National Aeronautics and Space Administration (NASA)
Agency E-Government Act Implementation Update
October 20, 2006

NASA is pleased to submit our annual update on compliance with the E-Government Act of 2002, completed in response to Office of Management and Budget (OMB) memorandum for CIOs, "FY 2006 E-Government Act Reporting Instructions," dated August 25, 2006. As described in the following sections on implementation, information dissemination, and FOIA operations NASA has made implementation of the E-Gov Act a priority within the Agency.

Implementation of the E-Government Act of 2002

The NASA Information Resources Management (IRM) Strategic Plan was revised in March 2006 to align with the Agency's updated 2006 Strategic Plan, reflecting NASA's new challenges in implementing the Vision for Space Exploration. Updated in September 2006, the plan directly links IRM strategies to the NASA vision, mission, and strategic goals, and is a companion document to the NASA Enterprise Architecture (EA). Version 4.1 of the Agency's EA was published in February 2006, and recently incorporated the updated Federal Enterprise Architecture (FEA) reference models into the NASA Enterprise Architecture. The six strategic goals of NASA's IRM guide the Agency in meeting its E-Government Act responsibilities (as well as OMB Circular A-11, the Clinger-Cohen Act, and GPRA):

1. Provide an IT infrastructure that can evolve and adapt to emerging technologies and service models;
2. Optimize investments in mission and program-unique IT systems by utilizing common infrastructure tools and services where practical;
3. Provide a customer focus to the provisioning of common IT services across NASA;
4. Protect and secure the Agency's information assets;
5. Maintain an Agency-wide IT investment portfolio in alignment with mission and business needs; and
6. Maintain a strong workforce through effective human capital management.

For each of these strategic goals, targeted performance measures have been developed that are citizen-centered and productivity-related.

Another of the overarching principles of the E-Government Act of 2002 requires that agencies ensure compliance with Section 508 of the Rehabilitation Act of 1973. NASA has taken, and continues to make, strides that provide increased accessibility to the Agency's information, consistent with Section 508. NASA has instituted a virtual Section 508 help desk, which accepts email questions from Agency civil servants and contractors concerning all aspects of Section 508 requirements and implementation. Responses to questions are sent via email to the originators, within a target window of three business days. Questions and responses of general interest are also posted as FAQs on the NASA Section 508 web site. NASA is also re-designing its Agency Section 508 web site to better deliver Section 508-related information to the entire NASA community. The NASA Section 508 Working Group and other Agency Section 508 activities continue to contribute to a robust NASA Section 508 effort.

NASA is also participating in sixteen of the original twenty-four Presidential E-Government initiatives applicable to the Agency, plus the E-Authentication crosscutting initiative. As of September 2006, the Agency had fully migrated to and/or completed all of the approved Implementation Plan milestones. In addition, NASA is actively engaged in five of the six initial Federal Lines of Business (LoB) initiatives, and is currently exploring potential opportunities for the three newest LOBs (Infrastructure, Geospatial, and Budget Formulation and Execution).

Highlights of the Agency's PMA efforts include: streamlining three separate online training systems into one central online training system (SATERN) as part of the E-Training initiative; completed deployment of the Federal Docket Management System to receive public comment on its rules (E-Rulemaking); for Integrated Acquisition Environment (IAE), completed transition to the electronic Small Business Reporting System and shut down the Agency's interim Small Business Reporting System; and aligned NASA wireless activities with the SAFECOM initiative.

Implementation of a NASA-specific E-Government Initiative

NASA's strategic intent, consistently stated for the last several years, is to pursue an integrated solution that seamlessly ties together financial applications, supports government mandates such as the President's Management Agenda (PMA), and supports internal NASA initiatives such as full cost accounting. Consistent with these broader goals, NASA's procurement community is in the process of optimizing its business operations to keep pace with common industry practices. This optimization project, once fully implemented and integrated, will transform procurement processes across the Agency.

Compusearch Software Systems Inc. was selected to provide the software for the agency-wide Contract Management Module (CMM). The contract resulted from a competition among vendors under a GSA schedule. The software has been configured and tested, and is scheduled to be implemented at all NASA Centers in November 2006. NASA, due to its large number of complex contracts and the required integration with SAP, will be the most complex implementation of the Compusearch product to date. The CMM Project verified the Section 508 aspects of the NASA CMM configuration during the CMM test phase.

The CMM Project will provide a comprehensive tool to support contract writing, contract administration, procurement workload management, and data reporting/management for NASA. The Project will also provide process reengineering to facilitate, economize, and expedite procurement processes, and will be integrated within the current Integrated Enterprise Management Program (IEMP).

NASA's functional requirements for CMM focus on the following areas:

- Contract Writing System: electronic document generation and transmission system capable of seamlessly interfacing/integrating with the Agency's IEMP Core Financial System.
- Data Management: (several Federal requirements for reports) provision of data to

General Services Administration's (GSA) Federal Procurement Data System (FPDS) and NSF's Federal Assistance Awards Data System, along with reports to the Department of Labor (DOL) and Small Business Administration (SBA).

- Procurement Workload Management: workload tracking and data system capable of providing timely and accurate metric and status data to procurement personnel, managers, customers, and stakeholders.
- Contract Administration and Other: management of acquisitions above the bank card threshold, complex commercial item acquisitions, complex modifications, non-commercial item acquisitions, cooperative agreements, grants management, and federally required reports.

CMM will comply with the Federal Acquisition Regulation (FAR), NASA FAR Supplement (NFS), the Grant and Cooperative Agreement Handbook, and related or applicable Federal and NASA policies. The system will interface with electronic commerce systems, incorporate the proper security measures, and allow seamless communication between the Agency's procurement personnel and customers. CMM will result in less paperwork, a standardized business process, a platform for e-Gov initiatives, and an overall improvement in the way NASA does business.

Key benefits of the CMM include:

- Providing a collaborative and efficient procurement process to better manage procurement and related financial reporting (e.g., reporting to Congress)
- Modernizing NASA procurement processes and systems with clearly defined lines of responsibility and control (i.e., consistent and accurate contract formation in accordance with FAR and NFS updates)
- Leveraging and applying expertise of trained Procurement workforce and apply best practices
- Supporting informed decision making and improve IEMP data quality
- Maximizing the budget for mission expenditures by reducing life cycle costs through the utilization of procurement and project management data fields

The efficiencies gained through standardized procurement processes will benefit NASA by allowing workload realignment and by supporting the NASA Shared Services Center (NSSC). Without the new tools provided by CMM, the diminished NASA procurement workforce will be hard-pressed to carry out important contract management duties. The estimated 10-year present value benefit to the Agency is 12.5M based on savings and cost avoidance as detailed below. An investment of 54.8M yields the following present value benefits. Specifically:

Project Present Value Benefits:

System Savings / Cost Avoidance	est. $37.1M
Mission Savings / Cost Avoidance	est. $30.2M
Total Present Value Benefits:	**est. $67.3M**

In addition, performance measures exist and adequately reflect the linage to the appropriate mission and business functions and objectives. The measures are:

- Reduction in time required to reconcile data for external Agency reporting
- Increase in procurement staff and procurement system users satisfied with NASA procurement systems
- Reduction in average resolution time for procurement systems help desk tickets
- Average level of system availability

With an integrated e-Gov tool, processes that directly affect contract management and procurement can be properly maintained to fulfill the stewardship responsibility incumbent upon all NASA employees. Increasing effectiveness and efficiency will inevitably reduce life cycle costs, thereby maximizing the budget available for NASA mission expenditures. In addition, better data quality (allowing for more informed investment decision-making), less risk (consistent contract structure and content), and more satisfied customers (with better procurement services) will result from this integrated process.

Ensuring Electronic Availability of NASA's Information

NASA has historically provided a wide variety of information to the public via the Internet, and is continually reviewing and revising its processes for making Agency information available to its audiences. As one of the first Federal organizations to publish a web page featuring news and information targeted to the general public, many of NASA's key informational products are already available through the Internet. NASA's ever-evolving Web Portal provides the public with a wide range of material pertaining to the Agency and its mission, including strategic plans and budget information, scientific and technical publications, Agency events and science discoveries, historical accounts of the aeronautics and space programs, and biographies of astronauts and other key NASA officials. Additional audience-targeted content is made available in channels provided through the NASA Web Portal.

An illustrative example of NASA's commitment to ensuring electronic availability of information is the amount of content posted, maintained, and shared during the Space Shuttle Discovery mission in July 2005. NASA posted exhaustive coverage of the launch through video and audio streams, as well as high-resolution images. The web portal sent 586 terabytes (TB) to users during the 14-day mission, including 2.5 million webcast streams of NASA Television mission coverage. At one point, NASA was streaming 257,000 videos at once.

The inventory of information available through the NASA Web Portal and the links to access such information includes the following:

- Agency news releases and other materials for the news media, linked to the For Media page
- Agency organizational information, linked to the About NASA page
- Agency reports and plans, linked to the Budget/Plans page
- Curricula and other educations resources for educators, linked to the For Educators page
- Educational and other material for students, linked to the For Students page
- Feature stories on Agency activities, linked to NASA's home page
- Material for children, linked to the For Kids page
- Images, video and interactive media, linked to the Multimedia page

Information for students and teachers is generally updated weekly. Information for the media and general public is updated as events warrant, usually several times each business day. The inventory of information available through the Web Portal is comprised of the portal archives, which users can link to via the search engine on the pages.

NASA's Office of Public Affairs determines which Government information is made available and accessible to the public through the NASA Web Portal, http://www.nasa.gov.

The Office of Public Affairs releases information based on its news value and interest to the media and public. Final determination of which material will be released is based on the judgment and professional expertise of the Director of the Multimedia Division, the NASA News Chief and the Internet Services Manager. As the release of this information is timed to its news value and is highly variable in content, the Agency does not maintain a fixed schedule or list of priorities. In terms of final determinations, priorities, and schedules available for public notice and comment, the public and the news media provide feedback to the News and Multimedia Division on a daily basis via telephone and e-mail, making a formal comment period unnecessary.

NASA provides a link for the public to access our final determinations, priorities, and schedules on its main webpage (www.nasa.gov), pages accessible to the public with URL's that end in nasa.gov, and each of the NASA Center's web pages. The link is called "NASA Information-Dissemination Product Inventories, Priorities and Schedules" and takes viewers to <http://www.nasa.gov/about/contact/information_inventories_schedules.html>. This link has been propagated throughout most of NASA's public web pages.

Other NASA web sites are managed by NASA mission directorates, centers, programs and projects, which make their own determinations of what material to release.

A further testimony of NASA's commitment to make information more available to the public is the upgrade of the Agency's search feature on its website. NASA significantly upgraded its search capabilities during 2006, adding a Google Search Appliance to the existing Verity search tool. Since the Google appliance was brought online, customer satisfaction with search has increased noticeably. The refined NASA-wide search engine, available on every www.nasa.gov Web page, searches all files posted to the Web through the portal, displays search results in order of relevancy and provides response times equivalent to industry best practices. Capabilities allow users to use advanced search criteria, and links are also provided for Category searches and Multimedia searches, in addition to popular search terms and search tips.

NASA is committed to not only sharing information with the public, but also ensuring the quality of the information. NASA has several on-going processes for ensuring information quality, including but not limited to editorial reviews, compliance reviews, content reviews, and peer reviews. NASA has also established administrative mechanisms by which affected persons can obtain, where appropriate, timely correction of information maintained and disseminated by NASA if the information does not comply with NASA's quality standards. Information about NASA's commitment to quality of scientific and technical information, including the relevant

processes can be found at http://www.sti.nasa.gov/nasaonly/qualinfo.html, "NASA Guidelines for Quality of Information."

As these examples above illustrate, NASA has a history of providing extensive scientific, educational, and news information via the Internet, and continues to evaluate and refine its processes for making Agency information available on the Internet. The audience-focused approach has been very effective for the Agency, ensuring that the most relevant content is quickly provided to the intended recipients. NASA continues to be receptive to feedback from its varied audiences about what information should be provided electronically (if it is not already available), and is committed to increasing the availability of Agency information via the Internet to the greatest possible extent.

Coordinating NASA's Information Dissemination Activities with FOIA Operations

Complimenting NASA's approach to ensuring the electronic availability of the Agency's information to the public via the Internet, FOIA operations at NASA are disseminated with the Web Portal to improve public access to this important government information.

In compliance with Executive Order 13392, National Aeronautics and Space Administration (NASA), on June 13, 2006, submitted its Freedom of Information Act (FOIA) Improvement Plan to both the Office of Management and Budget (OMB) and the Department of Justice (DOJ). This plan was additionally posted on NASA's FOIA web page, at http://www.hq.nasa.gov/office/pao/FOIA/EO13392.pdf, and specifically described areas chosen as improvement areas for the Agency. Currently, those areas are (1) FOIA Staffing, (2) Equipment/Logistics, (3) Web Site Improvement, (4) Agency Reference Guide, (5) FOIA Database, (6) FOIA Training, and (7) Communications. As of September 15, 2006, a modification to the original plan was submitted which specifically addressed NASA's FOIA backlog.

(1) Staffing – NASA is focusing on eliminating single point failures at each center. While in the past FOIA was relegated to a part-time or additional duty, current practices require that each of the Agency's 13 decentralized FOIA Requester Service Centers be staffed with a primary FOIA center employee.
(2) Equipment/Logistics – All FOIA Requester Service Centers will be acquiring FOIA redaction software. In tandem with procuring desktop scanners, these additions will improve the individual processing procedures.
(3) Web Site Improvement – NASA will be redeveloping its center FOIA web sites to incorporate the 'portal' design, which will allow the public to view and maneuver through each of the 13 FOIA related web pages in a more user-friendly manner. During this redesign NASA will consolidate its E-FOIA Reading Rooms into a one-stop shop for the convenience to the public.
(4) Agency Reference Guide – This easy reference guide will be available to the public both in print and electronically to help them through the FOIA process. The guide will provide the public with all information to assist them to make a perfected FOIA request to NASA.

(5) FOIA Database – The Agency is reviewing ways to replace our current FOIA database with either a commercial or in-house version that will allow the pubic to access and track the status of their FOIA requests.
(6) FOIA Training – NASA has committed itself to seek professional development training for all its primary and backup FOIA staff members. The American Society of Access Professional (ASAP) training program has been identified as our primary source of training. ASAP is a professional forum dedicated to bringing government FOIA and Privacy Act personnel in touch with the requester community. The organization provides quality professional educational programs that draw upon the highest caliber of government FOIA and Privacy instructors, along with known experts in the public requester field, to teach and discuss common problems in an open-dialogue forum.
(7) Communications – NASA has established a toll-free telephone number (877-627-FOIA) and a direct email address (nasafoia@nasa.gov) for public use to directly contact the Agency's Chief Public Liaison Officer. This communications process provides focus at the highest level of the Agency to handle citizen-based comments or complaints.
(8) Back Log Reduction – NASA has identified backlogs at its larger volume processing centers and has initiated means to begin to reduce this, beginning with using its internal resources to reduce its FOIA backlog. Additional measures include the use of electronic redaction tools to process requests, transferring backlog cases to other processing centers, and conducting electronic reviews prior to public release of agency records. NASA's modified plan calls for the identification of the oldest FOIA requests on a quarterly basis. The Agency Chief FOIA Officer or Principal Agency FOIA Officer will conduct a review of those files and prepare a specific plan of action to be implemented to close out by the end of that specific quarter. This portion of the modified FOIA Improvement Plan has divided the decentralized FOIA Requester Service Center into three (3) NASA FOIA Regions (East, South, and West), which will provide additional regional assistance to processing FOIA requests.

The revised FOIA Improvement Plan has incorporated electronic improvements to NASA's current FOIA process, primarily with the focus on public accessibility to Agency information. As part of a continuing assessment to improve this FOIA program, NASA will evaluate additional ways to connect with the public via our NASA FOIA web page. One example currently being evaluated is the utilization of commercial FOIA Database designs. These commercial firms have additional features that were not considered as a primary need for NASA's implementation or procurement (i.e. interconnectivity with our redaction software and public dissemination online to the requester and the public).

NASA has been proactively complying with the "Electronic Freedom of Information Act Amendments of 1996." In past years the Agency set up a specific Electronic FOIA (E-FOIA) Reading Room for posting documents relating to the Columbia accident. Currently, NASA has awarded a major contract for the development of the Crew Exploration Vehicle (CEV), which was recently posted to the Agency E-FOIA Reading Room. These and other Agency records have been electronically posted for: (1) meeting the multiple requests for similar records; or (2) the anticipation of public interest for agency records. NASA continues to be vigilant in maintaining and augmenting the Agency's FOIA web sites in order to ensure consistent compliance with the Electronic FOIA amendments.

It should be noted that there is a planned web site improvement that will focus on the consolidation of NASA's decentralized E-FOIA Reading Rooms. This will provide a one-stop shop for the public to find all electronically posted Agency records, which have been placed in the public reading room, in accordance with the E-FOIA Amendments of 1996 (as described in the above paragraph). NASA is also redesigning the method for indexing those documents into a subject matter + alpha order system, which will reduce the public search time to seek responsive Agency records already processed, under the FOIA.

Additional information about how NASA is improving access and dissemination to Agency information can be located in the NASA Information Resources Management (IRM) Strategic Plan, posted online at: http://www.nasa.gov/pdf/160990main_CIO_IRM_Strategic_Plan.pdf. Updated in September 2006, the Agency's IRM Strategic Plan is in alignment with NASA's vision, mission, and strategic goals. This plan serves as a communication vehicle for sharing NASA's strategy both internal and external to the Agency. Effectively managing, preserving, protecting, and disseminating the Agency's information across the Agency and external to NASA stakeholders, including the public, is imperative for mission success.

In terms of Federal research and development activities, NASA research and development (R&D) information is available through the Rand Database of Research and Development in the U.S. (RaDiUS). Although NASA is currently in compliance with its reporting requirements to RaDiUS, the Agency continues to work with its procurement community and the NASA Shared Service Center (NSSC) to update and improve the quality of R&D award information in RaDiUS.

While NASA does not have a dedicated database listing on the "Federal R&D Project Summaries" page at Science.gov, the "Astronomy & Space" section at Science.gov does have a direct link to the NASA Technical Report Server (NTRS). The NTRS is a comprehensive source of NASA's current and historical aerospace research and engineering results. NASA's R&D and missions produce a wealth of important scientific and technical information that is essential to the Agency, to U.S. aerospace companies and educational institutions, and to the Nation. The NTRS is an integral part of gathering and disseminating this mission-related information. NTRS promotes the dissemination of NASA Scientific and Technical (STI) to the widest audience possible by allowing NTRS information be harvested by sites using the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH).

NTRS is sponsored by the NASA Scientific and Technical Information Program Office, which supports the acquisition, organization, management, and dissemination, and long-term retention and safeguarding of STI relevant to NASA's research and development and missions. The purpose of the NASA STI Program is to:

- Help ensure that NASA research is cost-effective by providing scientists and engineers with access to existing NASA and worldwide research results. In this way, the NASA STI Program reduces duplication and increases productivity, which not only increases the yield of the tax dollars invested in NASA research but also accelerates scientific progress
- Support the work of the U.S. aerospace industries. To maintain their competitiveness,

they rely on current knowledge of R&D developments in NASA, the United States, and the world
- Share the results of NASA's research with the world, as appropriate

In conclusion, NASA has made implementation of the E-Gov Act a priority within the Agency. The integrated Contract Management Module is transforming the efficiency and effectiveness of the procurement process across NASA. In addition, the Agency has enjoyed success and improved efficiencies in making information available to the public via the Internet. Finally, the revised Freedom of Information Act (FOIA) operations – also disseminated via NASA's Web Portal – have greatly improved public accessibility to Agency information.