

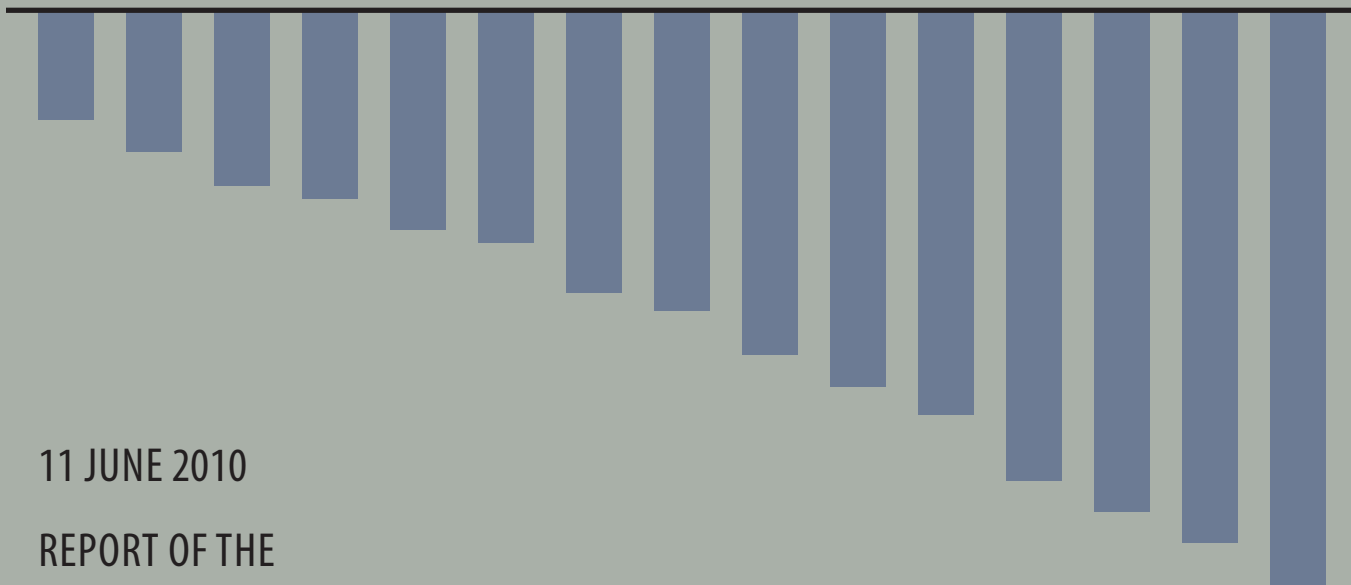
DEBT, DEFICITS, & DEFENSE

A WAY FORWARD



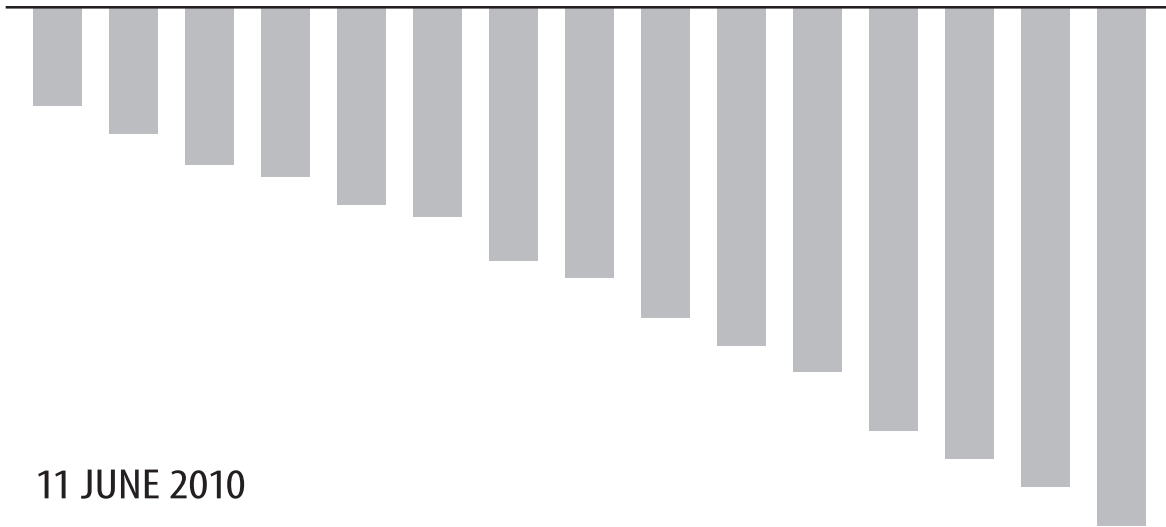
11 JUNE 2010

REPORT OF THE
SUSTAINABLE DEFENSE TASK FORCE



Debt, Deficits, and Defense

A WAY FORWARD



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THE SUSTAINABLE DEFENSE TASK FORCE

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Task Force members serve as individuals. Affiliations are listed for identification purposes and do not imply organizational endorsement of the Task Force findings.

The Sustainable Defense Task Force was formed in response to a request from Representative Barney Frank (D-MA), working in cooperation with Representative Walter B. Jones (R-NC), Representative Ron Paul (R-TX), and Senator Ron Wyden (D-OR), to explore possible defense budget contributions to deficit reduction efforts that would not compromise the essential security of the United States. The Project on Defense Alternatives coordinated the work of the Task Force. Carl Conetta drafted the main body of the Task Force report in ongoing consultation with Task Force members who developed or digested proposals from the diverse sources cited in the report. A sub-committee of the Task Force reviewed the final draft before publication. It should not be assumed that all Task Force members endorse all items and sections of the report.

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Design by Sheila Walsh

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Conservatives need to hearken back to our Eisenhower heritage, and develop a defense leadership that understands military power is fundamentally premised on the solvency of the American government and the vibrancy of the US economy.

– Kori Schake, Hoover Institution Fellow and former McCain-Palin Foreign Policy Advisor¹

A country that becomes economically weakened because it has shortchanged necessary domestic investments and carries excessive levels of debt will also eventually be a weaker country across the board. An overall defense strategy that is fiscally unsustainable will fail every bit as much as a strategy that shortchanges the military.

– John Podesta and Michael Ettinger, Center for American Progress²

Executive Summary

DEBT, DEFICITS, AND DEFENSE: A WAY FORWARD

Report of the Sustainable Defense Task Force, 11 June 2010

At a time of growing concern over federal deficits, it is essential that all elements of the federal budget be subjected to careful scrutiny. The Pentagon budget should be no exception. As Secretary of Defense Robert Gates noted in a recent speech, paraphrasing President Dwight D. Eisenhower, “The United States should spend as much as necessary on national defense, but not one penny more.”³

This report presents a series of options which, taken together, could save up to \$960 billion between 2011 and 2020. The proposals cover the full range of Pentagon expenditures – procurement, research and development, personnel, operations and maintenance, and infrastructure. Some involve changes in our military posture and force structure; others are more limited in scope, focusing on outdated, wasteful, and ineffective systems that have long been the subject of criticism by congressional research agencies and others. Taken together or in part, they could make a significant contribution to any deficit reduction plan.

There is no doubt that defense expenditure has contributed significantly to our current fiscal burden. This is true even aside from war costs. Today, annual discretionary spending is \$583 billion above the level set in 2001. Overall, the rise in defense spending accounts for almost 65% of this increase. Non-war defense spending is responsible for 37%. These portions are much greater than any other category of discretionary spending. The savings options that we have developed focus mostly on the “base” portion of the Pentagon budget, excluding expenditures slated to support overseas contingency operations. Those that would affect such operations are pegged explicitly to progress in concluding today’s wars.

Our recommendations fall in 6 areas:

- Strategic forces
- Conventional force structure
- Procurement, research, and development
- Personnel costs
- Reform of DoD maintenance and supply systems
- Command, support, and infrastructure expenditures

In developing its options, the Task Force has used a set of criteria to identify savings that could be achieved without compromising the essential security of the United States. We have focused especially on:

- Department of Defense programs that are based on unreliable or unproven technologies,
- Missions that exhibit a poor cost-benefit payoff and capabilities that fail the test of cost-effectiveness or that possess a very limited utility,
- Assets and capabilities that mismatch or substantially over-match current and emerging military challenges, and
- Opportunities for providing needed capabilities and assets at lower cost via management reforms.

Table ES-1 (page vi) provides an overview of the savings options we propose. Not all the contributors endorse all the options, but all agree they offer genuine possibilities for resource savings and deserve serious consideration. They are described in more detail below.

Table ES-1. Options for Savings in Defense

<i>Strategic Capabilities</i>	
1. Reduce the US nuclear arsenal; adopt dyad; cancel Trident II <ul style="list-style-type: none">• 1000 deployed warheads• 7 Ohio-class SSBNs• 160 Minuteman missiles	\$113.5 b.
2. Limit modernization of nuclear weapons infrastructure and research	\$26 b.
3. Selectively curtail missile defense & space spending	\$55 b.
<i>Conventional Forces</i>	
4. Reduce troops in Europe and Asia, cut end strength by 50,000	\$80 b.
5. Roll back Army & USMC growth as wars in Iraq and Afghanistan end	\$147 b.
6. Reduce US Navy fleet to 230 ships	\$126.6 b.
7. Only retire two Navy aircraft carriers and naval air wings	\$50 b.
8. Retire two Air Force fighter wings, reduce F-35 buy	\$40.3 b.
<i>Procurement and R&D</i>	
9. Cancel USAF F-35, buy replacement	\$47.9 b.
10. Cancel USN & USMC F-35, buy replacement	\$9.85 b.
11. Cancel MV-22 Osprey, field alternatives	\$10 b. – \$12 b.
12. Delay KC-X Tanker, interim upgrade of some KC-135s	\$9.9 b.
13. Cancel Expeditionary Fighting Vehicle, field alternatives	\$8 b. – \$9 b.
14. Reduce spending on research & development	\$50 b.
<i>Personnel Costs</i>	
15. Military compensation reform	\$55 b.
16. Reform DoD's health care system	\$60 b.
17. Reduce military recruiting expenditures as wars recede	\$5 b.
<i>Maintenance and Supply Systems</i>	
18. Improve the efficiency of military depots, commissaries, and exchanges	\$13 b.
<i>Command, Support, and Infrastructure</i>	
19. Require commensurate savings in command, support, and infrastructure	\$100 b.

The option set could be implemented in whole or part. As an integrated set, it would entail:

- Reducing the US nuclear arsenal to 1000 warheads deployed on 160 Minuteman missiles and seven nuclear submarines,
- Curtailing nuclear weapons research and the planned modernization of the nuclear weapons infrastructure,
- Curtailing national missile defense efforts,
- A reduction of approximately 200,000 military personnel, yielding a peacetime US military active-duty end-strength of approximately 1.3 million,
- Capping routine peacetime US military presence in Europe at 35,000 and in Asia at 65,000, including afloat,
- Reducing the size of the US Navy from its current strength of 287 battle force ships and 10 naval air wings to a future posture of 230 ships and 8 air wings,
- Rolling back the number of US Army active-component brigade combat teams from the current 45 to between 39 and 41,
- Retiring four of the 27 US Marine Corps infantry battalions along with a portion of the additional units that the Corps employs to constitute air-land task forces,
- Retiring three US Air Force tactical fighter wings,
- Ending or delaying procurement of a number of military systems – the F-35 Joint Strike Fighter, MV-22 Osprey, KC-X Aerial Refueling Tanker, and the Expeditionary Fighting Vehicle – and fielding less expensive alternatives,
- Reducing base budget spending on R&D by \$5 billion annually,
- Resetting the calculation of military compensation and reforming the provision of military health care,
- Implementing a variety of measures aiming to achieve new efficiencies in DoD’s supply and equipment maintenance systems, and
- Setting a cost reduction imperative for command, support, and infrastructure expenditures.

SUSTAINABLE DEFENSE TASK FORCE OPTIONS

Strategic capabilities

Our options in this area would save nearly \$195 billion during the next decade. The United States should act now to accelerate the drawdown of nuclear weapons to a level of 1,000 warheads deployed on seven Ohio-class submarines and 160 Minuteman missiles. This is more than enough to ensure deterrence. Shifting to a nuclear “dyad” of land- and sea-based missiles would provide an optimal balance between efficiency and flexibility.

Missile defense efforts should be curtailed to focus on those systems and those missions most likely to succeed and provide real protection for our troops in the field. And we should roll back nuclear weapons research and limit efforts to modernize the weapon infrastructure. This best accords with a reduced emphasis on nuclear weapons, the smaller arsenal, and the general trend of arms control efforts.

Conventional force structure

No other nation or likely combination of nations comes close to matching US conventional warfare capabilities. Our options in this area seek to match conventional force capabilities more closely with the actual requirements of defense and deterrence. These are the tasks most appropriate to the armed forces and most essential to the nation. Focusing on them helps ensure that our investments are cost-effective. Our options on conventional forces would save the United States almost \$395 billion from 2011-2020.

Ground forces: We propose capping routine US military presence in Europe at 35,000 personnel and in Asia at 65,000 troops, and then reducing some force structure accordingly. We can rely on our incomparable capacities for rapid deployment to flexibly send more troops and assets to these regions if and when needed.

We also propose rolling back the recent growth in the Army and Marine Corps as progress in winding-down our Iraq and Afghanistan commitments allows.

This option views future conduct of protracted, large-scale counterinsurgency campaigns by the United States as strategically unwise and largely avoidable. Certainly, there are better, more cost-effective ways to fight terrorism.

Air forces: The experience of the United States in recent conventional wars, including the first two months of the Iraq conflict, show that we can safely reduce our tactical air power – both Air Force and Navy. The capacity of the US military to deliver weapons by plane or missile substantially overmatches existing and emerging threats. And the gap continues to grow. Also, entirely new capabilities, notably remotely piloted vehicles, are joining our air fleets in growing numbers. This option envisions a future air attack capability comprising between 1,600 and 1,750 Air Force, Navy, and Marine Corps fighter-attack aircraft and bombers in combat squadrons. Remotely-piloted vehicles would be additional.

Sea power: We can reduce the size of our Navy from the current fleet of 287 battle force ships to 230, although this will require using our naval power differently. Included in this fleet would be nine aircraft carriers. This option would keep fewer of our war ships permanently “on station,” partly by having them operate in smaller groups. It would put greater emphasis on surging naval power as needed. The firepower of our naval assets has grown dramatically during the past 20 years. In this light, the smaller fleet that we propose can meet America’s warfighting needs. The reduction in fleet size also reflects a smaller contingent of nuclear ballistic missile submarines, as proposed in the section on strategic capabilities.

Procurement

Regarding procurement, our options for saving \$88.7 billion from 2011-2020 focus mostly on cancelling or reducing systems with long histories of trouble and cost growth, such as the MV-22 Osprey and the Expeditionary Fighting Vehicle. These embody all that is wrong with the acquisition process. We also include the option of cancelling the F-35 Lightning and replacing it, for the time being, with advanced versions of aircraft already in service. Development of the F-35 is

rapidly going the way of the F-22 Raptor: late, over cost, and less capable than promised. However, even if this aircraft performed according to specifications, it would not be needed in order for us to defeat current and emerging challengers. America’s air forces are today the best in the world by a wide margin – not principally due to our technology, but instead due to the combination of technology, skill, training, morale, support, and coordination.

Research and development

Research and development has experienced more spending growth since 2001 than any other major DoD appropriation category. Today it stands at \$80 billion annually – 33% above the Cold War peak in real terms. And yet, today, we face no competitor in military technology comparable to the Soviet Union. We seem increasingly in a race with ourselves. The results have been uneven in terms of producing affordable capabilities that serve the needs of war fighters, however. Individual efforts by the armed services and defense agencies are too often disjointed and seemingly at odds with each other. In our view, DoD needs to exercise more discipline in this area and Congress needs to exercise more oversight. Our modest proposal is that DoD set clearer priorities and seek \$5 billion in savings per year or \$50 billion during the coming decade.

Command, support, and infrastructure

We propose that DoD seek more than \$100 billion in savings over the next decade in the areas of command, infrastructure, maintenance, supply, and other forms of support. The Congressional Budget Office and the Government Accountability Office have both outlined a variety of measures to achieve savings in these areas by means of streamlining, consolidation, and privatization. Additionally, the reductions we have proposed in force structure and procurement will reduce the demand on support services and infrastructure (albeit not proportionately). The goal we have set for savings in these areas is only 15% as much as what we propose for force structure and procurement. This much should be easily in DoD’s reach.

Personnel costs

Cost growth in military compensation and health care is a serious and increasing concern of military planners and leaders. Over the past decade personnel costs rose by more than 50% in real terms, while health care costs rose 100%. Secretary of Defense Gates recently described the problem as “eating the Defense Department alive.”⁴

The *Quadrennial Review of Military Compensation* has proposed that we recalibrate how military pay raises are set and that we increase health care fees and co-pays for some former military personnel between the ages of 38 and 65.⁵ The estimate for potential savings from such measures is \$120 billion over the decade, assuming gradual implementation as the wars wind-down. In our opinion, however, these options involve more than matters of simple economics. They can only go forward as part of a broader program of change.

We are a nation at war and these measures affect those who are making the greatest sacrifice. We have a responsibility to them and, thus, great care is due. If the rise in personnel costs has been extraordinary, so have been the demands placed on our military personnel. It is not simply war that bears down on them, but also *the way we have conducted it*. Some force utilization policies have been unwise and some personnel policies have been both unwise and unfair.

If cost growth in this area is to be addressed, it must be addressed as part of a compact that relieves our military personnel of the undue burdens of routine “stop loss” orders and long, repeated war rotations. Compensation levels for those fighting overseas must be protected and health care for the injured improved. Finally, we must accept that if we are to deploy 175,000 active-duty troops to war (as we do today), then we cannot also maintain another 142,000 troops overseas doing other jobs. Fiscal realities and proper treatment of our military personnel demand that we make choices.

SYSTEMIC CHANGE

The savings options we have outlined promise to provide immediate fiscal relief. They would help to bring the goal of meaningful deficit reduction within reach.

Nonetheless, they remain *ad hoc* steps. For the longer term, putting America’s defense establishment on a more sustainable path depends on our willingness to:

- *Rethink* our national security commitments and goals to ensure that they focus clearly on what concerns us the most and what we most need in the realm of security;
- *Reset* our national security strategy so that it reflects a cost-effective balance among the security instruments at our disposal and also uses those instruments in cost-effective ways; and
- *Reform* our system of producing defense assets so that it is more likely to provide what we truly need at an affordable cost.

Reform efforts

With regard to the third of these systemic goals, there is today renewed interest in reforming the ways we produce and sustain military power. However, those efforts have not yet gone far enough to assuredly deliver the type and degree of change needed. Among the tasks ahead, several imperatives stand out:

Audit the Pentagon: Today, DoD is one of only a few federal agencies that cannot pass the test of an independent auditor. This means that DoD cannot accurately track its assets – a condition that not only opens the door to waste and fraud, but also makes it difficult to gauge progress in other areas of reform, including acquisition. DoD has been under obligation to get its books in order for 20 years, but has enjoyed the benefit of special dispensations and rolling deadlines: Most recently, a new deadline of September 2017 for audit readiness. Given current and emerging fiscal pressures, this is too generous. Moreover, strong incentives for compliance are lacking.

Determine mission costs: Beyond accurately accounting for its assets, the Pentagon needs to provide cost estimates for its core missions and activities, as suggested in 2001 by the Hart-Rudman Commission on National Security.⁶ Lawmakers might ask, How much of the defense dollar do we presently invest in counterterrorism, counterproliferation, the defense of Europe, or nuclear deterrence? At present, no one really knows. And until we do know, it will be difficult

to make fully rational decisions about the allocation of defense resources.

Strengthen acquisition reform: The finding by the Government Accountability Office that major weapons programs are suffering \$300 billion in cost overruns has sparked renewed interest in acquisition reform.⁷ Defense Secretary Gates and the Obama administration have promised to vigorously pursue such reforms. Congress has responded with the Weapons Systems Acquisition Reform Act of 2009. However, the Act needs to be strengthened if it is to substantially deliver on its promise. It creates the position of Director of Independent Cost Assessment, but there needs to be a mechanism for reconciling differences between the Director’s estimates and those of the Pentagon. With regard to competition requirements, it gives DoD too easy recourse to invoking waivers. The bar must be set higher. And there needs to be a simple prohibition on giving an outside contractor responsibility for evaluating the work or managing the contract of any entity with which that contractor is linked.

OTHER OPTION SETS

We include in our report two other sets of savings options that reflect different perspectives. Table ES-2 summarizes options developed in 2009 by the *Task Force for a Unified Security Budget*.⁸ These are part of its ongoing effort to rebalance our security investments, which presently are weighted too heavily to the military side.

Table ES-3 presents a set of options developed by scholars of the Cato Institute. It suggests the budget implications of a shift in US global strategy to a stance of “Offshore Balancing” or what the authors call a “strategy of restraint.”

The reductions in military spending summarized in Table ES-3 reflect a security strategy that aims to bring force from the sea to defeat and deter enemies, rather than keeping troops ashore in semi-permanent presence missions or in long-term policing roles.

Table ES-2. Unified Security Budget Task Force Proposed Defense Cuts for FY 2010 (figures in billions)

<i>Program</i>	<i>Administration's FY 2010 Request</i>	<i>Proposed Cuts</i>
Ballistic Missile Defense	9.3	-6
Virginia-class Submarine	4.2	-4.2
DDG-1000	1.6	-1.6
V-22 Osprey	2.9	-2.9
Expeditionary Fighting Vehicle	0.3	-0.3
F-35 Joint Strike Fighter	10.4	-7.4
Offensive Space Weapons	1.6	-1.5
Future Combat Systems	3	-1.5
Research and Development	79	-5
Nuclear Forces	21	-13.1
Force Structure	na	-5
Waste in Procurement and Business Operations	na	-7
<i>Total</i>		-55.5

Report of the Task Force on a Unified Security Budget for the United States, FY 2010 (Washington DC: Institute for Policy Studies and Foreign Policy in Focus, September 2009).

Table ES-3. Defense Reductions Associated with Restraint Strategy *

<i>Strategic Capabilities</i>	
1. Nuclear arsenal (warheads)	\$100 b.
<i>Ground Forces</i>	
2. Reduce the size of the Army	\$220 b.
3. Reduce the size of the Marine Corps	\$67 b.
<i>Navy and Air Force</i>	
4. Build/operate fewer aircraft carriers and associated air wings	\$43 b.
5. Operate fewer ballistic missile submarines (SSBNs)	\$4 b.
6. Build/operate fewer tactical submarines (SSNs/SSGNs)	\$34 b.
7. Build/operate fewer destroyers	\$28 b.
8. Build/operate fewer littoral combat ships	\$11 b.
9. Reduce the number of expeditionary strike groups	\$9 b.
10. Cancel the Maritime Prepositioning Force (Future)	\$17 b.
11. Build/operate fewer Air Force fighters	\$89 b.
<i>Other Reforms, Procurement and RDT&E</i>	
12. Cancel Expeditionary Fighting Vehicle	\$11 b.
13. Terminate V-22 Osprey	\$15 b.
14. Realign Missile Defense Program	\$60 b.
15. Cut Pentagon civilian workforce	\$105 b.
16. Reform Military Pay and Health Care	\$115 b.
17. Reform DoD Maintenance and Supply Systems	\$13 b.
18. Reduce RDT&E	\$70 b.
19. Obtain Add'l Savings in Command, Support, and Infrastructure	\$100 b.
<i>Total</i>	\$1,111 b.

* This set of options was developed by Benjamin Friedman and Christopher Preble of the Cato Institute.

NOTES

1. Kori Schake, “Stop spending so much on defense,” *Foreign Policy Online*, 20 January 2010.
2. John Podesta and Michael Ettliger, “The Big Questions: Setting the Stage for Fiscal Reform for the New Deficit Commission,” Center for American Progress, 26 April 2010.
3. *Report of The Tenth Quadrennial Review of Military Compensation, Volumes I & II* (Washington DC: Department of Defense, Undersecretary of Defense for Personnel and Readiness, February 2008, July 2008).
4. Secretary of Defense Robert M. Gates, Speech at the Eisenhower Library, Abilene, Kansas, 8 May 2010.
5. Gates, op. cit.
6. *US Commission on National Security, Creating Defense Excellence: Defense Addendum to Road Map for National Security* (Washington DC: US Commission on National Security/21st Century, May 2001).
7. GAO, *Defense Acquisitions: Assessments of Selected Weapons Programs* (Washington DC: Government Accountability Office, March 2010).
8. *Report of the Task Force on a Unified Security Budget for the United States, FY 2010* (Washington DC: Institute for Policy Studies and Foreign Policy in Focus, September 2009), p. 13.

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*– Kori Schake, Hoover Institution Fellow and
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A country that becomes economically weakened because it has shortchanged necessary domestic investments and carries excessive levels of debt will also eventually be a weaker country across the board. An overall defense strategy that is fiscally unsustainable will fail every bit as much as a strategy that shortchanges the military.

– John Podesta and Michael Ettinger, Center for American Progress²

I. Introduction

No serious approach to cutting the deficit can afford to exempt the largest portion of the discretionary budget. Defense analysts and political figures alike agree that, in a time of great financial challenge, budget discipline and cuts would be not only appropriate for the Pentagon, but also beneficial to the larger goal of maintaining our national security. Although particular cuts will inevitably be controversial, the idea that the Pentagon's budget and spending practices should be included in any overall review and program of cuts or freezes should not be.

The reform suggestions that have come out of the Executive and Legislative processes to date are a first step. But they fall far short of what is possible and what is needed to put defense spending and defense strategy back in check.

This report provides a digest of proposals for cuts or changes to rates of growth in various aspects of the Pentagon budget. The proposals have been developed by individuals and organizations representing various political and policy perspectives. Not all the contributors endorse all the options, but all agree they offer genuine possibilities for resource savings.

We present in detail our central recommendations in Section V of this report (a summary table appears on page 13). The recommendations fall in 6 areas:

- Strategic Forces
- Conventional Force Structure
- Procurement, research, and development
- Personnel Costs
- Reform of DoD Maintenance and Supply Systems
- Command, Support, and Infrastructure Expenditures

Options in each area are associated with estimated dollar savings for the next decade: 2011–2020. The set of options can accommodate a variety of strategic perspectives. They can be adopted in whole or part, as a first step or as an end point. It will be the responsibility of the Administration and Congress to set a balance. If adopted in whole, however, the central set of options would deliver \$960 billion in savings during the next decade.

We should spend as much as necessary on national defense, but not one penny more.

The report also reviews some broader issues of strategy and defense reform relevant to economizing efforts. While making some process recommendations, especially with regard to financial management and acquisition reform, the report does not associate these with estimated dollar savings. These observations and suggestions are found in Sections III and IV.

The report also incorporates two other sets of defense savings options developed from somewhat different perspectives. The first of these comes from the *Task Force for a Unified Security Budget*, which has set out to balance defense reductions with increases in other security portfolios, such as International Affairs spending. We summarize their FY 2010 report in Section VI. The second set has been developed by scholars of the Cato Institute. In Section VII, it illustrates the

budget implications of a shift in US global strategy to a stance of “offshore balancing” – what the authors term a “strategy of restraint.”

Our central set of recommendations incorporate some options from both of these other sets. And the Sustainable Defense Task Force includes among its participants some members of these other efforts. What we share in common is a core, bipartisan observation: The nation needs to reconsider and revise not only its defense budgeting, but also the strategy that governs it. As a nation, we need to revisit the question, *What global role can we afford our military to play and what role does our security and well-being require of it?*

Some may not be prepared to address our current dilemma in such broad terms. And we are sure that some of the more sweeping or comprehensive of the proposals presented will stir disagreement. Nonetheless, we hope all Americans can minimally agree with

President Obama when he promised to “reform our defense budget so that we’re not paying for Cold War-era weapons we don’t use,” and with House Minority Leader John Boehner (R-OH), who said of the defense budget: “There’s got to be wasteful spending there, unnecessary spending there.”

A significant number of the cuts that we propose and review represent outdated, wasteful and ineffective systems that could be foregone without any arguable impact on our national security. Some, such as the V-22 Osprey, have featured in the reform rhetoric of defense experts of both parties for decades. Given the scope of the fiscal challenges our nation faces, and the emphasis by military and civilian leaders on fiscal health as essential to national security, it should be unthinkable to exclude these items from a deficit reduction plan.

II. Weighing the Role of Defense

The relevance of defense to debt and deficit relief is obvious when we review discretionary spending over the past decade. Since 2001, annual discretionary spending rose \$583 billion. As Table 1 shows (page 5), defense spending is responsible for nearly 65% of this increase. Discounting the war budget, the “base” or “peacetime” defense budget accounts for nearly 37% of discretionary budget growth. Although other components of the discretionary budget have risen by greater percentages – State, Homeland Security, and Veterans Affairs outstanding among them – none come

Major weapons programs are suffering \$300 billion in cost overruns.

close to claiming as large a share of the budget or the budget increase. (The last column of Table 1 shows the percentage share of various agencies in the overall discretionary budget increase.)

Despite the contribution that DoD makes to our annual deficits, it is not entirely clear how to apportion deficit reduction. National security spending has gained a special status because it concerns the preservation of all that we value most, including our lives and liberty. For this reason, many argue that defense budgets should flow from security strategy and goals, and not the other way around. This *proviso* seems straightforward and indisputable when a nation is defending against major and immediate threats to its very survival. But what makes sense when the threats are less monumental and the benefits of our expenditures less clear or assured? How do we defend for the long-haul against many and varied lesser challenges without sapping our national strength?

In fact, the supposed opposition of budgets and strategy is a false one. Strategy is about mapping a way forward through a field of constraints, including fiscal ones. National security strategy should be governed by an overarching “national strategy” which, at heart, reflects our shared sense of who we are as a nation, what we value, and how we hope to progress.

This broader vision and map helps us to identify what is most important in every area of national endeavor. It helps us to balance risks and to allocate scarce resources among goals. This task is never easy. Nor is it often free of contention. But it can be made easier and less contentious by acknowledging that some goals are less vital than others and by recognizing that there are almost always multiple paths to any goal, some less costly than others. With this in mind we have taken a hard look at our defense budget and posture, seeking to identify options for significant savings that will not undermine our fundamental security.

One pivotal finding of our study is that, in order to ensure significant savings, we must change how we produce military power and the ways in which we put it to use. Significant savings may depend on our willingness to:

- *Rethink* our national security commitments and goals to ensure they focus clearly on what concerns us the most;
- *Reset* our national security strategy so that it reflects a cost-effective balance among the security instruments at our disposal and uses those instruments in cost-effective ways; and
- *Reform* our system of producing defense assets so it provides what we truly need at an affordable cost.

The next sections of this report review the broad reasons why change in our current defense posture is possible. They also summarize some of the budget-related problems in how we produce and sustain military power. Finally, they outline some needed reform in how DoD manages its finances and resources.

Table 1. Change in US Federal Discretionary Spending 2001–2010 (billions of current dollars)

<i>Agency</i>	<i>2001</i>	<i>2010</i>	<i>\$ Change</i>	<i>% Change</i>	<i>% Share of Budget Increase</i>
DoD incld war costs	316.3	693.42	377.13	119%	64.6%
(DoD w/o war costs)	316	531	215	68%	(36.9%)
Veterans Affairs	22.38	53.06	30.68	137%	5.3%
Health and Human Services	54.15	84.1	29.95	55%	5.1%
Homeland Security	16.05	43.28	27.24	170%	4.7%
State	7.77	29	21.23	273%	3.6%
HUD	28.36	43.58	15.22	54%	2.6%
Int'l Assistance Programs	12.59	23.4	10.81	86%	1.9%
Justice	18.4	27.65	9.25	50%	1.6%
Commerce	5.1	13.8	8.71	171%	1.5%
Agriculture	19.24	27.35	8.11	42%	1.4%
Transportation	14.68	21.78	7.1	48%	1.2%
Education	40.1	46.78	6.68	17%	1.1%
Energy	20.03	26.41	6.38	32%	1.1%
NASA	14.25	18.72	4.47	31%	0.8%
Other	22.77	26.61	3.84	17%	0.7%
Treasury	10.34	13.55	3.21	31%	0.6%
EPA	7.84	10.3	2.46	31%	0.4%
The Judiciary	3.99	6.44	2.45	61%	0.4%
National Science Foundation	4.43	6.87	2.44	55%	0.4%
Labor	11.96	14.27	2.31	19%	0.4%
Interior	10.27	12.15	1.89	18%	0.3%
Legislative Branch	2.85	4.73	1.89	66%	0.3%
Total Discretionary Authority	664	1247	583	88%	n.a.

Source: Office of Management and Budget, Historical Tables, Budget of the US Government, Fiscal Year 2011 (Washington DC: OMB, 2010), Table 5.4 Discretionary Budget Authority by Agency 1976–2015, p. 118

III. Realistic Goals, Sustainable Strategy

THE MEASURE OF OUR STRENGTH

In the conventional realm, the United States today faces no global threat remotely comparable to that once posed by the Soviet Union and its allies. And none comparable is on the horizon – not even China, which today spends barely one-fifth as much on military power as does the United States. This general circumstance may change, which is why we must preserve our national strength and remain both vigilant and flexible. But for now, we have a greater degree of freedom than during the Cold War.

During the Cold War, the Soviet camp had nearly matched the West's level of military expenditure, making it a true global peer competitor. Competition was especially manifest in Europe, where two million Soviet troops, 60,000 tanks, and 10,000 combat aircraft stood within striking distance of the West European heartland. It also was manifest in a global naval contest, proxy wars throughout the developing world, and a nuclear arms race involving more than 70,000 nuclear warheads.

One measure of change since the Cold War is the balance of world military spending. In 1986, US military spending was only 60% as high as that of its adversaries (taken as a group). Today, America spends more than two and one-half times as much as does the group of *potential* adversary states, including Russia and China. This means that *if the United States were to cut its spending in half today*, it would still be spending more than its current and potential adversaries – and the balance would still be twice as favorable as during the Cold War.

If attention to the global spending balance shows that we profoundly overmatch traditional challengers, our recent experiences in Iraq and Afghanistan suggest that we simply mismatch nontraditional ones.

Since the end of the Cold War, US security policy has focused more and more on so-called transnational challengers – such as Al Qaeda – and on problems of regional instability. Terrorism, ethnic conflict, fragile states, weapons proliferation, and humanitarian disasters have attracted more of our attention, commitment, and resources. Nations might choose to address these problems in a variety of ways. In the United States, there has been an increasing focus on the need to “rebalance” our policy toolkit, which is heavily-weighted toward military power, and to find more cost-effective modes of action.

No serious effort to cut the deficit can exempt the largest part of the discretionary budget.

The desire to “rebalance” is not hard to understand. Years of effort in Iraq and Afghanistan, 5,500 American fatalities, and \$1 trillion have not brought reliable peace or stability to either country, which together comprise less than 1% of the earth's population. For most of the time that we have been fighting in Iraq and Afghanistan, the cost of sustaining the fight has exceeded the GDP of those two countries. This must give pause to anyone concerned with the cost-effectiveness of our chosen tools and strategies.

Although Americans remain divided over the wars, few believe that large-scale and protracted counter-insurgency campaigns are a sustainable model for future American action. The costs are too high and the likely outcomes too uncertain. At any rate, such

wars do not represent the most direct way to blunt those challenges that concern us the most – such as terrorist groups targeting the United States and nuclear proliferation.

Fortunately, today's security challenges do not bear down on us with the same weight as once did the Soviet threat or the threat of global nuclear holocaust. Although we must always act decisively to defend ourselves, we today enjoy greater freedom to choose when, where, and how. Recognizing this freedom and using it is key to achieving a sustainable defense posture.

STRATEGIC CHOICE AND BUDGETARY CONSEQUENCES

Deciding the appropriate level of defense expenditure is never simply a matter of weighing an adversary's capabilities against our own. Also central is a nation's choice of security goals and strategy, which might be more or less ambitious. What goals have we set for our armed forces? What do we hope to accomplish in the world by means of military power?

With the end of the Cold War and collapse of the Soviet Union, we set goals for our armed forces that reached beyond the traditional ones of simple defense and deterrence. One after another, the US *Defense Reviews* of the past 16 years have put increased emphasis on various forms of preventative action –

not only preventative war and regime change, but also greater reliance on our military to “shape the strategic environment” and stem the emergence of threats. We have asked our armed forces to conduct more types of missions, faster and more frequently, across a broader expanse of the earth. And we have asked the Pentagon to assume functions and “authorities” that once had been the sole province of the State Department.

For 16 years, a key Defense Department planning objective has been the capacity to deploy very rapidly to fight – and quickly win – multiple nearly-simultaneous major wars in widely separated theaters. We now have added smaller wars and contingencies as well. It is no surprise that the baseline defense budget has returned to and surpassed Cold War levels, despite the absence of a peer military competitor.

Putting America's defense establishment on a more sustainable path may require curbing some of our commitments abroad, adopting more realistic military goals, or putting greater emphasis on more cost-effective instruments of power. Most likely, it will require some mix of all three. But this adjustment need not in any way risk our freedom, our survival, or our victory in the struggle against terrorism and weapons proliferation. Indeed, dedicated counterterrorism and counterproliferation capabilities have claimed relatively little of the Pentagon's burgeoning budget.

IV. A More Efficient Defense

Donald Rumsfeld, while Secretary of Defense, once speculated that waste and mismanagement accounted for at least 5% of the Pentagon budget annually – a loss that today would amount to more than \$35 billion. Other observers – the Defense Science Board and DoD Inspector General among them – have argued that nearly as much or more might be saved by even partial measures aiming to reform how DoD and the services organize themselves, provide support services, and manage their resources. Implementing such reforms and actually extracting savings has proved easier to imagine than accomplish, however.

The last broad effort at DoD organizational and management reform, dating from the early 1990s, is instructive. In addition to repairing the acquisition process, reformers sought to trim the redundancy in service missions, fully integrate military planning at the joint level, adopt much leaner command structures, consolidate many of the individual services' support programs, outsource or “compete” a wide variety of support activities, privatize military housing and utilities, and reduce excess base infrastructure and excess capacity in depots, labs, and testing facilities.³

Progress along most of these avenues was modest at best, as was the momentum. The Government Accountability Office points to military base reductions and competitive sourcing as the initiatives that probably saved the most money, although the extent of savings from the latter are now contested.⁴ At any rate, the recurring savings from both do not exceed a few percent of today's base budget. And, it is *despite* these savings that we find ourselves in our current predicament, with the base DoD budget having rocketed 50% in real terms since 1998.

Fiscal pressures now argue for renewing DoD reform efforts across a broad front. But the needed complements to new efforts at reform are quantifiable

benchmarks and budget limits enforced from outside the Pentagon. Otherwise, “savings” may never materialize or will be absorbed by other Pentagon accounts if they do.

AUDIT THE PENTAGON

One area of reform with consequences for all others is financial management. Today, DoD is one of only a few federal agencies that cannot pass, nor even stand for, the test of an independent auditor. Among this handful of errant agencies, DoD is both the worst offender and the most consistent. The DoD Inspector General has found that the weaknesses in DoD's financial system “affect the safeguarding of assets, proper use of funds, and impair the prevention and identification of fraud, waste, and abuse.”⁵ The Acting Inspector General of the United States concurs, adding that these weaknesses “adversely affect the reliability of DOD's financial data” as well as “the economy, efficiency, and effectiveness of its operations.”⁶

What these failings mean is that DoD cannot accurately track its assets, nor cost them out. As one analyst summarizes the problem, “Because the Pentagon cannot link financial inputs (appropriations) to results, managers cannot consistently and reliably identify what their weapons, forces, and policies are now costing, will cost in the future, or even what they really cost in the past.”⁷

DoD's financial failings make it highly likely that there are substantial “wasting assets” under its management – assets that should count against material requirements and, thus, mitigate DoD's budget needs. The implication for acquisition reform is also clear. As the House Armed Services Committee has found, “the inability to provide accurate and timely financial information prevents the Department from adequately managing its acquisition programs and from implementing true acquisition reform.”⁸

DoD has been under obligation to get its books in order for 20 years, but has enjoyed the benefit of special dispensations and rolling deadlines. In 2005, DoD published a Financial Improvement and Audit Readiness Plan and, since then, some progress has been recorded – but goal posts and deadlines continue to roll forward. Most recently, the 2010 Defense Authorization Act set out a variety of accountability measures for DoD to implement on its way to audit readiness, setting a due date for the latter of September 2017. Given current and emerging fiscal pressures, this is too generous a time line. Moreover, strong incentives for compliance are lacking.

The Defense Department is one of a few federal agencies that cannot pass an audit.

Some observers have proposed that the only way to compel DoD to mobilize the resources and personnel needed to close the accountability gap is to freeze or otherwise restrict the funding of those DoD components failing to produce auditable financials.⁹ Exemptions for urgent reasons of “national security” would be possible, but the bar would have to be set higher than in the past.

DETERMINE THE COST OF MISSIONS

An important step for DoD to take beyond accurately accounting for the cost and disposition of its assets is providing reliable cost estimates for its core missions and activities, as once suggested by the Defense Science Board. To better inform defense budgeting, lawmakers might ask, for instance: How much do we presently invest in counterterrorism, counterproliferation, the defense of Europe, nuclear deterrence, and sea patrol? At present, no one really knows.

As observed by the US Commission on National Security (“Hart-Rudman Commission”) in a 2001 report,

[T]he Department can point to any number of program element codes associated with tactical systems, but it cannot evaluate the price of tactical operations or missions... Nor does the Department possess the means to measure progress toward achieving any objectives... Without missions or objectives specified, the Department cannot measure meaningful “outputs.”¹⁰

Relating dollars, assets, and personnel time to actual missions is a difficult task, but one that any enterprise must execute if it hopes to succeed and attract investors. Until this is done, not even DoD can know how well its expenditures track the national security objectives laid down by the President and Congress. Under such circumstances, political authorities will be endlessly compelled to take *ad hoc* steps to trim back DoD “outputs” that exceed or stray from national requirements.

STRENGTHEN ACQUISITION REFORM

Defense Department spending on weapons research, development, and procurement has risen steeply over the past decade. These activities now routinely cost taxpayers over \$200 billion a year. Procurement costs are up 110% in real terms since 2000. Setting aside war-related expenditures, DoD “peacetime” spending on research, development, and procurement has increased 75% in real terms.

In this context, findings by the GAO that major weapons programs are suffering \$300 billion in cost overruns has sparked renewed interest in acquisition reform.¹¹ The number of weapons programs exhibiting one or more characteristic problems – over budget, late in delivery, less capability than expected – has steadily risen. GAO points to multiple flaws in the acquisition process: cost and performance estimates are unrealistic

from the start; programs depend on immature technologies; programs proceed on the basis of inadequate standards and testing; competition for contracts is too often limited and weak; and program risks are inappropriately allocated between manufacturers and taxpayers.¹²

These problems are endemic to the acquisition process. They have persisted for a variety of reasons:

- The tendency to seek technological fixes to nagging budgetary and operational problems is deeply rooted.
- The “low-balling” of cost estimates and exaggeration of performance has become part of the game of competition among services and corporations vying for defense dollars.
- Program offices seek to broaden their base of institutional support and compensate for delays in development by overloading acquisition programs with capability requirements. And,
- Even bad and obsolete programs die hard because most are firmly tied to strong economic and institutional interests.

The current acquisition process has produced a large number of unaffordable systems that, even if they performed as advertised, would be better suited to a strategic environment that no longer exists. This suggests that our acquisition of defense assets has become detached from our real security needs.

Defense Secretary Gates and the Obama administration have promised to vigorously renew acquisition reform efforts. And Congress has responded with the Levin-McCain Weapons Systems Acquisition Reform Act of 2009. These are welcome and important developments. However, the recent legislation needs to be strengthened if it is to fully deliver on its promise.

The acquisition reform bill has created a Director of Independent Cost Assessment, strengthened some requirements for program competition, and increased the oversight of technology. Unfortunately, it also contains some critical lapses and loop-holes. These unduly limit the authority of the cost assessment director and free DoD from actually adhering to or reconciling with the director’s independent cost estimates. With regard to competition requirements, it gives DoD too easy recourse to invoking vague “national security” and cost waivers. And it allows the same companies that are building weapons to contract for the job of evaluating those weapons.

**Even if acquisition reform
proves fully successful,
it is unclear how much relief
it will bring or how soon.**

That problems persist despite the unanimous passage of the bill is evident in GAO’s recent finding that the Defense Department has approved low-rate production of some elements of the Army’s Future Combat System that it acknowledges are “immature, unreliable, and not performing as required.”¹³ Also, the Pentagon’s new cost estimates for its largest acquisition program, the Joint Strike Fighter, reject much of the work of an independent cost estimating team, known as JET II. And the Air Force is in the process of selecting a new counterinsurgency attack aircraft without conducting any competitive fly-off.

None of these problems are insoluble. Acquisition reform can be strengthened by extending the purview of the cost estimation “czar,” by freezing programs when contending cost estimates vary by more than some threshold percentage, by raising the bar on exemptions from competition, and by simply prohibiting DoD from giving any contractor responsibility for evaluating the work or managing the contract of any entity with which that contractor is linked. Some observers suggest that a deeper, surer reform of the process would monitor and restrict the “the revolving door between the defense industry and government.”¹⁴

It also is important that reform measures be extended to cover the services, and not just the goods, that DoD purchases. GAO estimates that DoD’s total contract obligations were almost \$380 billion in 2009, having doubled since 2001.¹⁵ And the dollar proportion of these involving services has overtaken the “goods” portion. According to one study of DoD contracts, “services” constituted one-third of purchases in 1984, but 56% by 2003.¹⁶

Even if acquisition reform proves fully successful, it is unclear how much relief it will bring or how soon. If reforms serve only to close the gap between the armed services’ acquisition plans and DoD’s planned budgets

then they cannot help to relieve *currently projected* federal deficits. The calculation of deficits is based on planned budgets, not armed services wish-lists. Under these conditions, acquisition reform might only help prevent matters from getting worse. More than that is needed, however.

Secretary Gates achieved assured near-term savings in the FY 2010 budget – about \$8.8 billion for the year – when he terminated a number of acquisition programs including the F-22 Raptor, Airborne Laser, and the vehicle portion of the Army’s Future Combat System. Of course, DoD simply redirected these savings into other programs. The same is true of the cancellation of the Comanche Helicopter and Crusader Howitzer during Donald Rumsfeld’s tenure as defense secretary. Future costs were avoided and some real near-term savings achieved, but the base defense budget did not decline. Still, the decisive actions of Secretaries Rumsfeld and Gates stand as a precedent for achieving assured outcomes. Looking forward, such action can provide debt and deficit relief if it serves to lower current and projected budgets.

V. Options to Save in 2011–2020

In reviewing and developing its recommendations, the Task Force has used a set of criteria to identify reductions that might be implemented without compromising the essential security of the United States. We have focused especially on:

- DoD programs that are based on unreliable or unproven technologies,
- Military missions and capabilities that exhibit low military utility or a poor cost-benefit payoff,
- Assets and capabilities that mismatch or substantially over-match current and emerging military challenges, and
- Opportunities for providing needed capabilities and assets at lower cost *via* management reforms.

Table 2 (page 13) provides a quick summary of our central recommendations. These options might be implemented either individually or as a set in order to maximize savings – as much as \$960 billion for the 2011–2020 period.

As an integrated set, the options would entail:

- Reducing the US nuclear arsenal to 1000 warheads deployed on 160 Minuteman missiles and 7 nuclear submarines,
- Curtailing nuclear weapons research and the planned modernization of the nuclear weapons infrastructure,
- Curtailing national missile defense efforts,
- A reduction of approximately 200,000 military personnel, yielding a peacetime US active-duty military of approximately 1.3 million personnel,
- Capping routine peacetime US military presence in Europe at 35,000 and in Asia at 65,000, including afloat,

- Reducing the size of the US Navy from its current strength of 287 battle force ships and 10 naval air wings to a future posture of 230 ships and 8 air wings,
- Rolling back the number of US Army active-component brigade combat teams from the current 45 to between 39 and 41,
- Retiring 4 of the 27 US Marine Corps infantry battalions along with a portion of the additional units that the Corps employs to constitute air-land task forces,
- Retiring three US Air Force tactical fighter wings,
- Ending or delaying procurement of a number of military systems – the F-35 Joint Strike Fighter, MV-22 Osprey, KC-X Aerial Refueling Tanker, and the Expeditionary Fighting Vehicle – and fielding less expensive alternatives,
- Reducing base budget spending on Research, Development, Test and Evaluation by \$5 billion annually,
- Resetting the calculation of military compensation and reforming the provision of military health care,
- Implementing a variety of measures aiming to achieve new efficiencies in DoD’s supply and equipment maintenance systems, and
- Setting a cost reduction imperative for command, support, and infrastructure expenditures.

Table 2. Options for Savings in Defense

Strategic Capabilities

1. Reduce the US nuclear arsenal; adopt dyad; cancel Trident II
 - 1000 deployed warheads
 - 7 Ohio-class SSBNs
 - 160 Minuteman missiles\$113.5 b.
2. Limit modernization of nuclear weapons infrastructure and research \$26 b.
3. Selectively curtail missile defense & space spending \$55 b.

Conventional Forces

4. Reduce troops in Europe and Asia, cut end strength by 50,000 \$80 b.
5. Roll back Army & USMC growth as wars in Iraq and Afghanistan end \$147 b.
6. Reduce US Navy fleet to 230 ships \$126.6 b.
7. Only retire two Navy aircraft carriers and naval air wings \$50 b.
8. Retire two Air Force fighter wings, reduce F-35 buy \$40.3 b.

Procurement and R&D

9. Cancel USAF F-35, buy replacement \$47.9 b.
10. Cancel USN & USMC F-35, buy replacement \$9.85 b.
11. Cancel MV-22 Osprey, field alternatives \$10 b. – \$12 b.
12. Delay KC-X Tanker, interim upgrade of some KC-135s \$9.9 b.
13. Cancel Expeditionary Fighting Vehicle, field alternatives \$8 b. – \$9 b.
14. Reduce spending on research & development \$50 b.

Personnel Costs

15. Military compensation reform \$55 b.
16. Reform DoD's health care system \$60 b.
17. Reduce military recruiting expenditures as wars recede \$5 b.

Maintenance and Supply Systems

18. Improve the efficiency of military depots, commissaries, and exchanges \$13 b.

Command, Support, and Infrastructure

19. Require commensurate savings in command, support, and infrastructure \$100 b.
-

STRATEGIC CAPABILITIES – OPTIONS FOR SAVING \$194.5 BILLION

1 Reduce the US nuclear arsenal. Save \$113.5 billion from 2011–2020.

- Reduce the US nuclear warhead total to 1050: 1000 on launchers and 50 in store.
- Launchers would include 160 Minuteman missiles and 7 Ohio-class SSBNs (24 missiles, each w/ 5 warheads). Official launcher total would be 328.
- Retire the bomber leg of the “nuclear triad.”
- End work on the Trident II missile.

Current US nuclear forces are far in excess of what is needed to deter a nuclear attack on the United States or its allies. This is true now, and will continue to be true if the New START agreement signed in April 2010 is ratified and put into force. There is ample room for additional cuts in US nuclear forces without jeopardizing US security. The Obama administration has recognized this fact and stated its intent to seek a follow-on agreement to New START.

Today the United States possesses a total of 1,968 operationally-deployed strategic nuclear warheads and over 5,000 active warheads total in its stockpile.¹⁷ The New START agreement sets a formal limit of 1,550 deployed warheads. However, because it counts bombers as a single warhead each, the number of real warheads actually deployed could significantly exceed the formal limit. Still, the long trend downward to fewer and fewer is clear. Since 1991, the total stockpile has shrunk by almost 75%. It was cut in half between 1990 and 1994, and cut in half again between 2002 and 2008.¹⁸

How low might warhead numbers go? Advocates of nuclear abolition argue that these weapons have limited military utility and add little to America’s already overwhelming conventional power. In their view, more will be gained by negotiating down to zero, which would reduce the risk of inadvertent use, bolster non-proliferation efforts, remove the possibility of these weapons falling into the hands of terrorists, and generally improve the tenor of international relations.

Some of those who put more faith in nuclear deterrence also argue for low numbers. In a spring 2010 article, the chief of the Air Force Strategic Plans and Policy Division and two Air Force War College professors conclude that a few hundred warheads – 311 by their count – are sufficient to achieve real deterrence.¹⁹ When nations accumulate many more weapons than that number, cost-effectiveness plummets and problems multiply.

The authors argue that the United States could move toward the lower level unilaterally without risking its security. Mid-sized nuclear powers have already settled down at a remarkably similar number: the United Kingdom, France, and China all maintain arsenals of between 200 and 400 warheads. Arsenals of this size convey confidence that any attack could be met by a devastating counter-attack.

A middle option

The option we have outlined represents a moderate mid-point between a minimum deterrent force and the limits set out in the New START agreement. Savings would come from the 50% reduction in the fleet of Ohio-class submarines and Trident missiles, the almost 50% reduction in numbers of Minuteman missiles, ending work on the Trident II missile, and reduced personnel, operation, and maintenance costs associated with these systems and the bomber leg of the nuclear triad (which our option retires). The bombers themselves are assumed to remain available for conventional missions.

Retiring one leg of the nuclear triad serves to simplify the control and coordination of nuclear assets. The idea finds support in a recent report published by the Air Force Association’s Mitchell Institute for Airpower Studies.²⁰ The authors, who are analysts with the Northrup Grumman Analysis Center, conclude that bombers presently constitute the weakest leg of the triad, partly due to the age of one of their principal weapons: the Air Launched Cruise Missile. Also, the bomber fleet faces competing demands for nuclear and conventional missions, which is not true of the other

legs of the triad. Thus, the report concludes, the United States should adopt a “dyad” of land-based and submarine-based missiles.

Estimated savings

We have based our estimate of savings on a detailed analysis of the long-term costs of US nuclear forces conducted by the Center for Strategic and Budgetary Assessments (CSBA).²¹ One of the nuclear configurations examined in the study closely mirrors current US forces. Another option that CSBA examines parallels the option we have outlined above – with a few exceptions. It includes one more Ohio-class submarine, but 10 fewer ICBMs. It also retains the bomber leg of the triad, although at much reduced size. The CSBA alternative and our own field the same number of warheads, however: 1,050.

The CSBA study concludes that its alternative would cost \$10.7 billion less per year to sustain than would America’s present nuclear configuration. To these savings we add an average of \$650 million per year, which is the cost of assets and activities that the CSBA option includes, but ours does not: an additional Ohio-class submarine (operations and support costs only), continued purchase of Trident II missiles, operations and support costs for bomber nuclear capabilities, purchase and upgrade costs for nuclear cruise missiles, and the cost of upgrading the F-35 Joint Strike Fighter to carry nuclear weapons.²²

2 Limit the planned modernization of the nuclear weapons infrastructure and reduce research activities. *Save \$26 billion from 2011–2020.*

This proposed option would forgo the construction of three new nuclear-bomb-making facilities: a new plutonium production plant in Los Alamos, New Mexico; a new uranium processing facility in Oak Ridge, Tennessee; and a new plant for making non-nuclear parts in Kansas City, Missouri.

Given the plans to reduce the size of the US nuclear arsenal over time, a convincing case has not been made for the need for three brand-new nuclear weapons facil-

ities. Stopping these facilities would save an estimated \$6 billion, or an average of \$600 million per year over a ten-year period.²³

A more efficient and disciplined approach to nuclear warhead-related R&D and to maintenance of reliable warheads could save an additional \$2 billion per year. This assessment is based on the fact that current Department of Energy funding for nuclear weapons activities is \$2 billion more than was spent on average during the Cold War, when the US was maintaining a much larger arsenal.²⁴

This option would include stopping a \$251 million study designed to enable an extensive refurbishing of the B61 bomb, versions of which are deployed as tactical nuclear weapons in Europe (estimated at 200).²⁵ Given current discussions with NATO allies about the possibility of removing these tactical weapons from Europe and the possibility that they may be eliminated as part of an additional round of arms reductions with Russia, a costly study of this sort is at a minimum premature and may be completely unnecessary.

Savings from forgoing new weapons facilities and from running nuclear weapons activities at the Department of Energy more efficiently would save a total of \$2.6 billion per year, or \$26 billion over ten years.

3 Selectively curtail missile defense & space spending.

Save \$55 billion from 2011–2020.

Missile Defense, formerly known as “Star Wars,” is the most expensive Pentagon project ever launched. The Obama administration cut the Missile Defense Agency budget by 14% – from \$10.9 billion in 2009 to \$9.3 billion in 2010 – canceling or scaling back costly and unworkable systems such as the Multiple Kill Vehicle. However, FY 2011 saw a marked increase in missile defense with the Administration requesting \$9.9 billion for the agency. This covers proposed increases to a multitude of current programs, including AEGIS and the

Patriot terminal defense system. It also funds the development of three new initiatives: the land-based SM3 missiles, the Precision Tracking Space System (PTSS), and directed energy programs.

The Congressional Budget Office calculates that scaling back US missile defense could save approximately \$40 billion over the next ten years. It also says freezing new program development until current systems are proven would save approximately \$1.2 billion per year. CBO's estimate would eliminate programs including the Far-Term Sea-Based Terminal Defense, Sensor Development, the Missile Defense Space Experimentation Center, and "Special Programs."²⁶ Together, these cuts amount to a total savings of approximately \$51 billion over ten years. This number accounts for enacted cuts previously included in the analysis of the CBO.

There is substantial overlap between missile defense and defense-related space spending. For example, PTSS will replace the Space Tracking and Surveillance System (STSS), which was created to detect incoming ballistic missiles. The Space-Based Infrared Systems (SBIRS) is also intended to provide initial warning of a ballistic missile attack, although the program has undergone significant delays and cost overruns.²⁷ The poor performance of programs like SBIRS indicates the need for a "distributed architecture" that fields many smaller, cheaper satellites instead of huge mega-satellites. For that reason, the program should be truncated and the final "blocks," known as the GEO-5 and GEO-6 satellites, eliminated for a savings of \$2.1 billion.²⁸

One example of a non-missile defense space program also suffering from endemic cost overruns is the National Polar-Orbiting Environmental Space System (NPOESS), a joint program of the Air Force, NASA, and NOAA built to track global weather and climate patterns. The program was restructured this year to split procurement between the three agencies, allowing DOD to eliminate the C-1 spacecraft platform used for the system's afternoon orbit for a savings of \$1.7 billion.²⁹

CONVENTIONAL FORCES – OPTIONS FOR SAVING \$315 BILLION TO \$394 BILLION

4 Reduce US military presence in Europe and Asia by one-third and cut military end strength accordingly.

Save \$80 billion from 2011–2020.

This option would cap routine US military presence in Europe and Asia at 100,000 personnel, which is 26% below the current level and 33% below the level planned for the future. All told, 50,000 personnel would be withdrawn. End strength would be reduced accordingly as would associated assets and units. Savings would include reduced personnel costs, military housing expenses, incremental costs of stationing troops abroad, steady-state acquisition costs for reduced force structure, and operations and maintenance costs associated with reduced units and personnel.

Today there are more than 317,000 active-duty US military personnel stationed or deployed overseas. In the Central Command area, encompassing Iraq and Afghanistan, there are approximately 180,000 active-component personnel as well as over 45,000 reservists. Approximately 150,000 active-component US military personnel are officially assigned to Europe and Asia. However, about 15,000 of these have been re-deployed to the wars. The remaining 135,000 in Europe and Asia represent the current minimum US presence in these regions. Not even the extreme demands imposed by the Iraq and Afghanistan wars have compelled a reduction in this minimum.

America's commitments in Asia and Europe also tie down some troops at home. Although most of the troops who forward deploy to these areas do not rotate on a short time cycle, some do – and these require a rotation base. Moreover, those who are stationed overseas for longer periods – one to three years – are normally not available for immediate redeployment when they return home. There is some "down time." Finally, all duty assignments in the services add to the need for trainees and students. A modest assumption is that the 135,000 personnel who constitute our minimum presence in Europe and Asia tie down as many as an additional 50,000 personnel. Thus, measured in terms of

personnel, our total “irreducible” investment in these regions runs as high as 185,000. This is the number of personnel who have been rooted to those regions and, so far, unavailable for use elsewhere.

Why so many US troops in Europe and Asia?

In part, our permanent presence in these regions is supposed to serve a direct deterrence function. It also is meant to reassure allies, stake out US interests, and facilitate regional crisis intervention. In both regions, however, and for a variety of reasons, a reduction in our presence should be considered.

In Europe, the need for a high-readiness deterrent force is a small fraction of what it once was. On the Korean peninsula, the gap between adversary and friendly conventional capabilities has grown much more favorable. Also, US capacities for long-range strike and for effective rapid deployment of forces has grown greater, reducing the crisis response requirement for troops “on the spot.”

In Asia, the balance across the Taiwan straits has grown less favorable over the past 15 years, but there is no steady rise in political tensions there. In fact, tensions now seem patterned and cyclical. What is helping to contain this situation are other, non-military factors: Taiwan and the Mainland are strongly interdependent economically, China is much better integrated into the regional order than before, and Beijing does not seek to fracture its relationship with the United States. The future of relations between Beijing and Taipei does not hinge on the disposition of the 17,000 US military personnel that this option would remove from Asia.

Finally, regarding reassurance functions and assertions of American interest in both Europe and Asia, these might be accomplished using a variety of instruments – some much cheaper and less provocative than the permanent stationing of military units. At any rate, reassurance does not translate into a set number of “boots on the ground” – although 100,000 troops would still mark a uniquely strong commitment by today’s standards.

An option to reduce

Because some of the US personnel officially stationed in Europe and Asia are now routinely sent to Iraq and Afghanistan, the proposed reduction would occur in phases. In the near-term, 30,000 troops might be withdrawn and reduced, producing savings of more than \$6.5 billion per year. The remainder would have to wait until the total number of active-duty troops committed to the wars has fallen below 100,000. With this, the proposed reductions could be completed and annual savings would rise to \$12 billion.

In terms of structural reductions, the plan would retire one Air Force fighter wing, one Army Brigade Combat Team, and two reinforced Marine Corps infantry battalions. It also would relieve some of the requirement for US Navy ship deployments. Procurement savings would include a reduction in F-35 purchases of 110 aircraft as well as some Army and Marine Corps ground equipment.

The geographical distribution of reductions would be:

- Europe – 33,000 personnel, leaving a future presence of 35,000 (including afloat); and
- Asia – 17,000 personnel, leaving a future presence of 65,000 (including afloat).

The reductions by service would be:

- USAF – 10,000 personnel. Additionally remove one Fighter Wing Equivalent (FWE) from the force structure; reduce overseas administrative structure; and curtail new basing arrangements in eastern Europe.
- US Army – 24,000 personnel. Additionally remove one Brigade Combat Team (BCT) from force structure along with a proportionate slice of aviation and fire support assets; reduce support and administrative structure in Europe; and curtail new basing arrangements in eastern Europe.

- US Navy – 9,000 personnel. Additionally reduce overseas command and administrative structure; and reduce requirement for ship presence abroad.
- US Marine Corps – 7,000 personnel. Additionally remove the equivalent of one reinforced Marine infantry battalion from structure; and reduce the requirement for Marines afloat.

As noted above, foreign-stationed and deployed troops also tie down some number at home. In the case of the proposed reduction, this number probably does not exceed another 18,000 personnel. These additional positions would not be removed from the force structure, however. Instead, they would add to America's strategic reserve for use worldwide, as needed.

5 Rollback the size of US ground forces as the wars in Iraq and Afghanistan wind down.

Save \$147 billion during 2011–2020.

(This option derives in part from one outlined by the Congressional Budget Office in 2009. It has been updated to reflect 2011 prices and to take fuller account of personnel costs.)³⁰

This option would roll back the active component Army from 45 to 42 maneuver brigades and reduce its end strength from 547,400 to 482,400. (A judicious additional measure might limit the number of Army active component brigades to 40, thus ensuring higher levels of operational readiness.)

As with the Army, the recent growth of the Marine Corps can be reversed as the demand for troops in Iraq and Afghanistan declines. This option would roll back USMC end-strength to 175,000. All told, 22,000 Marine Corps billets would be rescinded. Also reduced would be 9,000 Navy personnel who serve the Corps. In terms of units, the Corps would reduce from 27 planned infantry battalions to 24. As part of its growth initiative, the USMC had also planned increases in some of the units that combine with infantry units to form expeditionary task forces. These, too, would return to pre-2007 levels.

The estimated savings for 2011–2020 reflect reduced costs for personnel, procurement, operations and maintenance, and military construction.³¹

Can smaller ground forces meet our future security requirements?

Given the current capacity of the Army and Marine Corps to set aside about two-thirds of their personnel for expeditionary purposes, the rollback would imply a combined expeditionary ground force of approximately 440,000. Such a force could comfortably keep approximately 150,000 active-duty troops overseas continuously, some stationed and others operationally deployed. This compares with the approximately 200,000 active-component ground troops currently stationed or deployed overseas. (Of these 200,000 active-duty troops, approximately 130,000 are deployed for Iraq or Afghanistan operations.)

Clearly, the proposed force would preclude planning to conduct two large-scale protracted counterinsurgency campaigns at once, as we are currently attempting. However, it could allocate as many as 100,000 active-component ground troops to such operations continuously, while also maintaining another 50,000 elsewhere overseas. Moreover, it could occasionally surge more than 200,000 active-component troops for one-year commitments, and these might be supplemented by as many as 80,000 reservists – a ground force more than twice as large as that which swept through Iraq in 2003.

An important caveat is that large surges would compel reduced deployments in the year following. Still, the force would enjoy the benefit of a variety of structural adjustments which, since 2001, have increased the proportion of personnel and the number of units that the Marine Corps and, especially, the Army can deploy.

In a 2010 article in *Foreign Affairs*, Defense Secretary Gates argues that US policy for the future will emphasize building partner capacity, rather than repeating the recent experience of attempting to wage protracted, large-scale counterinsurgency campaigns mostly on our own.³² Certainly, no one talks today about choosing to attempt two such endeavors at once. At any rate, if judged necessary, provisions could be made to ensure that additional units could be reconstituted more rapidly than was the case during 2007–2010.

A better approach would adopt a far more skeptical view of large-scale counter-insurgency (COIN) wars in the first place. Almost all such campaigns are a poor strategic choice for the United States: they are costly and time-consuming; they do not play to our unique technological advantages; and success in such endeavors is far from certain. The broader implication of a shift away from COIN would be a de-emphasis on seeking “regime change” by military means and strictly limiting “post-conflict reconstruction” operations in cases where these face substantial indigenous opposition or lack broad international support.

6 Reduce US Navy battle fleet from current 286 ships to 230. Save \$126.6 billion from 2011–2020.

This option would build 48 fewer ships and retire 37 more ships than the Navy currently plans. The reduction would include two aircraft carriers and their associated air wings. It would entail the Navy buying 60 fewer F-35 strike fighters than currently planned, as well as reduced buys of other aircraft. And it would reduce the Navy’s personnel requirement by 29,800 sailors.

As of mid-year 2010, the US Navy’s battle fleet includes 286 battle force ships. The Navy hopes to build up to a fleet of 315 ships by 2020. However, the Congressional Budget Office (CBO) has expressed serious doubts about whether the Navy’s plan is affordable.³³ CBO has offered various future fleet options, varying from 211 ships to 313 ships, depending on mission emphasis.³⁴ We offer an option that can meet the nation’s essential security needs while being 20% smaller than the Navy’s current fleet and 27% smaller than the one it plans for 2020. This 230-ship fleet would comprise:

- 9 aircraft carriers with 8 air wings,
- 7 strategic ballistic missile subs,
- 4 guided-missile subs,
- 37 attack subs,
- 85 large surface combat ships,
- 25 littoral combat ships,
- 27 amphibious combat ships,
- 36 logistics and support ships.

This alternative cuts the fleet of nuclear missile subs by seven and the attack sub fleet by about a dozen. Today the Navy has about 116 surface combatants, large and small. It desires 135. The proposed option offers 110. The option would also reduce the fleet by two aircraft carriers and their associated air wings. And it would entail that the Navy buy 60 fewer F-35 strike fighters than currently planned. The option would reduce the Navy’s personnel requirement by at least 29,800 sailors.³⁵

All told, the option would save \$102 billion in procurement expenses during the next decade and \$24.6 billion in operations, maintenance, and personnel expenses.³⁶

A variety of factors combine to determine the needs for naval power, but they do not add up to the present fleet of 286 ships – much less the Navy’s dream fleet of 315. As one analyst points out, the US Navy possesses much more firepower than the next largest 20 navies combined, not including nuclear capabilities.³⁷ And many of those other navies are staunch allies. Our present capacity to oppose the power of other nations at sea far outstrips the requirement.

Another requirement has to do with “surging” naval power for war. The US Navy has routinely surged between 20 and 30 ships of all types to support recent US wars (at their peak), with many more ships cycling into and out of the war zones. But these assets have never been used to their full capacity in these wars. Fewer would do. The 230-ship option could have met all the naval requirements of our recent wars – provided that the potential of these ships was more fully utilized.

The most pressing demand put on the Navy is the requirement to maintain a forward presence in three oceans almost all the time – the so-called 2.5 ocean standard. Typically, between 105 and 125 ships are on deployment continuously, although most are cycling to or from their forward areas. This continuous peacetime presence is supposed to reassure friends, while dissuading others from errant behavior. But the link between generalized “presence” and specific outcomes is too tenuous to warrant the cost.

The demand for ships could be reduced by patrolling in smaller groups and by shifting emphasis from “presence” requirements to “surge” requirements. In particular, large-deck aircraft carriers and their air wings – which are the fleet’s most expensive component – could be mostly reserved for meeting war-time surge requirements.

As noted, the 230-ship option reduces the nuclear ballistic missile submarine (SSBNs) fleet by seven boats – a 50% cut. With rotating crews, this would allow an average of 4.5 boats with 500 nuclear warheads to be on patrol at any given time, which accords well with our reduced nuclear deterrence needs.

Regarding fast-attack submarines (SSNs), the option provides only 75% as many as the Navy currently plans. This reflects a more realistic appraisal of the power of opponent navies, including the more limited activity of other nations’ submarine fleets. And it accords with a general shift in our strategy from a heavy emphasis on continuous presence to a greater emphasis on “surging” power when needed. The same principle can and should apply to the use of the new Littoral Combat Ship, which is why the option reduces the buy of these ships. They should be used as needed to meet crisis and war requirements, rather than as a means of establishing a routine littoral presence in foreign waters.

7 Only retire two Navy aircraft carriers and two naval air wings. Save \$50 billion from 2011–2020.

This option is a more modest alternative to #6 above, focusing reductions solely on the Navy’s aircraft carrier fleet.³⁸ The option would eliminate procurement and advanced procurement costs for two aircraft carriers. Savings also would come from a reduced demand for new aircraft: approximately 60 F-35’s and 10 E-2D Advanced Hawkeye aircraft could be removed from the procurement pipeline. Finally, there would be substantial savings from operations and support accounts. All told, about 11,000 naval personnel would be subtracted from end strength.

Among US air power assets, those that are carrier-based have a special role. Where access to land bases is limited, aircraft carriers can bring tactical air power within reach of enemy bastions. But this fact should not exclude them from close scrutiny, especially in times of tight budgets. In fact, the United States has more of this asset than it reasonably needs. Moreover, sea-based air power is relatively vulnerable and expensive. Sortie for sortie, it costs more than twice as much as land-based tactical air.

America’s requirement for big-deck aircraft carriers can be divided into a “surge” requirement for crisis response and a peacetime requirement for forward presence. Relevant to the surge requirement is the actual experience of recent wars. Three or four aircraft carriers were directly engaged in Afghan operations at any one time during October–December 2001. During the first phase of the 2003 Iraq war, four or five were engaged. During the 1999 Kosovo war, one.

In none of these wars were the engaged carriers employed to their fullest, however. For instance, during the first month of Operation Iraqi Freedom, naval fighters flew an average of 0.8 sorties per day. They are capable of flying two, at least – and the Navy claims they can do more in a pinch.

Looking to the future, the target attack capability of each naval air wing is supposed to increase significantly with the addition of smaller, longer-range, and more accurate munitions. In 2005 Senate testimony, then Chief of Naval Operations Admiral Vernon Clark asserted that the number of targets that a carrier air wing could attack per day in the future would increase from 700 to more than 1,000 – having already risen substantially from 200 in 1997. Implicit in this is the option to reduce the overall number of carriers and wings, while maintaining or even increasing striking power.

The Navy asserts that, given an 11 carrier fleet, it can surge six carriers for war within 30 days and another one within the next 60 days. This implies an emergency or “surge” utilization rate of 63 percent. A somewhat higher rate could be achieved through changes in homeporting arrangements, rotations of crews, and reduced use of carriers for simple “forward presence” activities. Some

reform along these lines would allow a 9-carrier, 8-wing fleet to surge “five plus one” for crisis response. These six carriers, fully utilized and equipped with weapons now being fielded or procured, should be able to strike well over twice as many targets per day as the five that deployed for Operation Iraqi Freedom.

Supplementing the future offshore strike capability of US carriers would be the long-range attack capability of America’s bomber force – able in the future to carry several times as many guided munitions as today. Also bolstering the aircraft carriers would be the rest of the Navy’s surface fleet and the four Ohio-class submarines that have been reconfigured for conventional missions. The surface fleet is equipped with approximately 8,000 Vertical Launch Systems.

8 Retire two US Air Force tactical fighter wings; Reduce F-35 fighter procurement by 220 aircraft. Save \$40.3 billion from 2011–2020.

The estimated savings for this option reflects reduced aircraft, missile, and ammunition procurement costs; reduced personnel costs for approximately 3,000 air force personnel; reduced air wing operations and maintenance expenses; and reduced base operating expenses.

The 2010 *Quadrennial Defense Review* foresees a reduction in the number of US Air Force fighter wings as the F-35 joint strike fighter enters the force. It denotes a future force of 6 air superiority fighter wings and 10 or 11 “theater strike” wings. The rationale is that 16 wings of F-22s and F-35s, supplemented by additional unpiloted aerial vehicles, are much more capable than 20 wings of older aircraft. Additionally, with new smaller munitions, Air Force bombers will be able to strike many more targets than today.

Looking forward, the alternative option we outline here envisions a future Air Force comprising a minimum of 1,000 mission-assigned F-22 and F-35 fighters. (Under a separate proposal presented below, we consider terminating the F-35 buy and, for now, substitut-

ing updated versions of current aircraft. For that case, we would assume a future minimum of 1,250 mission-assigned fighters.)

During the past 15 years, the United States deployed air armadas of various sizes to fight its wars: 1,100 Air Force, Navy, and Marine Corps combat aircraft in 1991; 300 for Operation Allied Force; approximately 250 for Operation Enduring Freedom; and 655 for the conventional phase of Iraqi Freedom. The average number of combat sorties flown each day varied widely: 1,400 for Desert Storm, 140 for Allied Force, 82 per day for the first 78 days of Enduring Freedom, and 700 for Iraqi Freedom.³⁹

At the time of the 1991 Persian Gulf War, less than 8% percent of America’s combat aircraft had the ability to deliver guided weapons autonomously. Since then, this capability has generalized throughout the air fleets, including large bombers. Also contributing to increased combat capability since 1991 has been the generalization of night-fighting and all-weather capabilities as well as substantial improvements in target acquisition and data fusion and sharing.

It is not surprising that the 2003 Iraq war involved only one-third as many combat aircraft sorties as its predecessor and less than nine percent as many air-delivered munitions. All things considered, America’s combat air fleets today possess many times the battlefield air interdiction capability of their 1991 counterparts. By comparison, traditional conventional adversaries have not nearly kept pace. Given current capabilities and those new ones now emerging and being introduced, the United States might handle comparable future contingencies with combat air packages comprising 200 to 500 fighters and bombers each, plus UAVs.

With a future all-service force of more than 1,600 mission-assigned fighters and bombers, the United States could surge more than 1,100 combat aircraft at one time – a more than sufficient number, with UAVs added, to handle multiple wars and deterrence tasks.

PROCUREMENT, RESEARCH, AND DEVELOPMENT – OPTIONS FOR SAVING AS MUCH AS \$138.7 BILLION

9 US Air Force Joint Strike Fighter cancellation or delay. *Save \$47.9 billion from 2011–2020.*

This option would entirely replace planned procurement of F-35s with advanced versions of the F-16 and F-15E. Originally outlined by the Congressional Budget Office in an August 2009 publication, *Budget Options, Volume 2*, our proposal has been adapted to reflect current procurement plans.

Cost growth trends for the F-35 program are beginning to resemble those of the F-22 Raptor. And, like the Raptor, the F-35 Lightning may represent all that is wrong with our weapons acquisition process. The principal advantages of this aircraft over advanced versions of those already in the fleet are supposed to be its stealth characteristics, superior avionics, and capacity to engage opposing fighters at very great ranges. Also, the aircraft is to be built and procured in three (and possibly four) different versions, which is supposed to reduce future maintenance and replacement costs. However, the effort to combine all these features is driving acquisition costs upward and requiring design compromises that will result in an aircraft that is overweight and underpowered.

The stealth and long-range air combat advantages of the F-35 are less reliable and assured than the program promises. (At any rate, in order to carry more than two 2,000-pound bombs, the F-35 will have to load up its wings, thus sacrificing its stealthiness.) Even assuming (against historical precedent), that the F-35 performs as promised, it would provide a capability that is not warranted, considering current and emerging threats. The capacity of US air combat fleets to overmatch threats resides not only in technological features. Pilot skill, training, support, and coordination among various air and ground assets set US air forces well apart from all others. The ongoing fixation of acquisition efforts on overloading individual platforms with putative capabilities is rooted in outmoded concepts of force design which persist in judging each aircraft type as a stand-

alone asset, rather than part of a system. Looking forward, whichever aircraft the United States buys to replace those now reaching the end of their service lives will operate as part of a team of combat and support assets, including F-22s and numerous remotely piloted vehicles.

10 US Navy Joint Strike Fighter cancellation or delay. *Save \$9.85 billion from 2011–2020.*

This option would cancel the Navy and Marine Corps buy of F-35 Joint Strike Fighters and fulfill the requirement for additional aircraft with F/A-18E/Fs. (Also as outlined in CBO's August 2009 *Budget Options*.) Factors to consider in addition to those outlined in Option #9 are the Navy's ongoing acquisition of the F/A-18E/F, which is considered a 4.5 generation fighter, and the Navy's substantial ongoing investment in future carrier-based remotely piloted vehicles. Both of these alternatives will be available.

One concern may be that cancellation of the F-35 would leave the Marine Corps without Vertical- and Short-Takeoff and Landing (VSTOL) combat jets once the AV-8 Harrier leaves the service. This capability, like that afforded by the V-22 Osprey, is central to the Corps' vision of longer-range, higher-paced operations as well as operations from austere air strips. But it has not proved critical to operations in recent wars, and is unlikely to be in the future. Moreover, the technological complexity of VSTOL aircraft make them difficult to maintain and fly. In fact, they are the most dangerous of all US aircraft. Since 1971, more than 45 Marines have lost their lives in non-combat accidents in Harriers.⁴⁰

Removing VSTOL jets from amphibious assault ships (which now carry as many as six), and replacing them with UAVs or additional attack helicopters will alter the mix of capabilities available to the nation. But the net effective difference to our overall capabilities for waging war will be negligible. Marine Corps pilots will continue to fly F-18s, perhaps more than today, from the Navy's big deck carriers, and these will provide jet support to the Corps' combat elements on the ground.

11 End procurement of MV-22 Osprey and field alternatives. *Save \$10 billion to \$12 billion from 2011–2020.*

Cease procurement of the MV-22 Osprey at 245. The residual requirement – 193 aircraft – can be met at much lower cost by a “high-low mix” of reliable MH-60S and CH-53K helicopters. Implementing this option will save between \$10 billion and \$12 billion during the next decade.

Troubled since its inception and nearly cancelled several times, the V-22 program is now at least 150% over its original unit cost. The Osprey is a “tilt-rotor” aircraft and its one sure advantage over helicopters is its capacity to fly 40% to 60% faster when it operates in “airplane” mode. But its cost – now \$100-plus million per unit (2010) – is much higher than that of helicopters that are equal in power and weight. And the latter can carry much more payload. The MV-22’s speed figures centrally in the Marine Corps’ plans for “rapid maneuver from the sea” – an ambitious operational concept whose necessity is itself unclear.

The MV-22’s greater speed is supposed to render it less vulnerable to hostile fire. However, in “hover mode,” it is considerably less stable than helicopters and must descend slowly and carefully, which increases its exposure. Maneuverability and evasive action in hover mode also are compromised. Reviewing the MV-22’s tours in Iraq, the GAO concluded that, while it successfully completed missions in a “low-threat theater of operations,” there were serious questions about its “ability to operate in high-threat environments.”⁴¹ In April 2010, one of a handful of Ospreys operating in Afghanistan crashed, killing four. In this case, the Taliban claimed responsibility. However, the V-22 previously had itself claimed 30 lives in test flights.

The aircraft also has been plagued by reliability problems, including persistent engine troubles (that compelled at least one emergency landing in Iraq). Given substantial manufacturer support, the Ospreys in Iraq were able to achieve a 68% readiness rating, which is below that achieved by older helicopters in theater. Other problems noted by GAO include trouble flying above 8,000 feet or in extreme heat, carrying the required number of combat troops, transporting exter-

nal cargo, and operating from Navy ships. For all these reasons, GAO concluded in 2009 that DoD and the Marines should reconsider procurement of this aircraft and investigate alternatives.

12 Delay procurement of the KC-X Aerial Refueling Tanker for five years; In the interim, retain and upgrade some existing tankers. *Save \$9.9 billion from 2011–2020.*

The KC-X is supposed to replace roughly one-third of the current KC-135 tanker fleet. The first five tankers were to have been purchased in 2010, with production increasing to 15 aircraft per year in 2014. The program remains on hold, however, due to an ongoing contracting debate.

An alternative option, described in 2009 by the Congressional Budget Office, would delay procurement of the KC-X Aerial Refueling Tanker by five full years and, instead, retain and upgrade 60 KC-135Es during that period.⁴² CBO notes that, despite their age, the “KC-135s still have significant structural life remaining.” The retained aircraft would be upgraded to the KC-135R standard, which CBO argues is better performing and more reliable.

A five-year delay would also allow the program to focus on the new design 787 or A-350XWB commercial aircraft, rather than the old design Boeing 767 and the Airbus A-330, as is currently likely. The new design aircraft are likely to have lower operating costs. In addition, DoD might benefit from larger production runs as these new aircraft draw other government and commercial buyers.

13 Terminate the Expeditionary Fighting Vehicle; field alternatives. *Save between \$8 billion and \$9 billion during 2011–2020.*

This option would terminate the USMC Expeditionary Fighting Vehicle program, estimated by GAO to require \$11.2 billion to complete. The Marine Corps’ stated requirement for 573 of these vehicles can be met by a combination of refurbished AAV7A1s – the Corps’ current armored amphibious vehicles – and a newly built, updated version of the current vehicle.

The Expeditionary Fighting Vehicle is part of the suite of systems meant to serve the Marine Corps' vision of an over-the-horizon rapid assault capability. It is supposed to replace the Corps' current amphibious assault vehicle, providing greater armor protection and firepower, greater range, and greater speed on land and water. However, as noted by the Task Force on a Unified Security Budget, "What has been produced so far is a vehicle that breaks down every eight hours on average, is unpredictable to steer in the water, and has more than doubled in price."⁴³

Conceived in 1995, the EFV program faced a number of critical design and development problems during 2002–2008. Although the program is more than 14 years behind schedule, prototypes are currently in production incorporating hundreds of design improvements. These will probably add weight to the system, which is not a good omen for speed on land or sea. DoD predicts that, by the time the system is ready for full-rate production, its costs will have increased 168% over original estimates.⁴⁴ In March 2010 the GAO estimated the unit cost as \$24 million.

Apart from reliability problems and costs, concerns focus on the vehicle's vulnerability as it rushes to land from as far as 25 kilometers off-shore and on the vulnerability to Improvised Explosive Devices of its flat hull, once it lands.⁴⁵ A more fundamental concern has been voiced by Defense Secretary Gates, who in 2009 questioned the rationale for boosting large-scale amphibious assault capabilities, asking, "In the 21st century, how much amphibious assault capability do we need?" Although Gates has allowed the system to go forward, increased concerns about the budget deficit make it a prime candidate for rescission.⁴⁶

14 Reduce base budget spending on R&D by \$5 billion annually, including classified expenditures. Save \$50 billion from 2011–2020.

Nothing has grown as far or as fast since the end of the Cold War as research and development funding. During the peak of the Reagan buildup, when the United States

was locked in a fierce technology competition with the Soviet Union, DoD spent \$60 billion (2011 USD) on research, development, testing, and evaluation (henceforth, R&D) efforts. Today, it spends around \$80 billion. Relatively little of the difference – between \$6 billion and \$8 billion – is due to the current wars .

The recent rise in this area of expenditure traces back to the time of post-Cold War retrenchment: the early- and mid-1990s. While procurement budgets declined sharply during the 1990s, R&D budgets declined less. In essence, one compensated for the other. R&D spending was also driven by a desire to test the limits of new information technologies. When budgets rebounded (and soon surpassed Cold War levels), R&D rose also – but from a higher baseline than before.

Since the end of the Cold War, the United States has been increasingly locked in a military technology race with itself. But "pushing the envelope" in technology does not necessarily provide warfighters with relevant and reliable tools at an affordable cost. This is evident in many of the procurement programs we have reviewed. Even the most elemental efforts – for instance, the capacity of our armed forces to communicate with each other – have been bedeviled by a bewildering array of programs working at odds with each other. The fundamental problem is that R&D priorities are not governed by warfighter needs, the actual demands of war, or market forces. Greater discipline is due – and this can produce not only more usable products, but also savings.

For several reasons, Congressional oversight of this area is relatively weak. As GAO has pointed out, R&D budget requests often lack vital tracking information.⁴⁷ Also, the classified, or "black," defense budget contains a significant amount of funding for research and development. Classified acquisition funding has more than doubled in real terms since 1995. In FY 2010, the classified budget accounted for \$18 billion or 17 percent of the Defense Department's total acquisition spending and more than \$17 billion or 22 percent of total RDT&E spending, for a total of \$35.8 billion.⁴⁸

Weak oversight of classified programs has resulted in significant financial losses to the government in the past. One recent example is the National Reconnaissance

sance Office's Future Imagery Architecture program, the technological failings of which led to \$4 billion in cost overruns.⁴⁹

More than 90 percent of the classified budget goes to the Air Force because of the service's management of several missile defense and satellite programs.⁵⁰ In fact, 43 percent of the Air Force's \$28 billion FY2010 research and development budget was classified. Also, significant amounts of funding exist in the classified budget for strategic programs, including the X37b aircraft and portions of the missile defense program.⁵¹

The 2010 edition of the Unified Security Budget report argued for a non-specific \$5 billion cut in R&D spending, citing the growth of expenditures in this area. For this reason as well as others cited above, we agree. This, together with the R&D cuts specified in other options, would return base RDT&E spending to a real level somewhat below the Reagan peak, but still 10% above the inflation-adjusted level in 2001.

PERSONNEL COSTS – OPTIONS FOR SAVING \$120 BILLION

Cost growth in the areas of military compensation and health care is an increasing concern of military planners and leaders. No issue is more difficult to address, especially in times of war. But problems related to military compensation will outlast the war. As one analyst observes, "If the overall defense budget remains relatively flat over the coming years, continued increases in personnel-related costs will crowd out funding for acquisitions."⁵² And not just acquisitions, according to Undersecretary of Defense for Personnel and Readiness, Clifford Stanley. Stanley, a retired Marine, points out that "rising personnel costs could dramatically affect the readiness of the department."⁵³

Since 2001, spending in the personnel account has risen by 50% in real terms. About one-half of the rise can be construed as direct war costs. Also relevant are burgeoning health care costs. The Defense Health Program has grown by more than 100% in real terms since 1999. Secretary Gates has noted of health care

costs, and Congress's habit of routinely raising military pay more than the Pentagon requests, "they limit what can be saved and where."⁵⁴

There is more to this than a simple political impasse, however. If the rise in personnel costs has been extraordinary, so have been the demands placed on our military personnel. Soldiers might reasonably expect to go to war, but not expect to be subjected to exceptionally long and repeated war rotations. The possibility that service time might be involuntarily extended is clear and contractual. But it has become routine, rather than exceptional. The resulting pressures on military personnel and their families have been extreme, generating a range of persisting health and other problems. In our view, this is neither right nor smart: It cannot continue. And we cannot seek to economize on pay and benefits, while also over-using our military personnel.

An important proviso to any cost saving proposals in this area is that they be part of a "renewed compact" with those who serve in the armed forces. Key features of such a compact have been outlined by Lawrence Korb, a former Assistant Secretary of Defense for Manpower and Reserve Affairs:⁵⁵

- No unit or person will be sent to a combat zone for longer than a year, and they will not be sent back involuntarily without spending at least two years at home.
- The practice of "stop loss," which extends an individual's period of duty against his or her will, will be discontinued.
- The Guard and Reserve will return to their status as a strategic reserve. No unit or individual in the reserves will be activated for more than one year out of every six.
- When individuals join the active component, their obligation will not exceed six years or more than four years active service, whichever comes first.

Additionally, steps could be taken to ensure (and perhaps enhance) the compensation levels and the care available to those who are sacrificing most through their service in war.

The points outlined above also imply some difficult decisions about how we utilize our finite number of personnel. If we are to deploy 175,000 active-duty troops to war (as we do today), then we cannot also maintain another 142,000 troops overseas doing other jobs – not within current or likely future budget constraints. Fiscal realities and proper treatment of our military personnel demand that we make choices.

15 Military compensation reform. *Save \$55 billion from 2011–2020.*

The *Quadrennial Review of Military Compensation* has proposed that DoD add additional elements of military compensation – such as tax advantages and housing and subsistence allowances – to its calculations when planning pay raises.⁵⁶ These elements are currently excluded from the basket of military compensation items that are pegged to changes in comparable compensation in the civilian sector. This option, phased in gradually over the decade in tandem with the wind-down of the wars and a decrease in Army and Marine Corps size, would gradually reform the calculation of military pay to save \$55 billion over the 2011–2020 period.

16 Reform DoD's Health Care System. *Save \$60 billion from 2011–2020.*

Today DoD's health care system, Tri-Care, routinely consumes more than 8% of all DoD spending. In the words of Secretary Gates:

Leaving aside the sacred obligation we have to America's wounded warriors, health-care costs are eating the Defense Department alive. The premiums for Tri-Care, the military health insurance program, have not risen since the program was founded more than a decade ago. Many working age military retirees who are earning full-time sal-

aries on top of their full military pensions are opting for Tri-Care even though they could get health coverage through their employer, with the taxpayer picking up most of the tab. In recent years, the Department has attempted modest increases in premiums and co-pays to help bring costs under control, but has been met with a furious response from the Congress and veterans groups. The proposals routinely die an ignominious death on Capitol Hill.⁵⁷

Reforming this system along the lines suggested by the *Quadrennial Review of Military Compensation* could save more than \$60 billion over the 2011–2020 period, according to a June 2009 CBO report.⁵⁸ The changes would mostly affect those ex-service personnel between the ages of 38 and 65 with other health insurance options available.

17 Reduce military recruiting expenditures as war-related demand recedes and military end strength declines. *Save \$5 billion from 2011–2020.*

Since 1999, expenditures related to military recruiting have grown by nearly 100% in real terms. Today, the US military spends approximately \$4 billion on recruiting (including the cost of recruiters). The principal challenge to recruiting sufficient numbers of qualified personnel has been the wars and extreme demands placed on military personnel due to those wars. Various studies have found that the war had depressed recruiting by 12%–20%, with an even more negative impact on Army recruiting and the recruiting of high quality candidates.⁵⁹ The Pentagon compensated by pouring more people and resources into the effort and by bolstering recruitment bonuses. As demand falls, the pressures of war recede, and a "new compact" is forged with military personnel (as outlined above), recruitment costs should retreat to some level closer to pre-war costs. This option assumes a gradual ramp up to \$1.2 billion saved annually, with \$5 billion total saved during the next ten years.

MAINTENANCE AND SUPPLY – OPTIONS FOR SAVING \$13 BILLION

18 Improve the efficiency of military depots, commissaries, and exchanges. *Save \$13 billion from 2011–2020.*

In its 2009 report, *Budget Options, Volume 2*, the Congressional Budget Office outlines a selection of proposals to reform and reorganize supply and maintenance systems that, taken together, would achieve approximately \$13 billion in savings during 2011–2020.⁶⁰ Consolidating the redundant retailing functions found in the military's network of commissaries and exchanges would save \$6.5 billion. Changing the pricing structure for repairs in military depots could save \$2.5 billion in a decade, by creating incentives for unit commanders to use central depots more than their less cost-effective unit-level repair facilities. And opening up an additional 10% of depot work to bidding from private contractors would save \$3.9 billion during the decade.

COMMAND, SUPPORT, AND INFRASTRUCTURE EXPENDITURES – SEEK \$100 BILLION IN SAVINGS

19 Pursue commensurate savings in command, support, and infrastructure budgets. *Minimum required reduction in expenditures: \$100 billion for the 2011–2020 period.*

The previous 18 measures, taken together as an integrated set, entail military personnel reductions of between 11% and 12%. In dollar terms, the peacetime portion of the defense budget would be reduced by about 14%. However, largely untouched by these cuts is the approximately 40% of the DoD budget that funds headquarters, central support, infrastructure, and defense-wide programs. Of course, the requirement for funding in these areas would decline as force structure and personnel numbers decline – albeit not proportionately. Following on the proposed reductions, it would be incumbent on DoD and the services to also seek new efficiencies in the command, support, and infrastructure categories. A reasonable minimum goal for additional economizing would be 2% of the peacetime budget or approximately \$10 billion per year. This would add \$100 billion to savings for the 2011–2020 period.

VI. Defense Cuts Proposed by the Task Force for a Unified Security Budget

At a February Pentagon briefing, the Chair of the Joint Chiefs of Staff, Adm. Mullen, advocated greater investment in non-military security accounts such as homeland security and the State Department, to balance the massive sums devoted to the military. “My fear, quite frankly, is that we aren’t moving fast enough in this regard,” he said. “US foreign policy is still too dominated by the military, too dependent upon the generals and admirals who lead our major overseas commands and not enough on the State Department.” Defense Secretary Gates has been calling for a correction to the extreme imbalance between allocations for the Departments of Defense and State since 2007, as has Secretary of State Clinton since taking office.

None of these advocates of rebalancing have called for a reduction in defense spending to achieve this, but defense budget reductions are required to accomplish it if we are not to add to the deficit.

Since 2004 the Task Force on A Unified Security Budget for the United States (USB) has laid out an annual framework for such a shift of resources.⁶¹ It includes a list of cuts to each year’s DoD budget request that can be made with no sacrifice to US security. See Table 3, below. The USB Task Force makes the case that a more unified approach to security budgeting would make such a rebalancing possible, a proposal supported by the director of the General Accountability Office and the Director of National Intelligence, among many others.

Table 3. Unified Security Budget Task Force Proposed Defense Cuts for FY 2010 (figures in billions)

<i>Program</i>	<i>Administration's FY 2010 Request</i>	<i>Proposed Cuts</i>
Ballistic Missile Defense	9.3	-6
Virginia-class Submarine	4.2	-4.2
DDG-1000	1.6	-1.6
V-22 Osprey	2.9	-2.9
Expeditionary Fighting Vehicle	0.3	-0.3
F-35 Joint Strike Fighter	10.4	-7.4
Offensive Space Weapons	1.6	-1.5
Future Combat Systems	3	-1.5
Research and Development	79	-5
Nuclear Forces	21	-13.1
Force Structure	na	-5
Waste in Procurement and Business Operations	na	-7
<i>Total</i>		-55.5

Report of the Task Force on a Unified Security Budget for the United States, FY 2010 (Washington DC: Institute for Policy Studies and Foreign Policy in Focus, September 2009).

VII. A Strategy of Restraint Would Allow Even Greater Savings

(The following set of options was developed by Benjamin Friedman and Christopher Preble of the Cato Institute to illustrate the budget implications of adopting a “strategy of restraint.”) ⁶²

The reductions in military spending outlined below are based on a strategy of restraint – one that reacts to danger rather than going out in search of it. Another way to describe this strategy is “Offshore Balancing,” a term that emphasizes our ability to bring force from the sea to defeat and deter enemies, rather than putting troops ashore in permanent policing roles. We need not stick around in foreign lands often. The imbalance of power that brought our Cold War alliances long ago disappeared. The alliances should follow suit. Our friends in Asia and Europe can now defend themselves. We also tend to confuse foreign internal disorder with foreign threats. But we are rarely threatened by turmoil abroad. And our ability to quell it with our forces is usually limited, as we have been learning of late. We should retain the ability to participate in multilateral efforts to prevent humanitarian disasters, but we should not confuse this work with our own defense.

By cutting missions we can cut force structure – reducing the number of US military personnel and the weapons and vehicles we procure for them. By cutting force structure and bringing back our forces from overseas, we can reduce the cost of operating and maintaining the military.

Our proposals reduce defense spending by more than 1 trillion over ten years. These reductions are conservative in two ways. First, in several cases we likely erred on the side of under-counting savings. Second, we believe deeper cuts could be made under a strategy of restraint. We could likely save more by eliminating more procurement programs, closing bases, building less military housing, and closing the geographic combatant commands.

We would most deeply cut the ground forces. With few conventional enemies and a disinclination for large-scale occupations, the Marines and Army would have far less to do. The Marines get cut less than the Army because we envision a military that typically comes from the sea and stays for a short period.

We propose reducing the Navy to eight carrier battle groups and six expeditionary strike groups. We would eliminate the maritime prepositioning force. The Navy we would maintain is plenty given the dearth of current naval challengers and the strike power provided by modern carrier air wings.

We would also eliminate six fighter wing equivalents from the Air Force. There are three justifications for this cut. First, the Navy already provides considerable airpower from the sea. Second, the precision revolution has greatly increased the destructive power of each airframe. Third, the Air Force lacks enemies that challenge its air superiority. Because we want an offshore posture rather than a forward defense, we retain our current bomber and refueling tanker procurement plans. We also maintain the Air Force’s spending on unmanned aerial vehicles, given their flexibility.

We would cut research and development by ten percent. A smaller force requires less research and testing to support it. But because this spending helps keep our military far ahead of rivals, we do not cut research and development funding as much as we cut operational force structure.

Additional savings come from making national missile defense into a research program, rather than continuing the rush to deploy it for no clear benefit; cutting questionable vehicles such as the Littoral Combat Ship, the Expeditionary Fighting Vehicle and V-22 Osprey; and reforming the provision of military pay and benefits.

Table 4. Defense Reductions Associated with Restraint Strategy*

<i>Strategic Capabilities</i>	
1. Nuclear arsenal (warheads)	\$100 b.
<i>Ground Forces</i>	
2. Reduce the size of the Army	\$220 b.
3. Reduce the size of the Marine Corps	\$67 b.
<i>Navy and Air Force</i>	
4. Build/operate fewer aircraft carriers and associated air wings	\$43 b.
5. Operate fewer ballistic missile submarines (SSBNs)	\$4 b.
6. Build/operate fewer tactical submarines (SSNs/SSGNs)	\$34 b.
7. Build/operate fewer destroyers	\$28 b.
8. Build/operate fewer littoral combat ships	\$11 b.
9. Reduce the number of expeditionary strike groups	\$9 b.
10. Cancel the Maritime Prepositioning Force (Future)	\$17 b.
11. Build/operate fewer Air Force fighters	\$89 b.
<i>Other Reforms, Procurement and RDT&E</i>	
12. Cancel Expeditionary Fighting Vehicle	\$11 b.
13. Terminate V-22 Osprey	\$15 b.
14. Realign Missile Defense Program	\$60 b.
15. Cut Pentagon civilian workforce	\$105 b.
16. Reform Military Pay and Health Care	\$115 b.
17. Reform DoD Maintenance and Supply Systems	\$13 b.
18. Reduce RDT&E	\$70 b.
19. Obtain Add'l Savings in Command, Support, and Infrastructure	\$100 b.
<i>Total</i>	\$1,111 b.

*This set of options was developed by Benjamin Friedman and Christopher Preble of the Cato Institute.

“STRATEGY OF RESTRAINT” REDUCTIONS IN DETAIL

1 Cut nuclear weapons arsenal to 500 deployed warheads. *Save \$100 billion from 2011–2020.*

This estimate is consistent with the SDTF findings but would cut the number of warheads faster and more deeply. Savings shown apply primarily to reductions associated with the development and maintenance of warheads, though it does take into consideration reductions in the number and character of delivery vehicles, an option that might ultimately result in retiring one leg of the nuclear triad (either manned bombers or ICBMs). Additional savings from reducing the number of SSBNs from the planned 14 to 6 are shown below.

2 Cut active-duty Army to approximately 360,000 personnel. *Save \$220 billion from 2011–2020.*

The estimate of these savings draws on a 2009 CBO calculation that reversing the “Grow the Army” initiative, which had added 65,000 troops to the Army, would save \$88.7 billion over the next ten years. We assume that our savings over the same ten-year period would be at least two and a half times that of the CBO estimate.

3 Cut the size of the Corps by nearly 30 percent, from 202,000 to approximately 145,000. *Save \$67 billion from 2011–2020.*

Personnel reductions would occur over a ten-year period, approximately 3.5 percent each year. We arrived at these estimates by modifying the CBO projections for the Army. While Army and Marine Corps personnel costs differ, this calculation is sufficient for illustrative purposes.

Our estimates of savings from Army and Marine Corps reductions are conservative. Given trends in the cost of compensation and particularly health care, the DoD projections of Total Obligational Authority for Army and Marine Corps during 2011–2015 are unrealistic.

4 Reduce number of carriers to eight; Reduce naval air wings to seven. *Save \$43 billion from 2011–2020.*

Current Navy plans call for 12 carriers by 2020. This option would continue progress on production of the new Ford Class CVN 78, which will be deployed in 2015. Canceling procurement of CVN 79 and all future Ford Class CVNs would save \$16 billion in planned procurement through 2020 (approximately \$7 billion for CVN 79 and \$9 billion for CVN 80). Decommissioning the *Nimitz*, *Eisenhower*, and *Vinson* (along with the *Enterprise*) would save at least \$5 billion over 10 years in reduced O&M costs, including associated air wings. A further \$12 billion would be saved in foregone procurement of 60 F-35 Joint Strike Fighters, assuming a 50% replacement of F/A-18s with JSFs for each carrier eliminated. Associated reductions in personnel would save \$10 billion.

This option would take one step beyond that proposed by the SDTF, but the essential rationale for the reductions is the same. See SDTF Option # 7.

5 Operate fewer ballistic missile submarines (SSBNs). *Save \$4 billion from 2011–2020.*

Annual O&M cost for each SSBN is at least \$60 million per year. Cutting eight SSBNs (from the Navy’s planned 14 to 6) would save \$3 billion over ten years. Associated personnel savings would be \$1 billion. There are no plans for building additional SSBNs over the next ten years, therefore no additional savings from procurement.

6 Build and operate fewer tactical submarines (SSNs/SSGNs). *Save \$34 billion from 2011–2020.*

Current projections show the number of SSNs declining to 40 by 2028. We can reach 40 in 2020, eight years earlier, by slowing the rate of procurement to one per year (instead of the proposed two). Thus, instead of spending \$5.8 billion per year, we could spend \$2.9 billion per year, thereby saving \$29 billion in procurement and \$1.5 billion in O&M cost over 10 years. Cutting the four active guided missile submarines would save a further \$1.8 billion in O&M. Additional savings from reductions in personnel would be \$1.5 billion.

7 Build and operate fewer destroyers. *Save \$28 billion from 2011–2020.*

Keep the number of DDG-51s at current level of 62 and cancel the DDG-1000 program. The Navy has already proposed stopping production of the DDG-1000 at three and wants to build 11 or 12 new DDG-51s, which cost about \$1.85 billion each. Not building 12 more DDG-51s would save at least \$22.2 billion, plus \$3.3 billion in associated O&M costs. Additional savings from reductions in personnel would be \$2.5 billion.

8 Build and operate fewer Littoral Combat Ships. *Save \$11 billion from 2011–2020.*

Scale back the LCS program and consider investing in a less expensive class of frigates or corvettes to better suit the strategic needs of the Navy. In the meantime, refurbish a reduced frigate fleet (14 by 2020) at a cost of about \$100 million each. Besides the four LCSs already (or nearly) completed, the Navy plans to build about 24 in the next 10 years, at an average cost of \$550 million each. Forgoing these vessels would thus save \$13.2 billion over the next 10 years, plus \$3.1 billion in associated O&M costs. Accounting for the costs of refurbishing and retaining the frigates would result in net savings of \$12.3 billion over ten years. Net personnel costs would be \$1.6 billion.

9 Reduce the number of Marine Corps expeditionary strike groups. *Save \$9 billion from 2011–2020.*

By reducing the number of expeditionary strike groups to six, \$4.3 billion would be saved in O&M costs over ten years. These reductions are consistent with cuts to Marine Corps cited above. Associated naval personnel cuts would be \$4.9 billion.

10 Cancel the Maritime Prepositioning Force (Future). *Save about \$17 billion from 2011–2020.*

According to the CBO, canceling the Maritime Prepositioning Force (Future) program would save \$17.3 billion over 10 years. The Navy would maintain sufficient Marine supply ships overseas and, if deemed absolutely

necessary, it could lease ships (instead of procuring) as it has in the past.

11 Build and operate fewer Air Force fighters.

Save about \$89 billion from 2011–2020.

Eliminate six fighter air wing equivalents (AWE). We would accomplish this drawdown by accelerating the retirement of aging airframes and purchasing 301 fewer F-35s than currently programmed. Estimated cost per new aircraft is \$200 million, which translates into \$60 billion in reduced procurement expenses, plus an additional \$29 billion in reduced personnel and O&M expenses, for total ten-year savings of \$89 billion.

12 Cancel the Expeditionary Fighting Vehicle.

Save about \$11 billion from 2011–2020.

Existing platforms, including the Assault Amphibious Vehicle 7A (AAV), are suitable in the highly unlikely event that the United States wished to deploy Marines via amphibious operations on a hostile shore. (The last time this occurred was the Inchon landing in September 1950.) About \$11 billion in funding is needed to complete the program and purchase of 573 units – which this option would save.

13 Terminate the V-22 Osprey. *Save about \$15 billion from 2011–2020.*

Cancel the troubled V-22 Osprey program and save the \$23 billion needed to finish procurement. Relying on proven, rotary-wing aircraft for troop and material transport, such as the MH-60 and the CH-53, including the purchase of new units, would result in a slight offset in net savings.

14 Realign the missile defense program.

Save about \$60 billion from 2011–2020.

The FY 2011 budget request includes \$9.9 billion for missile defense, an increase over the FY 2010 budget, and an amount that is consistent with spending patterns over the past few years. This option refocuses investment in missile defense programs away from procurement and towards research and development and

cancels components with excessive cost overruns, such as the airborne-laser program. Assuming that DoD plans to spend an average of \$9 billion annually over the next ten years, reducing spending to \$2 to \$3 billion annually would save at least \$60 billion over ten years. By way of comparison, CBO has suggested canceling programs including the Far-Term Sea-Based Terminal Defense, Sensor Development, Missile Defense Space Experimentation Center, and Special Programs. This would save \$11.25 billion over the next five years, and \$40.09 billion over the next ten years.

15 Cut the Pentagon civilian workforce. *Save about \$105 billion from 2011–2020.*

A smaller military requires fewer civilian support personnel. Accordingly, we propose reducing the Pentagon civilian workforce by nearly a third, chiefly through attrition. (GAO estimated in 2008 that more than 50 percent of DoD’s civilian workforce is eligible to retire in the next few years.) The civilian workforce will total 789,000 in FY2011 at a cost of \$77.07 billion. Reducing the civilian payroll by roughly 30 percent over a ten-year period would save approximately \$105 billion. This estimate mirrors larger reductions made between 1991 and 2001, when civilian manpower was reduced by roughly 35 percent and civilian compensation declined by roughly 25 percent. Cuts in manpower averaged roughly 4 percent each year, resulting in compensation savings of roughly 2.5 percent per year.

16 Reform the calculation of military compensation and restructure health care benefits. *Save about \$115 billion from 2011–2020.*

This proposal concurs with the SDTF options #15 and #16.

17 Reform DoD Maintenance and Supply Systems. *Save about \$13 billion from 2011–2020.*

This proposal concurs with the SDTF options #18 and includes consolidating DoD retailing, changing DoD’s depot pricing structure for equipment repairs, and easing restrictions on contracting for depot maintenance.

18 Reduce RDT&E expenditures by \$70 billion from 2011–2020.

Over the period FY 2011–2015, DoD plans to spend an average of \$72.9 billion *annually* on RDT&E (Research, Development, Test & Evaluation). The Pentagon should reduce total RDT&E spending by an additional ten percent annually, which would generate at least \$70 billion in savings over ten years. This amount greatly exceeds what would be required to maintain the US military’s quantitative and qualitative superiority for the foreseeable future. Additional reductions in RDT&E are captured above in changes to, or cancellations of, specific programs.

19 Reduce expenditures on Command, Support, and Infrastructure by \$100 billion from 2011–2020.

This proposal concurs with the SDTF option #19.

RATIONALE: THE LOGIC OF RESTRAINT

Today, our military spending serves many purposes: Other nations' defense, the purported extension of freedom, the maintenance of hegemony, and the ability to threaten rivals with conquest. But the relationship between these objectives and the end they are supposed to serve – the protection of Americans and their welfare – is unclear. In fact, defining the requirements of our defense so broadly is probably counterproductive. Our global military posture and activism drag us into others' conflicts, provoke animosity, prompt states to balance against our power, and waste resources. We can save great sums and improve national security by adopting a defense posture worthy of the name.

Substantially reducing military spending requires reducing the ambitions it serves. Efforts to improve military efficiency – by means of acquisition reform, the elimination of waste and duplication, and better financial management – might save some small portion of the budget. But such efforts have been underway for years. And still we find ourselves in our current predicament. That's because real savings require strategic change. We spend too much because we choose too little.

Our military budget should be sized to defend us. For this end, we do not need to spend \$700 billion a year – or anything close. We can be safe for much less, provided that we capitalize on our geopolitical fortune.

Our principal enemy, al Qaeda, has no army, no air force, and no navy. Some contend that we can be safe from al Qaeda only by occupying and transforming failed states. And so, countering terrorism is supposed

to require something approaching global counterinsurgency, which entails a permanent state of war. The claim does not bear scrutiny, however. Indeed, what experience tells us is that occupations tend to create terrorism rather than prevent it.⁶³

The hunt for anti-American terrorists is mostly an intelligence and policing task. Military forces are useful in destroying well-defended targets. Terrorists are mostly hidden and lightly armed. The difficulty lies in finding them, not killing or capturing them once they are found.

Neither can state rivals justify our level of expenditure. North Korea, Iran, and Syria collectively spend roughly one sixtieth of what we spend on our military. They are local trouble-makers but, as a result, they have local enemies that balance and contain them.

As for our potential great power rivals – Russia and China – we have no good reason to fight a war with either in the foreseeable future. And even if we did, both remain far behind us in military capability. That would remain the case even with the reductions proposed here. Note that even with the 10% reduction in research and development funding we propose, the US military will spend on research and development alone almost as much as Russia spends on its entire military – and more than half of what China spends.

We are sometimes told that we must spend heavily on defense today to prepare for the eventuality of new rivals. But the best hedge against an uncertain future is a prosperous and innovative economy supporting a capable military that can be expanded to meet rivals as they arise.

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