd AW Base
		Replace fire/crash rescue station, phase two	9,300	NMR	Rosencrans Memorial Airport, MO
		Aircraft maintenance administration facility	10,000	Cochran	Columbus AFB
		Upgrade weapons storage area	9,600	Tester	Malmstrom AFB
		Replace squadron operations facilities	10,000	Gregg	Pease ANG Base
		Replace squadron operations facilities	10,000	Shaheen	Pease ANG Base
		Base civil engineering complex	9,700	Lautenberg	108th Air Refueling Wing, McGuire AFB
		Base civil engineering complex	9,700	Menendez	108th Air Refueling Wing, McGuire AFB
		NV Air National Guard fire station replacement	10,800	Ensign	Reno, NV
		NV Air National Guard fire station replacement	10,800	Reid	Reno, NV
		Joint force headquarters building	1,300	Graham	Air National Guard
		Above ground multi-cubicle magazine storage	1,300	Thune	Joe Foss Field
		Addition/alteration to munitions maintenance complex	1,300	Thune	Joe Foss Field
		ANG engineer maintenance and training facility	9,800	Alexander	164th Airlift Wing, Memphis

NMR = no member request

**COMPLIANCE WITH RULE XLIV OF THE STANDING RULES OF THE SENATE**

LINE	PE	DESCRIPTION	CHANGE (thousands)	MEMBER	SUGGESTED RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
<b>Military construction, Air National Guard</b>						
		ANG engineer maintenance and training facility	9,800	Corker		164th Airlift Wing, Memphis Hill AFB, Utah
		PCC apron northwest end taxiway	5,100	Hatch		Burlington International Airport
		Fire crash and rescue station addition/alteration	6,000	Leahy		Burlington International Airport
		Fire crash and rescue station addition/alteration	6,000	Sanders		General Mitchell International Airport
		Upgrade corrosion control hangar	5,000	Kohl		General Mitchell International Airport
		C-5 taxiway upgrades	19,500	Byrd		Shepherd Airbase, Martinsburg
		Squadron operations	1,500	Barrasso		Cheyenne Airport/WY National Guard
		Squadron operations	1,500	Enzi		Cheyenne Airport/WY National Guard
<b>Military construction, Air Force Reserves</b>						
		Indoor small arms range	5,700	Gillibrand		Niagara Falls Air Reserve Station, NY
		Indoor small arms range	5,700	Schumer		Niagara Falls Air Reserve Station, NY
		Visiting quarters phase one	12,400	Casey		Pittsburgh Air Reserve Base
		Visiting quarters phase one	12,400	Specter		Pittsburgh Air Reserve Base
<b>TITLE 31</b>						
<b>Weapons activities</b>						
		Advanced simulation and computing campaign: operation and maintenance	9,000	NMR	n/a	n/a
		Engineering campaign: enhanced surety	5,000	NMR	n/a	n/a

NMR = no member request

**COMPLIANCE WITH RULE XLIV OF THE STANDING RULES OF THE SENATE**

LINE	PE	DESCRIPTION	CHANGE (thousands)	MEMBER	SUGGESTED RECIPIENT	SUGGESTED LOCATION OF PERFORMANCE
<b>Weapons activities</b>						
		Engineering campaign: enhanced surveillance	10,000	NMR	n/a	n/a
		Inertial confinement fusion and high yield campaign: facility operations and target production Omega operations	6,500	NMR	University of Rochester	Rochester, NY
		Nuclear counterterrorism incident response: national technical forensics	5,688	NMR	n/a	n/a
		Readiness in technical base and facilities: construction: 09- D-007, LANSCCE refurbishment	30,000	NMR	Los Alamos National Laboratory	Los Alamos, NM
		Science campaign: advanced certification	5,000	NMR	n/a	n/a
		Stockpile services: R&D certification and safety	30,000	NMR	n/a	n/a
		Support to intelligence	30,000	NMR	n/a	n/a
		Weapons dismantlement and disposition: operation and maintenance	15,000	NMR	n/a	n/a
<b>Defense nuclear nonproliferation</b>						
		Fissile materials disposition: Russian surplus materials disposition	6,000	NMR	n/a	n/a
		Nonproliferation and verification research and development: operation and maintenance	50,000	NMR	n/a	n/a

NMR = no member request



## **ADDITIONAL VIEWS**

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### **ADDITIONAL VIEWS OF MR. CHAMBLISS**

In relation to the report language in the bill directing the Secretary of the Air Force to develop a plan for executing the Air Sovereignty Alert mission, I encourage the Air Force to give particular consideration in their plan to the "5 Corners" plan in which Air Sovereignty Alert aircraft, to include F-22's or F-35's the Air National Guard receives for executing that mission, are based at strategic, coastal locations in the United States, specifically Massachusetts, California, Oregon, Louisiana, and Florida, as well as in Alaska and Hawaii.

SAXBY CHAMBLISS.

## ADDITIONAL VIEWS OF MR. THUNE

I appreciate the Committee passing my Next Generation Bomber Amendment and my Air Force Alternative Aviation Fuel Amendment during markup of the Fiscal Year 2010 National Defense Authorization Act. These additional views provide further context to my amendments.

### **Thune Next Generation Bomber Amendment**

My amendment that has been accepted by the committee regarding the Next Generation Bomber is based on legislation I introduced earlier this year known as the Preserving Future United States Capability to Project Power Globally Act of 2009 (S. 1044). As my amendment states, “[t]he 2006 Quadrennial Defense Review found that there was a requirement for a next generation bomber aircraft and directed the United States Air Force to ‘develop a new land-based, penetrating long range strike capability to be fielded by 2018.’” As an advocate for preserving our nation’s future long range strike capability, I strongly disagree with the Obama Administration’s proposal to terminate the Next Generation Bomber program. Their justification for this proposal, on page 44 of the Office of Management and Budget’s “Terminations, Reductions, and Savings” document for FY10, cites a Congressional Budget Office (CBO) conclusion that the Department of Defense’s weapons acquisition program, including the future bomber fleet, “may not be affordable over the next six years” and states that “[n]ot pursuing this [Next Generation Bomber] program will result in savings of several hundred million dollars through 2013.”

I believe the Obama Administration’s decision to terminate the Next Generation Bomber is a reflection of the austere approach the administration has taken toward the funding of the Department of Defense, rather than an approach based on the National Defense Strategy and the 2006 Quadrennial Defense Review. President Obama’s proposed 2010 defense budget increase is substantially less than the robust 6.7% increase in the overall budget. In my view, our nation’s strategic long range strike capability is eroding at an alarming rate. As I wrote in a March 26, 2009 letter to President Obama, signed by a bipartisan group of five other Senators,<sup>1</sup> almost half of our current bomber inventory pre-dates the Cuban Missile Crisis of 1962. There are only 16 combat ready B-2 bombers currently available with vital stealth technology to hold targets deep in heavily defended airspace at risk. Allowing this long range strike capability to further erode due to budget considerations, where less pressing priorities are robustly funded by the adminis-

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<sup>1</sup> Senator Tim Johnson, Senator Mary Landrieu, Senator David Vitter, Senator John Cornyn, and Senator Kay Bailey Hutchison.

tration at the expense of our nation's long range strike capability, is a mistake we cannot afford to make.

Preserving a credible long range strike capability is important because, while our current wars are being fought in undefended airspace, the conflicts of the near-term future will likely feature heavily defended airspace, due in large part to the proliferation of relatively inexpensive, but extremely sophisticated and deadly air defense systems. These and other emerging anti-access capabilities drive the need for a Next Generation Bomber. Secretary Robert Gates, who I admire and respect, has publicly acknowledged the need for a Next Generation Bomber on at least four separate occasions:

- In a September 29, 2008, speech at National Defense University, Secretary Gates said that “[i]n the case of China, investments in cyber- and anti-satellite warfare, anti-air and anti-ship weaponry, submarines, and ballistic missiles could threaten America’s primary means to project power and help allies in the Pacific: our bases, air and sea assets, and the networks that support them. *This will put a premium on America’s ability to strike from over the horizon, employ missile defenses, and will require shifts from short-range to longer-range systems such as the next generation bomber.*” (Emphasis added)

- In the January/February 2009 edition of *Foreign Affairs*, in an article entitled “A Balanced Strategy; Reprogramming the Pentagon for a New Age,” Secretary Gates wrote that “[i]n the case of China, Beijing’s investments in cyberwarfare, anti-satellite warfare, anti-aircraft and anti-ship weaponry, submarines, and ballistic missiles could threaten the United States primary means to project its power and help its allies in the Pacific: bases, air and sea assets, and the networks that support them. *This will put a premium on the United States ability to strike from over the horizon and employ missile defenses and will require shifts from short-range to longer-range systems, such as the next generation bomber.*” (Emphasis added)

- In the First Quarter 2009 edition of *Joint Force Quarterly*, in an article entitled “The National Defense Strategy; Striking the Right Balance,” Secretary Gates wrote that “[i]n the case of China, investments in cyber and anti-satellite warfare, anti-air and anti-ship weaponry, submarines, and ballistic missiles could threaten America’s primary means to project power and help our allies in the Pacific: our bases, air and sea assets, and the networks that support them. *This will put a premium on America’s ability to strike from over the horizon and employ missile defenses; and it will require shifts from short-range to longer range systems such as the next generation bomber.*” (Emphasis added)

- During a May 14, 2009 Senate Armed Services Hearing on the Defense Authorization Request for Fiscal Year 2010 and the Future Years Defense Program, Secretary Gates testified that “*My own personal view is we probably do need a follow-on bomber.*” (Emphasis added)

Until the 2009 QDR is completed and released next year, the 2006 document is the only framework we have for judging how well

the military's airpower capabilities meet national requirements. I believe we must undertake the task of developing a new long range strike capability by 2018, based in substantial part on the arguments Secretary Gates has made since October of last year. This view is reinforced by the views of the commanders of the United States Pacific Command, the United States Strategic Command and the United States Joint Forces Command, who have each testified before the Senate Armed Services Committee this year in support of the capability that the next generation bomber aircraft would provide. General James Cartwright, Vice-Chairman of the Joint Chiefs of Staff, and chair of the Joint Requirements Oversight Council, has also testified before the Senate Armed Services Committee this year that "the nation needs a new bomber."

### **Maintaining the Triad**

Secretary Gates also stated at the same May 14 Senate Armed Services hearing mentioned above that the negotiations with Russia regarding the follow-on Strategic Arms Reduction Treaty (START) to further reduce the number of nuclear weapons, are going to "raise the question whether we still need a triad, depending on the number of deployed nuclear weapons that we need." I believe that the triad of strategic delivery systems (bombers, submarines, and intercontinental ballistic missiles) should be maintained, for the reasons set forth by the Commission on the Strategic Posture of the United States, in its final report to Congress. With regard to bombers, the Commission states unequivocally on page 25 of its report that it has "reviewed arguments in favor of a dyad but recommends retention of the current triad. Each leg of the triad has its own value: The bomber force is valuable particularly for extending deterrence in time of crisis, as their deployment is visible and signals U.S. commitment. Bombers also impose a significant cost burden on potential adversaries in terms of the need to invest in advanced air defenses." It is my fervent hope that the Obama Administration will not negotiate away the bomber leg of the triad during talks on the follow-on START treaty.

### **Delays in START Negotiations**

Secretary Gates' proposal to subject decisions on our current strategic and nuclear-force structure, including the Next Generation Bomber, to post-START arms-control talks also appears problematic due to the foreseeable delays that could occur in negotiating the follow-on treaty. While seemingly reasonable on its face, waiting until a new START treaty is negotiated could, literally, take years. Appearing before the Carnegie Endowment for International Peace last fall, Secretary Gates himself expressed concern about how long the original START negotiations took, and what that meant for the follow-on START treaty about to be negotiated. The lead START negotiator, likewise, has indicated that negotiations over the follow-on treaty could be delayed. I do not believe the Next Generation Bomber program should be delayed by negotiations with Russia over the follow-on START treaty, particularly if it becomes clear that negotiations will extend past the December 5, 2009 expiration of the current treaty.

### **The Nation Needs a New Bomber**

During his appearance before the Senate Armed Services Committee on May 14, 2009, Secretary Gates said that “[t]he idea of a next-generation bomber, as far as I’m concerned, is a very open question, and the recommendation will come out of the Quadrennial Defense Review and the Nuclear Posture Review.” As the Administration develops a new QDR to inform FY 2011 budget decisions, I believe that the record that has been developed before the Armed Services Committee since January of this year, along with the Committee’s passage of my amendment with regard to the Next Generation Bomber, provides compelling evidence of the need and requirement for a new bomber, and should ultimately be validated by the new QDR. As we move forward with the FY 2010 National Defense Authorization Act, and observe further decisions by the Obama Administration on the Next Generation Bomber program, I will continue the fight to preserve this important long range strike capability.

### **Thune Air Force Alternative Aviation Fuel Amendment**

I appreciate the committee accepting an amendment I offered that seeks to advance two innovations being made by the Air Force regarding alternative aviation fuel. My amendment represents an effort to enact into law current innovative Air Force programs that will help alleviate America’s growing energy problems.

We need to move toward secure, domestic energy sources. One need look no further than last year’s oil price spikes, the oil embargoes of the 1970’s, or the effect recent Russian-Ukraine natural gas disputes had on the European continent to see the peril of relying on unsecure, foreign sources for the preponderance of our energy needs. Continuing to fund foreign regimes unfriendly to the U.S. grows more untenable by the day, and we must decrease this capital flight.

This amendment advances two innovations being made by the Air Force. First, the amendment moves the Air Force toward domestic, synthetic fuels. The amendment sets the goal that the Air Force certify its entire fleet on a 50/50 synthetic blend by early 2011. The Air Force has already certified the B-1, B-52, C-17, F-15, and F-16. The amendment also sets the goal that the USAF acquire half of its domestic fuel requirement from a domestically sourced synthetic fuel blend by 2016. It is important to note the amendment contains the following limitations:

- Synthetic fuels would only be acquired if the fuel is the same cost or less than conventional fuels and if they have a “greener” lifecycle than conventional fuels.
- The synthetic fuels procured can be based on *any* feedstock.

My amendment also encourages the Navy and Army to advance similar innovations with regard to alternative aviation fuels. We should seek to understand how the Army and Navy can also use these alternative aviation fuels, and how the buying power of the entire Department of Defense can achieve efficiencies and decreased costs due to large economies of scale. The amendment calls on the Navy and Army to annually report on each department’s

goals and progress to research, test, and certify the use of alternative fuels in their respective aircraft fleets.

The amendment also requests the Defense Science Board to assess the achievability and impact of the goals with implementation recommendations while there is still time to make program changes. The amendment requires the Defense Science Board to report on the feasibility and impact of reaching the Air Force's alternative energy goals. This report is due in 2011, five years prior to the Air Force 2016 goal.

This amendment is a responsible use of public policy to take a step toward solving our energy crisis. This amendment will help to save the government money as any fuels procured will be at or less than the cost of conventional petroleum fuels. This amendment will help to preserve the environment as any fuels procured must be "greener" than conventional petroleum fuels throughout their lifecycle.

I look forward to continuing work on this and other important defense energy initiatives.

JOHN THUNE.

