

Amendment 934 – Strikes Title III of the bill which expands duties for NASA

Title III of the America COMPETES Act lays out the role the National Aeronautics and Space Administration (NASA) is expected to contribute to innovation in order to improve the competitiveness of the United States in the global economy.

The bill states that NASA shall be a full participant in any interagency effort to promote innovation and economic competitiveness through near-term and long-term basic scientific research and development and the promotion of science, technology, engineering, and mathematics education.

The bill expresses the sense of Congress that NASA should be funded at the levels authorized for fiscal years 2007 and 2008 and at appropriate levels in subsequent fiscal years which would enable a fair balance among science, aeronautics, education, exploration, and human space flight programs and allow full participation in any interagency efforts to promote innovation and economic competitiveness.

This bill also establishes a new program at NASA, the Aeronautics Institute for Research for the purpose “of managing the aeronautics research carried out by the Administration.” This program duplicates NASA’s Aeronautics Research Missions Directorate (ARMD), which is funded at \$893.2 million.

Before the duties, responsibilities, authority or budget of any agency are expanded, Congress should hold that agency accountable for meeting its current expectations.

NASA has been unable to efficiently or effectively perform the duties it is currently assigned and NASA’s administrator has provided testimony to the Senate that Congressional earmarks are distracting the agency from achieving its goals, yet this bill expands NASA’s size and role without addressing either of these problems.

NASA Project Mismanagement

Since 1990, the Government Accountability Office (GAO) has identified NASA's contract management function as an area at high risk due to its ineffective systems and processes for overseeing contractor activities. NASA has not been able to effectively oversee contracts because it lacked accurate and reliable information on contract spending and it has placed little emphasis on end results, product performance, and cost control.¹

This is especially consequential considering much of NASA's success depends on the work of its contractors—on which it spends 90 percent of its funds.

A prime example of NASA's poor management is the large cost overruns and schedule delays of the International Space Station. The project's estimated cost has skyrocketed from \$17 billion in 1995 to estimates around \$100 billion today. The station is currently way behind schedule and is projected to be completed in 2010,² years behind the original timetable.

In a July 2002 report on the International Space Station, GAO identified reasons for continued cost growth which included an inadequate definition of requirements, changes in program content, and schedule delays and inadequate program oversight. NASA has controls in place that should have alerted management to the growing cost problem and the need for mitigation, but these were largely ignored because of NASA's focus on fiscal year budget management rather than on total program cost management.³

The estimated cost growth is having a profound effect on the utility of the space station—with substantial cutbacks in construction, the number of crew members, and scientific research.⁴

¹ GAO Report 03-114

² <http://usinfo.state.gov/xarchives/display.html?p=washfile-english&y=2006&m=March&x=200603031142481cnirellep0.4094812>

³ GAO Report 02-735

⁴ GAO Report 02-735

Another example of NASA's mismanagement is the 1999 Mars Polar Lander failure. NASA lost a \$125 million Mars orbiter because a Lockheed Martin engineering team used English units of measurement while NASA's team used the more conventional metric system for a key spacecraft operation. The units mismatch prevented navigation information from transferring between the Mars Climate Orbiter spacecraft team at Lockheed Martin in Denver and the flight team at NASA's Jet Propulsion Laboratory in Pasadena, California. As a result, the Climate Orbiter likely plowed through the atmosphere, continued out beyond Mars and now could be orbiting the Sun.⁵

Columbia Disaster:

In 2003, NASA and the entire nation struggled to cope with the Columbia tragedy.

The Columbia Accident Investigation Board, charged with reviewing the disaster and its causes, declared that "In the Board's view, NASA's organizational culture and structure had as much to do with this accident as the External Tank foam."⁶

The Board also concluded that NASA suffers from ineffective leadership, flawed analysis, and a reactive and complacent approach to safety. It noted that the mistakes on Columbia were "not isolated failures, but are indicative of system flaws" in the agency.⁷

NASA's Financial Management Challenges

Another serious and troubling aspect of NASA is its financial management. NASA's Inspector General has listed financial management as one of NASA's most serious Management and Performance Challenges in six separate reports dating back to 2000, including the most recent for FY 2006.

⁵ <http://www.cnn.com/TECH/space/9909/30/mars.metric.02/>

⁶ <http://caib.nasa.gov/>

⁷ <http://caib.nasa.gov/>

NASA's financial management remains on the list of challenges because of continued internal control weaknesses affecting the agency's ability to produce complete and accurate financial statements.⁸

GAO reported in 2003 that NASA's financial management environment is comprised of decentralized, nonintegrated systems with policies, procedures, and practices that are unique to its field centers. For the most part, data formats are not standardized, automated systems are not interfaced, and on-line financial information is not readily available to program managers. Thus, it is difficult to ensure that contracts are being efficiently and effectively implemented and that budgets are executed as planned.⁹

To improve its financial management, in 2003 NASA converted its accounting data from 10 separate systems to a single Integrated Enterprise Management Program (IEMP). The backbone of IEMP is the Core Financial Module. However, despite substantial investment, in both time and money, into development and implementation of the Core Financial module, NASA still cannot produce auditable financial statements—a key goal of the module.¹⁰

NASA received a disclaimer of opinion on its financial statements as a result of the Independent Public Accountant (IPA) audits in FY 2003 by PricewaterhouseCoopers and in FY 2004, FY 2005, and FY 2006 by Ernst & Young because NASA has been unable to provide auditable financial statements and sufficient evidence to support statements throughout the fiscal year.¹¹

Ernst & Young's testing of internal control disclosed certain weaknesses, including lack of integrated financial management systems, incomplete efforts to resolve data integrity issues, and weaknesses in entity-wide internal control which impaired NASA's ability to report accurate financial information on a timely basis.¹²

⁸ http://oig.nasa.gov/reading_room.html

⁹ GAO-03-114

¹⁰ <http://oig.nasa.gov/FSauditFY2006.pdf>

¹¹ <http://oig.nasa.gov/FSauditFY2006.pdf>

¹² <http://oig.nasa.gov/FSauditFY2006.pdf>

Additional NASA Findings:

- For the third quarter financial statements in FY 2006, NASA had not reconciled all of its intra-governmental balances with its trading partners. The review of the Treasury difference report identified over \$200 million for which NASA could not identify the reasons for differences with its trading partners.¹³
- As of March 31, 2006, the IPA noted over 4,000 grants and 3,000 contracts for FY 2005 and prior which were past their period of performances still awaiting closeout and de-obligation.¹⁴
- As of June 30, 2006, Ernst & Young noted numerous unliquidated obligations and accounts payable that were greater than one year old.
- Manual input errors on key authorizing documents, such as one for \$133 million, a result of an extra digit, not found when the transaction was originally recorded.¹⁵
- Of NASA's Real Property, over 10 percent is either excess or underutilized.¹⁶
- NASA maintains a restoration and repair backlog that is estimated at over \$2.05 billion as of the end of FY 2006.¹⁷

Clearly, NASA is ripe for massive amounts of waste, fraud, and abuse; however, since NASA has not complied with the Improper Payment Information Act of 2002 in any of the three reporting years, it is impossible to know how many taxpayer dollars NASA has wasted.

¹³ <http://oig.nasa.gov/FSauditFY2006.pdf>

¹⁴ <http://oig.nasa.gov/FSauditFY2006.pdf>

¹⁵ <http://oig.nasa.gov/FSauditFY2006.pdf>

¹⁶ GAO Report 07-349

¹⁷ GAO Report 07-349

NASA is also in Non-Compliance With Numerous Other Laws and Regulations:

- Federal Financial Management Improvement Act of 1996
- OMB Circular A-127, *Financial Management Systems*
- OMB Circular A-130, *Management of Federal Information Resources*
- OMB Circular A-136, *Financial Reporting Requirements.*
- Federal Information Security Management Act
- Anti-Deficiency violations(making expenditures exceeding amount appropriated)
- Ernst & Young identified instances of noncompliance with generally accepted accounting principles and reportable conditions
- Because Ernst & Young could not complete an audit for NASA, they were unable to determine whether there were other instances of noncompliance with laws and regulations that are required to be reported.

Ernst & Young concluded on NASA's financial management concerns that "due to the severity of these issues, an integrated financial system, a sufficient number of properly trained personnel, well-documented policies and procedures, stronger leadership from the Headquarters Office of the Chief Financial Officer, and a strong oversight function are needed."¹⁸ NASA clearly has to take care of its current issues before it takes on additional responsibilities.

¹⁸ <http://oig.nasa.gov/FSauditFY2006.pdf>

Establishment of the Aeronautics Institute for Research Is Duplicative

Section 1302 of this bill establishes another program at NASA, the Aeronautics Institute for Research for the purpose “of managing the aeronautics research carried out by the Administration.”

This program duplicates NASA’s Aeronautics Research Missions Directorate (ARMD), with an FY 2006 budget of \$893.2 million. The ARMD supports the Agency’s goal of developing a balanced overall program of science, exploration, and aeronautics by advancing knowledge in the fundamental disciplines of aeronautics and develops technology for safer aircraft and high capacity airspace systems.

There is no need for two programs of similar nature in the same agency, especially considering the existing programs budget nears \$1 billion.

DOD is also performing aeronautics and aerospace research as well. For example, the Aerospace Corporation, a federally funded research and development center (FFRDC) for the United States Air Force and the National Reconnaissance Office, has provided independent technical and scientific research, development, and advisory services to national-security space programs since 1960.¹⁹

The Private Sector Is Already Performing This Role As Well

On December 20, 2006, President Bush signed an Executive Order (EO) establishing the nation’s first Aeronautics Research and Development Policy. President Bush stated in the order that “The Federal Government shall only undertake roles in supporting aeronautics Research & Development that are not more appropriately performed by the private sector.”²⁰

¹⁹ <http://www.aero.org/corporation/>

²⁰ <http://www.ostp.gov/html/PressReleaseNationalAeronauticsResearchDevelopmentPolicy12-20-2006.pdf>

In June 2006, John Kopecky, President of the Kopecky Group, a consulting firm specializing in aerospace program and public policy issues, testified to the Aerospace States Association that it “is often raised that is the role of the private sector to invest in commercially-relevant Research and Development, not the governments. I agree with this argument and the record shows that in the past this has in fact been the case. For every dollar the federal government spends on the commercially-relevant portion of its aeronautics research portfolio, industry spends \$10 to complete the process by developing products for the market that utilize those technologies. Thus while government-sponsored S&T primes the technology pump, the private sector funds the development part of the process where-by that technology pump results in usable output.”²¹

Given NASA’s trouble with efficiently or effectively carrying out its programs and missions, coupled with its current nightmarish financial management issues, it is clearly irresponsible and foolish to expand the size and role of NASA at this current time, especially considering other agencies and the private sector are performing these similar roles and duties.

Congressional Earmarks “Distracting” NASA From It’s Mission

In Fiscal Year 2006, \$568.5 million of NASA’s budget was assigned to Congressional earmarks and the administrator of NASA has identified these earmarks as distractions from the very activities that Congress is seeking to promote in the America COMPETES Act.

In testimony submitted to a Senate appropriations subcommittee just a year ago, NASA Administrator Michael D. Griffin stated "The growth of these Congressional directions is eroding NASA's ability to carry out its mission of space exploration and peer-reviewed scientific discovery."

The Washington Post noted that “Earmarks, also known as ‘special projects,’ ‘congressional directions,’ ‘directed funding’ or, less flatteringly, ‘pork,’ are the gifts that lawmakers make to their districts

²¹ http://www.aia-aerospace.org/aianews/speeches/2006/testimony_kopecky_060706.pdf

or states. The NASA bill included pages and pages of these, including \$4 million for something called the 'Alliance for NanoHealth' and \$500,000 for the 'Temporal Land Cover Change Research Program at Idaho State University.'"

Griffin pointed out that \$568.5 million was real money for an agency whose total budget is \$16.623 billion. It was a "record high in both dollar amount and number of individual items," the statement said, and needed to be offset "by reductions within NASA's budget" to "ongoing and planned NASA programs."

These included "redirections" for half of NASA's education budget, 5 percent of the exploration budget and 4 percent of the science budget, the statement said. This comes at a time when NASA is trying to fly the space shuttle, build the international space station and design a new spaceship to go to the moon and Mars, all at the same time.

Griffin explained to the *Washington Post* that "Our budget is very limited. We have a strategy approved by Congress, and we can carry out that strategy . . . but every earmark, if it isn't coaligned with that strategy, is a fiscal distraction."²²

Congress Should Hold NASA Accountable for Meeting Its Current Mission and Stop Distracting the Agency with Earmarks Before Expanding the Agency's Responsibilities

Serious management problems have been identified with NASA management and Congress' earmarking of NASA funds.

Before Congress expands NASA's authority and bureaucracy, oversight is needed to improve the agency's performance.

Likewise, Congress needs to prioritize NASA funding by refraining from inserting earmarks that distract the agency from meeting its

²² Guy Gugliotta. "At NASA Hearing, Silence on Earmarks," *Washington Post*, April 26, 2006; A23; <http://www.washingtonpost.com/wp-dyn/content/article/2006/04/25/AR2006042501702.html>

mission or achieving the very contributions to education, science and U.S. competitiveness sought by the America COMPETES Act.

Excerpt of Statement by NASA Administrator Michael Griffin before the Senate Appropriations Subcommittee on Science and Space

April 25, 2006

Impact of Earmarks on NASA's Mission

NASA pioneers the future in space exploration, scientific discovery and aeronautics research. In order to carry out this mission, NASA awards peer-reviewed science grants and conducts competitively-selected procurements to select research and development projects to benefit the public based on the priorities of the Congress, President, and scientific community. NASA is implementing these priorities within the resources provided. NASA's FY 2006 appropriation totals \$16.623 billion, including \$349.8 million in emergency supplemental appropriations for Hurricane Katrina recovery at NASA facilities in Louisiana and Mississippi. Within this FY 2006 appropriation is a total of \$568.5 million in directed funding for 198 discrete site-specific and programmatic Congressional interest items, a record high in both dollar amount and number of individual items. These Congressional interest items are offset by reductions within NASA's budget, to ongoing and planned NASA programs. Earmarks have increased by a factor of more than 30 in number and almost 8 in dollar value since FY 1997, when NASA was earmarked \$74 million, for 6 discrete items. The growth of these Congressional directions is eroding NASA's ability to carry out its mission of space exploration and peer-reviewed scientific discovery.

In formulating our budget, NASA prioritizes activities to achieve an integrated package of programs and projects to best achieve the priorities that have been provided us by both the President and the Congress. The redirection of funding erodes the integrity of our plans, has resulted in delays and/or cancellation of planned activities, and may conflict with timely development of the CEV. In FY 2006, as a result of earmarks, NASA had to redirect a significant portion of many planned budgets. Fully 50 percent of the planned Education program required redirection, 16 percent of the Innovative Partnerships Program, 5 percent of the Exploration Systems budget, and 4 percent of the Science budget. Further, the scientific community bases its

research priorities on a peer-review process. Congressional site-specific earmarks circumvent this process for setting research priorities within the science community and erode the integrity of that process. Site specific earmarks to institutions outside of NASA exacerbate the problems of NASA's "uncovered capacity" workforce, where NASA civil servant scientists and engineers do not have funds for their own research and development projects. As stated in the President's ACI, "The rapidly growing level of legislatively directed research funds undermines America's research productivity." NASA seeks the assistance of this Committee and Congress in reducing earmarks in the FY 2007 budget process.

NASA's Role in American Competitiveness Initiative (ACI)

As part of his FY 2007 budget request to Congress, the President proposed the American Competitiveness Initiative, or ACI, to encourage American innovation and strengthen our Nation's ability to compete in the global economy. Many have asked why NASA is not a part of the ACI. My response is that it is the mission of NASA to pioneer the future of space exploration, scientific discovery, and aeronautics research, while the ACI is focused on bolstering the Nation's economic competitiveness in areas such as information technology and nanotechnology. NASA contributes to the Nation's competitiveness through all of the cutting-edge exploration, science, and aeronautics investments accomplished by our Mission Directorates.

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Wednesday, April 26, 2006
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<http://www.washingtonpost.com/wp-dyn/content/article/2006/04/25/AR2006042501702.html>

At NASA Hearing, Silence on Earmarks

By Guy Gugliotta
Washington Post Staff Writer

Most administration officials are on their best behavior when they appear before Congress, but NASA Administrator Michael D. Griffin, despite reasonable skills as a forehead-knuckler, is much better known for telling blunt truths.

It would have been interesting to see how members of the Senate subcommittee on science and space would have reacted had they asked Griffin during a hearing yesterday about the \$568.5 million in earmarks that lawmakers had tucked into NASA's spending bill this year.

Because Griffin was ready to talk about it. Deep inside his 10-page prepared statement -- submitted for the record but not read -- NASA had fixed him up with two meaty, single-spaced paragraphs on the "Impact of Earmarks on NASA's Mission."

The topic sentence left little to the imagination: "The Growth of these Congressional directions is eroding NASA's ability to carry out its mission of space exploration and peer-reviewed scientific discovery."

Earmarks, also known as "special projects," "congressional directions," "directed funding" or, less flatteringly, "pork," are the gifts that lawmakers make to their districts or states. The NASA bill included pages and pages of these, including \$4 million for something called the "Alliance for NanoHealth" and \$500,000 for the "Temporal Land Cover Change Research Program at Idaho State University."

Griffin pointed out that \$568.5 million was real money for an agency whose total budget is \$16.623 billion. It was a "record high in both dollar amount and number of individual items," the statement said, and needed to be offset "by reductions within NASA's budget" to "ongoing and planned NASA programs."

These included "redirections" for half of NASA's education budget, 5 percent of the exploration budget and 4 percent of the science budget, the statement said. This comes at a time when NASA is trying to fly the space shuttle, build the international space station and design a new spaceship to go to the moon and Mars, all at the same time.

But none of this got said at the hearing. Even though heads of federal departments generally do not like earmarks, they rarely say so, especially when they are making their periodic pilgrimages to ask Congress to keep funding their programs.

So did Griffin pull his punches?

Naw: "I feel about these earmarks the same way I always feel about earmarks," Griffin told reporters after the hearing. "Our budget is very limited. We have a strategy approved by Congress, and we can carry out that strategy . . . but every earmark, if it isn't coaligned with that strategy, is a fiscal distraction."

As far as the future, Griffin said he understood that "members have specific interests, and we try to work with members," but \$568.5 million was a bit much. What would he like instead? "I would like it to be a lower number," he said. "This is not a hard problem, guys."

Executive Order: National Aeronautics Research and Development

By the authority vested in me as President by the Constitution and the laws of the United States of America, including section 204 of the National Science and Technology Policy, Organization, and Priorities Act of 1976, as amended (42 U.S.C. 6613), section 101(c) of the National Aeronautics and Space Administration Authorization Act of 2005 (Public Law 109 155), and section 301 of title 3, United States Code, it is hereby ordered as follows:



Section 1. National Aeronautics Research and Development Policy. Continued progress in aeronautics, the science of flight, is essential to America's economic success and the protection of America's security interests at home and around the globe. Accordingly, it shall be the policy of the United States to facilitate progress in aeronautics research and development (R&D) through appropriate funding and activities of the Federal Government, in cooperation with State, territorial, tribal, local, and foreign governments, international organizations, academic and research institutions, private organizations, and other entities, as appropriate. The Federal Government shall only undertake roles in supporting aeronautics R&D that are not more appropriately performed by the private sector. The National Aeronautics Research and Development Policy prepared by the National Science and Technology Council should, to the extent consistent with this order and its implementation, guide the aeronautics R&D programs of the United States through 2020.

Sec. 2. Functions of the Director of the Office of Science and Technology Policy. To implement the policy set forth in section 1 of this order, the Director of the Office of Science and Technology Policy (the "Director") shall:

- (a) review the funding and activities of the Federal Government relating to aeronautics R&D;
- (b) recommend to the President, the Director of the Office of Management and Budget, and the heads of executive departments and agencies, as appropriate, such actions with respect to funding and activities of the Federal Government relating to aeronautics R&D as may be necessary to
 - (i) advance United States technological leadership in aeronautics;
 - (ii) support innovative research leading to significant advances in aeronautical concepts, technologies, and capabilities;
 - (iii) pursue and develop advanced aeronautics concepts and technologies, including those for advanced aircraft systems and air transportation management

systems, to benefit America's security and effective and efficient national airspace management;

(iv) maintain and advance United States aeronautics research, development, test and evaluation infrastructure to provide effective experimental and computational capabilities in support of aeronautics R&D;

(v) facilitate the educational development of the future aeronautics workforce as needed to further Federal Government interests;

(vi) enhance coordination and communication among executive departments and agencies to maximize the effectiveness of Federal Government R&D resources; and

(vii) ensure appropriate Federal Government coordination with State, territorial, tribal, local, and foreign governments, international organizations, academic and research institutions, private organizations, and other entities.

Sec. 3. Implementation of National Aeronautics Research and Development Policy. To implement the policy set forth in section 1 of this order, the Director shall:

(a) develop and, not later than 1 year after the date of this order, submit for approval by the President a plan for national aeronautics R&D and for related infrastructure, (the "plan"), and thereafter submit, not less often than biennially, to the President for approval any changes to the plan;

(b) monitor and report to the President as appropriate on the implementation of the approved plan;

(c) ensure that executive departments and agencies conducting aeronautics R&D:

(i) obtain and exchange information and advice, as appropriate, from organizations and individuals outside the Federal Government in support of Federal Government planning and performance of aeronautics R&D;

(ii) develop and implement, as appropriate, measures for improving dissemination of R&D results and facilitating technology transition from R&D to applications; and

(iii) identify and promote innovative policies and approaches that complement and enhance Federal Government aeronautics R&D investment; and

(d) report to the President on the results of the efforts of executive departments and agencies to implement paragraphs (c)(i) through (iii) of this section.

Sec. 4. General Provisions. (a) In implementing this order, the Director shall:

(i) obtain as appropriate the assistance of the National Science and Technology Council in the performance of the Director's functions under this order, consistent with Executive Order 12881 of November 23, 1993, as amended;

(ii) coordinate as appropriate with the Director of the Office of Management and Budget; and

(iii) obtain information and advice from all sources as appropriate, including individuals associated with academic and research institutions and private organizations.

(b) The functions of the President under subsection (c) of section 101 of the National Aeronautics and Space Administration Authorization Act of 2005, except the function of designation, are assigned to the Director of the Office of Science and Technology Policy. In performing these assigned functions, the Director shall, as appropriate, consult the Administrator of the National Aeronautics and Space Administration, the Secretary of Defense, the Secretary of Transportation, the Director of the Office of Management and Budget, and other heads of executive departments and agencies as appropriate. The Director also shall ensure that all actions taken in the performance of such functions are consistent with the authority set forth in subsections (a) through (d) of section 6 of Executive Order 13346 of July 8, 2004.

(c) This order shall be implemented in a manner consistent with:

(i) applicable law, including section 102A(i) of the National Security Act of 1947, as amended (50 U.S.C. 403 1(i)), and subject to the availability of appropriations; and

(ii) statutory authority of the principal officers of executive departments and agencies as the heads of their respective departments and agencies.

(d) This order shall not be construed to impair or otherwise affect the functions of the Director of the Office of Management and Budget relating to budget, administrative, and legislative proposals.

(e) This order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity by a party against the United States, its departments, agencies, instrumentalities, or entities, its officers, employees, or agents, or any other person.

THE WHITE HOUSE,

December 20, 2006