

AMERICA'S DEFENSE MELTDOWN



Pentagon Reform for President Obama and the New Congress



13 non-partisan Pentagon insiders, retired military officers
& defense specialists speak out

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CHAPTER 11

UNDERSTAND, THEN CONTAIN AMERICA'S OUT-OF-CONTROL DEFENSE BUDGET

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The foregoing chapters have described how America's armed forces are manned and equipped to fight, at best, enemies that do not now exist and may never again in the foreseeable future. I say "at best" because there is much evidence, cited here and elsewhere, that the hugely expensive and extraordinarily complex programs that the Pentagon and Congress describe as vital for national defense are not even good ideas to fight the Second Generation Warfare which U.S. armed forces would seem best suited to conduct. Indeed, for Third Generation Warfare, which many in our armed forces seem very interested to talk about but which their leadership mostly does not seem to comprehend, such systems are little, if any, help. And, in Fourth Generation Warfare, such programs and policies – and the thinking that goes with them – lend a clear advantage to the enemy and almost guarantee our own defeat.

Almost as disturbing is the condition of the defense budget. Our problems are redoubled: it is not that the defense budget adequately supports our irrelevant, even counterproductive forces. For that to be the case would be a significant improvement. Instead, to promote armed forces that fight the wrong type of war in the wrong places – liberals, moderates and conservatives in the Pentagon, Congress, think tanks and the White House have over time constructed an edifice that makes our forces smaller, older and less ready to fight, all at dramatically increasing cost. And, we have done so with a system that, quite literally, does not know – or apparently care – what it is doing.

Do You Know What Your Defense Budget Is?

Each year, when the new defense budget is released, the media discusses it with great precision – always careful to cite it to at least the first decimal. The vast majority of those ostensibly precise newspaper articles have the numbers quite wrong – not just to the right of the decimal point; they are often off by tens of billions of dollars, and by some measures, they are off by hundreds of billions. Their reportage on George W. Bush's defense budget request for fiscal year 2009 (FY 09) was no exception.

On Feb. 4, 2008, the Department of Defense (DOD) briefed the press on the new 2009 defense budget, citing its total, \$515.4 billion. President Bush's Office of Management and Budget (OMB) released the same budget on the same day, citing it to be \$518.3 billion. That's a \$2.9 billion difference. OMB was accurate; the Pentagon "forgot" to include some permanent appropriations (also called "entitlements" or "mandatory")

spending) for retirement and some other non-hardware spending. Nonetheless, the vast majority of the press used the Pentagon's number. Going to DOD's budget "roll out" press briefing is an annual ritual for defense journalists, as is regurgitating the numbers in the Pentagon press release with little, if any, meaningful review.

All the numbers cited above were quite wrong. They did not include \$70 billion that was also requested to pay for the wars in Iraq and Afghanistan. While some journalists did include that number in their articles, \$70 billion was also inaccurate. It did not include enough money to fight the wars for more than a few months in 2009. Doubling that number, if not more, is necessary. As this anthology is released, no one knows the right number; neither the White House nor Congress have bothered to put together a properly documented estimate of what amount will likely be needed. It is something responsible politicians would do, especially in Congress which is the definitive constitutional authority on such matters. Previous presidents and congresses did; today's politicians have not.

To do so, however, would only be part of what will ultimately be appropriated to fund American security for FY 09. The Pentagon's budget, plus the full amount needed to conduct operations in Iraq and Afghanistan, does not include:

- Department of Energy (DOE) funding for nuclear weapons research, storage and related activities. Bush requested \$17.1 billion for 2009.
- An additional \$5.7 billion for miscellaneous defense activities in other agencies, such as the General Services Administration's National Defense Stockpile, the Selective Service and the FBI's international activities, all of which OMB includes in its so-called "National Defense" budget category.

If you add these estimates, you get a total of \$611.1 billion for 2009. It is a number most journalists ignore; most likely for the simple reason that it's not in the Pentagon's press release.

However, there is more.

Any inclusive definition of U.S. security spending should also include the budget for the Department of Homeland Security (DHS): add \$40.1 billion for 2009.

There are also important security costs in the budget of the State Department for diplomacy, arms aid to allies, U.N. peacekeeping, reconstruction aid for Iraq and Afghanistan, and foreign aid for other countries. These and other international activities are clearly intended to contribute to U.S. national security: add \$38.4 billion.

U.S. security expenses might also include the human costs of past and current wars: add another \$91.3 billion for the Department of Veterans Affairs.

We could add the share of the 2009 payment for the national debt that can be attributed to national defense spending. While few agree on what that share is; one

reasonable calculation argues that the “National Defense” budget category constitutes 21 percent of federal spending, and that percent of the 2009 payment on the debt should be calculated. That would be \$54.5 billion.

There’s more; add the costs to the U.S. Department of the Treasury for military retirement that are not counted in the DOD budget; that’s \$12.1 billion. Some would also add the interest earned in the Treasury’s military retirement fund, another \$16.2 billion.

Altogether, the total security bill for America for 2009 comes to \$863.7 billion. (Actually, it will be more – once Congress and the White House adopt a spending figure for Iraq and Afghanistan that approximates reality.)

Table 1 recounts these numbers.

Some will argue that the \$863.7 billion figure inflates what we spend for national defense. It is, of course, significantly more than what we are asked to pay for the Department of Defense (\$588.3 billion), but it can be argued that the figure that is \$275.4 billion higher (not including the full cost of the wars) better characterizes what we pay for national security.

A Comparison to History and Other Nations

Even if you count just Pentagon spending for 2009, it is a historic amount. It is more than we have spent for the Department of Defense at any time since the end of World War II.

Figure 1 on the next page shows post-World War II Pentagon spending; the dollars are adjusted for inflation.

Notice in Figure 1 how far above average Cold War spending we are today. With no superpower opponent challenging the United States, this is remarkable. A less powerful threat means a larger budget.

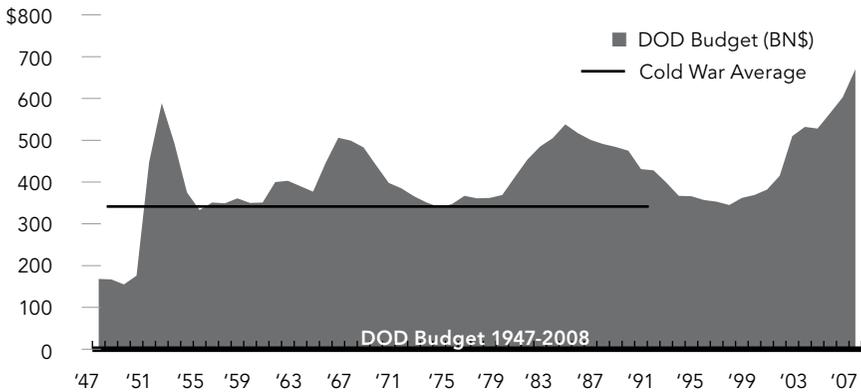
It is also notable that what the U.S. government spends for national defense is an amount that approximates what the rest of the world spends. Depending on which

Table 1.
Total National Security Costs
as Requested in President George W. Bush’s
Fiscal Year 2009 Budget

Category	2009 Request
DOD	518.3
War Funding	70.0
“Atomic Energy Defense Activities” (DOE)	17.1
“Defense Related Activities” (GSA, etc.)	5.7
Homeland Security (DHS)	40.1
Veterans Affairs (DVA)	91.3
International Affairs	38.4
Non-DOD Military Retirement	28.3
21% of Interest on the Debt	54.5
Grand Total	863.7

Source: Office of Management and Budget

Figure 1. Post-World War II DOD Spending, Constant 2008 Dollars



Source: National Defense Budget Estimates for the 2008 Budget (“Greenbook”), Department of Defense.

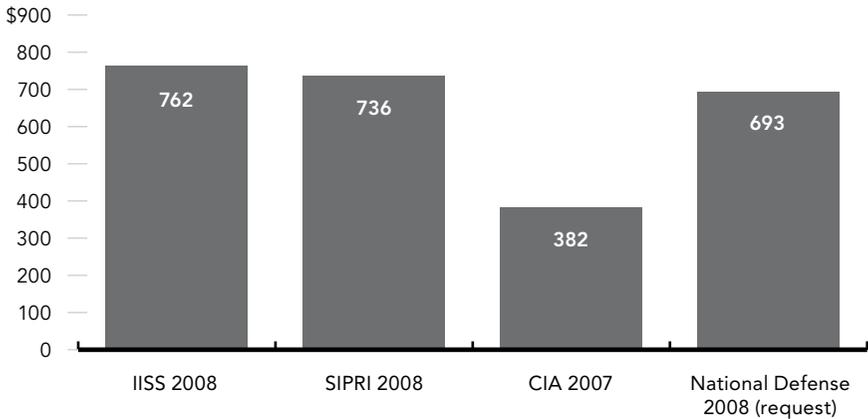
estimate one uses, the United States spends slightly less than, or significantly more than, the rest of the world combined. See Figure 2 below.

The figures above show not just America’s enemies or potential enemies, but the entire rest of the world. In the 19th century, Great Britain adopted a standard to assure security for its navy – a navy that dominated all others: to possess as many capital ships as the next two most powerful navies combined, whether friend or foe. America has gone well beyond this measure; we have adopted not a “Two Power” standard, instead we have adopted a standard that approaches all 191 other members of the United Nations.

Spending amounts that approximate the combined budgets of just so-called threat nations would mean virtual evisceration of the Department of Defense budget. The defense budgets of the remaining “Rogue States” (Iran and North Korea) are tiny in comparison. Adding Cuba to the mix, adds virtually nothing. Even if we were to consider significant defense spenders like Russia and China to be enemy-, or potential-enemy states, the grand total comes to less than one-third of the current DOD budget.

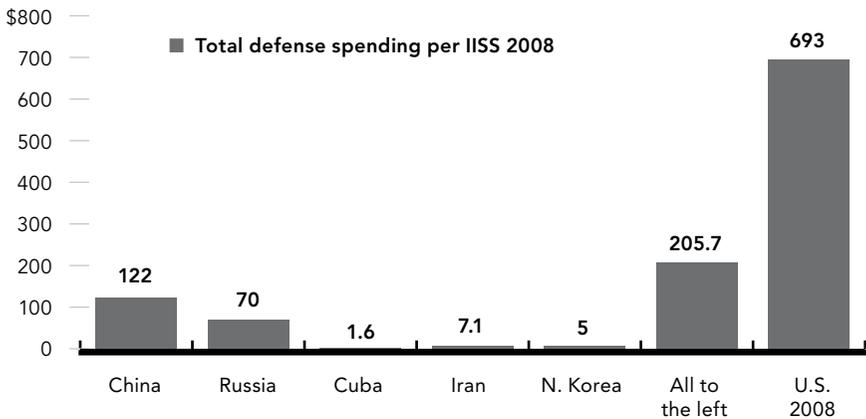
As Col. Chester Richards pointed out in Chapter Two – and others elsewhere – the United States and China are major trading partners, and the U.S. and Russia, while competitive on various international issues, have a relationship nothing like the Cold War posture we had with the Soviet Union. In addition, 65 years of post-World War II history have shown that nuclear powers – like the United States, Russia and China – go to great lengths to avoid direct military confrontations. It would require leadership of incomprehensible incompetence or virtual clinical lunacy to permit war among nuclear powers. Many use the possible threat of Russia and China to justify adding programs

Figure 2. United States Defense Spending Compared to Worldwide Military Expenditures



Sources: International Institute for Strategic Studies, *The Military Balance for 2008*; Stockholm International Peace and Research Institute, *Yearbook for 2008*; Central Intelligence Agency, *The World Factbook, 2007*.

Figure 3. U.S. Defense Spending Compared to “Rogue” & Other Non-Allied States



Source: International Institute for Strategic Studies, *“The Military Balance, 2008.”*

to the defense budget, but it is ludicrous to think these two nations, and any other possible foes, such as Iran and North Korea, justify a defense budget more than three times the size of what all these countries spend on defense collectively.

Figure 3 above shows the U.S. defense budget in relation to these others.

It is apparent that no measure from threat countries, or from any other external source, is used to size the Pentagon budget. The only limit would appear to be how much money the politicians in the Pentagon, Congress and the White House are willing to throw at it.

Non-Threat Based Justification for Larger Defense Budgets

A significant number of important people in government and think-tank punditry have adopted a measuring system to size the U.S. defense budget independent of the external world. It is a system that – conveniently – can justify an even larger, indeed ever growing, defense budget. At the head of this highly politicized parade is the Chairman of the Joint Chiefs of Staff, Adm. Michael Mullen. He has been advocating a defense budget based on the size of the U.S. economy. The Pentagon's "base" budget should,¹ he says, increase from 3.3 percent of America's Gross Domestic Product to 4.0 percent.

His is an advocacy of stupendous brilliance and stupidity at the same time.

The amount sounds modest, just 0.7 percent more. Why should that be any problem, especially if, as he and others say, we spent much more during the Cold War, such as the 8.9 percent we spent in 1968 during the Lyndon Johnson administration?

Data from the Treasury Department shows the Gross Domestic Product, the approximate size of the U.S. economy, to be \$13.4 trillion. If we increase the Pentagon's "share" of it from 3.3 to 4.0 percent, that 0.7 percent increase comes to \$94 billion. On top of the \$518 billion Mullen is also asking for, it is no small amount.

It is a lot more than a large increase masquerading as a puny percentage; it seeks to base the top-line amount of the U.S. defense budget on something that poses no threat to the United States. He wants to size the defense budget based on an internal attribute of the country, the national economy, that makes us stronger, not weaker. It is only because the U.S. economy has been growing more than the defense budget over time, that it makes the defense budget appear to have become smaller when it has, in fact, grown larger. Moreover, using this measure, it can be argued that we have somehow become laggards with our current all-time high defense budget. (Recall Figure 1.)

The admiral's argument also implies the extra dollars to expand defense spending are easy to find. Now spending "only" 3.3 percent compared to percentages twice that, and more, in the past gives one the sense that the money now "missing" from the defense budget can be found lying around, performing no useful function. In truth, you have only three places to find the "extra" money: 1) through increased taxes, 2) in other federal spending, or 3) from growing the federal deficit. Admiral Mullen and the other advocates of this measure of the defense budget forget to tell us which they prefer.

The specious nature of this measure is apparent when you consider what Mullen would also link defense spending to. As the economy has grown, so too have the number of McDonald's hamburger franchises in the country. It would be just as "rational" to base Pentagon spending on the number of golden arches in American towns and cities.

What Our Expanding Defense Budget Has Bought

While many appreciate that Pentagon spending is now higher than it has ever been since the end of World War II, it should also be conventional wisdom, yet isn't, that our military forces are smaller than they have ever been since 1946. Major categories of equipment are also, on average, older than they ever have been before; and key elements of our most important fighting forces are not ready for combat.

The wars in Iraq and Afghanistan are not the cause. The negative trends have been around for decades.² The wars have not siphoned off money from the non-war parts of the Pentagon budget. While the Pentagon has received more than \$800 billion for the wars in Iraq and Afghanistan, since 2001 it has also received \$770 billion more than was anticipated for it for the years 2001 to 2009. One would hope this huge "plus-up" for the "peacetime" (or "base," non-war) budget would have addressed some of the decades-old problems. It did not, and today they are worse.

The "base" DOD budget has increased, in inflation-adjusted dollars, from \$370.8 billion in 2001 to \$518.3 billion in 2009, a 40-percent increase.³ Comparing the actual annual Pentagon base budgets to the base budgets planned at the start of the first George W. Bush administration (for the years from 2001 to 2009⁴) computes to an added \$770 billion. These data are shown in Table 2.

Assessing the plus-ups each of the military services has received will demonstrate how more money has made our problems worse.

Table 2. Additional Funding in the "Base" DOD Budget⁵

	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
2001 "Plan" (Extrapolated for 2006-2009)	291.1	294.8	301	308.3	316.4	325	335	346	358	2875.6
"Base" Budgets	295	327.8	378.6	379.6	402.6	421.1	441	483.2	518.3	3647.2
DOD "Plus-Up"	3.9	33.0	77.6	71.3	86.2	96.1	106	137.2	160.3	771.6

The Army

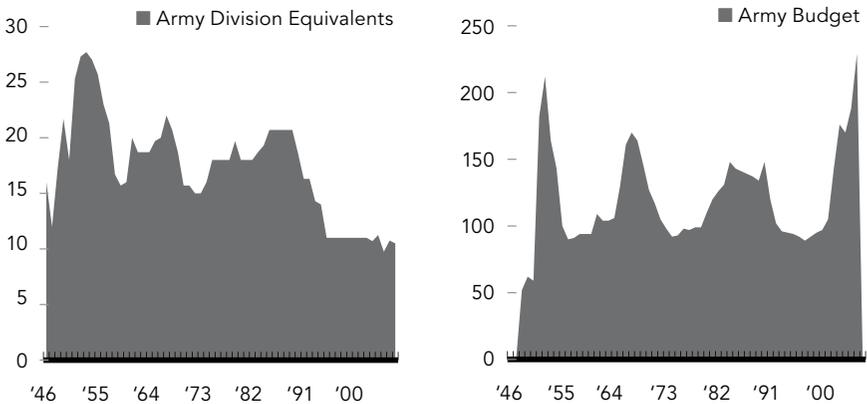
In early 2001, the Army anticipated an approximate budget of \$719 billion for the period 2001 to 2009. Not counting the \$387 billion subsequently appropriated for Army participation in the wars in Iraq and Afghanistan, the Army's "base" budget was increased by \$191 billion to \$911 billion. The data used for these calculations are displayed in Table 3 on the next page.

And yet, the \$191 billion plus up the Army received in its base budget for 2001 to 2009 resulted in no increase in the Army's size. In fact, the historic trend is for more

Table 3. U.S. Army Funding: 2001-2009⁶

	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
2001 "Plan" (Extrapolated for 2005-2009)	70.6	74.4	76.1	78.0	79.9	81.9	84.0	86.2	88.4	719.5
Base Budget Requests	73.0	80.1	90.8	93.8	97.0	98.5	110.3	128.4	139.0	910.9
Base Army Budget above 2001 Plan	2.4	5.7	14.7	15.8	17.1	16.6	26.3	42.2	50.6	191.4
Total Appropriations (including War Funding)	77.0	85.9	121.1	153.1	152.8	174.9	218.5	175.4	139.0	1297.7
Calculated War Funding	4.0	5.8	30.3	59.3	55.8	76.4	108.2	47.0	-	386.8

Figure 4. Army Division Equivalents and Budget (with Trendlines) (Billions, FY 2009 Dollars)¹¹



money to result in a smaller Army. The publicly available budget and force structure data for the Army for the post-World War II period are shown in Figure 4 above.

As shown, the Army's "division equivalents"⁷ have declined over time to a post-World War II low at about 11 divisions. Army budgets have shown highs and lows, but the overall trend is one of growth, and the Army budget is now at an all-time high.

A key equipment inventory – ground fighting vehicles – continues to age while it also shrinks. The Congressional Budget Office measures that this inventory will continue to shrink even as the number of combat units has stabilized in the early 21st

century. It is a trend that Army plans will accelerate in future years.⁸

Evidence on readiness is also discouraging. Army budget materials for 2009 state the Army achieved 459 tank training miles (per tank per year) in 2008. During the Clinton administration, the Army set a goal of about 800 tank miles per year but did little better than 650. During the previous George H.W. Bush administration, the Army had a goal of 1,000 miles, and 800 were sometimes achieved. In other words, in 2008, tank crews are training at a level less than half of what was considered optimal in the early 1990s.

The Army asserts today that all units sent to the theaters in Iraq and Afghanistan are “fully ready.” This assertion is suspect. Training time in the continental United States for unconventional war has been reduced thanks to the high operating tempo and the recurrent deployments of the same units back to combat after just 12 months back home. Only a portion of the non-deployed time is spent retraining for redeployment. More importantly, during that limited training time, units do not always have available to them the proper equipment with which to train, and the people in those units get truncated time to train together – whether or not they possess the right equipment – with new personnel. This makes it very difficult, if not impossible, to achieve the kind of intra- and inter-unit cohesion that the Army has come to understand is needed to give soldiers the best chance to survive and prevail in combat. Few, if any, units inside the United States are rated as fully combat ready, and yet when they go into Iraq or Afghanistan they are rated as such. While the units deploying to Iraq and Afghanistan may be officially designated as “ready,” those ratings are based on the subjective assessment of unit commanders in a command atmosphere that appears not to welcome “bad news.”⁹

The Army is not alone in facing these problems.

The Navy

In early 2001, the Navy anticipated an approximate budget of \$900 billion for itself and the Marine Corps for the period 2001 to 2009.¹⁰ Not counting \$95 billion subsequently received for the wars in Iraq and Afghanistan, the Navy/Marine Corps “base” (non-war) budget was increased by \$174 billion to \$1.07 trillion. The data used for these calculations are displayed in Table 4 on the next page.

As with the Army, a significant budget plus-up resulted in a stagnant force structure. Over time, the trend is – again – worse: more money means smaller forces. The publicly available budget¹⁵ and force structure data for the U.S. Navy for the post-World War II period are shown in Figure 5 on the next page.

As shown, the fleet today is as small as at any point in the post-World War II period. From a 1953 high of 835 combat ships, it persistently hovers in the 21st century at about 300.

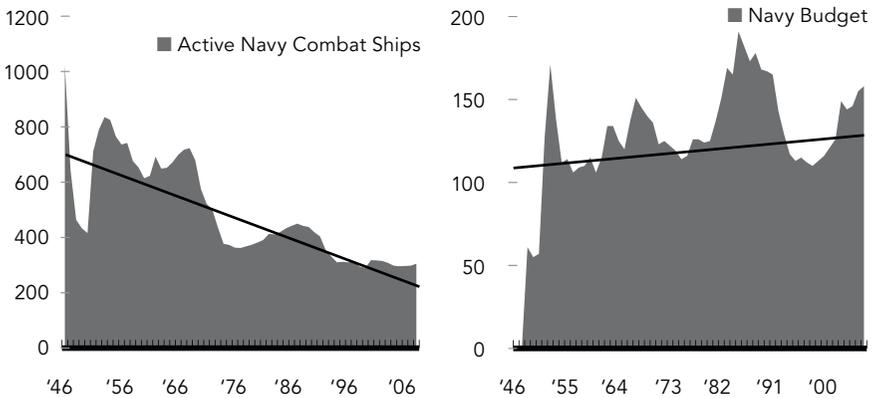
The budget shows ups and downs, but the overall trend is for it to increase in “real” dollars.¹⁶ In recent years, the Navy’s budget has increased sharply, mostly for

Table 4. U.S. Navy & Marine Corps Budget¹²

	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
2001 "Plan" (Extrapolated for 2005-2009)	91.7	90.8	94.1	96.4	98.7	101.6	105.8	108.7	111.9	899.7
Base Budget Requests	92.6	98.7	108.2	114.5	119.2	125.4	127.1	139.5	149.0	1074.2
Base Navy Budget above 2001 Plan	0.9	7.0	14.1	20.1	20.5	23.8	21.3	30.8	37.1	174.5
Total Appropriations (including War Funding)	95.5	102.4	124.1	124.3	131.7	143.8	150.3	147.7	149.0	1168.8
Calculated War Spending	2.9	3.7	15.9	9.8	12..5	18.4	23.2	8.2	N.A.	94.6

Figure 5.

Navy Active Duty Combat Ships and Budget (with Trendlines) (Billions FY 2009 Dollars)¹³



expenses not related to the wars in Iraq and Afghanistan, and yet the force structure remains flat.

In the Air Force, things are the same.

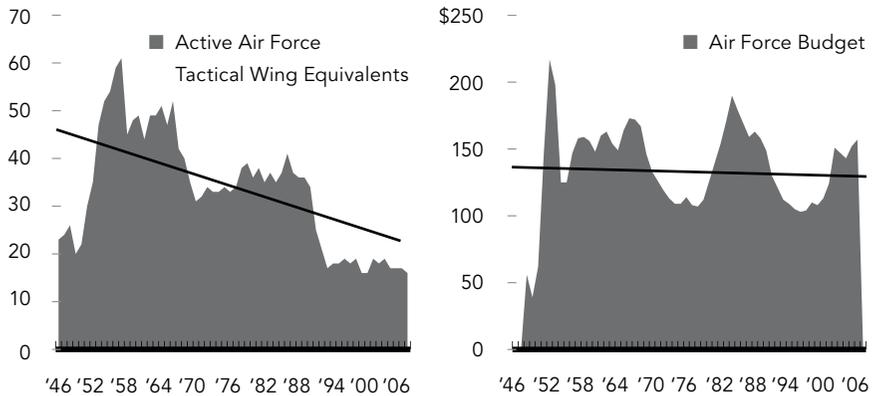
The Air Force

Since early 2001, the Air Force has received more than \$200 billion above what was then planned for its "base" budget.¹⁷ The data used for this calculation are displayed in Table 5 on the next page.

Table 5. U.S. Air Force Budget¹⁵

	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
2001 "Plan" (Extrapolated for 2006-2009)	85.3	88.3	89.3	90.9	93.3	96.3	100.3	104.3	108.3	856.3
"Base" Budget	85.4	95.3	106.9	113.7	120.4	127.4	130.3	136.4	143.7	1059.5
"Base" Budget above 2001 "Plan"	+0.1	7.0	17.6	22.8	27.1	31.1	30.0	32.1	35.4	203.2
Total Appropriations (including War Funding)	89.5	100.2	125.2	125.6	127.9	141.7	148.9	139.2	143.7	1141.9
Calculated War Spending	4.1	4.9	18.3	11.9	7.5	14.3	18.6	2.8	N.A.	82.4

Figure 6. Air Force Active Fighter & Attack Wings (Equivalents)²¹
and Budget (with Trendlines) (Billions, FY 2009 Dollars)²²



Source: National Defense Budget Estimates for FY 2009, Office of the Under Secretary of Defense (Comptroller) March 2008 and Air Force Historical Research Agency (Maxwell AFB) analysis, "Force Structure, United States Army Air Forces and United States Air Force."

The budget and force structure data for the Air Force for the post-World War II period are shown in Figure 6 above.

The tactical inventory of the Air Force is as small today as at any point in the post-World War II period. From a 1957 high of 61 "wing equivalents," it persistently hovers in the 21st century at 16 to 18.¹⁸

There have also been budget ups and downs, but the overall trend is for the budget to remain constant in inflation adjusted dollars, and today the amount of spending for the Air Force is above the overall trendline. Thus, at a level of spending today higher than the historic norm, we have an Air Force tactical inventory that is as small as it has ever been.

While shrinking, the overall Air Force inventory has aged further. Each year, *Air Force Magazine* publishes an almanac that presents data on the age of the "Active-Duty Fleet." The 2001 U.S. Air Force Almanac shows the average age of the total Air Force "active-duty fleet," all types of aircraft, to be 21.2 years, a then historic high. The 2007 almanac shows the current "active-duty fleet" to have further aged to 23.0 years, a new historic "high."¹⁹

Perhaps the most important measure of readiness to fight effectively in the air is pilot skill. One way to measure that is the number of hours each month pilots practice air combat in the air, known as "flying hours." In 2006, Air Force representatives informed the author that F-22 pilots receive just 10 to 12 hours of air combat training in the air per month. Air Force budget justification data assert that F-16 pilots receive 16 to 18 hours per month. In the late 1990s, Air Force fighter pilots were receiving 18 to 20 hours per month. During the Vietnam War, about 25 hours per month was considered just adequate. In the 1960s, when they were at the height of their proficiency, fighter pilots in the Israeli Air Force were getting 40 to 50 hours per month. Anywhere from 10 to 18 hours each month is completely inadequate. In wartime, one would hope and expect air combat training hours to rise.²⁰

Given the failure of the \$200-plus billion the Air Force received from 2001 to 2009 to stem the shrinking, aging, less ready nature of the Air Force, there is no reason to think that throwing still more money at the Air Force will do anything but perpetuate the problems.

Where Did the Money Go?

Considering the \$191 billion plus-up for the Army, the \$174 billion added for the Navy, and \$203 billion for the Air Force, it is reasonable to ask: "Where did the money, \$568 billion, go?"²³

Pork

Congress added approximately \$60 billion in pork to post-Sept. 11 defense bills. The impact on national defense is a matter of apparent indifference to Congress. Pork projects are added without an objective estimate of their cost, without an independent evaluation of their need or efficacy, and certainly without the politically risky idea of competing the contract. Competition for pork contracts is especially unpopular on Capitol Hill. It might permit non-preferred contractors, universities or other trough feeders to receive money that a member of Congress intends for someone else.

It is not unreasonable to consider every penny of the \$60 billion to have been squandered.

Hardware cost growth

If one inspects the Defense Department's Selected Acquisition Reports (SARs)²⁴ for just before and at the end of the George W. Bush administration, one finds two types of pathologies: programs that increased in cost, and programs that increased in cost to buy fewer weapons. For example:

- In 2000, DOD planned to buy 458 V-22s for the Marines for \$38.1 billion (unit cost: \$83.2 million per V-22). In 2007, the same 458 V-22s were rescheduled to cost \$54.2 billion (unit cost: \$118.3 million).
- In 2000, 30 SSN-774 Virginia-class submarines were going to cost \$65.7 billion; today, the same 30 will cost \$92 billion. Unit cost increased from \$2.2 billion to \$3.1 billion.

These would appear to be the better-managed programs. In other cases, we don't get the same quantity for more money. We get fewer systems for more money.

- In 2000, the Air Force promised 341 F-22 fighters would cost \$61.9 billion (\$181.5 million each). Today, the estimate is \$64.5 billion for 184 aircraft (\$350.5 million each). Program cost went up 4 percent. Unit cost increased by 185 percent. The inventory to be bought shrank by 46 percent.
- In 2000, the Navy projected 12 LPD-17 amphibious warfare ships for \$10.7 billion (\$891.7 million each), while today we are to expect 9 LPD-17s for \$14.2 billion (\$1.6 billion each). Program cost went up 33 percent; unit cost increased by 179 percent. Inventory decreased by 25 percent.

Taken together, the Government Accountability Office (GAO) found that major system costs from 2000 to 2007 escalated by \$295 billion.²⁵

Some of these systems never have and never will appear in the wars in Iraq and Afghanistan. Given their irrelevance to war as we currently know it, one must also consider whether not just the cost growth should be considered waste but rather the entire cost of the program.

Understanding how these ultra-high-cost programs were started and are sustained is essential to recognizing the nature of the problem, as well as the character of the solution.

Getting the camel's nose under the tent

Some advocates of high-cost weapon systems will claim that the reduced size of the military force structure is offset by “tremendous” advances in capability. These advocates are quick to skip over the aging nature of these “high-tech” inventories and the serious readiness problems.

Advocates of high-cost and -complexity weapons also ignore two other key attributes. First, the equipment is far more expensive than they allow. They describe costs in terms of “flyaway” unit cost that ignores development and testing expenses, and they routinely understate the cost relationship with equipment being replaced. Systems end up costing far more than what is promised at the “buy-in” stage, and they often cost multiples of what they are replacing, even more when maintenance costs are considered. Second, the advocates grossly overstate how well complex systems perform, both initially in theoretical discussions and in combat after they are deployed.²⁶ For some systems, real improvements do occur, but they are far less than what is advertised, as well as virtually never being commensurate with the cost increase. Other times the new, more expensive system brings no meaningful improvement, and by virtue of the smaller, less ready force size, real-world capability is significantly reduced.

Understanding this “buy-in” process in detail is important. There is no better explanation of the intricacies and implications of it than in some remarkable congressional testimony offered by Franklin C. Spinney to the House of Representatives in June 2002.²⁷

“Chuck” Spinney had come to the end of a long career in the Defense Department. I must disclose that he is a personal friend, and a professional colleague on numerous efforts over the years. He is also well-known among countless defense journalists and analysts in the Pentagon, Capitol Hill and Washington, D.C. think tanks. Time and time again he produced thoroughly documented forensics on fundamental Pentagon pathologies, including the budget and warfighting consequences of the ever increasing complexity of U.S. weapon systems (“Defense Facts of Life”), the un-realism of future spending plans (“The Plans/Reality Mismatch”),²⁸ the politicization of weapons acquisition in the Pentagon, industry, and Congress (“Defense Power Games”),²⁹ the wars in Kosovo, Iraq and Afghanistan, and much more.³⁰ Relentlessly following the data to wherever it led, Spinney had the habit – most unwelcome in Washington – of presenting data and analysis that made it all too apparent that much of the conventional wisdom in Washington that surrounded weapons, budgets and policies were not just poorly informed, but driven by selfish agendas.

The process that builds the defense budget and the system that measures it, the financial management system in the Pentagon, are both broken. As Spinney describes it – an observation endorsed in the previous chapter by Thomas Christie and his four decades of intimate observation of the system – when various entities put together the Pentagon's spending plans, they bias their cost estimates downward, their performance estimates upward and they resist any effort to correct the inaccuracies. A fundamental

characteristic of this system is not just its refusal to measure its past, present and future, but also its inability to do so accurately, were it ever to try.

Imagine the implications: when managers in the Pentagon make a program decision, they cannot accurately identify the effects of what they are doing. For some, this is a matter of choice as they do not want to scare off support (due to “sticker shock”) for the system being advocated. For others, it is a question of being unwilling to challenge the generally accepted wisdom that advocates in the military services, industry, think tanks and Congress promote as well-informed, “pro-defense” thinking.

Spinney starts his analysis with the Pentagon’s Future Year Defense Plan (FYDP). It is the Pentagon’s programmatic and budget road map for five or six years into the future. It is approved by the secretary of defense and the president; it is the definitive statement of what the Pentagon says will happen to programs and budgets “over the long term if Congress appropriate[s] the funds to pay for the first year of that plan.”³¹

It is not just that this long-range plan is consistently wrong; it is consistently biased in a certain direction. The same biases consistently re-occur every year. Spinney came to this conclusion based on his analysis of 26 separate FYDPs. He examined how accurately the cost, quantity and budget predictions of earlier FYDPs matched up with what actually happened. His testimony cited the example of the Navy’s F-18 fighter-bomber.

The first major bias is that the FYDP predicts significantly larger annual production runs than the ones that actually occur. This has major implications. For the F-18, peak production rates of 150 to 200 were predicted; the actual rate never exceeded 84 per year. The optimistic predictions persisted until late in the program, “Long after it should have been clear that the production plan was a pipe dream.”³²

It is important to note that the reason for the production cutbacks was not a lack of money. In the case of the F-18, more money was appropriated than predicted in the first six years of the program, and for the rest of the program, despite a few outlier FYDPs that envisioned bigger budget growth, the amounts spent stayed roughly on track. With production rates being less at predicted or higher levels of spending, it was the unit cost of the F-18 that showed the impact, and the error was not small. Actual production costs, per unit, were commonly twice as much than what was initially predicted.

This mismatch between plans and reality in the F-18 was no exception; Spinney found it in program after program.³³ The results are always the same, regardless of military service, manufacturer, or whether the program is originally based on a domestic or foreign design. He came to the inescapable conclusion that there was a deliberately “low-balled” estimate of future costs early in the program. This bias had the important effect of helping to ensure the program’s approval inside the Pentagon and shortly thereafter in Congress.

This “front-end loading” was just the first step in a two-step process. Next came

the “political engineering” to lock the program in. An essential partner to the buy-in price was the effort by the advocates to parcel out production of F-18 components and subcomponents to as many congressional districts as possible. It is a practice I observed many times on Capitol Hill. Early in the program, before the real costs or other potential downsides of a program are made apparent in actual budgets, the manufacturer ensures that each senator and representative is made fully aware of the production, and jobs, that will occur in their political district. With the member of Congress now “locked in” with the prospect of jobs and spending (“pork”) in his state, and with the public being made fully aware of the negative economic consequences if the program fails or is terminated, political support from the vast majority of states and congressional districts is guaranteed. With these commitments being secured before reality in the form of higher costs (and lower performance) set in, the stage is set to continue to support the program – no matter what. When the actual, higher costs do emerge, decision-makers in the Pentagon and on Capitol Hill take the easy way out by cutting back production rates to keep total costs at an “affordable” level. In the face of adversity, the politicians on both sides of the Potomac make a decision based not on the data and its long-term implications but on the risks presented to their own livelihood and bureaucratic careers.

With many “front-loaded” programs receiving the same buy in, the FYDP becomes overstuffed with unrealistically priced programs. The inevitable result is ever-rising pressure to grow the entire defense budget to accommodate the massive unit cost expansion.

There are important effects at this stage. With the political engineering scaring decision-makers away from permitting program terminations, the resulting lower production rates naturally decrease the inventory being purchased to a rate lower than the aging rate of the existing inventory. Weapons become older and thus more expensive to operate. These higher operating costs face severe resistance due to the drive to find additional money to support the inadequate production rate of the newer, politically engineered weapons. As a result, raids on the operating budget mean less maintenance and repair for both the old and new weapons, and less money available for training as well.

There, you have it: the shrinking, aging, less-ready military force we spoke of earlier. Spinney explained the essential dynamics.

Not keeping track

The Pentagon's broken financial management apparatus is an essential part of this busted system. It is dysfunctional beyond dispute. More than twenty years of reports from GAO and the Pentagon's own auditor, the Inspector General (the DOD IG), make that abundantly clear.

What is less clear – at least to many in Washington – is what that means. Spinney explains it; there is no reliable data link from the past to the present, nor from the pres-

ent to the future. 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.³⁴ Simple questions such as, the actual cost of a component for a weapon system, the amount paid to the contractor and whether the contractor was overpaid, under paid, or did not paid at all, are, in today's system, answered only by the contractor. Incredibly, we rely on the contractor to keep our records for us. DOD's Comptroller (the department's CFO) has estimates, but they are exactly that: estimates.

It is not just a question of satisfying the arcane requirements of green eye-shade accountants. It is a question of having a process to know accurately and understand past, present and future costs, and use that knowledge to inform contemporary decisions. As Spinney puts it, "Today's budget should reflect a sound appreciation of and account for the intended consequences of past decisions as well as the future consequences of current decisions."³⁵

The most likely consequence of a decision to fund a weapon program suggested by a military sponsoring service is not identified. Decisions are made not just in an information vacuum, but in a forest of misinformation – all biased in one direction.

The Pentagon's response is to refuse to solve the accounting problem. As noted above, there are decades of GAO and DOD IG reports detailing the intricacies and depths of the problem, and there are recurring promises from secretaries of defense and DOD comptrollers to solve the problem. Not once have they met their own self-imposed, and relaxed, deadlines. In the late 1980s, Congress, tired of the empty promises from DOD and many other federal agencies, imposed the Chief Financial Officers Act of 1990. It demanded, at long last, that DOD and all the rest clean up their books and prepare themselves to pass an audit. Most did, but not DOD. After a few more years, and more failures, DOD requested, and Congress granted, what amounted to a wholesale exemption from the CFO Act for DOD exclusively. It is today the only major federal agency that not only cannot pass an audit, but that still cannot be audited. The difference is significant. One fails an audit when the accountants track the money and find it misspent. In DOD, the accountants cannot track how the money was spent.

The Pentagon's solution

Instead of accountability, the Pentagon has a solution it strongly prefers: send it more money.

Advocates in the Pentagon and on Capitol Hill complain that the defense budget is being "starved" while it is at historically high levels. For example, today, as it has each year since the mid-1990s, the U.S. Army is seeking to supplement its own budget with extracurricular money, mostly in the form of a "wish list" that it sends to Congress each year after an eagerly anticipated congressional request for it. Citing the many

problems it currently faces, the Army seeks a \$3.9 billion supplement. Taking into account the amount by which the 2009 Army budget has already been increased over and above the extrapolated 2001 plan for 2009, \$50.6 billion (see above), it is apparent that the Army is actually seeking a \$54.5 billion “wish list plus-up.”

The Navy is doing the same. Citing the shrunken size of the fleet, the Navy seeks \$7 billion more than it requested in its official 2009 budget request, \$149 billion, which is an amount well above the Navy's post-World War II average. Taking into account the amount by which the 2009 Navy budget has already been increased over and above the extrapolated 2001 plan for 2009, \$37.1 billion, the Navy is actually seeking a \$44.1 billion plus-up.

Even though it is the service least involved in the wars in Iraq and Afghanistan, the Air Force is seeking the largest “wish list,” \$18.7 billion. Taking into account the additional money already built into the Air Force budget above the 2000-2009 “plan,” \$35.4 billion, the Air Force is actually seeking a \$54.1 billion plus-up.

Having failed to reform a system that requires an increasing amount of money to shrink, age and blunt the armed forces, each of the military services can only suggest one solution: more of the same. The military services have put themselves and the nation on a treadmill of squandered resources with no positive result. They operate in an environment, both in the Pentagon and Congress, where no one fundamentally questions their self-scripted vision of the past, present and future.

Time is way overdue to break the self-destructive chain of declining forces at increasing cost.

Recommendations

Real reforms do not need to be complicated or elaborate, but simplicity does not mean the implementation will be easy. The business-as-usual crowd in Congress, industry, and the Republican-Democratic national security think-tank apparatus will aggressively oppose them.

De-grease the pork

Ending the addition of billions of dollars of dubious pork projects to defense bills each year requires a process to sort out the junk from the worthy projects, if any exist.³⁶ Members of Congress who argue that their earmarks are good ideas should have no problem with competent, independent evaluation of their proposals and a good-government process for implementing them. Any earmark proposed to any defense (or any other) bill should have:

1. An estimate from the Congressional Budget Office for all costs, past, present and future.

2. An evaluation from an independent entity (one with no material interest in the project, which eliminates the Pentagon) to determine if the project is needed and, if needed, whether the proposed solution can be effective. In most cases, GAO can and should provide such evaluations.
3. A requirement that any earmark that successfully emerges from the CBO and GAO evaluations must be submitted to a competitive bidding process, both for initial and for any follow-on work.

This proposal will be vehemently opposed by the vast majority of today's Congress. Members will insist on controlling the evaluation of any earmarks and where the contracts for them are awarded. After all, the whole idea is to send the money to a pre-designated client. To affect real reform, Congress needs – and currently lacks – an uncompromising and uncompromised reformer to make the existing system too painful and politically costly to continue further.

Rectify the books³⁷

No weapon acquisition or policy decision can properly be made in the absence of accurate data about the past and the present, and an objectively obtained view of the likely future. Up to now, the system has been operating in the absence of such data. That must be changed. The first, indeed mandatory, place to start is DOD's program and accounting books. I refer not just to the well-defined, but very important, regime of financial management, but more broadly to accurate information and reliable analysis.

The place to start achieving a rectification of various forms of data in DOD is with financial management. The reform must spread thereafter to the broader realm of the analysis and evaluation of programs and policies.

The new president and the secretary of defense should announce together – to obviate dissension – a “budget pause” at the level of spending Congress has set for the previous fiscal year, 2008. That level would constitute a ceiling, not a floor, for ongoing spending. The purpose is to buy time, without making new financial commitments, to scrub the books. With war funding fully provided at the all-time high 2008 level, Pentagon decision-makers should avoid any new, non-war-related contract or other spending obligations. For example, all weapons program milestone decisions would be frozen, with existing programs sustained only at the level authorized by previously signed contracts. No programs would start or advance to a new milestone, with the possible exception of truly extraordinary, not conjured, circumstances.

The Defense Department's audit agencies, with the help of GAO and private accounting firms as needed, would undertake a maximum effort to complete a comprehensive audit of all DOD components, programs and systems. Simultaneously, war-related managers would perform a comprehensive readiness audit of the military

services and their readiness-related functions, such as training, exercises, spare parts inventories, weapons maintenance and manning.

The point is to find the weaknesses, both in substance and in the quality of information. Problematic programs and policies (and the managers associated with them) would be identified and put on a watch list for ongoing, continuous oversight until the program in question is cancelled or all discovered problems and data uncertainties are resolved.

The purpose of this vital step is to understand current programs and the financial consequences of past decisions. It provides the essential information baseline for going forward. Programs and entities that are so incompetently managed that they cannot comply are obvious candidates for termination, both for the program and its management.

The failure to fix the Pentagon on this essential measure will mean that no other reforms will be meaningful. How can you control an acquisition process that you cannot accurately measure in terms of cost, schedule and performance? We cannot begin to clear out the dubious programs, and, more importantly, end the biased “front-end loading” and the “political engineering” to buy unrealistically assessed new programs without these steps.

Sorting Out the Mess³⁸

During this period and its immediate aftermath, a new series of decisions would be called for by a special panel that would address the relevance, efficacy and affordability of the existing and proposed programs and policies of all DOD components. A new panel of uniquely professional and objective individuals should be convened for two core purposes:

The first purpose is to combine the data made available from the above described process on cost, schedule and performance with an all-source analysis of the overall world situation. Information on the relevance of programs and policies to current threats and realistic future U.S. needs would be combined with more realistic assessments of the programs' and policies' cost, schedule and performance.

The second purpose is to take into account the arguments of all program advocates, from inside the military services, Congress, industry and any other entity interested to make a pleading for – or against – specific programs and policies.

The panel would then make recommendations to the secretary of defense and the president. In some cases the executive branch might be able to cancel contracts for programs that fail to measure up – either for cause or for the “convenience of the government.” However, in many cases the president will likely have to forward legislative recommendations to Congress, perhaps with a recommendation for urgent action.

The panel's recommendations to the secretary of defense, president, and Congress will have to acknowledge real-world budget constraints in several respects. In the past,

more money has made our problems worse (as explained above). The implications of the recommendations for force structure and how and when to use those forces as outlined in this volume, and the calls on the U.S. federal budget for other purposes – such as healthcare and social security reform – are issues that a responsible president will need to seek for Congress to address.

Purists will argue that this will mean that crass budget considerations will be allowed to drive program and security decisions. Correct; it means exactly that. The availability of resources is a necessary and proper consideration in determining strategy and the implements to carry it out. While many in Washington will be horrified that strategy and weapons should be affected by acknowledging whether money is available, the simple truth is that affordability has been in other times and, in fact, should continue to be as a matter of course. To select a strategy and its implementation unconstrained by budget considerations simply facilitates the situation we are now in: a shrinking, aging, less ready national security apparatus at ever-increasing cost.

As a matter of historical record, consideration of strategy, implementation and budget have been, and should be in the future, interactive and nonlinear. To consider the former two in the absence of the latter is to dwell in a cloud-cuckoo-land most typically found in end-of-war bunkers and politically driven prognostications from advocates of an agenda.

With only a very few exceptions, such as “blue-ribbon” panels have a poor record of past performance.³⁹ Learning from the failures and the successes of the past, certain characteristics are essential.

While the views of the defense corporations, the military services and other interested parties should be heard, their membership on such a review panel must be barred for it to have any credibility. Similarly, retired military officers who have any pecuniary relationship with defense corporations must also be barred. Finally, any person accepting membership on the panel, as well as staff, should be barred from accepting any future position with any entity that can gain, or lose, from the panel’s decisions.

Business-as-usual apologists will complain that such rules for membership on a program review panel would call into question their integrity. They will be correct; it does.

They will also ask where the appropriate expertise will be found if the usual legions of interested parties are barred from participating. There are many retired military officers, previous civilian Pentagon officials and former members of Congress who have declined association with the many vested interests that gain from weapons procurement decisions. That they are not prominent among those who typically opine publicly about hardware decisions says more about how America conducts its defense business than it does about the fitness of such people to make these decisions.

If the panel can perform as hoped for by using the data to identify an array of defense programs and policies that should be retained, terminated and significantly

modified, the president should institutionalize the panel as a continuing body in DOD. Indeed, the implementation of the associated recommendations may take several years, and each year there will likely be new, necessary reviews and decisions as the process whittles down to a national security apparatus outlined in this book, or at least one approaching its less bloated dimensions. The continuing work will require its own advocate and basis of authority.

It would help immensely for this process to occur in an atmosphere of “adult supervision,” especially in Congress. Major reforms will be needed there as well if Congress is to re-learn how to perform serious oversight and to legislate in a manner consistent with its own findings.⁴⁰ In an atmosphere of foreknowledge that someone will be looking over their shoulder, asking informed questions and holding them responsible for their promises and their actions, decision-makers and advocates in the Pentagon might become infected with an appreciation for reliable, accurate predictions of the future, along with valid descriptions of past and current events.

The question naturally occurs why the military services and Pentagon officials should be deprived of controlling the acquisition process and whether that “deprivation” should be permanent. Acquisition decisions have been made in the Pentagon by military and civilian bureaucrats for decades, and they have the expertise and resources to make an effective system work properly. A “blue-ribbon panel” would not possess the infrastructure to do everything.

The problem we are trying to address is that the military services have not exercised their control of the system with a positive result. Indeed, their influence in, if not control of, the process in the Pentagon up to now has been such a disaster that clearly a completely new approach must be tried. However, as the independent panel described above – perhaps to be called the “Defense Evaluation Board” – performs its duties, it will require the cooperation of the military services and of civilian bureaucracies in the Pentagon. The military services are sure to be generally hostile to the idea of people beyond their control deciding the fate of their budgets, programs, and policies – a loss of control earned by decades of mismanagement. As the work of the Defense Evaluation Board unfolds, many in the military services and the civilian parts of the Pentagon bureaucracy are sure to be frustrated and uncooperative. Some will attempt to undermine the changes.

As the Defense Evaluation Board’s work progresses, however, a new operating and managerial ethic may become apparent. Some in the military services, or the services themselves as a corporate entity, may learn to “get with the program.” The positive effects, namely more effective fighting forces with adequate support operating in an ethical environment that strives to understand events and to prepare for a complex and difficult future without selfish agendas, will hopefully be manifest. Such an atmosphere is likely to attract strong support from military service members and professional civilian bureaucrats. At some point, the military services – or perhaps

components within those services – may demonstrate their willingness and competence to resume control of their programmatic and budgetary fate.

All services and the components within them will not progress at the same rate. That those that progress rapidly to understand and cooperate with the new environment are duly rewarded will serve as incentive for those that find it more difficult to discard old, ineffective and force-eviscerating management techniques. In the final analysis, it will be important for the military services to “buy in” to the new set of moral, mental and written rules of a reformed Pentagon acquisition system. Failure to do so will imply the need for a wholesale reorganization of the Pentagon, perhaps in a rewriting of the 1947 National Security Act, where completely new approaches to acquisition with less control by the military services may be needed.

Before that bridge is crossed, however, it needs to be established that the decision to allow the re-entry of the military services and other Pentagon bureaucracies to control their budgetary and programmatic fate would be up to the Defense Evaluation Board – in consultation with the secretary of defense and other officials deemed appropriate. Whether even more radical ideas than the Defense Evaluation Board need to be explored should be a matter that is ultimately laid before the military services and the Pentagon bureaucracy to contemplate.

One Final Word

In a system that measures merit by the amount of money spent and maintaining that flow, these changes will meet huge resistance. The changes described here call for a presidential leader with an iron will who will require real, not cosmetic, reforms of a system determined to and skilled at countering any real change. It will also require a president who will stick with the process for years, continuously making decisions that will ultimately reverse the present disastrous course U.S. national security is now on.

The journey will be a difficult one, and many opportunistic politicians – in Congress, the Pentagon and the military services – will attack and attempt to undermine the fundamental changes that need to be made. The one thing that is sure to be more problematic for all than the comprehensive reforms set forth in this volume is the failure to start them and to persist to the end.

ENDNOTES

- 1 The so-called “base” Pentagon budget is that part that does not include special, “emergency” appropriations to fund the wars in Iraq and Afghanistan.
- 2 These trends are addressed in detail in an analysis by Franklin C. Spinney, “Defense Death Spiral,” put together in the late 1990s. It is available at http://www.d-n-i.net/lcs/defense_death_spiral/contents.htm. However, Spinney’s briefing does not include the additional funding that has

been put into the Pentagon's budget since 2000, both for the wars in Iraq and Afghanistan and additional money not related to the wars.

- 3 Also, substantial amounts of non-war spending have been added to appropriations for the wars. Such spending includes additional money for C-17, V-22, F-16, and other aircraft, which are highly unlikely to see service in Iraq or Afghanistan, and money for a reorganization of the Army, initiated well before the wars started. The \$770 billion "plus-up" in base Pentagon spending is a likely understatement.
- 4 The budget plan specified in early 2001 extended to 2005. For the years 2006 to 2009, an extrapolation was made, citing the largest increases consistent with the 2001-2005 plan.
- 5 Source: National Defense Budget Estimates, volumes for 2001-2009, Office of the Under Secretary of Defense (Comptroller).
- 6 Source: National Defense Budget Estimates, volumes for 2001-2009, Office of the Under Secretary of Defense (Comptroller).
- 7 This analysis includes both divisions and separate combat regiments, brigades, and modern brigade combat teams. Earlier independent brigades and regiments are counted at the rate of three per division equivalent. Given the reduction of full size maneuver battalions in modern brigade combat teams, those are counted at the rate of four per division equivalent.
- 8 See Figure 3-5 of "The Long Term Implications of Current Defense Plans: Detailed Update for Fiscal Year 2008 (March 2008)," Congressional Budget Office, at <http://www.cbo.gov/ftpdocs/90xx/doc9043/03-28-CurrentDefensePlans.pdf>.
- 9 The assertions by the author are based on messages from and conversations with direct observers of the character of units deploying to Iraq.
- 10 The budget plan specified in early 2001 for the Navy & Marine Corps extended to 2005. For the years 2006 to 2009, an extrapolation was made, citing the largest increases consistent with the 2001-2005 plan.
- 11 Sources: National Defense Budget Estimates for FY 2009, Office of the Under Secretary of Defense (Comptroller) March 2008; Center of Military History, Historical Perspective on Force Structure Reductions 1946-1988, (Washington, D.C.: 1989); Department of Defense Annual Reports, and Department of Defense Appropriations Bill Reports from the House Committee on Appropriations.
- 12 Source: National Defense Budget Estimates, volumes for 2001-2009, Office of the Under Secretary of Defense (Comptroller).
- 13 Sources: National Defense Budget Estimate for FY 2009, Office of the Under Secretary of Defense (Comptroller) March 2008, and Navy fleet data from annual Department of the Navy Budget Estimates, the Congressional Research Service, and Department of Defense Annual Reports.
- 14 Source: National Defense Budget Estimates, volumes for 2001-2009, Office of the Under Secretary of Defense (Comptroller).
- 15 Budget data for this period of time that separate the Navy from the Marine Corps, or naval shipbuilding from the Navy's other expenses are not readily available.
- 16 FY 2009 "Constant" dollars.
- 17 The budget plan specified in 2001 for the Air Force extended just to 2005. For the years 2006 to 2009, an extrapolation was made, citing the largest increases consistent with the 2001-2005 plan.
- 18 The 16 to 18 "wing equivalents" cited by the AFRHA for the 21st century may be an over-count; Air Force budget justification materials cite just 10 "Air Expeditionary Wings" available during this period. It is not clear to what extent these AEWs may be larger than historically typical wings, thereby justifying the AFRHA count of 16 to 18 "wing equivalents."
- 19 Find *Air Force Magazine's* Almanac editions for these and other years at <http://www.afa.org/magazine/almanacs.asp>.

- 20 The standard Air Force position on these issues is that the technology it pursues may cost more, but it brings extraordinary results on the battlefield. The F-22 is a typical example. As a fighter, it depends on the efficacy of a technological road that has not proven itself in real war. The “beyond visual range” radar-based air war the F-22 is highly specialized to fight is yet to be proven workable, let alone effective, in real-war aerial engagements involving more than a very few aircraft. Moreover, some serious experts, including the designers of highly successful combat aircraft such as the F-15, F-16, and A-10, argue that the F-22 is a huge disappointment in the actual performance characteristics that count in real-world aerial warfare. Also, the costs to acquire these “highly capable” systems are far more than what the advocates will tell you. The dollar’s value has inflated by a factor of twelve since the end of World War II. But the cost of the F-22 has inflated by a factor of 273 the cost of 1946-47 fighter aircraft. Surely, the F-22 performs at a level barely imagined in 1946 by the designers of the Air Force’s first jet fighter, the P-80. But, just as surely, the F-22 does not bring an increase in effectiveness against its likely enemies, even remotely like its cost increase.
- 21 Consistent data on the size of the Air Force in terms of aircraft are not readily available. In lieu of a year-by-year count of actual tactical aircraft for the 1946 - 2008 period, the Air Force Historical Research Agency (AFHRA) at Maxwell Air Force Base has published an analysis of “wing equivalents” of the Air Force’s force structure since the late 1930s. Find this analysis at <http://www.afhra.af.mil/timelines/>. Although this analysis does not track the shrinkage and growth of the Air Force combat aircraft inventory with the best measure (actual aircraft) and may over-count the forces available in more recent times compared to the past, it is used here as the only Air Force data available to the public from 1947 to the present day.
- 22 Sources: National Defense Budget Estimate for FY 2009, Office of the Under Secretary of Defense (Comptroller) March 2008 and Air Force Historical Research Agency [Maxwell AFB] analysis, “Force Structure, United States Army Air Forces and United States Air Force.”
- 23 All Pentagon components received a non-war “plus-up” of \$772 billion. The balance left from the \$568 billion absorbed by the Army, Navy, and Air Force (\$204 billion) went into defense-wide spending for DOD components such as missile defense, special forces, and OSD operations.
- 24 Available at <http://www.acq.osd.mil/ara/am/sar>.
- 25 See GAO testimony at <http://www.gao.gov/new.items/d08674t.pdf>.
- 26 For example, for an analysis of actual high tech system performance in Operation Desert Storm against Iraq in 1991, see “Operational Desert Storm: Evaluation of the Air Campaign,” General Accounting Office, June 1997, GAO/NSIAD, 97-134.
- 27 See Statement by Franklin C. Spinney before the Subcommittee on National Security, Veterans Affairs and International Relations of the Committee on Government Reform, House of Representatives, June 4, 2002. Also available at http://www.d-n-i.net/fcs/spinney_testimony_060402.htm.
- 28 See “Defense Facts of Life: The Plans/Reality Mismatch,” Franklin C. Spinney, (Westview Press, 1985).
- 29 See “Defense Power Games,” Franklyn C. Spinney, Fund for Constitutional Government, 1990; available at http://www.d-n-i.net/fcs/def_power_games_98.htm.
- 30 These “blasters” and other comments and analyses by Spinney can be found at <http://www.d-n-i.net/dni/about/spinneys-comments/>.
- 31 See Spinney Testimony, p. 7.
- 32 See Spinney Testimony, p. 9.
- 33 See “the Plans/Reality Mismatch” in “Defense Facts of Life, Franklin C. Spinney, Westview Press, 1985.
- 34 This is not just Spinney’s conclusion, it is that of virtually any auditor who has reviewed the

Pentagon. Beyond GAO and DOD IG reports, see also "Transforming Department of Defense Financial Management: A Strategy for Change," April 13, 2001, a special report commissioned by the Secretary of Defense to review the situation.

- 35 See Spinney testimony, p. 1.
- 36 See "Congress, the Defense Budget, and Pork: A Snout to Tail Description of Congress' Foremost Concern in National Security Legislation," Winslow T. Wheeler, Independent Institute Policy Report. Copies are available from the author at winslowwheeler@msn.com.
- 37 Important elements of this section are borrowed from Chuck Spinney's thinking in his statement to Congress in 2002. See statement by Franklin C. Spinney before the Subcommittee on National Security, Veterans Affairs and International Relations of the Committee on Government Reform, House of Representatives, June 4, 2002. Also available at http://www.d-n-i.net/fcs/spinney_testimony_060402.htm.
- 38 Important elements of this section are also borrowed from Chuck Spinney's work. See statement by Franklin C. Spinney before the Subcommittee on National Security, Veterans Affairs and International Relations of the Committee on Government Reform, House of Representatives, June 4, 2002. Also available at http://www.d-n-i.net/fcs/spinney_testimony_060402.htm. Also see, "Defense Power Games," Franklyn C. Spinney, Fund for Constitutional Government, 1990; available at http://www.d-n-i.net/fcs/def_power_games_98.htm.
- 39 For a discussion of the negative record of many such panels, see Chapter 1 of "Military Reform: A Reference Handbook," Winslow T. Wheeler and Lawrence J. Korb, Praeger Security International, 2007.
- 40 For a discussion of this author's proposed reforms for restoring oversight on Capitol Hill, see "The Wastrels of Defense," U.S. Naval Institute Press, 2004.