Eisenhower's Neglected Warning

By Melvin A. Goodman
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Editor's Note: In the early years of the Cold War, President Dwight Eisenhower saw the future better than most U.S. leaders, recognizing the dangerous distortions to the nation's political and economic systems from massive investments in military power.

Though Eisenhower surely signed off on some misguided policies – the CIA-engineered coups in Iran and Guatemala come to mind – former CIA analyst Melvin A. Goodman notes in this guest essay that the outgoing president also left the nation with a prophetic warning that wasn't heeded:

On Jan. 17, 1961, President Dwight D. Eisenhower issued his prophetic warning about the military-industrial complex, anticipating the increased political, economic, military and even cultural influence of the Pentagon and its allies.

Several weeks earlier, he had privately told his senior advisers in the Oval Office, "God help this country when someone sits in this chair who doesn't know the military as well as I do."

His concern about the growth of the military-industrial complex was also not new for Eisenhower. Several months after his inauguration in 1953, he warned against warfare that had "humanity hanging from a cross of iron."

In the spring of 1961, I was part of a small group of undergraduates who met with the president's brother, Milton Eisenhower, who was then president of Johns Hopkins University. Milton Eisenhower and a Johns Hopkins professor of political science, Malcolm Moos, played major roles in the drafting and editing of the farewell speech of January 1961.

The actual drafter of the speech, Ralph E. Williams, relied on guidance from Professor Moos. Milton Eisenhower explained that one of the drafts of the speech referred to the "military-industrial-Congressional complex" and said that the president himself inserted the reference to the role of the Congress, an element that did not appear in the delivery of the farewell address.

When the president's brother asked about the dropped reference to Congress, the president replied: "It was more than enough to take on the military and
private industry. I couldn't take on the Congress as well."

In addition to the Congress reference, an entire section was dropped from the speech that dealt with the creation of a "permanent, war-based industry," with "flag and general officers retiring at an early age [to] take positions in the war-based industrial complex shaping its decisions and guiding the direction of its tremendous thrust."

The president warned that steps needed to be taken to "insure that the 'merchants of death' do not come to dictate national policy."

The section also warned against any belief that some "spectacular and costly action could become the miraculous solution to all current difficulties."

President George W. Bush's war in Iraq and President Barack Obama's escalation of the war in Afghanistan certainly come to mind.

Although the Cold War ended two decades ago with the collapse of the Soviet Union, recent presidents have found no way out of increased military deployments and expenditures, nor have they challenged the national security influence of the military.

No president since Eisenhower has genuinely understood the dangers of the Pentagon's increasing influence over our national security policy.

Eisenhower made sure that he was never outmaneuvered by his military advisers, particularly on such key issues as the Bay of Pigs and Vietnam, which his immediate successors thoroughly bungled.

President John F. Kennedy never understood that the Pentagon anticipated the failure of the CIA in Cuba in 1961 and hoped to use its air power to achieve success. President Lyndon B. Johnson failed to challenge pleas from the Pentagon for more force and additional troops in Vietnam until it was too late.

Unlike Kennedy and Johnson, Eisenhower ignored the hysteria of the bomber and missile gaps in the 1950s, as well as the unnecessarily heightened concerns about U.S. security in the National Security Council report NSC-68 in the late 1940s and in the Gaither Report in the mid-1950s, which called for unnecessary increases in the strategic arsenal.

Eisenhower ignored the many Democrats and Republicans who advocated for increased defense spending and even cut the military budget by 20 percent between 1953 and 1955 on the way to balancing the budget by 1956.

Eisenhower clashed with the military mindset from the very beginning of his presidency. He knew that his generals were wrong in proclaiming "political will" the major factor in military victory and would have shuddered when General David Petraeus proclaimed recently that political will is the key to U.S. success in Afghanistan.

Eisenhower knew that military demands for weaponry and resources were always based on inexplicable notions of "sufficiency," and he made sure that Pentagon briefings to the Congress were countered by testimony from the intelligence community.
Henry A. Kissinger was one of the rare national security advisers and secretaries of state who understood Eisenhower's point of view.

During the ratification process for the first Strategic Arms Limitations Treaty (SALT I) agreement in 1972, he countered conservative and military opposition to SALT and the Anti-Ballistic Missile Treaty with two questions opponents of arms control could never answer: what is strategic sufficiency, and what would we do with strategic sufficiency if we had it?

Eisenhower warned in his farewell address in 1961 that the United States should not become a "garrison state," but, nearly 50 years later, we have developed a garrison mentality with unprecedented military spending, continuous military deployments, exaggerated fears with regard to "Islamo-terrorism" (and, now, cyberwars) and exaggerated aspirations with regard to counterinsurgency and nation-building.

Eisenhower understood that it was the military-industrial complex that fostered an inordinate belief in the omnipotence of American military power.

Eisenhower knew the limits and constraints on use of force and did not fall prey to the type of planning that led to Kennedy's Bay of Pigs, Johnson's Vietnam, Reagan's Grenada, Bush II's Iraq and now Obama's Afghanistan. He started no wars and wisely settled for a stalemate in Korea.

He stood alone in heavily criticizing the British-French-Israeli invasion of Egypt in 1956, and he ignored criticism for not assisting the Hungarian uprising weeks later.

Finally, Eisenhower understood that too much spending on defense would weaken both the economy and national security.

"Every gun that is made," Eisenhower said, "every warship launched, every rocket fired signifies ... a theft from those who hunger and are not fed, those who are cold and are not clothed."

Ironically, Soviet President Leonid Brezhnev made the same charge in a speech in 1977, a move that signaled Moscow's interest in detente with the United States - a signal that the Carter administration ignored.

Unfortunately, with the possible exception of President Richard Nixon, we have not had a president who understood the military mindset and was willing to limit the influence of the military.

Democrats such as Kennedy, Johnson and Clinton as well as Republicans such as Reagan, Bush I and Bush II have deferred too readily to the military. They devoted too many resources to the military and often resorted to the use of power instead of diplomacy and statecraft.

The twin military setbacks in Iraq and Afghanistan, where failed counterinsurgency strategies have cost billions of dollars and thousands of lives, should lead to a serious national security debate to prevent the mistakes of the past two decades.
Such a debate should include subjects that aren’t susceptible to a military solution, such as nationalism, religious fundamentalism, ethnic violence and the proliferation of weapons of mass destruction. Vietnam, Iraq and Afghanistan immediately come to mind.

Currently, Obama must deal with a military that wields far too much influence on Capitol Hill and within the intelligence community, controls too much of the U.S. economy and has the leading policy voice on security issues.

Our economy will continue to suffer if we don’t reduce the rising costs of defense ($800 billion), intelligence ($80 billion), and homeland security ($45 billion) in order to make essential investments in education, transportation, and research and development.

In his first two years as president, Obama too often catered to the interests of the military. Now he must begin the task of demilitarizing U.S. national security policy. In doing so, he would do well to heed the philosophy and advice of Eisenhower, who stood alone in countering America’s infatuation with military power.

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“Mr. President: Fifty years ago, on January 17, 1961, Dwight D. Eisenhower bid farewell to the Nation as the President of the United States. At the heart of his farewell address was a warning -- one keenly insightful in its sense of how, in a way new to the American experience, an immense military establishment and a large arms industry had developed in the 20th Century post-war period. While acknowledging the need for a strong national defense, President Eisenhower called for the American People to understand the grave implications of this new aggregation of political and industrial power. In particular, he warned, ‘In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex. The potential for the disastrous rise of misplaced power exists and will persist.’

“The fiftieth anniversary of President Eisenhower’s address presents us with a valuable opportunity today to carefully consider, have we heeded President Eisenhower's admonition? Regrettably and categorically, the answer is, no. In fact, the military-industrial complex has become much worse than President Eisenhower originally envisioned: it's evolved to capture Congress. So, the phenomenon should now rightly be called, the ‘military-industrial-congressional’ complex.

“On July 16, 2009, in a speech to Economic Club of Chicago, then-Secretary Gates described the military-industrial-congressional complex this way: ‘First, there is the Congress, which is understandably concerned … about protecting jobs in certain states and congressional
districts. There is the defense and aerospace industry, which has an obvious financial stake in the survival and growth of these programs. And there is the institutional military itself -- within the Pentagon, and as expressed through an influential network of retired generals and admirals …

“One aspect of the military-industrial-congressional complex I have focused on considerably over the last few years is its role in congressional earmarks -- congressional pet projects, unwanted by the Administration but amounting to billions of dollars annually that frequently take on a life of their own in a way that continues to waste taxpayer resources for years and sometimes decades. In the military-industrial-congressional complex, earmarks are the currency of corruption.

“Another manifestation of the military-industrial-congressional complex I have called attention to is the ‘revolving door’ that exists between the Pentagon and the defense industry. In 1969, then-Senator William Proxmire said this about the revolving door in the context of defense procurement: ‘The easy movement of high-ranking military officers into jobs with major defense contractors and the reverse movement of top executives in major defense contractors into high Pentagon jobs is solid evidence of the military-industrial complex in operation. It is a real threat to the public interest because it increases the chances of abuse… How hard a bargain will officers involved in procurement planning or specifications drive when they are one or two years from retirement and have the example to look at over 2,000 fellow officers doing well on the outside after retirement?’

“Probably the most recently publicized example of the revolving door between the Department of Defense and private industry and the prevalence of the military-industrial-congressional complex in the Department’s planning and procurement processes, is its ‘mentorship’ program. In its most recent story in a series exposing this program, USA Today reported that the Air Force allowed a retired general officer who was then-serving as an executive in The Boeing Company to participate as a ‘mentor’ in a war game involving the aerial refueling tanker that Boeing was at the same time competing to build for the Air Force under a multibillion dollar procurement program. Over the last two years, I have exercised keen oversight of the mentorship program, which I understand has been essentially shut down under the weight of newly promulgated public disclosure requirements -- in other words, former general and flag officers serving as Department ‘mentors’ preferred to exit the program rather than publicly disclose their corporate affiliations and compensation. I ask that my most recent investigative letter on the issue be made part of this record.

“The aspect of the military-industrial-congressional complex I would like to focus on today relates to how the Pentagon buys its very largest weapons systems. That covers the top 100 or so of the Defense Department’s weapons procurement programs -- into which taxpayers have invested to date about $1.7 trillion (that’s ‘T’ for trillion). In particular, I would like to focus on how the military-industrial-congressional complex has kept even some of the most poorly-performing programs funded -- siphoning-off precious resources even while they go over-budget, face years of schedule delays and fail to deliver promised capability to the warfighter.
“To be clear, the military-industrial-congressional complex does not cause programs to fail. But, it does help create poorly-conceived programs -- programs that are so fundamentally unsound that they are doomed to be poorly executed. And, it does help keep them alive -- long after they should have been ended or restructured.

“By ‘poorly conceived,’ I mean major programs that are allowed to begin despite having insufficiently defined requirements; unrealistic cost or schedule estimates; immature technology or too much manufacturing and integration risk; or unrealistic performance expectations. By ‘poorly executed,’ I am referring to programs that poorly perform because of, among other things, unanticipated design, engineering, manufacturing or technology problems. These sorts of programs should either never have been started to begin with or should have been significantly restructured or terminated at the end of the day. And yet, through the influence of the military-industrial-congressional complex, they are allowed to enter the defense procurement process and to persist -- often under guise of a ‘concurrent development’ acquisition strategy and executed under ‘cost-plus’ contracts.

“Specifically, the military-industrial-congressional complex helps ensure that poorly-conceived programs get on rails -- and stay there -- with ‘production money’ when they are supposed to still be in development. And, for Industry and many of their sponsors in the Pentagon and on the Hill, that’s desirable because it is far more difficult to restructure or terminate a production program -- even one that’s performing poorly -- than one that’s in development. In the military-industrial-congressional complex, if excessive concurrency is a drug, then the cost-plus contracts used to facilitate it are its delivery vehicles.

“Over the last decade of so, what I have described here has resulted in a massive windfall for Industry. But for the taxpayer and the warfighter, it has been an absolute recipe for disaster.

“With the federal budget deficit having hit $1.3 trillion for the 2011 budget year and facing the fact that the defense budget will likely not grow to any significant extent in the near-term, we in Congress must be mindful of how the military-industrial-congressional complex can negatively affect decisions to buy and keep major weapon systems.

So, how does the military-industrial-congressional complex help create problem programs and keep them going long after they should be cancelled or restructured? A review of some of the problems with the original Air Force tanker lease deal is instructive. From that first attempt by the Air Force to replace its aging airborne tanker aircraft, which started nearly a decade ago, we now know that very early in the planning of a major defense acquisition program, senior officials from Industry and the relevant Service(s) work with senior Members of Congress to ensure that the economic -- and therefore political -- benefits of the program will be distributed widely among key congressional states or districts. That ensures long-term political buy-in and support.

“How much could the military-industrial-congressional complex’s
negative influence ultimately cost taxpayers? Once again, consider the original tanker lease deal as just one example.

“That deal would have had new aerial refueling aircraft developed under a cost-plus contract, which exposes the taxpayer to, and protects the contractor from, the negative impacts of cost overruns and schedule delays. Once developed, those new tanker aircraft were supposed to be leased -- not bought outright -- from a sole-source contractor, as provided under a multi-billion dollar earmark stuck in a defense appropriations bill without having been vetted by the Administration or reviewed by the relevant congressional oversight committees. That unusual acquisition strategy was based on a case that the Air Force presented at that time, which the deal’s congressional sponsors roundly endorsed, that the legacy fleet of tankers needed to be replaced ‘urgently.’ Needless to say, that case was proven false. There can be no doubt that the original tanker lease deal was a classic creation of the military-industrial-congressional complex.

“When we compare the likely costs of the sole-source tanker lease with the costs of the recently concluded tanker competition—which calls for ‘fixed-price’ development and a purchase under full-and-open competition, the difference is dramatic. According to recent analysis by the Department of Defense, the original tanker lease deal would have, over the lifecycle of the aircraft, cost taxpayers billions of dollars more -- for a less capable airplane.

Those billions that could have been lost under the original tanker lease deal are effectively the cost associated with the military-industrial-congressional complex when it is allowed to run unchecked and unchallenged. And, they are, particularly in the current fiscal environment, utterly unsustainable.

“The lesson of the original tanker lease deal is that the powerful combination of interests that comprise the military-industrial-congressional complex can be strong enough to both give birth to procurement programs that should never have been started in the first place and nurture programs that should have been killed or fundamentally restructured early on -- to the grave detriment of the taxpayer and our servicemen and -women.

“While, over the last couple of years, former Secretary Gates ended some of the most poorly performing major programs in the defense enterprise, the situation remains serious. The new National Military Strategy calls the growing national debt a ‘significant security risk.’ And, as the Government Accountability Office (GAO) noted in its March 2011 report, since 2008 the total acquisition cost of the Pentagon’s major defense acquisition programs in its current portfolio has increased by $135 billion -- about half of which is attributed to pure cost growth and the other half due to cuts in the intended number of weapons we planned to buy. It shouldn’t come as any surprise that, as a result, about half of the Pentagon’s very largest weapons procurement programs exceed cost-performance goals agreed to by the Pentagon, the Office of Management and Budget and GAO. In fact, GAO’s March report found that about one-third of all major weapons programs since 1997 have had cost overruns of as much as 50 percent over their original projections. And, noting that ‘the costs of developing and buying weapons have
historically been, on average, 20 percent to 30 percent higher’ than Pentagon estimates, the Congressional Budget Office (CBO) recently projected that, in addition to health care, higher costs for weapons systems will increase the Pentagon budget by about $40 billion over the next five years.

“Congress and current leadership at the Department of Defense have tried to attack these problems, but they have not been successful in changing the prevailing culture yet. For example, after several attempts to change the Pentagon’s buying approach, which (as CBO noted) rarely, if ever, correctly predicts how much a program will likely cost, the Weapons Systems Acquisition Reform Act (WSARA) of 2009 created an Office of Cost Assessment and Program Evaluation to analyze the cost of new programs and why they fail. It also required the Pentagon to keep closer tabs on technology maturity and emphasized testing new weapons before they enter production. As a result of the WSARA, some newer major programs are not making the mistake of relying on overly optimistic cost estimates provided by the contractor, or of staking too much production-money too early -- before critical technologies, design drawings and manufacturing processes have stabilized and matured. But, even this new law will be judged well only if the Pentagon can demonstrate some success with its largest acquisition programs -- even those that went into development before the WSARA’s enactment.

“The F-35 ‘LIGHTNING II’ JOINT STRIKE FIGHTER (JSF) program is a good example of one such program. Last week, I spoke at length about this program, so today I will keep my remarks about it brief.

“Currently, the F-35 is the Pentagon’s largest weapons procurement program. It was originally intended as a revolutionary, affordable solution to the Navy’s, Marine Corps’ and Air Force’s tactical aviation needs for the future. With three different versions of the aircraft for each Service and commonality in design among those versions, the Pentagon sold this program as a fifth-generation strike-fighter that would, more so than any other major defense procurement program, be cost-effectively developed, procured, operated and supported. According to the Pentagon, the program ‘was structured from the beginning to be a model of acquisition reform.’

“That has not been the case.

“When the program was first launched, the Pentagon planned to buy over 3,000 Joint Strike Fighters, but the development effort has performed so poorly that we can now only afford to buy 2,457 of them. And, given recent delays and restructuring moves, that number could go down further. To date, the total cost to buy all of the aircraft as intended has grown by about $150 billion to $385 billion. The cost of each Joint Strike Fighter is now 80% over the original (2001) baseline estimate and that is expected to increase. It would be hard to buy a car at 80% over the original sticker price without looking for major tradeoffs. Currently, the Joint Strike Fighter costs on average about $133 million each, and that is without an engine. We have invested about $56 billion in R&D costs in this project through fiscal year 2010.

“Over the nearly 10-year life of the F-35 program, Congress has authorized and appropriated funds for 113 of these jets, but as of today the
program has delivered just 20 flying aircraft -- with most of them are being used for testing. Early production aircraft just started to be delivered a few months ago -- three years late.

“The main problem with the program has been this: before the Pentagon went ‘all in’ on the F-35 program, it never really understood the risks associated with developing and integrating the F-35’s critical technologies and manufacturing each version of the plane, much less how much money and time would be needed to overcome these risks. So, ever since the Pentagon awarded Lockheed Martin a contract to develop the Joint Strike Fighter contract in 2001 and despite having signed several follow-on contracts with it for blocks of ‘production’ aircraft, the program has effectively been stuck in development. Experts call what the Pentagon has been trying to do here ‘concurrent development.’

“I call it a mess. Using a ‘concurrent development’ strategy to procure high-risk weapon systems that promise generational leaps in capability when (1) their underlying design is unstable; (2) the risks associated with developing their critical technologies and integration are not fully known; and (3) their manufacturing processes are immature, is a very bad idea. And, trying to do this under ‘cost-plus’ contracts is a recipe for disaster.

“In July 2011, the Department revealed that the cost for the first three lots of early-production aircraft, amounting to twenty-eight jets bought under cost-plus contracts, exceeded by about $1 billion the original estimate of about $7 billion. The Department also indicated that taxpayers’ share of this overrun amounted to about $771 million. The program’s prime contractor would absorb approximately $283 million.

“Moreover, just a few days ago, the Department indicated that the costs of the fourth lot of early-production aircraft, bought for the first time in the program’s history under a fixed-price-type contract, may be as high as 10 percent over that contract’s $3.46 billion target cost. This is a $350 million overrun, with only about 40% of that work completed to date. This suggests that the costs of the program have still not been contained, despite two years of concentrated effort by the Pentagon to bring costs under control.

“Just last week, the program executive officer of the Joint Strike Fighter program (PEO-JSF) indicated in a media interview that the JSF program needs to slow down production and deliveries of the aircraft. He attributed this to the need to open up the aircraft and install fixes to numerous structural cracks and ‘hot spots’ that the program has discovered in the plane over the last year or so. He estimated that the work needed to remedy these cracks could add an additional $3 to $5 million per jet.

From these comments, I understand that the overlap between development and production, called ‘concurrency,’ that persists in the program is still too great to assure taxpayers that they will not have to continue paying for costly redesigns or retrofits due to discoveries late in production.

“My frustration and, more importantly, the taxpayers’ frustration, with the chronic failure of this program to deliver required combat capability on time and on schedule cannot be overstated. This frustration is conveyed...
well in a provision in the Conference Report accompanying the Fiscal Year 2012 National Defense Authorization Act that would require that the sixth lot of early-production aircraft be procured on a firm fixed-price basis. Apparently, the fixed-price contract used for the fourth lot, which provides that overruns between a 'target cost' and 'ceiling price' be shared between the government and prime contractor, is failing to incentivize the contractor to control its costs. So, tougher measures are warranted. We should all hope that they work.

"Another example is the Marine Corps' EXPEDITIONARY FIGHTING VEHICLE (EFV). The Marine Corps and General Dynamics originally promised that the EFV was going to be the most advanced and operationally effective amphibious assault vehicle ever produced. Originally designed to be an 'over-the-horizon' platform to protect the Navy's ships from mines and shore-based missiles and maximize our flexibility and the enemy's difficulty in planning a defense, the EFV was intended to be capable of being launched from a ship up to 25 miles away from shore and speed to a landing zone at 25 knots. Once ashore, the EFV would then be able to travel at speeds equal to those of the Abrams tank. The Marines were originally supposed to buy over 1,000 of these vehicles, which were to be initially operable by 2010, at a total cost about $7.3 billion.

"Needless to say, things didn't turn out that way.

"Prototypes of the EFV were tested at about 1,900 pounds too heavy and blew past original cost estimates for research and development. Testing also revealed significant problems in terms of limited visibility, excessive noise, breakdowns in the loading system of the 30mm gun, and concerns about the hull's vulnerability to IED attacks. From its start in 1996 to about 2007, the Marine Corps and General Dynamics said, 'don't worry.' But at the end of the day, the program's cost rose by 55% to over $14 billion and initial capability was pushed back to 2016. At the start of this year, the cost of each EFV was expected to be as much as $23 million and the estimated costs to operate and maintain the vehicle went up with the increase in that price. The Commandant of the Marine Corps estimated that the EFV would consume over 90% of the Marine Corps' total ground combat vehicle budget. Against that backdrop, former Secretary Gates and the Commandant called for this program to be terminated. Unfortunately, the taxpayers had invested about $3 billion, and the Marine Corps had waited 15 years, for an improved amphibious vehicle that simply became too costly to buy.

"Another example of a legacy acquisition program in trouble is the V-22 OSPREY. Inspired by the failure to rescue hostages from Iran in 1980, the V-22 was originally designed to be a revolution in vertical take-off aircraft. It was intended to improve, beyond anything currently in the arsenal, the Marine Corps' and our Special Forces' capability to get in, get out, and resupply from long ranges at high speeds in hostile landing zones.

"What we ended up with has been great expectations and enormous costs.

"Since it was first deployed, the Marine Corps' version of the V-22 has
had a ‘mission capable rate’ in the middle to high 60% range, as compared to the latest versions of the Army heavy-lift helicopters, the CH-47s, which had readiness rates in the high-80s to low-90s. During its recent deployments in Afghanistan, in fact, the V-22’s engine saw a service-life of just above 200 hours -- well short of the 500-600 hours that the program’s managers originally estimated. That has caused the cost per flying hour to more than double to over $10,000, as compared to about $4,600 per hour for the much older CH-46 it is intended to replace, or about $2,600 per hour for a new, modern MH-60 Blackhawk helicopter. When it is not being repaired, the V-22 performs its missions impressively. But, the sustainment cost of keeping the V-22 flying is eating up the Marine Corps’ budget and causing aircraft maintainers to work much harder than should be required for a brand new aircraft.

“While the V-22 program was supposed to cost just over $39 billion, independent estimates are that it will come in at $56 billion—a 43% increase. The price per aircraft itself has risen by 186%, from $42.8 million to $122.5 million. You will notice that this hybrid helicopter-airplane’s unit cost is approaching that of the troubled F-35 priced at about $133 million a copy, as I mentioned earlier. And, the budget-strapped Marine Corps may have to afford both of them.

“Recently, the Marine Corps conceded that, over the last three years, the lifetime cost of operating its V-22 aircraft had increased 64 percent -- to $121.5 billion. Given the likelihood of major cuts to defense spending, many budget experts are now recommending that buying more of the Marine Corps’ version of the V-22 be stopped -- in favor of cheaper helicopters, including those that the V-22 was supposed to replace. So much for ‘transformational’ capability.

“Military space procurement programs are among the most notorious for chronically performing poorly. Indeed, as a share of all the Defense Department’s major weapons programs, the Air Force has more programs that have had cost overruns of at least 30 percent over their original, or 15 percent over their revised, projections than any other Service. And, that has much to do with the how many military space programs comprise the Air Force’s overall portfolio of major defense acquisition programs.

“The SPACE-BASED INFRARED SYSTEM HIGH (SBIRS-HIGH) program is a particularly good example. This program has been a problem since its inception in 1996. In fact, 5 years into the program -- in 2001 -- an independent review cited the program as ‘too immature to enter the system design and development phase’ and observed that the program was based on faulty and overly optimistic assumptions with respect to, among others things, ‘management stability and the level of understanding of requirements.’ The independent review also highlighted a breakdown in execution and management resulting from those overly optimistic assumptions and unclear requirements that essentially ‘overwhelmed’ government and contractor management.

“That was 2001, when it was determined that total program cost growth could exceed $2 billion, a 70 percent increase in cost. And, here we are today, 10 years later, and the system still has not achieved its objectives. In fact, it was just launched -- for the first time -- recently, on May 7, 2011.
“Originally estimated to cost $2.4 billion, it is now expected to cost nearly $16 billion, roughly 7 times the original estimate. With SBIRS’ finally having been launched, we will see if it has overcome its continuing software issues and delivers its improved ballistic missile-monitoring capability as promised. I am, however, not optimistic: the satellite was launched even though the flight system software was not ready, and the ground control software needed to exploit the satellite’s full capabilities is still lagging.

“It is worth bearing in mind that the Government Accountability Office’s latest March 9, 2011, report on major defense acquisition programs notes that SBIRS has the odious distinction of breaching the ‘Nunn-McCurdy’ law on cost growth a record four times -- the most of any major weapons program. It’s a hall-of-famer.

“By the way, the Defense Department just recently reported to Congress that the next pair of these satellites, built by Lockheed Martin, could cost $438 million more than previously estimated and could be delivered a year late.

“SBIRS is, however, not the only space program that has been facing these types of problems. Over the past decade, most -- I repeat, most -- of the Defense Department’s space programs have been over cost and behind schedule. Their delays have in fact been so significant that we now face potential gaps in capabilities in vital areas dependent on space procurement such as weather monitoring and ultra-high frequency communications.

“After years of spiraling costs and under the specter of diminishing budgets, the Air Force now says it wants to buy space assets in bulk to save money. Only in Washington could programs with the kind of history of mismanagement and unparalleled cost-growth and schedule-delays we have seen in large military satellite and launch programs -- which in the most egregious cases have yet to see a single day of operational performance or demonstrate intended capability -- be proposed for economic savings by buying its related components in bulk.

“Until the Air Force overhauls how it buys its biggest and most expensive military space assets -- more than simply doubling down on bad bets -- these kinds of programs will continue to be painful case studies of how problematic our overall system for acquiring major weapons remains.

“In the area of military space procurement, the AIR FORCE’S ADVANCED EXTREMELY HIGH FREQUENCY (AEHF) satellite is worth mentioning. This system of satellites is supposed to replenish the existing ‘Milstar’ system with more robust and secure communication capabilities for strategic and tactical warfighters. While AEHF-1, the first of six of these satellites, was launched in August 2010, glitches with its thruster delayed the satellite from reaching its planned orbit by more than a year and significantly affected when the other two satellites will launch. In connection with how the prime contractor, Lockheed Martin Space Systems, has performed on this program, the Air Force penalized Lockheed Martin by reducing its award fee under the contract by $15 million. The Air Force reportedly took this action because the Lockheed Martin did not properly flush out one of the satellite’s fuel lines, which
caused the engine ignition to fail. Otherwise, how does the Air Force intend to address these glitches? Well, just a few days ago, it awarded Lockheed Martin a $312 million cost-plus contract modification to conduct ‘on-orbit anomaly analysis.’ Lockheed Martin asserts that this award is unrelated to the satellite’s problems. I call it another good example of ‘business as usual.’

“One space acquisition program that I have focused much on in the Fiscal Year 2012 National Defense Authorization Act is the Air Force’s EVOLVED EXPENDABLE LAUNCH VEHICLE (EELV) program. In connection with amendments to this bill that I offered on the EELV program that would enhance congressional oversight, I spoke to this program extensively in connection with floor consideration of this legislation a couple of weeks ago. So, I won’t repeat myself today. Suffice it to say now that the increasing cost of launching satellites into space has become a major problem. And, with defense dollars likely to decline for as far as the eye can see, driving down the cost of space launch is tough because, with regard to ‘EELV-class’ rockets, only one company provides the U.S. government with the ‘heavy’ launch capability it needs--the United Launch Alliance, ULA, comprised of former competitors Lockheed Martin and Boeing.

“Largely because of the lack of competition and the Department’s reliance on a sole incumbent provider, by some estimates, EELV’s costs may increase by more than 50 percent over the next 5 years. This is neither desirable nor affordable.

“In my view, only competition can meaningfully drive down these costs. With the active assistance of the General Accountability Office, I will continue to look at this program carefully in the future. I ask that the October 21, 2011, letter that I sent to Secretary Panetta, with Chairman Levin, on this issue be made part of this record.

“I should take care not to overlook the Army. Among all the Services, the Army has had the poorest record of pumping billions of dollars into weapon systems that were never deployed. A recent Army study indicated that since 1995 almost 40% of research dollars that the Army spent did not result in the procurement of any product. The Army spent at least $32 billion on development, testing and evaluation of 22 weapons programs that were later cancelled -- almost a third of its budget for creating new weapons. And, every year since 1995 the Army spent $1 billion on doomed programs. Since 2004, canceled Army programs have consumed between $3.3 billion and $3.8 billion per year. That represents an average of 35-45% of the Army’s annual budget for development, testing and engineering, or 25% when factoring in the cancellation of the hugely expensive FUTURE COMBAT SYSTEMS (FCS) program.

“That brings us squarely to the FCS program. To say that this program was a spectacular, shameful failure would not do it justice. As first envisioned in 1999 by then-Army Chief of Staff General Eric Shinseki, FCS was intended to be a revolution in capability -- the centerpiece of the Army’s effort to transform itself into a lighter, more modular and more deployable fighting force. Originally and erroneously executed under a type of contract more fitting for small cutting-edge-research-type programs, FCS was supposed to develop 18 manned and unmanned ground systems, including sensors, robots, UAVs and vehicles, all
connected by a complicated mobile electronic network. When work began on this program in 2000, the Army estimated that the first combat units would be equipped by 2011 and that all of the Army’s ground combat formations would be equipped by 2032. The Army initially estimated the entire effort would cost about $160 billion dollars.

“By July 2006, however, independent cost estimators at the Pentagon pegged total procurement costs at upwards of $300 billion. And, from there and with the assistance of a fundamentally flawed fee structure that was not focused on objective results, FCS’ total cost just kept growing. As of 2009, the Government Accountability Office found that only 3 of FCS’ 44 critical technologies were mature. By that time the Army had used over half of its planned development funds. In April 2009, then-Secretary Gates terminated most of the program. He did, however, authorize the ‘spin-out’ of certain FCS elements that were deemed to be most technologically mature into what was renamed the Early Infantry Brigade Combat Team (EIBCT). The Army kept Boeing as the prime contractor.

“After the EIBCT spin-out failed two important tests in the summers of 2009 and 2010, the Pentagon decided to cut its losses on the program by letting the Army buy equipment for only two brigades of the small ground robots that had been developed and one network integration kit to link it together. Otherwise, the Defense Department ended plans to buy the remaining FCS hardware. While subcontractors were ordered to stop work, Boeing remains under contract -- working with the Army to negotiate the costs of terminating the contract, which of course taxpayers will have to eat.

“Rather than serve as the centerpiece of the Army’s efforts to transform itself, the FCS program, which the Pentagon’s current acquisitions chief described as ‘irrevocably damaged [from the start] by poor systems engineering’ ended up as a spectacular failure.

“While the Army has had its problems, the Navy’s LITTORAL COMBAT SHIP (LCS) program is another example of a fundamentally flawed acquisition process. Originally conceived by former Chief of Naval Operations Vern Clark as a revolutionary new, affordable class of surface combatant -- about the size of a light frigate or Coast Guard cutter -- the LCS was to be able to conduct shallow-water and near-shore operations. But, as compared with a frigate or a cutter, it would be considerably faster. With several ‘plug-and-fight’ mission packages, it would also be far more capable. LCS was originally also promoted by the Navy as being unique for its use of an automation system that would significantly reduce the number of sailors needed to maintain and operate it, especially as compared to a frigate or a destroyer. However, the Navy put the program at risk from the start by adding a profusion of new ‘requirements’ that caused costs to skyrocket, and as a result the LCS program has yet to deliver on its promise. 

“What the Navy originally said it wanted -- and what could be delivered on budget and on schedule -- have proven to be irreconcilable. As a result, the LCS program acquisition strategy has changed several times -- with the Navy cancelling contracts with both sets of competing contractor teams. Whether the Navy has gotten past those fundamental issues afflicting the program remains to be seen.
The first two LCS contracts set the cost of the sea frame at $188 million each. After spiking to over $730 million, the cost is now about $400 million per hull. In December 2010, the Pentagon’s chief tester gave LCS poor performance ratings, saying that ‘LCS is not expected to be survivable in terms of maintaining a mission capability in a hostile combat environment.’ He also found several reliability problems in systems required for self-defense and mission-package support. Given the extent of unresolved technical deficiencies and the fact that the combined capability of the mission packages with the sea frames has yet to be demonstrated, I continue to be very troubled by the Navy’s decision late last year to set aside the then-pending competition and award contracts to each of the bidders on the program.

The Navy’s decision was particularly disconcerting given the testimony that the Congressional Budget Office (CBO) and Congressional Research Service (CRS) provided to the Senate Armed Services Committee hearing in December 2010 that suggests that the actual life-cycle costs of buying both versions may be a lot higher than the Navy thinks. Unless the program is further restructured to drop one of the variants, at this point, I expect the program will fail in one of its key objectives: affordability. This program has been anything but the quick and inexpensive derivative of commercial designs that it was originally intended to be to rapidly increase the size and flexibility of the Navy’s surface fleet.

Another example of how flawed the Pentagon’s weapons procurement process is can be found in the F-22 RAPTOR program. When the Pentagon and the defense industry originally conceived of the F-22 in the mid-1980s, they intended it to serve as a revolutionary solution to the Air Force’s need to maintain air superiority in the face of the Soviet threat during the Cold War. The F-22 obtained ‘full operational capability’ twenty years later -- well after the Soviet Union dissolved. When it finally emerged from its extended testing and development phase, the F-22 was recognized as a very capable tactical fighter, probably the best in the world for some time to come. But, plagued with developmental and technical issues that caused the cost of buying to go through the roof, not only was the F-22 twenty years in the making, but the process has proved so costly that the Pentagon could ultimately afford only 187 of the planes -- rather than the 750 it originally planned to buy.

Unfortunately, the F-22 also ended up being effectively too expensive to operate compared to the legacy aircraft it was designed to replace. It also ended up largely irrelevant to the most predominant current threats to national security -- terrorists, insurgencies, and other non-state actors. In fact, if one were to set aside the F-22’s occasional appearances in recent big-budget Hollywood movies where it has been featured fighting aliens and giant robots, the F-22 has to this day not flown a single combat sortie -- despite that we have been at war for 10 years as of this September and recently supported a no-fly zone in Libya.

Politically engineered to draw in over 1,000 suppliers from 44 states represented by key Members of Congress and, by the estimates of prime contractor Lockheed Martin, directly or indirectly supporting 95,000 jobs, there can be little doubt that the program kept being extended far longer than it should have been -- ultimately to the detriment to the taxpayer and the warfighter. As such, it remains an excellent example of how much
our defense procurement process has been in need in reform. We may fight a near-peer military competitor with a fifth-generation fighter capability someday, but we have been at war for 10 years and until a few months ago had been helping NATO with a no-fly zone in Libya. And, this enormously expensive aircraft sat out both campaigns.

"Moreover, as a result of problems with its OBOG (On-Board Oxygen Generating) system, which has caused pilots to get dizzy or, in some cases, lose consciousness from lack of oxygen, on May 3, 2011, the Air Force grounded its entire fleet of F-22s. While this grounding was lifted earlier this year, exactly why F-22 pilots have been experiencing hypoxia remains unknown -- but similar unexplained incidents continue.

"And then, there is the issue of the sky-rocketing maintenance costs to the Air Force in trying to sustain a barely adequate 'mission capable rate' for the F-22. Its seems that the 'plug and play' component maintenance features that were supposed to reduce costs for the Air Force over the life cycle of the aircraft doesn’t really play well. And, each time a panel is opened for maintenance, the costs to repair the 'low-observable' surface in order to maintain its stealthiness have made this critical feature of the aircraft cost-prohibitive to sustain over the long-run. Finally, it seems that the engineers and technicians designing the F-22 forgot a basic law of physics during some point of the development phase -- that dissimilar metals in contact with each other have a tendency to corrode. The Air Force is now faced with a huge maintenance headache costing over hundreds of millions of dollars-and-growing to keep all 168 F-22s sitting on the ramp from corroding from the inside out.

"One thing is clear: because of a problem directly attributable to how aggressively the F-22 was acquired -- procuring significant quantities of aircraft without having conducted careful developmental testing and reliably estimating how much they will cost to own and operate -- the 168 F-22s, costing over $200 million each, may very well become the most expensive corroding hanger queens ever in the history of modern military aviation.

"The DDG-1000 ZUMWALT CLASS DESTROYER is another good example of a program that did not live up to its original cost, schedule and performance promises. Originally estimated in 1998 to cost about $1.1 billion each and to deliver in 2015, the DDG-1000s are now expected to cost $3.5 billion each and will be delivered no earlier than 2017. In fact, DDG-1000 grew in cost so much that rather than buying 32 of them, as originally planned, we can afford only three. While the taxpayer has paid for the construction of all three of these ships, not a single one has been launched yet or demonstrated that it is capable of serving as intended. So, for sunk costs in excess of $10 billion and after 13 years, we have three destroyers in the process of being built and, as such, have yet to see a single day of operational use or return on investment to the taxpayer.

"I could go on. Other examples of poorly performing programs include the Missile Defense Agency’s AIRBORNE LASER (ABL) effort and the VH-71 PRESIDENTIAL HELICOPTER REPLACEMENT program. Former Secretary Gates radically downsized the Airborne Laser into a research and development program after the Pentagon sank $5.2 billion into it—and terminated the Presidential Helicopter after its estimated unit costs approached that of a full-size 747, starting it over as the VXX
program. That said, both programs have starring roles demonstrating how badly major procurement programs can spin out of control and the role the military-industrial-congressional complex plays in making it nearly impossible to rein them in.

“If you think you heard a lot of the same words about each of the programs I discussed, you would be right. Those words describe root causes of why big programs fail: aggressive promises for ‘revolutionary’ capability; poorly understood or fluid requirements; unrealistic initial cost estimates; overly optimistic schedules and assumptions; unreliable manufacturing and integration risk assessments; starting major production with an immature design or unproven critical technologies; and poorly performing government and industry teams. The disruption from those root causes has been exacerbated by a shocking lack of any accountability. So, over time, we have been left with a defense procurement system that has actually incentivized over-promising and underperformance. In the face of the military-industrial-congressional complex, the taxpayer and the warfighter have not stood a chance.

“So, going forward, what can be done to prevent the havoc the military-industrial-congressional complex can wreak on how we buy major weapon systems? Well, little can be done to disrupt the inherent biases of those who are the major forces in the military-industrial-congressional complex to maximize their own particular interests. But, we can help the Department of Defense reform itself by developing a weapons procurement process that directly responds to the root causes of failure by, for example, starting programs on a solid foundation of knowledge with realistic cost and schedule estimates and budgeting to those estimates; locking in sufficiently defined requirements early; managing the cost, schedule and performance trade-space effectively to ensure that needed capability is procured within a fixed, reasonably short period of time; insisting on early and continued systems engineering; leveraging mature technologies and manufacturing processes; not procuring weapon systems that promise generational leaps in capability in a single bound; and definitely not doing so under cost-plus contracts.

“We must also ensure transparency and accountability throughout, and use competition to encourage industry to produce desired outcomes and better incentivize the acquisition workforce to do more with less. We should also embrace initiatives geared at making the government as skilled and knowledgeable a buyer as Industry is a seller. With the right leadership, such approaches may help overcome the negative, pernicious effects of the military-industrial-congressional complex on how we buy major weapon systems. And, given how tightly woven the military-industrial-congressional complex is into the fabric of our society and economy, this is all we can really hope for.

“Only after implementing such an approach over a period of time and under the right leadership can one hope to see the most elusive of all behavioral improvements—enduring cultural change. But, if achieved -- and it most certainly can be -- cultural change would be a powerful panacea to the ‘unwarranted influence’ of the military-industrial-congressional complex in the defense procurement process.

“In conclusion, providing for the common defense is the first, highest, and most explicit duty of the federal government from which all other
political rights, economic well-being, and freedoms flow. But, in times of austerity such as we now face, the Defense Department cannot waste resources. The Pentagon must do the hard work and make the hard choices to prioritize better and manage limited resources better, and reinvest any savings in providing more return and benefit to the warfighter and the taxpayer. Defense spending will be part of the budget debate going forward, simply as a result of its size within the overall federal budget. We cannot allow the military-industrial-congressional complex to obscure that fact any longer and, even worse, disrupt our ability to make hard choices.

“There can be no doubt that we have clearly failed to abide the warning President Eisenhower issued in his speech fifty years ago. But, I do find some comfort that times of fiscal restraint and austerity can drive desired change -- even in the face of daunting systemic obstacles like the military-industrial-congressional complex.

“What we must do is embrace the opportunity to alter our myopic course, starting now, recognizing -- as President Eisenhower did -- that ‘[we cannot] mortgage the material assets of our grandchildren without risking the loss also of their political and spiritual heritage.’

“Given the stakes involved, it is not too late to start. The times, in fact, demand it.

“Thank you, Mr. President.”

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12/05/11  FLOOR STATEMENT BY SENATOR JOHN McCAIN ON THE F-35 JOINT STRIKE FIGHTER PROGRAM

12/07/11  FLOOR STATEMENT BY SENATOR JOHN McCAIN ON RUSSIA

12/14/11  FLOOR STATEMENT BY SENATOR JOHN McCAIN ON IRAQ

Current record

12/15/11  REMARKS BY SENATOR JOHN McCAIN IN SUPPORT OF THE CONFERENCE REPORT OF THE NATIONAL DEFENSE AUTHORIZATION BILL