



The Domestic Roots of Perpetual War

Franklin Spinney

Why does the United States spend so much on defense? Why do we feel no more secure? As the government faces pressure to cut federal spending, it is time to get a clearer picture of what motivates our military spending. This former Pentagon analyst provides it.

People say the Pentagon does not have a strategy. They are wrong. The Pentagon does have a strategy; it is: "Don't interrupt the money flow, add to it."

—Col. John R. Boyd (U.S. Air Force, ret.)
Fighter Pilot, Tactician, Strategist,
Conceptual Designer, Reformer

TODAY, TWENTY YEARS AFTER THE END OF THE COLD WAR and the disappearance of the Soviet Union, the United States spends more on defense than at any time since the end of World War II. This is true even if one removes the cumulative effects of sixty-five years of inflation from the current defense budget. Yet, notwithstanding the absence of a nuclear-armed superpower to threaten our existence, this

FRANKLIN SPINNEY retired from the Defense Department in 2003 after a military/civilian career spanning thirty-three years, twenty-six of them as a staff analyst in the Office of the Secretary of Defense. He is author of *Defense Facts of Life: The Plans/Reality Mismatch* (Westview Press, 1985) and has written for many other publications. This essay is adapted from *The Pentagon Labyrinth: 10 Short Essays to Help You Through It*, ed. Winslow Wheeler, Straus Military Reform Project, Center for Defense Information, winter 2010–2011 (forthcoming), chap. 1.

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gigantic defense budget is not producing a greater sense of security for most Americans.

Indeed, we have become a fearful nation, a bunkered nation, bogged down in never-ending wars abroad accompanied by shrinking civil liberties at home. We now spend almost as much on defense as the rest of the world combined, yet the sinews of our supporting economy, particularly the all-important manufacturing sector, are weakening at an alarming rate, threatening the existence of the high-income, middle-class consumer society we built after World War II.

President Barack Obama promised change, but he is under intense pressure to increase the defense budget even further, in part because he is continuing his predecessors' war-centric foreign policy. At the same time, he is being pressured to reduce the rapidly increasing federal deficit, caused in part by the rising defense budget but also by an ill-advised bank bailout and the cyclical effects of the worst recession since the end of World War II. Moreover, the president initially promised to place the Pentagon off-limits, while he sought reductions in discretionary spending for social programs and only reluctantly put defense spending "on the table" when he convened a bipartisan panel to seek a comprehensive path to a balanced budget. Lurking in the background, hanging over the American people like a guillotine, lies the menacing possibility of cutting social security and Medicare. In short, Obama may have promised change, but he is continuing the establishment's business-as-usual practices, including the grotesque diversion of scarce resources to a bloated defense budget that is leading the United States into ruin. Whether Obama's defense policy is a question of his free will is quite beside the point.

The salient question is: How did the American political system maneuver itself into such a destructive straitjacket?

This paper discusses not just the insatiable demands for ever larger defense budgets, but also the directly resulting damage to America's defenses and to the integrity of its politics. And, most important, the paper's purpose is to provoke thought on reversing that pervasive damage.¹

Follow the Money Trail

One source of the pressure for more defense spending is that our two relatively small wars in Iraq and Afghanistan, both much smaller than the Korean or Vietnam war, have stretched our military to the breaking point. These wars are small in terms of scale and tempo of operations. Bear in mind that the Korean and Vietnam wars took place against a backdrop of cold war commitments. Today, the United States is spending more than it did in 1969, when we had 550,000 troops in Vietnam. But the cold war meant that we also maintained hundreds of thousands of troops in Western Europe and East Asia, a huge rotation base at home to support these forward deployments, a large Navy fleet of 679 ships (compared with 287 today) to control the seas, and thousands of nuclear weapons on hair-trigger alert in airborne bombers, missile silos, and submarines. Nevertheless, according to a report issued by the Congressional Research Service, the cumulative costs of the fighting in Afghanistan and Iraq have made the response to September 11 the second-most-expensive war, adjusted for inflation, in U.S. history, exceeded only by World War II.

Despite the expenditures, the day-to-day combat that our troops face is no less grueling. On the contrary, our troops are stressed out and exhausted, and many are traumatized by the intensity of their experiences—all worsened by the endless troop rotations caused by a military manpower base that is too small to sustain even these small wars. Moreover, despite the doubling of the defense budget since 1998, equipment and weapons are being worn out and not replaced, something that did not happen in either Vietnam or Korea. For example, during the Vietnam War, the Air Force modernized its inventory of F-100s and F-105s with considerably more expensive F-4s, A-7s, and F-111s. Today, inventories of weapons and equipment in all three military services are aging rapidly, and modernization is going down the tubes because the new weapons the military services buy are many times more expensive than their predecessors. Therefore, the Pentagon cannot possibly buy enough new weapons to replace existing weapons one for one—even with a defense budget that has almost doubled since 1998.

This current-war problem is the product of a subtle web of dysfunctional bureaucratic modes of conduct taking the form of a systemic pattern of behavior that evolved gradually over the forty years of cold war. This behavior co-evolved with a pattern of military belief systems and distorted financial incentives that also built up slowly and imperceptibly over those forty years. These bureaucratic belief systems slowly insinuated themselves deeply and almost invisibly into a domestic political economy that nurtures financial-political factions of the Military-Industrial-Congressional Complex (MICC). The result is a voracious appetite for money that is sustained by a self-serving flood of ideological propaganda, cloaked by a stifling climate of excessive secrecy. President Dwight D. Eisenhower warned us to guard against the corrosive danger of exactly this in his 1961 farewell address.² He was ignored, and today, fifty years later, the domestic political imperative to steadily increase the money flowing into the MICC reaches into every corner of our society. It distorts and debases our economy, our politics, our universities and schools, our media, our think tanks, and our research labs, just as Eisenhower predicted it would. So, even without the Iraq and Afghanistan wars to hype the money flow, Obama could not have escaped massive pressures to increase defense spending.

In retrospect, it is clear that the cold war served as a domestic political engine to keep the money flowing into the MICC. Many believed—erroneously, as it turned out—that the end of the cold war would produce a “peace dividend” that would shut down the MICC and return the United States to being a normal country engaged primarily in peaceful business, not war. This view did not reflect the reality of the MICC’s political economy.³ By the time the cold war ended in 1991, a true peace dividend would have collapsed the defense industry and its powerful political dependents. To survive and flourish, the factions of the MICC badly needed to evolve a subtle, pervasive shift in strategy, a subliminal mutation in the MICC’s political DNA. It is now clear that this mutation has taken a frightening form: namely, the need to foment an enduring voter-terrifying threat and unending small wars to justify the money flow needed for the MICC’s survival.

Without that never-ending succession of little wars (Somalia, Bosnia, Kosovo, the first and second gulf wars, Afghanistan, Yemen, Pakistan, the war on terror, etc.) keeping the political system lathered up, the MICC's political-economic house of cards would collapse. A little reflection reveals that this mutation actually started in earnest as early as 1990, when Saddam Hussein invaded Kuwait. Clearly September 11 did not create this mutation, but it certainly proved a windfall for expanding the scale and cost of our small wars.

Continuous small wars (or the threat thereof) are essential for the corporate component of the MICC; these companies have no alternative means to survive. Although they now make up a very substantial part of America's much diminished industrial base, they cannot convert to civilian production. Many of them tried and failed; they simply do not have the marketing, managing, engineering, and manufacturing skills to compete successfully in global commercial markets. By 1990, the industrial leaders in the MICC fully understood this central economic fact of the MICC's political economy—namely that, in the prophetic words of William Anders, CEO of General Dynamics in 1991, “most [weapons manufacturers] don't bring a competitive advantage to non-defense business,” and “Frankly, sword makers don't make good and affordable plowshares.”⁴

Anders made this statement in a keynote address to the twelfth annual conference sponsored by *Defense Week*, then a very influential newsletter in the MICC. His intent was to explain why General Dynamics was not going to diversify its business into the nondefense sector, given the end of the cold war. Instead, Anders proposed to undertake a takeover strategy to increase market share in a (temporarily, as it turned out) shrinking market. Anders's speech was a precursor to the “Pac-Man” consolidation strategy promoted by President Bill Clinton's then deputy secretary of defense, William Perry, at a 1993 meeting with the defense titans, a meeting dubbed the “Last Supper.”⁵ Perry's strategy led to a rash of industry-wide mergers in the early to mid-1990s. Significantly, when the defense budget began to grow rapidly after 1998, there was no undoing of the consolidation. Thus, today the defense industry is dominated by three giant all-purpose

weapons manufacturers—two of which now have their headquarters in the Washington, DC, area, and the third (Boeing) with a major government relations office in the DC area as well—to more closely supervise their most important corporate activity: the lobbying efforts that influence the money flow out of the Pentagon, Congress, and the White House.

Turning Clausewitz on His Head

It is easy to throw rocks at President Obama, but he did not create the defense mess nor did his predecessor—though George W. Bush's reckless spending, coupled with incompetent management in the Defense Department under the stewardship of Donald Rumsfeld and the domestic politics of the war-centric foreign and domestic policies that metastasized in the wake of September 11, certainly worsened the crisis and accelerated the Pentagon's day of reckoning.

In fact, Obama inherited a Defense Department that was in the terminal stages of a meltdown first ignited as far back as the mid-1950s, when the unit costs of weapons started to grow substantially faster than the defense budgets.⁶ The deliberate explosion of military electronics spending—radar and other sensors, automation, communications, and then digitization in the late 1960s—greatly accelerated this cost growth and widened the mismatch further. That huge cost growth was (and still is) justified with a myopic argument, entirely tautological, that rising cost and technical complexity were a necessary consequence of our advantages in technology—and it was this technology that was the source of our strength.

The dogmatic belief that greater weapons-system complexity and, even worse, greater organizational complexity enhance combat effectiveness is at the epicenter of the belief system sustaining the MICC. As American strategist Colonel John Boyd explained in his monumental study of war, *Patterns of Conflict*, "Complexity (technical, organizational, operational, etc.) causes commanders and subordinates alike to be captured by their own internal dynamics or interactions—hence they cannot adapt to rapidly changing external (or even internal) cir-

cumstances.”⁷ In truth, not only has the out-of-control complexity of our weapon and command systems fed the MICC by driving up costs,⁸ Boyd showed how it has also shackled our forces in the field, making them rigid, predictable, and highly vulnerable to faster-thinking, more creative, and more adaptive enemies using far simpler weapons and systems of command—an outcome that is becoming increasingly clear in nine years of war in Afghanistan.

In fact, the MICC’s drive toward ever-increasing complexity makes a mockery of the hard-learned lessons of history going back thousands of years.

Most readers have heard of the KISS principle, distilled by World War II GIs out of their hard-won combat experience: Keep It Simple, Stupid. KISS and its antithesis, complexity, were hardly new concepts in the 1940s. They are, for example, at the heart of Carl von Clausewitz’s 200-year-old theory of friction in combat—encapsulated in his famous statement “Everything in war is simple, but the simplest thing is difficult. The difficulties accumulate and end by producing a kind of friction that is inconceivable unless one has experienced war.”⁹ Clausewitz considered friction the pervasive atmosphere of war or the fog of war; his musings on the proper conduct of war emphasized simplicity to reduce this friction.

According to Clausewitz : (1) each adversary possesses an independent will and therefore can act and react unpredictably; (2) uncertainty of information acts as an impediment to vigorous activity (i.e., friction); (3) a variety of psychological and moral forces can impede or stimulate vigorous activity; and (4) military genius can overcome friction, simplifying the myriad difficulties of war. These ideas are timeless but, as Boyd has shown, Clausewitz overemphasized the importance of reducing your own friction while greatly underestimating the importance of amplifying your adversary’s friction.¹⁰ This critique is central because the ideology of the American military—and its academies—purports to be grounded in Clausewitzian thinking. Yet, for at least the past forty years, military service doctrine, headquarters briefings, and defense contractor brochures and propaganda have continuously asserted that increasing the complexity of our technology

and organizations is the key to lifting the fog of war—that is, that it would reduce our friction.

The complexity dogma becomes ever more deeply ingrained, notwithstanding our painful combat lessons on the ineffectiveness of complex weapons and command systems in Vietnam, Kosovo, Iraq, and Afghanistan. While the lessons of Vietnam, Iraq, and Afghanistan are—or ought to be—clear, some readers may question the inclusion of Kosovo in the preceding list. Actually, Kosovo is a case study in the failure of high-complexity weapons and organizational arrangements to deliver their promised performance. U.S. military planners predicted that a “precision” bombing campaign would force the Serbs to capitulate in only two to three days, but the air campaign ground on for seventy-nine days. When the Serbs did not collapse as predicted, the target list grew exponentially. The conduct of the bombing campaign was shaped more by the speed with which targets got through the approval cycle than by any strategy linking a particular target’s destruction to a desired tactical or strategic effect. As a result, NATO bombers effectively destroyed the economic infrastructure of a tiny nation with an economy smaller than that of Fairfax County, Virginia.

But when it was over, NATO intelligence determined that only minute quantities of Serbian tanks, armored personnel carriers, self-propelled artillery, and trucks—all high-priority targets—were destroyed, in part because the Serbs fooled our complex surveillance and precision guidance technologies with simple decoys.¹¹ There are even reports that they used cheap microwave ovens as decoys to attract our enormously expensive radar homing missiles. Serbian troops marched out of Kosovo in good order, their fighting spirit intact, displaying clean equipment and crisp uniforms, and in larger numbers than planners said were in Kosovo to begin with. Moreover, the terms of Serb “surrender,” which the undefeated Serb military regarded as a sell-out by Serbian president Slobodan Milošević, were the same as those the Serbs agreed to at the Rambouillet Conference, before U.S. negotiators led by Secretary of State Madeleine Albright inserted a poison pill (in the form of an intrusive military annex that would al-

low NATO troops unfettered access to Serbia proper) to spoil the deal, so we could have what the politically troubled Clinton administration thought would be a neat, short war.¹²

Failure of the Reform Movement

In the 1970s, 1980s, and 1990s, I was a member of a small group of Pentagon insiders known as the military reformers. My colleagues and I used mounds of data to lay out the future consequences of the cost-budget mismatch in terms that were never rebutted empirically by the defenders of the status quo.¹³ Despite that, we were unable to convince either the Pentagon leadership or members of Congress of the long-term dangers posed by the increasing complexity to the ineffectiveness, the impact of the consequent cost growth on the shrinking and aging force structures, the combat dangers posed by the rigid, techno-dependent mindset, or the corrosive influence of the warped financial incentives that fueled this death spiral.

In response, the factions of the MICC united in persuading a succession of presidents to waste thirty years pursuing the fantasy that we could buy our way out of the military-economic death spiral with ever-larger defense budgets funding fewer yet ever more complex and costly weapons. The circularity of the underlying argument for complexity was perfectly expressed in 1980 by Defense Secretary Harold Brown, a leading proponent of high-tech spending and one of the chief architects of the shrinking, aging force: "Given our disadvantage in numbers, our technology will save us."¹⁴

A telling vignette of the buy-our-way-out fantasy is Ronald Reagan's spending spree beginning in 1981: His budget increases unleashed a round of cost growth wherein weapons costs grew at a far faster rate than ever before, thereby widening the gap between accelerating unit costs and the much slower growth of the overall budget. Those Reagan budget increases led directly to a 1990 combat force structure that, overall, was smaller and older than in 1981. Similarly, the ongoing Clinton-Bush-Obama spending spree that began in 1999 merely set the stage for today's much larger crisis.¹⁵

A Case in Point: The 2010 QDR

It became clear that Obama's defense team was not up to even acknowledging, let alone fixing, the core problems discussed above when the Pentagon released the results of the Quadrennial Defense Review (QDR) early in 2010, one year into Obama's presidency.

When a new president assumes office, as Obama did in January 2009, he inherits the long-range defense budget plan that was produced over the preceding eighteen months by his predecessor. Given the immensity of the Defense Department's total spending program and the reality of a Congress committed to ongoing spending programs, there is little any president can do quickly to change his predecessor's budget in a way that reflects his own policy intentions, unless he wants to throw money at the Defense Department indiscriminately, as Reagan did in 1981.¹⁶ In effect, the new president and his senior staff are prisoners of the department's fatally flawed bureaucratic planning process known as the Planning, Programming, and Budgeting System (PPBS) and all the MICC budget games it contains.¹⁷

The bureaucratic complexity of the PPBS boggles the mind. Its product is the Future Years Defense Plan (FYDP). A FYDP lays out the Pentagon's future spending intentions for thousands of individual spending line items. The first year of the FYDP is the budget that is sent to Congress each February. This annual document purports to link detailed future spending plans for the next five or six years to the actual spending patterns of the previous two years for thousands of program line items. It requires millions of man-hours of staff work over eighteen months to produce a single FYDP. The projections of successive FYDPs alternate annually between five and six years. Congress appropriates annual budgets, yet it takes at least eighteen months to prepare an FYDP, so staff members of the military services and the Office of the Secretary of Defense can be working on as many as three FYDPs at one time: the budget plan currently before Congress, finishing the budget plan the president will submit in January, and the early stages of preparing the FYDP the president will submit a year later. So, with only two months to make changes, and a staff not fully in place, the most a new president can do when he assumes office is

to make a few marginal changes to his predecessor's document. His first chance to make some real defense policy decisions occurs at the end of his first year, with his second budget submission, assuming he uses that year wisely.

But there is more to the bureaucratic freight train rolling over the president. Obama also inherited a congressionally mandated requirement to produce a long-range strategy document during his first year in office. This document is the QDR, required by law every four years, at the end of the first year of a newly elected president's term.¹⁸ The requirement to produce a QDR every four years is yet another pseudo reform originating in Congress to patch over the persistent strategy-budget mismatches that flow out of the deeply flawed PPBS process. In the 1994 National Defense Authorization Act, Congress mandated the Commission on Roles and Missions (CORM). Among the usual plethora of "feel-good" recommendations was the idea that the Defense Department should undertake a major strategy review every four years. Reacting to this, Congress directed the 1997 QDR as a method to conduct a "fundamental and comprehensive examination of America's defense needs."

The QDR is supposed to shape the activities of the PPBS, but they both go on simultaneously and, by necessity, pretty much independently. Nevertheless, the 2010 QDR was Obama's first real chance to imprint his policy intentions on the MICC.

Obama's Defense Department let him down by producing yet another sham QDR.¹⁹ To make a long story short, consider just one important example. Judge for yourself if it suffices to make the point.

First, a little background: The Defense Department has been producing FYDPs since 1962. But it has been repeatedly criticized, quite rightly, for producing defense budgets disconnected from the national military strategy. Because the dollar allocations made in the budget define the government's real policy, the critique was logically equivalent to saying there was no functioning national strategy, and budget decision making was actually driving strategy (which was and still is the case). The QDR legislation was the most recent attempt to deal with this long-standing criticism by requiring the Pentagon to lay out

a framework for matching its military strategy and policy ambitions to its budgetary, people, and technology constraints.

The 2010 QDR, together with the new FY 2011 budget (and accompanying FYDP), therefore, are supposed to permit an analysis of the strengths and weaknesses implicit in the administration's proposed matchup between resources and strategy. This information would then become the grist for a rational national debate by linking strategic considerations to the inevitable compromises made in the sausage-making factory that is Congress. Moreover, as this was the first defense budget Obama controlled from beginning to end, and because it represented \$700 billion-plus that Obama had temporarily put off-limits in the extant debate over spending, it was crucially important for the Pentagon to get the QDR and the accompanying FYDP right in a logically consistent and transparent manner.

The Pentagon flunked the test.

For the past twenty years or so, the mainstream press, the Government Accountability Office (GAO), and the Pentagon's own inspector general have inundated the American public with well-supported horror stories about the aging and shrinking military force structure, the department's unauditible budget shambles, the apparently deliberate inability of its accounting system to track actual expenditures, and the weapons-cost growth that outstrips the budget growth; and, more recently, the wearing out of the force structure caused by our never-ending wars and the alarming increase in post-traumatic stress disorder (PTSD) casualties (and suicides) caused by the excessive troop rotations mandated by shrinking force structures.

With this in mind, readers should examine the QDR and the FY 2011 Budget Overview (QDR, at www.defense.gov/qdr/QDR%20as%20of%2029JAN10%201600.pdf; and the FY2011 Budget Overview at http://comptroller.defense.gov/defbudget/fy2011/FY2011_Budget_Request_Overview_Book.pdf). I urge readers to do word and phrase searches on terms like "age," "weapons aging," "shrinking forces," "weapons cost growth," "wear-out," "excessive troop rotation," "sustainability of deployments," "accounting," "audit," "tracking expenditures," or anything else one can think of that might relate

to the widely known and overwhelmingly important people, money, and hardware problems described above. Determine for yourself whether any of these vital national security issues is addressed or analyzed in either the QDR or the defense budget; most are not even acknowledged.

A search in the “Budget Overview” document for the word “audit,” for example, will take you to pages 7–34, among others, where you will find that the Defense Department set a goal of reaching 100 percent readiness to audit its assets and liabilities by 2017, but the last column shows that the indicator of progress made toward that goal in FY 2010 was deleted at the request of the comptroller, who happens to be the chief financial officer of the Defense Department! Furthermore, the “auditability” asserted for 2017 would not include any audits of specific weapons programs!

Alternatively, you could search for any mention of these central problems by reading the entire text—but be advised, it makes for grim reading. Either way, a reader who approaches this task objectively will end up with the same conclusion: these documents fail to touch on any of the pressing strategy and resource problems described above, much less present plans for correcting any of them.

Defenders of the MICC status quo might say, we must go forward with these ridiculous plans that do nothing but whitewash business-as-usual, because we are at war and need the resources “for the troops.” But that argument merely proves our point about the MICC’s needing continual war to keep its political economy afloat.

Nor is it true that the ongoing wars force us to accept the budget as is: Obama could freeze the nonwar defense budget at this year’s level, just as he is doing for the rest of discretionary spending by the government. He could tell the Defense Department to go back to the drawing board and produce some plans that address the all too real fiscal problems that the country faces. He could declare the bookkeeping shambles a task of the highest national security urgency—which it is—and order the department to clean it up with a massive crash program, leaving the budget freeze in place until full and complete auditability is achieved, or, better yet, conduct the audits itself.²⁰

The omission of critical thinking and the failure to engage the Defense Department's most crucial problems in the 2010 QDR and the FY2011 FYDP are no accidents—they represent a defense of business as usual. And business as usual brings us full circle back to Colonel Boyd's quote at the beginning of this essay: the MIC complex "does have a strategy; it is: don't interrupt the money flow; add to it." QDRs and the FYDPs are merely handmaidens to that strategy.

Conclusion

This essay is adapted from the first chapter in an anthology, written by defense insiders, that aims to give citizens some of the tools needed for understanding and assessing national strategies that serve the country's interest rather than the MICC's. It is hoped that this will enable citizens and their representatives to gain control of the out-of-control defense budget. This goal calls for assessing productive changes in the money flow, changes that contribute to improved training and better combat leadership for our people in uniform, more-effective weapons that cost less, cures for the shrinking and aging forces, and full accountability throughout the Defense Department—sustaining troops in the field without the excessive rotations that incur widespread psychological—and physical—casualties in hugely expensive wars now driven more by the need to keep the MICC afloat financially than by considerations of the national interest.

The aim of the authors in all this can be found in James Madison's call for an informed citizenry: "A popular government without popular information, or the means of acquiring it, is but a prologue to a farce or a tragedy, or perhaps both. Knowledge will forever govern ignorance, and a people who mean to be their own governors must arm themselves with the power which knowledge gives."²¹ In that spirit, we hope to provide enough background and orientation to enable our audience to determine for themselves what has gone wrong and to assess what might be needed to end the ever-rising costs of America's defense meltdown.

Notes

1. A more detailed discussion of these issues is in the full text of *The Pentagon Labyrinth: 10 Short Essays to Help You Through It*, a short handbook written by Pentagon insiders, including retired military officers, civil servants, military, congressional staffers, and defense journalists with more than four hundred years of cumulative experience at the working level. The book will be available at Straus Military Reform Project, Center for Defense Information, Washington, DC (<http://www.cdi.org/smrp/>).

2. Eisenhower's farewell address, delivered January 17, 1961, available at www.americanrhetoric.com/speeches/dwightdeisenhowerfarewell.html.

3. My pamphlet "Defense Power Games," Fund for Constitutional Government, 1990 (<http://pogoarchives.org/labyrinth/01/09.pdf>) showed why it was wrong to believe that a peace dividend would materialize.

4. William Anders, chairman and chief executive officer, General Dynamics Corporation, "Rationalizing America's Defense Industry: Renewing Investor Support for the Defense Industrial Base and Safeguarding National Security," keynote address delivered to the twelfth annual conference of *Defense Week*, October 30, 1991, p. 13.

5. Norman Augustine, "The Last Supper Revisited," *Defense News*, June 26, 2006 (<http://integrator.hanscom.af.mil/2006/june/06292006/06292006-13.htm>).

6. I described this looming meltdown in my "Defense Time Bomb: F-22/JSF Case Study and Hypothetical Escape Option," *Challenge* 39, no. 4 (July/August 1996): 23-33.

7. Col. John R. Boyd, *Patterns of Conflict*, slide 176, available at <http://dnipogo.org/john-r-boyd/>. See also Robert Coram, *Boyd: The Fighter Pilot Who Changed the Art of War* (New York: Little, Brown, 2002).

8. See my *Defense Facts of Life: The Plans/Reality Mismatch* (Boulder: Westview Press, 1985).

9. Carl von Clausewitz, *On War*, trans. M. Howard and P. Paret (1832; Princeton: Princeton University Press, 1976); see especially book 1, chap. 7, which discusses friction.

10. See Boyd, *Patterns of Conflict*, at www.dnipogo.org/boyd/patterns_ppt.pdf, slides 40, 41, and 42.

11. Timothy Thomas, "Kosovo and the Current Myth of Information Superiority," *Parameters* (Spring 2000): 13-29 (<http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&requesttimeout=500&folder=4&paper=471/>).

12. An accurate summary of the poison pill can be found in David N. Gibbs, "Was Kosovo the Good War?" *Tikkun*, June 22, 2009 (www.tikkun.org/article.php/jul_09_gibbs/).

13. For detailed examples of the numbers and logic behind this statement, see *Defense Facts of Life*, "Defense Time Bomb," and my briefing "Defense Death Spiral" (<http://pogoarchives.org/labyrinth/01/05.pdf>).

14. See David Dickson, *New Politics of Science* (Chicago: University of Chicago Press, 1988), 125.

15. See "Defense Death Spiral." The source data is from official records maintained by the military services and the Office of the Secretary of Defense.

16. In 1981, the Reagan administration was so intent on throwing money at the Defense Department that it rushed through an amendment to President Jimmy Carter's budget. Without any systematic review—and not having the time to type up a new budget—Reagan's political appointees directed the department merely to hand-write changes adding billions of dollars to hundreds of line items. Much of this largesse was immediately converted into cost growth in existing programs.

17. For a description of how this fatally flawed budget-planning process produces unrealistic strategic plans, see my statement before the House Subcommittee on National Security, Veterans Affairs, and International Relations, Committee on Government Reform, June 4, 2002 (<http://pogoarchives.org/labyrinth/01/02.pdf>).

18. In the 1994 National Defense Authorization Act, Congress mandated the Commission on Roles and Missions (CORM). Among the usual plethora of “feel-good” recommendations was the idea that the Defense Department should undertake a major quadrennial strategy review. Reacting to this, Congress directed the 1997 QDR as a method to conduct a “fundamental and comprehensive examination of America's defense needs.”

19. See, for example, my critique of the first QDR in 1997, “What Went Wrong with the Defense Review,” *Challenge* 40, no. 5 (September/October 1997): 6–28. Since then, each succeeding QDR has been more flawed than its predecessor.

20. My June 2002 statement to Congress includes a proposal describing one way the president and secretary of defense might achieve these objectives (see <http://pogoarchives.org/labyrinth/01/02.pdf>).

21. James Madison, from a letter to W.T. Barry, August 4, 1822 (<http://press-pubs.uchicago.edu/founders/documents/v1ch18s35.html>).

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