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THE CASE FOR AEROSPACE AND DEFENSE SPENDING AS ECONOMIC STIMULUS

BY MARK NACKMAN

...But threats, new in kind or degree, constantly arise.

Of these, I mention two only.

A vital element in keeping the peace is our military establishment. Our arms must be mighty, ready for instant action, so that no potential aggressor may be tempted to risk his own destruction.

Our military organization today bears little relation to that known by any of my predecessors in peacetime, or indeed by the fighting men of World War II or Korea.

Until the latest of our world conflicts, the United States had no armaments industry. American makers of plowshares could, with time and as required, make swords as well. But now we can no longer risk emergency improvisation of national defense; we have been compelled to create a permanent armaments industry of vast proportions. Added to this, three and a half million men and women are directly engaged in the defense establishment. We annually spend on military security more than the net income of all United States corporations.

This conjunction of an immense military establishment and a large arms industry is new in the American experience. The total influence – economic, political, even spiritual – is felt in every city, every Statehouse, every office of the Federal government. We recognize the imperative need for this development. Yet we must not fail to comprehend its grave implications. Our toil, resources and livelihood are all involved; so is the very structure of our society.

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.

We must never let the weight of this combination endanger our liberties or democratic processes. We should take

nothing for granted. Only an alert and knowledgeable citizenry can compel the proper meshing of the huge industrial and military machinery of defense with our peaceful methods and goals, so that security and liberty may prosper together.

Akin to, and largely responsible for, the sweeping changes in our industrial-military posture, has been the technological revolution during recent decades.

In this revolution, research has become central; it also becomes more formalized, complex, and costly. A steadily increasing share is conducted for, by, or at the direction of, the Federal government.

Today, the solitary inventor, tinkering in his shop, has been overshadowed by task forces of scientists in laboratories and testing fields. In the same fashion, the free university, historically the fountainhead of free ideas and scientific discovery has experienced a revolution in the conduct of research. Partly because of the huge costs involved, a government contract becomes virtually a substitute for intellectual curiosity. For every old blackboard there are now hundreds of new electronic computers....

...It is the task of statesmanship to mold, to balance, and to integrate these and other forces, new and old, within the principles of our democratic system – ever aiming toward the supreme goals of our free society...”¹

I. INTRODUCTION

Since President Eisenhower’s famous “military-industrial complex” speech, delivered as he left office in January of 1961, there has been a healthy mistrust of America’s Aerospace and Defense companies by the general public. Like any large industry, there are good and bad individuals, honest and dishonest, wholesome and

¹ President Dwight D. Eisenhower's Farewell Address, January 17, 1961.

corrupt. The Aerospace and Defense sector is no exception to this. There has been no shortage of scandals to sway the public's opinion either.

Some recent examples include the Boeing-Druyun procurement integrity and fraud case, where major Air Force systems acquisitions were biased in the Boeing Company's favor by Darleen Druyun, a then senior Air Force procurement official, because of employment afforded to Druyun and members of her family.² Or the even more recent and highly publicized fraud investigation of Kellogg, Brown & Root's (KBR) cost accounting on the U.S. Army's Logistics Civil Augmentation Program (LOGCAP) contracts.³ But there is little public attention to the vast majority of Aerospace and Defense procurements and programs which are executed properly, on-time, and ethically. That said, at least two very important facts have radically changed since 1961.

A. U.S. CORPORATE PROFITS EXCEED TOTAL DEFENSE OUTLAYS

First, it is no longer the case that total defense spending exceeds the net income of all U.S. companies. In fact, the ratio has been radically inverted. When U.S. Secretary of Defense Robert Gates proposed his government fiscal year 2010

² See *Lockheed Martin Aeronautics Co., Comp. Gen. B-295401 et al.*, (Comp. Gen. Feb. 24, 2005); Jeffrey Branstetter, *Darleen Druyun: An Evolving Case Study in Corruption, Power, and Procurement*, 34 PUB. CONT. L.J. 443 (2005); George Cahlink, *Ex-Pentagon procurement executive gets jail time*, GOV'T EXEC, 1 Oct 2004, available at: <http://www.govexec.com/dailyfed/1004/100104g1.htm> last accessed 4 May 2009.

³ See Elise Castelli, *KBR contract accounts for 'vast majority' of contract fraud cases in war zones*, FED TIMES, 4 May 2009, available at: <http://www.federaltimes.com/index.php?S=4072265>, last accessed 4 May 2009; and Carrie Dann, *Army's largest contractor in Iraq under renewed attack*, CONGRESS DAILY, 4 Mar 2009, available at: http://www.govexec.com/story_page.cfm?articleid=42649&dcn=e_ndw, last accessed 7 May 2009.

Department of Defense budget, it called for top line total spending of 533.7 billion dollars.⁴ Whereas the net income of all U.S. companies (aka, 'U.S. corporate profits'), even in a time of a significant financial downturn, has fluctuated between 1.2 to 2 trillion dollars over the past year.⁵

Even with the somewhat controversial supplemental budgets in the 75 to 130 billion dollar range, the ratio still has been turned over on its head. Some would suggest that the actual spending on "military security" is significantly higher, when taking into consideration such outlays as the 22 billion dollars sought by the Department of Energy for nuclear weapons and other appropriations, such as for the Selective Service and the National Defense Stockpile, the 106 billion sought for the Department of Veterans Affairs, the 43 billion sought for the Department of Homeland Security, the 49 billion sought for foreign military and economic aid by the Department of State, or the 28 billion sought by the Department of Treasury to fund military retirements benefits.⁶ But even that calculus brings the total to approximately 974 billion dollars⁷, still well under net U.S. profits.

This change in the ratio of total defense spending vis-à-vis net U.S. corporate profits is not problematic. In fact, it is probably the sign of a healthy democracy. The

⁴ See OMB's A NEW ERA OF RESPONSIBILITY, RENEWING AMERICA'S PROMISE, pages 54-57, available at: http://www.whitehouse.gov/omb/assets/fy2010_new_era/Department_of_Defense.pdf, last accessed 7 May 2009.

⁵ See <http://www.bea.gov/national/index.htm#corporate>, last accessed 5 May 2009.

⁶ Winslow T. Wheeler, *Defense budget baloney*, appearing on POLITICO.COM, 6 May 2009, available at: <http://www.politico.com/news/stories/0509/22149.html>, last accessed 8 May 2009.

⁷ *Id.*

purpose of this paper is not to advocate a return to that ratio of U.S. Aerospace and Defense spending. However the fact that the ratio has been turned upside-down does demonstrate how Aerospace and Defense spending has been eclipsed by other U.S. commercial industries since President Eisenhower warned that the “military-industrial complex” might threaten to acquire “unwarranted influence.”⁸

B. RESEARCH AND DEVELOPMENT SPENDING IS THREATENED

Second, the research and development that drove the “technological revolution” is threatened. Even when, in 1961, President Eisenhower noted that the surge in “research has become central...” to that technological revolution,⁹ there were already disincentives for companies to develop intellectual property, especially in the context of government procurement. This led to a decline which began to be felt at the height of the Cold War when American innovation began to suffer as a result of an outdated of policy toward patent rights in government contracts. There was an attempt to rectify the problem with the passing of the Bayh-Dole Act which granted patent rights to certain government contractors for inventions developed with federal funds.¹⁰ While there is still need for reform in the Government’s policy toward technical data rights, there is an even greater need for reform in the tax policy for corporate spending on research and

⁸ President Dwight D. Eisenhower's Farewell Address, January 17, 1961.

⁹ *Id.*

¹⁰ See Bayh-Dole Act or University and Small Business Patent Procedures Act of 1980, 35 U.S.C. §§ 200-212; See also Eli Manzour, *If You Fix It, They Will Come: Drawing Lessons Learned From Patents for Dealing with Rights in Technical Data*, 38 Pub. Con. L.J. 667 at 668-70 (2009).

development that extends well beyond government contractors.¹¹ To understand this point, one must examine the whole story very carefully; patent rights are one thing, but the money to develop those patents is quite another.

In government fiscal year 1962, the National Defense outlays for Research, Development, Test and Evaluation totaled 6,319 million dollars.¹² In government fiscal year 2009, it is estimated that Research, Development, Test and Evaluation outlays totaled 79,500 million dollars.¹³ Even after adjusting the 1961 outlays for inflation, it is clear that the United States has net-increased its Department of Defense Research, Development, Test and Evaluation expenditures.

However, the federal appropriations only tell a small part of the bigger picture. These outlays are only for the government funded research and development, which the Government pays Aerospace and Defense contractors to research, develop, test and evaluate on the Government's behalf. These are nowhere near the true measure of American research and development efforts because they do not represent the amount of private capital spent by those same contractors on internal research and development efforts. This is a significant point of distinction.

¹¹ See Eli Manzour, *If You Fix It, They Will Come: Drawing Lessons Learned From Patents for Dealing with Rights in Technical Data*, 38 Pub. Con. L.J. 667 (2009).

¹² HISTORICAL TABLES, BUDGET OF THE UNITED STATES GOVERNMENT, FISCAL YEAR 2009, at 56, available at: <http://www.gpoaccess.gov/usbudget/fy09/pdf/hist.pdf>.

¹³ DOD RELEASES FISCAL 2010 BUDGET PROPOSAL, Department of Defense Press Release No. 304-09, summary charts, slide 2, 7 May 2009, available at: <http://www.defenselink.mil/news/FY10%20Budget%20Request.pdf>, last accessed 7 May 2009.

For this other type of corporate research and development, companies are currently able to claim, up to 3 years retroactively, a dollar for dollar reduction of taxes for qualified expenditures on research and development.¹⁴ While there is a separate incentive to spend capital on research and development in order to obtain and subsequently enjoy the short term monopoly position from a patent or other intellectual property right, the significance of the incentive effect this research and development tax credit has for companies to conduct their own internal research and development cannot be overstated.

However, Congress periodically allows this credit to expire; and it is currently slated to expire again at the end of December 2009.¹⁵ An expiration of this credit during this critical economic period would not just negatively impact research and development in the Aerospace and Defense industry; it would be felt in all U.S. industries; including but not limited to commercial sources of scientific, alternative energy, pharmaceutical, and medical research and development. For an economy in need of immediate stimulus, slowing down any corporate research and development would certainly be a step in the diametrically opposite required direction.

Furthermore, the currently proposed Department of Defense budget would result in an actual 1.1 percent or .9 billion dollar net reduction of Defense Research, Development, Test and Evaluation appropriations from the previous year; to be

¹⁴ See IRS Code §41; Treasury Regulation § 1.41-2; see also Public Law 110-343.

¹⁵ *Id.*

distinguished from the slightly less significant decline that a 1% spending baseline¹⁶ reduction would represent.¹⁷ Thus in the Aerospace and Defense sector, the impact of the expiration of the tax credit would certainly not be made up by any increased appropriations for government funded Research, Development, Test and Evaluation. In fact, the 1.1 percent reduction would compound the problem by reducing a potential second source of research funding.

Congress' hodgepodge approach of occasionally passing retroactive tax credits for research and development not only results in the short term risk of magnifying the current economic downturn, it is also incredibly disruptive to companies attempting to plan their research efforts over the longer term, which in turn inhibits efforts to perform large scale, high payoff research and development projects that require multiple years to complete. Perhaps even more significant is the relative disadvantage in which this places U.S. companies, and consequently the U.S. as a whole, vis-à-vis foreign companies and Governments.

As highlighted in a 10 December 2008 letter to the Senate and House majority and minority leaders from a collection of 12 Aerospace representing organizations and associations:

An increasing amount of research funding is being committed in countries – such as Ireland, Canada and China –because more attractive Research and Development (R&D)

¹⁶ See Allen Schick, *THE FEDERAL BUDGET POLITICS, POLICY, PROCESS*, 3d Ed, at 324 (2007).

¹⁷ DOD RELEASES FISCAL 2010 BUDGET PROPOSAL, Department of Defense Press Release No. 304-09, summary charts, slide 2, 7 May 2009, *available at*: <http://www.defenselink.mil/news/FY10%20Budget%20Request.pdf>, last accessed 7 May 2009.

tax incentives are available outside the United States. Thus, the U.S. has already fallen out of the top rank of Organization for Economic Cooperation and Development countries offering tax incentives for private sector R&D. The R&D tax credit provides a critical and effective incentive for companies to increase their investment in U.S.-based research and development.¹⁸

The facts clearly demonstrate that America's Aerospace and Defense industry has declined in two important areas. Areas that President Eisenhower saw fight to highlight as significant in his 1961 farewell address. The cold war is over, but new threats have taken its place. While Secretary Gates admonished that "[t]he United States cannot expect to eliminate national security risks through higher defense budgets, to do everything and buy everything,"¹⁹ his observations were focused in the context of the National Defense Strategy²⁰, and not in consideration of the potential utility of Aerospace and Defense spending as U.S. economic stimulus. This paper will examine the economic, policy, and legal arguments in favor of Aerospace and Defense spending as a useful form of federal economic stimulus spending. It will conclude with two recommendations to that end.

¹⁸ *Letter to The Honorable Nancy Pelosi, The Honorable Harry Reid, the Honorable Mitch McConnell, and the Honorable John Boehner, signed by Aerospace Industries of America, Air Transport Association, Airport Consultants Council, Airports Council International-North America, Aircraft Owners and Pilots Association, American Association of Airport Executives, Cargo Airline Association, General Aviation Manufacturers Association, National Air Carrier Association, National Business Aviation Association, National Association of State Aviation Officials, and Regional Airline Association, dated 10 Dec 2008, available at: http://www.aia-aerospace.org/assets/letter_joint_economic_stimulus_121008.pdf, last accessed 7 May 2009.*

¹⁹ Robert M. Gates, *A Balanced Strategy, Reprogramming the Pentagon for a New Age*, FOREIGN AFFAIRS, Jan/Feb 2009, at 28.

²⁰ See NATIONAL DEFENSE STRATEGY, Jun 2008, available at: <http://www.defenselink.mil/news/2008%20national%20defense%20strategy.pdf>, last accessed 7 May 2009.

II. ECONOMIC ARGUMENTS FOR AEROSPACE AND DEFENSE AS STIMULUS

In early 2009, as the 44th President of the United States' administration transitioned into the oval office, incoming President Barack Obama and his staff began articulating strategies for stimulus spending in an attempt to curb the impending global economic recession. During that time, three tenets were advanced as the administration's guiding principles for economic stimulus proposals; that such spending should be: 1) *timely* (rapidly infuse money into economic circulation), 2) *targeted* (represent clear value to the United States), and 3) *temporary* (not establish any new mandatory budget entitlement programs or other programs that require such continued spending that adds to the long-term fiscal problems already facing the United States).²¹

Assuming these three principles are indeed valid and that they continue to be the guiding principles for future federal stimulus spending, Aerospace and Defense spending fits squarely into the box as timely, targeted, and temporary and thus appropriate stimulus spending. Yet during this period of critical public discourse, increased Aerospace and Defense spending as a form of economic stimulus is seemingly off the table. As some astute commentators noted, "[i]n all the talk of economic stimulus in the White House and on Capitol Hill, one element has been conspicuously absent: defense programs."²²

²¹ Tom Donnelly & Gary Schmitt, *Here's How to Make a Real Stimulus Take Flight*, WASH. POST, Feb. 8, 2009, at B03.

²² *Id.*

As the Harvard University economist and chairman of the Council of Economic Advisors Martin Feldstein testified in a statement for the House Democratic Steering and Policy Committee:

Since the defense budget is as large as all of the other discretionary spending combined, it is surprising that defense is not proposed as part of the overall stimulus package. It is surprising also to read in the press that there will be reductions in military spending because, according to those stories, of the weakness of the economy. That logic is exactly backwards. The overall weakness of demand in the economy implies that the next two years are a time when military spending and other forms of spending should rise....Buying military supplies and equipment, including a variety of off-the-shelf dual use items, can easily fit this surge pattern.²³

A. TIMELY

As Professor Feldstein also wrote, “[i]f rapid spending on things that need to be done is a criterion of choice, the plan should include higher defense outlays, including replacing and repairing supplies and equipment, needed after five years of fighting. The military can increase its level of procurement very rapidly.”²⁴

Aerospace and Defense spending is capable of providing a “rapid infusion of dollars into economic circulation”²⁵ because funds are already being appropriated and

²³ Martin Feldstein, *The Economic Stimulus and Sustained Economic Growth, Full Statement for the House Democratic Steering and Policy Committee*, 7 Jan 2009, available at <http://www.nber.org/feldstein/EconomicStimulusandEconomicGrowthStatement.html>, last accessed on 4 May 2009.

²⁴ Martin Feldstein, *An \$800 Billion Mistake*, originally published in WASH. POST. Jan 29, 2009, now available at: http://www.nber.org/feldstein/washingtonpost_012909.html, last accessed on 4 May 2009.

²⁵ *Id.*

allocated, and can simply continue to be. As a matter of Congressional timing, increasing those amounts is a far more straightforward and expedient matter as opposed to the creation of new programs, with new appropriations. In fact, existing federal government contracts can be utilized immediately as a vehicle for injecting stimulus dollars. In the case of Cost-Reimbursement and Indefinite Delivery/Indefinite Quantity (IDIQ) contracts, it is a simple matter of adding funding or placing new orders.²⁶

As a matter of administrative timing, using existing contracts to inject stimulus has the important benefit of avoiding the loss of time required to announce, compete, and award new contracts because all of that work has already been accomplished. This is especially relevant after a year that saw a 17% increase in the volume of contract award bid protests at the Government Accountability Office (GAO), to include the Boeing Company's high profile and successful Government Accountability Office (GAO) bid protest of the United States Air Force's would-be 100 billion dollar plus 'KC-X' contract award to Northrop Grumman.²⁷

In examination of how current Aerospace and Defense programs may be utilized to channel economic stimulus spending, take the case of the United States Air Force's F-22 Raptor program, which Under Secretary of Defense for Acquisition, Technology and Logistics, John Young decided not to certify for further production on 3 March

²⁶ See *generally* Federal Acquisition Regulation (FAR) 16.3, and FAR 16.5.

²⁷ GAO BID PROTEST ANNUAL REPORT TO CONGRESS FOR FISCAL YEAR 2008, Comp. Gen. B-158766; and *The Boeing Company*, Comp. Gen. B-311344 et al., (C.G. Jun. 18, 2008).

2009²⁸, and Secretary Gates forwarded a Defense Budget to the White House recommending the end of F-22 Raptor production, phasing out total production at 187, an increase of only four total aircraft over previous production plans.²⁹ According to advertisements placed by the F-22 Raptor Team (including Lockheed Martin, Boeing, Pratt & Whitney, BAE Systems, Curtiss-Wright, GE, GKN, Goodrich, Hamilton Sundstrand, Honeywell, Northrop Grumman, Parker Aerospace and Raytheon) and the International Association of Machinists and Aerospace Workers, the F-22 program employs some 95,000 workers.³⁰ There are few stimulus options more ‘timely’ than the continued employment of 95,000 workers. Yet, the White House is putting forth a budget that would do just the opposite.

In addition, because the decision to cease production of the F-22 Raptor for U.S. orders logically would require the shutdown of that production line; it also almost guarantees that the multirole fighter will never be produced for export, or sold to even the closest of U.S. allies; denying the F-22 Raptor Team of a significant source of downstream revenues, to say nothing of the lost potential for increased return on the research and development investment for the U.S. Air Force and American taxpayers, or the increased international security our allies could be helping to provide with the F-

²⁸ David A. Fulghum, *Young Signs F-22 ADM to Keep Options Open*, AVIATION WEEK, 4 Mar 2009, *available at* <http://www.aviationweek.com/aw/generic/story.jsp?id=news/F22030409.xml&headline=Young%20Signs%20F-22%20ADM%20to%20Keep%20Options%20Open&channel=defense>, *last accessed* on 7 May 2009.

²⁹ DEFENSE BUDGET RECOMMENDATION STATEMENT (ARLINGTON, VA), AS PREPARED FOR DELIVERY BY SECRETARY OF DEFENSE ROBERT M. GATES, ARLINGTON, VA, MONDAY, APRIL 06, 2009, *available at* <http://www.defenselink.mil/speeches/speech.aspx?speechid=1341>, *last accessed* on 7 May 2009.

³⁰ See *Full Page Ad* at WASH. POST, Feb. 19, 2009, at A12; *also available at* <http://www.f22-raptor.com/advocacy/index.html>, *last accessed*, 4 May 2009.

22 Raptor in their air forces.³¹ Furthermore, the decision to bring the program to an end will fail to fully capitalize on the ever increasingly efficient production the F-22 program has seen, with a unit flyaway cost that has already decreased by 35% since full-rate production began.³² The F-22 Raptor is just one of many potentially ‘timely’ stimulus levers available to the Federal Government. Joint Strike Fighter (JSF), Future Combat Systems (FCS), Ground-Based Midcourse Defense (GMD), NASA’s Constellation program, and many other Aerospace and Defense programs have similar or even larger economies of scale.

The ‘timeliness’ aspect of Aerospace and Defense programs should be viewed in stark contrast to even ‘shovel ready’ infrastructure programs being put forth by the White House. As commentators have already noted, proposed infrastructure programs require “lengthy planning, design and approval processes” whereas “extending efficient, already running defense procurements would have brief, as the military says, ‘flash-to-bang’ times.”³³ Federal funds spent on existing defense programs would have impact beyond the immediate infusion of money to the prime defense contractors. Such expenditures would yield a “multiplying effect” throughout the domestic supply chain and thus U.S. economy, as can be partially observed just by the extensive list of F-22 Raptor Team defense contractors.³⁴

³¹ Tom Donnelly & Gary Schmitt, *supra*.

³² *U.S. House of Representatives Letter to President-elect Obama, dated 21 Jan 2009, available at: <http://www.f22-raptor.com/advocacy/documents/F22Final.pdf>, last accessed 4 May 2009.*

³³ Tom Donnelly & Gary Schmitt, *supra*.

³⁴ *Id.*

Furthermore, as elucidated in a 16 January 2009 U.S. Senate letter to then President-elect Barack Obama, signed by a bi-partisan group of 44 United States Senators, “The F-22 program annually provides over \$12 billion of economic activity to the national economy...”³⁵ Therefore, as viewed through the lens of just the F-22 Raptor program alone, Aerospace and Defense industry spending has the potential to be among the most ‘timely’ forms of expenditure available for a would-be stimulus planner to utilize.

B. TARGETED

“Defense spending could well be the most precisely targeted form of stimulus spending.”³⁶ Unlike the billions of dollars in grant money that will flow from the Federal Government to state and local Governments, as a result of rigorous accounting and auditing standards³⁷ and the existence of dedicated federal agencies such as the Defense Contract Audit Agency (DCAA) and Defense Contract Management Agency (DCMA), the Federal Government already has well structured insight into how Aerospace and Defense contract dollars are spent. Further, there are well established forums in the Boards of Contract Appeals and the Court of Federal Claims where the Federal Government can ultimately enforce its rights and resolve contract disputes. Granted, those systems of accounting and auditing do not always work perfectly or instantaneously, there has been a longtime deficiency in the size of the government

³⁵ *U.S. Senate Letter to President-elect Obama, dated 16 Jan 2009, available at: <http://www.f22-raptor.com/advocacy/documents/ObamaF-22Jan1609.pdf>, last accessed 4 May 2009.*

³⁶ Tom Donnelly & Gary Schmitt, *supra*.

³⁷ *See, generally* FAR Subpart 15.4.

acquisition workforce, and there are the occasional cases of misconduct and fraud. However, the federal acquisition systems is vastly superior in comparison to the patchwork of tracking processes the various state and local Governments may or may not have in place for federal grants.

As highlighted by the Aerospace Industries Association (AIA), an industry trade association formed in 1919 representing “the nation’s leading manufacturers and suppliers of civil, military, and business aircraft, helicopters, unmanned aerial systems, space systems, aircraft engines, missiles, materiel, and related components, equipment, services, and information technology,”³⁸ the U.S. Aerospace and Defense industry includes over 30,000 companies in all 50 states.³⁹ Furthermore, Aerospace and Defense companies account for “over 2 million middle class jobs.”⁴⁰ As a targeted industry, Aerospace and Defense represents access to the entire country for potential stimulus dollars to ‘trickle down’ through the supply base.

In addition to its vast reach across the entire country, Aerospace and Defense is also the United States’ leading manufacturing export industry, with 97 billion dollars in exports last year.⁴¹ Furthermore, the types of careers that exist in this industry are decisively high tech, science and engineering positions, in contrast to many of the types of jobs ‘shovel ready’ construction projects would potentially create. As AIA explains:

³⁸ See http://www.aia-aerospace.org/about_aia/, last accessed 4 May 2009.

³⁹ See <http://www.aia-aerospace.org/>, last accessed 4 May 2009.

⁴⁰ *Id.*

⁴¹ *Id.*

Our people bring a diverse set of skills and capabilities to their jobs: engineers on the cutting edge of advanced materials, structures and information technology; machinists fabricating complex shapes and structures, utilizing the latest fabrication technologies; and technicians from almost every degree field, testing, applying and integrating the latest technologies. Most of these positions are high-skill, quality jobs, paying above average wages. Production workers average \$29.37 an hour;⁴² entry-level engineers average more than \$74,000 a year, with more senior engineers well into six figures.⁴³ And that employment has grown steadily for years. Many of these jobs are unique, and require skills that take time to develop. It takes ten years for a degreed aerospace engineer to master the intricacies of aerospace vehicle designs. Technicians skilled in applying stealth coatings, programmers fluent in satellite-control algorithms, metallurgists expert in high-temperature jet engine design -- these skills and many more are very hard to replace.⁴⁴

The Aerospace and Defense industry is also one of the U.S.' healthiest, even in the current harsh financial environment. Unlike the financial or automotive industries, Aerospace sales increased last year by 2.1 percent; as AIA president and CEO Marion Blakey stated, "[w]e anticipate this to continue, and we expect our industry will continue to be an asset to the U.S. economy as we climb out of our current financial hardships."⁴⁵ Thus Aerospace and Defense is also one of soundest industries the Federal Government can turn to right now as an engine of stimulus.

⁴² Bureau of Labor Statistics, *Current Employment Statistics survey*. January-June 2008.

⁴³ AVIATION WEEK *Workforce Study*, 2008.

⁴⁴ *Aerospace and Defense: The Strength to Lift America*, available at: http://www.aia-aerospace.org/assets/wp_strength_nov08.pdf. last accessed 4 May 2009.

⁴⁵ *AIA News 2008, Aerospace Shows Strength in Harsh Financial Atmosphere*, 10 Dec 2008, available at: http://www.aia-aerospace.org/newsroom/aia_news/2008/Aerospace_Shows_Strength_in_Harsh_Financial_Atmosphere, last accessed on 8 May 2009.

The economic analysis of Aerospace and Defense spending as ‘targeted’ stimulus is further strengthened by the clear value it represents to the United States when one considers the national security benefits of maintaining: 1) a state-of-the-art inventory and arsenal, 2) our position as the dominant leader in space, 3) the industrial production capability of the United States, and 4) the intellectual base of educated and skilled workers necessary to build future Aerospace and Defense products.

Furthermore, as Professor Feldstein notes, “[r]eplacing the supplies that have been depleted by the military activity in Iraq and Afghanistan is a good example of something that might be postponed but that instead should be done quickly. The same is true for replacing the military equipment that has been subject to excessive wear and tear. More generally, replacement schedules for vehicles and other equipment should be accelerated to do more during the next two years than would otherwise be economically efficient.”⁴⁶ These benefits will be further examined under Policy Arguments for Aerospace and Defense as Stimulus; however it is clear from the above analysis that the ‘target-able’ nature of Aerospace and Defense spending is well established.

C. TEMPORARY

Aerospace and Defense spending as a form of economic stimulus can easily be accomplished in a manner that does not establish any new mandatory budget entitlement programs or other programs that require such continued spending so as to

⁴⁶ Martin Feldstein, *Defense Spending Would Be Great Stimulus*, originally published in THE WALL ST. J., 24 December 2008, now available at: <http://www.nber.org/feldstein/ws12242008.html>, last accessed 4 May 2009.

add to the long-term fiscal problems already facing the United States.⁴⁷ As some commentators have already recognized, “[i]n the post-Cold War ‘drawdown,’ the active-duty military was reduced by 700,000, and weapons buys were cut by at least one-third – that’s what produced the so-called peace dividend of the 1990’s.”⁴⁸ As quickly as Aerospace and Defense programs can be continued, they can cease to be so as well.

Going back to the F-22 Raptor program example, the continued production of such a program for just one or two additional years would be just that, one or two years of additional ‘temporary’ stimulus spending. As easily as programs such as the F-22 Raptor, Airborne Laser (ABL), FCS, and GMD are being removed from the budget now, programs could be scaled back latter, thus making increased Aerospace and Defense spending truly ‘temporary’ in nature and not exacerbating any long-term fiscal constraints already affecting the United States.⁴⁹

INCREASING MILITARY RECRUITING NOT TRULY ‘TEMPORARY’

Some pundits have championed increased military recruiting as an additional avenue for potential economic stimulus spending and engine of job creation.⁵⁰ Such a plan would potentially have the benefits of providing a reduction in unemployment, the eventual creation of a larger, more skilled civilian workforce, and also potentially expand

⁴⁷ THE NATION’S LONG-TERM FISCAL OUTLOOK SEPTEMBER 2008 UPDATE, GAO-09-44R.

⁴⁸ Tom Donnelly & Gary Schmitt, *supra*.

⁴⁹ THE NATION’S LONG-TERM FISCAL OUTLOOK, *supra*.

⁵⁰ *Id*; and Martin Feldstein, *An \$800 Billion Mistake*, *supra*.

the military reserves.⁵¹ Others have gone even one step further, asserting that “[i]ncreasing the size of the armed forces would have an even more direct and immediate effect on employment: Almost all military spending on personnel occurs within the year of appropriation.”⁵²

While these arguments appear persuasive from the perspective of reducing unemployment, it should be noted that simply because all military personnel or “MilPers” appropriations (which are used to fund military members pay and benefits) are one-year appropriations⁵³, it does not necessarily follow that military members do not have costs beyond a single given budgetary year. That would be a gross oversimplification. In fact, increasing military recruiting is not as ‘temporary’ a solution as simply continuing to fund active Aerospace and Defense programs for additional time. The reason is twofold.

First, not all newly recruited military members will leave the service after a convenient ‘temporary stimulus period’ on active duty, and even those that stayed in the reserves would generate a continued cost. Second, there is a significant tail of benefits that follow honorable military service. Primarily administered by the U.S. Department of Veterans Affairs, such benefits include: educational benefits, housing loans, death and burial benefits, and of course, potential medical and disability payments. To the extent that at least some of the new ‘stimulus’ recruits would tap into these benefits in the long-

⁵¹ *Id.*

⁵² Tom Donnelly & Gary Schmitt, *supra*.

⁵³ DoD Financial Management Regulation, Volume 2-A, Chapter 1, page 1-6, Oct 2008.; see also Schick, THE FEDERAL BUDGET at 330.

term, they would establish new mandatory budget entitlements requiring continued spending so as to add to the long-term fiscal problems already facing the United States.⁵⁴ Conversely, while most major systems acquisitions come with a logistics and maintenance tail; it can be priced into the cost of the procurement up front. Increasing military recruiting as a form of stimulus goes against the stated criteria of ‘temporary.’ Therefore, increased military recruiting is not recommended as appropriate stimulus spending as it fails to comply with the White House’s principles for proper economic stimulus.

III. POLICY ARGUMENTS FOR AEROSPACE AND DEFENSE AS STIMULUS

On February 17, 2009, President Barrack Obama signed the American Recovery and Reinvestment Act of 2009 (“ARRA”), commonly known as the ‘stimulus package.’⁵⁵ A few months prior, in late 2008, the Troubled Asset Relief Program (“TARP”), commonly known as the ‘bailout,’ was established with the passing and signing of the Emergency Economic Stabilization Act of 2008 by President George W. Bush.⁵⁶ During the discussion and debates surrounding the bailout and stimulus plans, two major topics continually arose in the public discourse: 1) so-called ‘But American’ provisions⁵⁷, and 2) executive compensation.⁵⁸

⁵⁴ See THE NATION’S LONG-TERM FISCAL OUTLOOK, *supra*.

⁵⁵ American Recovery and Reinvestment Act of 2009, Pub.L. 111-5.

⁵⁶ Emergency Economic Stabilization Act of 2008, Publ.L. 110-343.

⁵⁷ A 4 May 2009 Google search for “Stimulus Buy America” yielded 3,239 News results.

⁵⁸ A 4 May 2009 Google search for “TARP Executive Compensation” yielded 946 News results.

Aerospace and Defense expenditures by the Federal Government are uniquely positioned to satisfy both of these policy objectives without additional regulation, extraordinary steps taken to recoup executive compensation, or violation of any international treaties that especially some Buy America requirements had the potential to raise. Finally, there is a third policy reason to consider the case for Aerospace and Defense spending as appropriate stimulus. That reason is the inherent national security benefit.

A. BUY AMERICAN

Domestic preferences are nothing new in the world of U.S. federal spending; such requirements have long and often found their way into the federal procurement policy and regulations.⁵⁹ It was at the center of the public policy controversy surrounding the Boeing protest of the KC-X contract to Northrop Grumman and their major subcontract partner, European Aeronautic Defence and Space Company (EADS) – although the legal basis of the GAO protest had nothing to do with it.⁶⁰ Even on the presidential campaign trail, then candidate Obama commented that he had a difficult time believing that “an American company that has been a traditional source of aeronautic excellence” was not selected and that he was committed to “fight to ensure

⁵⁹ See National Defense Authorization Act for Fiscal Year 2002 §832 (Pub. L. 107-107); 10 U.S.C. §2241, now codified at 10 U.S.C. 2533a and 2533b; see also 73 Fed. Reg. 11354 (Mar. 3, 2008).

⁶⁰ See *The Boeing Company*, Comp. Gen. B-311344 et al., (C.G. Jun. 18, 2008).

that public contracts are awarded to companies that are committed to American workers.”⁶¹

The ‘Buy American’ public policy agenda again surfaced in the context of the stimulus package’s ARRA when §1605 of that act created the requirements that all iron, steel and manufactured goods, purchased under ARRA for the use in public works and buildings, must be produced within the United States.⁶² This requirement was importantly qualified in the U.S. Senate version of the ARRA, partially in response to numerous procurement and international trade experts warning of the potential to violate current international treaties and spark a trade war.⁶³ The Senate version added the caveat “in a manner consistent with United States obligations under international agreements.”⁶⁴

1. BUY AMERICAN PROVISIONS AT ODDS WITH TRADE AGREEMENTS

The problem with the original ARRA language and Buy America provisions in general, is that they run the risk of violating the World Trade Organization (WTO) Agreement on Government Procurement (GPA), which has 40 signatory members,

⁶¹ Steve Schooner & Chris Yukins, *Tempering ‘Buy America’ In The Recovery Act – Steering Clear Of A Trade War*, 51 GC ¶ 78 (Mar 11, 2009).

⁶² American Recovery and Reinvestment Act of 2009, Pub.L. 111-5, §1605.

⁶³ See Gary Clyde Hufbauer & Jeffrey J. Schott, *Buy America: Bad for Jobs, Worse for Reputation*, PIIE POLICY BRIEF 09-02 (Feb 2009), available at: www.petersoninstitute.org/publications/pb/pb09-2.pdf, last accessed 7 May 09; see also Steve Schooner & Chris Yukins, *Tempering*, *supra*.

⁶⁴ See CONGRESSIONAL RECORD, Feb. 4, 2009 at S1528; see also Steve Schooner & Chris Yukins, *Tempering*, *supra*.

including the United States and 27 European Union countries.⁶⁵ The matter is additionally controversial in light of the North American Free Trade Agreement (NAFTA) between Canada, Mexico and the United States.⁶⁶

The results of the trade agreements like GPA and NAFTA are that signatory nations are supposed to give each other reciprocal access in public procurements.⁶⁷ The United States was able to negotiate exceptions to the GPA regarding U.S. federal highway and transit projects, as part of existing 'Buy American' statutes dealing with both.⁶⁸ However federal highway and transit projects are only one of many categories of GPA and NAFTA public procurements.

This has led some experts within the procurement law community, such as Professors Steve Schooner and Chris Yukins of the George Washington University Law School, to sound the alarm that the 'Buy American' requirements in the ARRA "remain extremely controversial."⁶⁹ Specifically they advise, "[t]he optimal approach seems to be the most simple: to fold new procurement under the Recovery Act into the existing

⁶⁵ See, Agreement on Government Procurement (GPA), *available in English at* http://www.wto.org/english/docs_e/legal_e/gpr-94_01_e.htm, last accessed 7 May 2009; see also Trade Agreements Act (TAA) of 1979, Pub.L. 96-39, 93 Stat. 144, 19 U.S.C. §2501-2581.

⁶⁶ See North American Free Trade Agreement (NAFTA), *available in English at* <http://www.nafta-sec-alena.org/en/view.aspx?x=343>, last accessed 7 May 2009.

⁶⁷ See GPA and NAFTA, *Id.*

⁶⁸ See GPA, Appendix I Annexes-General Notes, *available in English at* http://www.wto.org/english/tratop_e/gproc_e/appendices_e.htm; see also David W. Burgett & Lewis E. Leibowitz, *Feature Comment: How Will Buy America Restrictions Affect Economic Stimulus Spending?*, 51 GC ¶ 51 (Feb 18, 2009).

⁶⁹ Steve Schooner & Chris Yukins, *Tempering, supra.*

FAR regulatory structure, which, in keeping with the Recovery Act, accommodates the U.S.' many trade agreements."⁷⁰

2. AEROSPACE AND DEFENSE SPENDING CONSISTENT GPA AND NAFTA, YET RESULTS IN STRONG DOMESTIC PROCUREMENT PREFERENCES

As Professors Schooner and Yukins go on to recommend, "[t]he simplest, most expeditious and elegant approach would be to fold Recovery Act procurement, when under-taken by federal agencies, into the existing regulatory structure in FAR pt. 25..." as a means of complying with the GPA and NAFTA requirements.⁷¹ "The existing structure in FAR pt. 25 provides a pragmatic solution, for FAR pt. 25 both *permits* and *excludes* foreign vendors."⁷² FAR 25 also expressly prohibits foreign acquisition from certain countries "without open-market agreements with the U.S., such as China, and creates a (so-called) 'walled garden' for vendors from the U.S. and from nations with open-market agreements."⁷³ Therefore, federal procurement of Aerospace and Defense programs would both comply with the U.S. Trade Agreements, to the extent they are subject to FAR 25,⁷⁴ and not run the risk of triggering an international trade war by drawing international attention to new protectionist, Buy American statutory language.

⁷⁰ *Id.*

⁷¹ *Id.*; see also FAR PART 25 - FOREIGN ACQUISITION.

⁷² *Id.*

⁷³ *Id.*

⁷⁴ See FAR 25.

As a result of this, and as Professor Feldstein and others have already taken note of, “[m]ilitary procurement has the further advantage that almost all of the equipment and supplies that the military buys is made in the United States, creating demand and jobs here at home.”⁷⁵ There are several additional reasons for this result, in addition to the complicated government procurement decision tree set forth in FAR Part 25.

Many of the larger U.S. Aerospace and Defense procurements and programs require those contractors working not them to have U.S. security clearances for their facilities and employees, which require U.S. citizenship.⁷⁶ Even more of those procurements and programs, including subcontracts down through the entire supply chain, are subject to the U.S. export controls regime, which restricts access to sensitive facilities, materials and information identified on the United States Munitions List (USML)⁷⁷ to “U.S. Persons” only, without prior license or other approval from the U.S. Department of State.⁷⁸ Finally, many of the U.S. Aerospace and Defense contractors are unable to be acquired by would-be foreign investors as a result of regulation by the

⁷⁵ Martin Feldstein, *Defense Spending Would Be Great Stimulus*, *supra*.

⁷⁶ See DoD 5220.22-M, National Industrial Security Program Operating Manual (NISPOM), 28 Feb 2006, *available at* https://www.dss.mil/GW/ShowBinary/DSS/isp/fac_clear/download_nispom.html, *last accessed* 8 May 2009.

⁷⁷ See 22 U.S.C. § 2751; The United States Munitions List (USML), 22 C.F.R. pt 121 (2008).

⁷⁸ See 22 U.S.C. § 2751; International Traffic in Arms Regulations (ITAR), 22 C.F.R. pts. 120-130 (2008); see *also* Export Administration Act, 50 U.S.C. app. § 2401 (2000); Export Administration Regulation (EAR), 15 C.F.R. pt. 730 (2008).; see *generally* Robert A. Borich Jr., *Globalization of the U.S. Defense Industrial Base: Developing Procurement Sources Abroad Through Exporting Advanced Military Technology*, 31 PUB.CON.L.J. 623 (2002).

Committee on Foreign Investment in the United States (CFIUS).⁷⁹ The result is a strong preference for domestic companies in federal Aerospace and Defense procurements. However, all of this is an already well established and excepted reality under the trade agreement regime. Thus, federal Aerospace and Defense spending would include innate 'Buy American' preferences, without the controversy or potential for setting off an international trade war.

B. EXECUTIVE COMPENSATION

Few issues seemed to agitate Americans worse than exorbitant executive compensation, especially for executives of financial companies that would otherwise have failed without receiving 'bail out' funds under TARP. However, unlike the U.S. financial industry, the Aerospace and Defense industry already has checks in place to limit executive compensation.

This is because the White House's Office of Federal Procurement Policy (OFPP), part of the Office of Management and Budget (OMB), pursuant to their authority under Section 39 of the Office of Federal Procurement Policy Act as amended,⁸⁰ and in consult with the Director of the Defense Contract Audit Agency, determined that the executive compensation 'benchmark' for government contractors in government fiscal year 2009 shall be capped at \$684,181.⁸¹ While this determination does not strictly limit what government contractor executives may receive in compensation from their

⁷⁹ See Exec Orders 11858 (1975); 12661 (1988); *and* 13456, (2008).

⁸⁰ See Office of Federal Procurement Policy Act of 1974, 41 U.S.C. § 435 et seq.

⁸¹ See OFPP-Determination of Executive Compensation Benchmark Amount, 74 Fed. Reg. 23893, May 21, 2009.

companies or organizations; it does limit the amount of executive compensation that will be considered 'allowable', and thus ultimately able to be reimbursed as allocated overhead under government cost accounting standards, a significant disincentive for government contractors to set executive compensation over the OFPP "benchmark."⁸²

Thus there will be no discussion in Congress of passing retroactive, draconian measures to reclaim portions of executive compensation paid by government contractors. Aerospace and Defense contractors are subject to additional regulations that enable the Federal Government to prevent excessive and unreasonable executive compensation and thus head-off potential public controversies stemming from stimulus funds being spent on Aerospace and Defense.

Without any new or additional statutory provisions, Aerospace and Defense spending would be concordant with two of the most recently and intensely contested public policy concerns surrounding the Federal Government's recent efforts to prevent further economic collapse and stimulate market growth. Aerospace and Defense spending as stimulus is therefore both economically advantageous, and compatible with public policy.

IV. RECOMMENDATION ONE: INCREASE DEFENSE OUTLAYS BY TEN PERCENT FOR BOTH PROCUREMENT AND RESEARCH, DEVELOPMENT, TEST AND EVALUATION, AND FIVE PERCENT FOR OPERATIONS AND MAINTENANCE

Rather than call out specific major programs to be funded or continued, which only comprise a small minority of the total Department of Defense budget, this paper's

⁸² *Id*; see also FAR 31.205-6(p).

more general recommendation is like those of Professor Feldstein and others advocating general increases in defense outlays in focused areas. This is partially because the general notion of increasing any spending in this area of appears to be the most controversial part of the entire recommendation to use Aerospace and Defense spending as economic stimulus.

As Professor Feldstein recommends that for the next two years:

[a] 10% increase in defense outlays for procurement and for research would contribute about \$20 billion a year to the overall stimulus budget. A 5% rise in spending on operations and maintenance would add an additional \$10 billion. That spending would create about 300,000 additional jobs.⁸³

These targeted increases would have maximum economic impact by stimulating the prime and subcontractors on the procurement side, the sagging research and development sector and the logistics and maintenance industries, at a total additional outlay of \$40 billion over two years.

V. RECOMMENDATION TWO: AMEND THE INTERNAL REVENUE CODE OF 1986 TO MAKE THE RESEARCH AND DEVELOPMENT ACTIVITY TAX CREDIT PERMANENT

Not all stimulus objectives are best achieved through appropriations spending; as evidenced by the case of the research and development tax credit. In order to stave off the potential negative impacts an expiration in the research and development tax credit could have on the economy, the disadvantage it would place U.S. companies at vis-à-

⁸³ Martin Feldstein, *Defense Spending Would Be Great Stimulus*, *supra*.

vis foreign competition, and the destabilizing impact continued patchwork application of the research and development tax credit would have on long-term commercial research planning, it is recommended that the research and development tax credit be made permanent. The recommendation is not to expand the scope of the credit, or increase the credit beyond a dollar for dollar ratio; rather to simply cease the heretofore piecemeal process of applying the credit by making it once and for all permanent. This approach creates no new government spending, nor does it reduce revenues collected as a new tax credit would; it simply requires a continuation of the status quo, without the uncertainty and lack of uniformity of the current credit.

There are several measures currently in Congress that would see this accomplished. They include: House Bill 422 which was introduced by Representatives Kendrick Meek (D-FL) and Kevin Brady (R-TX) and is currently referred to the House Committee on Ways and Means;⁸⁴ House Bill 783 which was sponsored by Representative James Sensenbrenner (R-WI) and also currently House Committee on Ways and Means⁸⁵; and Senate Bill 37 which was sponsored by Senator John McCain (R-AZ) and is currently referred to the Senate Committee on Finance.⁸⁶

H.R. 422 would amend the Internal Revenue Code of 1986 to extend the research credit through 2010, and increase, and make permanent the alternative

⁸⁴ See H.R. 422, *available at*: <http://www.govtrack.us/congress/bill.xpd?bill=h111-422>, *last accessed* 8 May 2009.

⁸⁵ See H.R. 783, *available at*: <http://www.govtrack.us/congress/bill.xpd?bill=h111-783>, *last accessed* 8 May 2009.

⁸⁶ See S. 37, *available at*: <http://www.govtrack.us/congress/bill.xpd?bill=s111-37>, *last accessed* 8 May 2009.

simplified research credit.⁸⁷ H.R. 783 and S. 37 would simply amend the Internal Revenue Code of 1986 to make the tax credit for increasing research activities permanent.⁸⁸ The language of S. 37, which varies only slightly from the text of H.R. 783, is:

A BILL

To amend the Internal Revenue Code of 1986 to permanently extend the research credit.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. PERMANENT EXTENSION OF RESEARCH CREDIT.

(a) IN GENERAL.—Section 41 of the Internal Revenue Code of 1986 is amended by striking subsection (h).

(b) CONFORMING AMENDMENT.—Paragraph (1) of section 45C(b) of the Internal Revenue Code of 1986 is amended by striking subparagraph (D).

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years beginning after December 31, 2009.⁸⁹

It is recommended the United State implement the permanent research and development tax credit by utilizing Senator McCain's bill, or similar language, ensuring the nation: continues to reap the economic stimulus benefits provided by research and development; that other nations do not gain further advantages against U.S. companies in their research and development; and enabling U.S. companies to plan long-term research and development most efficiently in order to maximize profits and shareholder value.

VI. CONCLUSION

⁸⁷ H.R. 422, *Id.*

⁸⁸ H.R. 783, *Id.*; and S. 37, *Id.*

⁸⁹ S. 37, *Id.*

The culminating two recommendations provide for an increase source or economic spending in a manner that best utilizes those appropriates and changes in tax policy, foregoing some federal revenues, which result in increase private capital being spent. The increased federal expenditures will create additional jobs, stimulate the economies of all 50 states and provide the U.S. with increased national security during a period of increased international strife. Finally, the recommended change in tax policy will put the U.S. research sectors on equal footing with foreign competition, insuring the future viability of American industry and ingenuity for years to come.