



# Semiannual REPORT TO Congress

March 2006

# Major Challenges for the Department

The Office of Inspector General, in assessing its work at the close of each semiannual period, develops its list of Top 10 Management Challenges the Department faces. Each challenge meets one or more of the following criteria: (1) it is important to the Department's mission or the nation's well-being, (2) it is complex, (3) it involves sizable resources or expenditures, or (4) it requires significant management improvements. Because of the diverse nature of Commerce activities, these criteria sometimes cut across bureau and program lines. Experience has shown that by aggressively addressing these challenges the Department can enhance program efficiency and effectiveness; eliminate serious operational problems; decrease fraud, waste, and abuse; and achieve substantial savings.

## Challenge 1

### Strengthen Department-wide Information Security

In the 4 years since enactment of the Federal Information Security Management Act (FISMA), government agencies have devoted significant resources to improving the security of information stored on their computer systems. The problem is long-standing: GAO has identified information security as a government-wide high-risk issue every year since 1997. At Commerce, it is the number one challenge, and has been a material weakness since 2001.

To eliminate the material weakness, Commerce has emphasized improving its certification and accreditation (C&A) process for IT systems. In initiating an effort in February 2005 to enhance the quality of its C&A packages, its chief information officer issued a plan to produce acceptable quality C&A packages for all national-critical systems and some mission-critical systems by the end of FY 2005 and for all other systems by the end of FY 2006. Given the plan, our approach to the C&A portion of our 2005 FISMA evaluation was to review all improved packages available by August 31, 2005. Only five were ready—three from NOAA and two from Census<sup>2</sup>—but these showed some noteworthy improvements.

<sup>2</sup> The schedules provided by the Department's CIO Office in June indicated that more than 20 C&A packages would be available by August 31, 2005. The CIO subsequently reported that by September 30, C&A packages for all national-critical systems and over half of the mission critical-systems had been improved.

#### TOP 10 MANAGEMENT CHALLENGES

1. Strengthen Department-wide information security.
2. Effectively manage departmental and bureau acquisition processes.
3. Strengthen internal controls over financial, programmatic, and business processes.
4. Ensure that USPTO uses its authorities and flexibilities as a performance-based organization to achieve better results.
5. Control the cost and improve the accuracy of the decennial census.
6. Effectively manage the development and acquisition of environmental satellites.
7. Promote fair competition in international trade.
8. Effectively manage NOAA's stewardship of ocean and living marine resources.
9. Aggressively monitor emergency preparedness, safety, and security responsibilities.
10. Enhance export controls for dual-use commodities.

NOAA had significantly enhanced risk assessments, security plans, and testing, while Census's security plans were more comprehensive than in the past.

However, because of the testing deficiencies we still found and the few packages available for review, we have concluded that the Department's C&A process has not improved to the point where authorizing officials have sufficient details about remaining system vulnerabilities to make fully informed accreditation decisions. Therefore, we concluded that the IT security material weakness remains.

Our forthcoming report on our review of NOAA will contain recommendations for improving that agency's C&A packages and its process for managing the correction of security weaknesses. These recommendations may inform efforts Department-wide.

Commerce officials have continued to make clear their commitment to working with us to strengthen the C&A process. At the request of the Department's acting CIO, we presented the findings from our 2005 FISMA evaluation of C&A packages at the December CIO Council meeting. The meeting gave us the opportunity

### Excerpt: Management of Federal Resources, OMB Circular A-130

Safeguards. Agencies shall:

- (a) Ensure that information is protected commensurate with the risk and magnitude of the harm that would result from the loss, misuse, or unauthorized access to or modification of such information;
- (b) Limit the collection of information which identifies individuals to that which is legally authorized and necessary for the proper performance of agency functions;
- (c) Limit the sharing of information that identifies individuals or contains proprietary information to that which is legally authorized, and impose appropriate conditions on use where a continuing obligation to ensure the confidentiality of the information exists;
- (d) Provide individuals, upon request, access to records about them maintained in Privacy Act systems of records, and permit them to amend such records as are in error consistent with the provisions of the Privacy Act.

to discuss the deficiencies, offer technical advice, and answer questions from the Department, bureau CIOs, and IT security officers. Our hope is that this interchange will continue and will enable Commerce to eliminate the problems with testing we have consistently noted, and to produce packages that fully support system accreditation decisions. The acting CIO is working with the operating units to identify the packages that will be available for our FY 2006 FISMA review.

### C&A Weaknesses at USPTO

In a separate FISMA review, we looked at two packages from the United States Patent and Trademark Office (USPTO). In FY 2004, we had found this agency's C&A process to be strong. However, our FY 2005 assessment noted shortfalls in USPTO's monitoring of certified and accredited systems. The two systems in our review had undergone major changes since their certification and accreditation in 2004, but the agency had not considered the potential impact of the changes on the security of the systems, or evaluated the need to reaccredit. In addition, our examination of USPTO's IT service contracts (see September 2005 *Semiannual Report*, page 33) found, among other things, that no contractor IT systems have been certified or accredited, a situation that could place restricted information at risk.

### FISMA Focus on Authenticating Remote Users

Another focus of our FY 2005 work was e-authentication risk assessments for selected Department systems. E-authentication is the process of electronically verifying the identities of users accessing government services over the Internet and is crucial to the Department's ability to properly authorize access to data and hold users accountable for their actions.

As part of our review, we evaluated the quality of NOAA's e-authentication risk assessment process for its Search and Rescue Satellite Aided Tracking System (SARSAT)—the U.S. portion of an international program that uses satellites to coordinate search and rescue activities. We identified a number of problems with the risk assessment as well as ways to strengthen the process and minimize the potential for unauthorized access to critical systems such as SARSAT, while improving user accountability. We will detail our findings and recommendations in our next semiannual report.

### Challenge 2

### Effectively Manage Departmental and Bureau Acquisition Processes

Commerce spends nearly \$2 billion annually on goods and services—roughly a third of its annual appropriation—and each year relies more on contractors to support its mission-critical work. Adequate oversight of acquisition planning and execution is essential to ensuring that taxpayer dollars are spent effectively and efficiently and procurement laws and regulations are followed.

The Census Bureau's contracting for products and services to support 2010 decennial operations continues to bear watching. The bureau estimates that 17 percent (\$1.9 billion) of its 2010 budget will be spent on contracts for information technology systems, advertising, and leases for local office space.<sup>3</sup> One key IT program—Field Data Collection Automation (FDCA)—will develop the handheld mobile computers that field staff will use to collect 2010 decennial information. This is a critical piece of the bureau's reengineered strategy. Census originally planned to develop this equipment in-house but determined in early 2004 that it lacked the management and technical resources to do so. It set a late-March 2006 date for selecting a contractor to develop the system, and planned to use information gained during field tests last summer and fall to refine

<sup>3</sup> <http://frwebgate.access.gpo.gov/cgi-bin/useftp.cgi?IPaddress=162.140.64.21&filename=d06465t.pdf&directory=/diskb/wais/data/gao>. Accessed April 7, 2006.

contract requirements. However, bureau officials had no process for transferring relevant information from the tests to the contract or identifying needed changes. So the contract was awarded without being modified to reflect lessons learned in the field tests. Should the need for changes to requirements emerge as the contract progresses, the bureau's costs for this key program are likely to grow.

We are also reviewing USPTO's acquisition management procedures and guidelines, looking at a sample of contracts worth nearly \$2.2 billion. Past work by our office and GAO has noted that—in the critical area of automation—the agency sometimes took an ad hoc approach to planning and managing acquisition of systems, and failed to sufficiently analyze needs, alternatives, and costs. Preliminary findings from our in-progress work indicate that while USPTO has high-level acquisition policies, it lacks specific guidance for contracting officers.

### Challenge 3

## Strengthen Internal Controls Over Financial, Programmatic, and Business Processes

Internal controls are the steps agencies take to make sure their operations are effective, efficient, and in compliance with laws and regulations. Internal controls also ensure that financial reporting is reliable, and assets are safeguarded from waste, loss, or misappropriation, according to the Office of Management and Budget (OMB). Two documents, the Federal Managers' Financial Integrity Act (FMFIA) and the 2004 revision of OMB Circular A-123 (*Management's Responsibility for Internal Control*), set out internal control requirements for the federal government: Commerce and all federal agencies must define and document major financial internal control processes and test key financial controls to determine whether they are effective as of June 30, 2006.

In addition, Circular A-123 requires management to provide an assurance statement on the internal controls over financial reporting in its annual *Performance and Accountability Report*, including a

Without effective controls, "fraud, waste, and abuse in federal activities and programs lead to loss of billions of dollars of government funds, erode public confidence, and undermine the federal government's ability to operate effectively."

—McCoy Williams, Director, GAO Financial Management and Assurance, April 15, 2004, in testimony before the Subcommittee on Government Efficiency and Financial Management Committee on Government Reform, House of Representatives

conclusion on whether the internal controls are effective, a statement on identified material weaknesses, and management's actions to correct the weakness. This is no small task. Today's automated environments require rethinking what constitutes effective controls, how they should be designed and implemented, and whether additional or alternative documentation and records are needed. OIG is participating in an advisory capacity in the assessment.

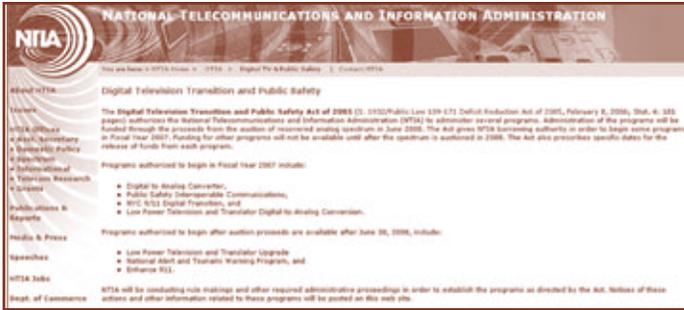
Although we noted recent improvement in the Department's management and financial accountability as well as in program and operational effectiveness, our audits continually indicate more work is needed to strengthen internal controls over programs, operations, and administrative areas. Past reviews have identified management and general control weaknesses, such as lack of guidelines for using travel and purchase cards; failure to recover full costs for reimbursable projects; fiscal and operational weaknesses disclosed in findings of questioned costs in financial assistance awards; and deficiencies in planning, legal review, and open competition in acquisition management.

### Performance Measures and Internal Controls

In this semiannual period, we completed an assessment of the Department's progress implementing the 1993 Government Performance and Results Act (GPRA). (See page 41.) Commerce first began implementing GPRA in 1997, and in March 1999, we identified it as a top management challenge for the Department. From September 2000 to September 2004, OIG issued eight separate audit reports covering 45 performance measures reported by six Commerce bureaus. Those audits uncovered repeated instances of ambiguous measures that either did not establish clear links between the activity being measured and the agency's actions or were stated in terms that did not appropriately represent performance results. We also found cases of inadequate disclosure, and we identified insufficient management controls and procedures for verifying performance information.

Over the past several years, the Department has improved both the utility and integrity of performance information. Because of this, we determined that Commerce and its bureaus had collectively taken sufficient steps to warrant the removal of GPRA implementation from the list of Top 10 Management Challenges, although we cautioned that management should continue to give attention to performance reporting.

We expect the new federal emphasis on strong internal controls to create a number of new demands for OIG reviews in the coming years. For example, new legislation passed in 2005 puts one of the Department's smaller agencies in a position of having to manage an enormous national project with an even larger budget than had been anticipated.



Source: NTIA

## New Law Will Alter NTIA's Future

The Digital Television Transition and Public Safety Act of 2005 requires the FCC to auction recovered analog spectrum and deposit the proceeds into a special fund, which is to be used for programs within the National Telecommunications and Information Administration. Funding for the programs authorized by the act exceeds \$2.5 billion, an overwhelming responsibility for an agency of NTIA's size. NTIA's FY 2006 budget allows a little over \$18 million for salaries and \$22 million for existing grant programs.

Successfully implementing the act will constitute a significant management challenge for the Department. Managing this level of budgetary growth in a short time period and establishing the programs required by the act will be difficult. NTIA will also have to oversee the work of contractors who assist in the design and implementation of the programs. OIG will work closely with NTIA as it begins to implement the requirements of the act. We will share lessons learned from our work in other areas to help the agency design strong, well-structured programs and minimize opportunities for fraud.

## Challenge 4

### Ensure that USPTO Uses Its Authorities and Flexibilities as a Performance-based Organization to Achieve Better Results

Since March 2000 when the Patent and Trademark Office Efficiency Act transformed USPTO into a performance-based organization designed to operate more like a private corporation than a government agency, OIG has paid close attention to a number of aspects of the organization's internal management structures. USPTO now is responsible for operational functions that once were controlled or monitored at the departmental level. To its credit, the bureau reports it accomplished 75 percent of its key performance measures in FY 2005, and it has had clean audit opinions for 13 consecutive years.

But USPTO faces numerous challenges, such as a continuing increase in applications, training about 1,000 newly hired examiners in Patents and Trademarks, and transitioning to an electronic processing environment. In addition, USPTO's expanded authority over personnel decisions and processes, procurement, and information technology operations needs to be fully utilized.

### GAO and OIG Reports Highlight Concerns

Two reports issued by the Government Accountability Office in June 2005 raised a number of management concerns. GAO reported that USPTO does not have a fully integrated, electronic patent process planned despite spending more than \$1 billion on the project



Newly hired patent examiners attend an orientation class. USPTO is hiring about 1,000 new patent examiners to handle increases in applications.

Source: USPTO

from 1983 through 2004.<sup>4</sup> In addition, recent increases in both the complexity and volume of patent applications have lengthened the time it takes to process patents and raised concerns about the validity of the patents USPTO issues.<sup>5</sup> The report also concluded that USPTO's difficulty attracting and retaining qualified staff stems from an ineffective management strategy for communicating and collaborating with examiners, outdated assumptions about production quotas and performance awards, and a lack of mandatory continued technical training for patent examiners.

OIG has issued nearly a dozen reports examining problems at USPTO since 2001. We have delved into systemic human resources and program issues, and have examined USPTO's computer systems security. A recent OIG evaluation found that while most USPTO contracts include information technology security clauses, important requirements are not implemented properly or are not enforced.<sup>6</sup> Our office is currently reviewing procurement criteria and procedures that USPTO has been using because it is exempted by the Patent and Trademark Office Efficiency Act from provisions of the Federal Property and Administrative Services Act of 1949.

The bureau has taken decisive action to address some problems we identified in the past, and we have been pleased that USPTO has been receptive to our recommendations. But ultimately, we believe the problems USPTO suffers are serious and require the sustained commitment of senior managers to resolve. OIG will continue to monitor the bureau's progress in this transition.

## Challenge 5

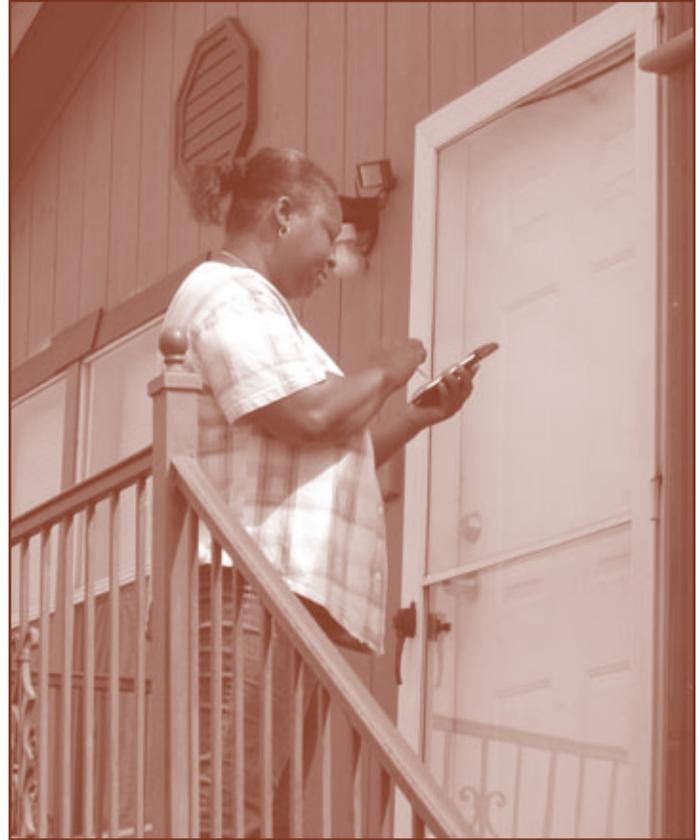
### Control the Cost and Improve the Accuracy of the Decennial Census

At an estimated cost of \$11.3 billion, the 2010 census will be the most expensive decennial to date, even after adjusting for inflation. Key to the Census Bureau's ability to conduct an accurate, comprehensive population count within budget is its reengineered design, which relies heavily on automating critical field operations. The bureau established a rigorous testing schedule to monitor development and implementation of the strategy's key components, identify problems, and incorporate solutions in time for the decennial.

<sup>4</sup> U.S. Government Accountability Office, June 17, 2005. *Intellectual Property: Key Processes for Managing Patent Automation Strategy Need Strengthening*, GAO-05-336. Washington, D.C.: GAO.

<sup>5</sup> U.S. Government Accountability Office, June 2005. *Intellectual Property: USPTO Has Made Progress in Hiring Examiners, but Challenges to Retention Remain*, GAO-05-720. Washington, D.C.: GAO.

<sup>6</sup> Department of Commerce, Office of Inspector General, Office of Systems Evaluation, September 2005. *U.S. Patent and Trademark Office: Information Security in Contracts Needs Better Enforcement and Oversight*, OSE-17455. Washington, D.C.: Department of Commerce OIG.



A "lister" with a mobile computer waits at a door for respondents during the Census Bureau's 2006 field test in Austin, Texas.

Source: OIG

This semiannual report details our review of Census's test of automated address canvassing—an operation designed to keep the bureau's address file and digital map database current and complete (see page 19). During address canvassing, temporary staff (called "listers") equipped with handheld computers go into the field to verify, update, add, or remove addresses; add and delete streets to correct computer maps; and annotate address locations on the maps. The information they collect has a direct bearing on the bureau's ability to accurately count the population.

Our review disclosed several problems that undercut the value of the canvassing test, most notably, unreliable handheld computer functions, including its GPS capabilities; inaccurate maps despite an effort to correct them nationwide; insufficient quality control, training, and information sharing; and an inadequate focus on outreach. In addition, Census had not sufficiently developed procedures for deleting nonexistent streets, fully canvassing complicated blocks, updating mobile home sites, identifying rural addresses, and manually placing map locations on the handheld units when GPS could not be accessed.

Also tested was a new quality control process that incorporates the verification of address deletions made by listers into the

canvassing operation, rather than performing this check after the operation concludes, as has been the practice. Using this new procedure, corrections can be made to the address list and maps prior to Census Day.

Despite this and other enhancements, we concluded that the bureau only partially achieved its test objectives. Census could have earned a better return on its investment if it had fielded more reliable handheld computers, tested areas where the postal service (rather than the bureau) could deliver questionnaires to reduce costs, and evaluated outreach efforts aimed at the hard-to-enumerate American Indian population. Based on our observation of this test, we believe the bureau should assess the viability and cost-benefits of its decision to canvass nearly every household in the country in 2010.

We are looking at several more 2006 test operations including update/enumerate at the Cheyenne River Reservation and Off-Reservation Trust Land in South Dakota. During this operation, which is used in communities where residents are less likely to return a completed questionnaire, enumerators update the address lists and maps, and interview a resident to complete a questionnaire for each housing unit. We are also assessing the bureau's progress in improving the method for designating which communities require this type of enumeration. Finally, we are reviewing the group quarters operation in Travis County, Texas, which enumerates individuals residing in group facilities, such as dormitories, prisons, and nursing homes.

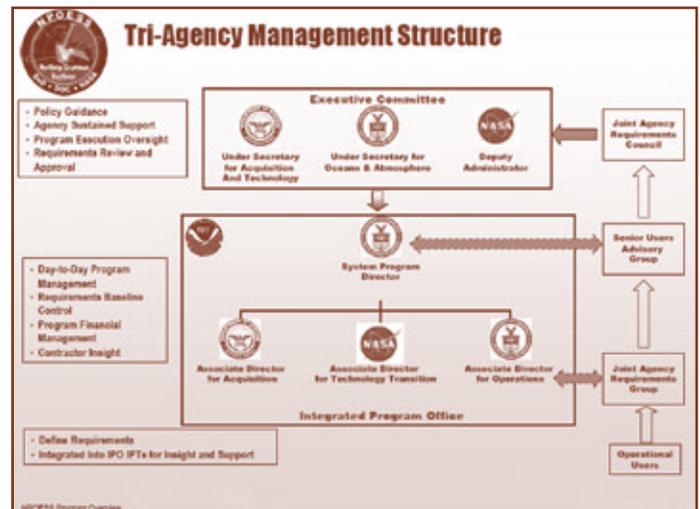
## Challenge 6

### Effectively Manage the Development and Acquisition of Environmental Satellites

Over the next 5 years, the Department, through the National Oceanic and Atmospheric Administration, will spend several billion dollars in contracts for the purchase, construction, and modernization of environmental satellites.<sup>7</sup> Two of these systems, operated by NOAA's National Environmental Satellite, Data and Information Service (NESDIS), collect data to provide short- and long-range weather forecasts and a variety of other critical environmental and climate information. Geostationary Operational Environmental Satellites (GOES) generate near-term data for the continental United States and Hawaii. Polar Operational Environmental Satellites (POES) provide full global data for short- and long-range forecast models, climate modeling, and various other purposes.<sup>8</sup>

<sup>7</sup> <http://www.osec.doc.gov/bmi/Budget/05APPR/PAR05.pdf>, page 210.

<sup>8</sup> [http://science.hq.nasa.gov/missions/satellite\\_64.htm](http://science.hq.nasa.gov/missions/satellite_64.htm).



NOAA, NASA, and Defense share oversight of NPOESS as members of the executive committee and manage specific aspects of satellite development, acquisition, and integration within the Integrated Program Office.

Source: [http://www.esipfed.org/business/library/meetings/12th\\_fed\\_meeting/documents/Mike\\_Haas\\_Pres.ppt#283,5, Tri-Agency Management Structure](http://www.esipfed.org/business/library/meetings/12th_fed_meeting/documents/Mike_Haas_Pres.ppt#283,5, Tri-Agency Management Structure)

The National Weather Service is the main customer for the satellite data, which it uses to provide weather, hydrologic, and climate forecasts and warnings that can be used by other governmental agencies, the private sector, and the global community.

Since 1994 the Department of Commerce, Department of Defense, and National Aeronautics and Space Administration have been working to develop the National Polar-orbiting Operational Environmental Satellite System (NPOESS), the nation's first polar orbiting system that will meet both civilian and defense environmental data needs. Slated to replace POES, NPOESS is considered critical to the United States' ability to maintain the continuity of data required for weather forecasting and global climate monitoring through the year 2020.

Complex, high-cost acquisitions such as these are extremely difficult to manage within cost and schedule goals. Given the billions of dollars at stake in the NOAA satellite projects and their importance to public safety and economic stability, we believe these programs require continuous scrutiny. We have therefore added satellite development and acquisition to our list of top challenges facing the Department.

### NPOESS Program Well Over Budget and Behind Schedule

We are currently conducting an audit of the NPOESS program, which focuses on how the contractor and program managers identify and communicate problems to NOAA senior officials, and whether the contract's award fee structure is appropriate and effective.

Problems developing new sensors for NPOESS have inflated costs and delayed the schedule significantly. The original cost estimate of \$6.9 billion now stands at \$9.7 billion, according to a GAO estimate. When the contract for integrating the satellite systems was awarded in 2002, the delivery date for the first NPOESS satellite was March 2008; the current projection is late 2011, at best.

The Nunn-McCurdy provision of the FY 1982 National Defense Authorization Act requires the Secretary of Defense to notify Congress when unit costs for a major acquisition program such as NPOESS grow by 15 percent<sup>9</sup> over original baseline estimates. Should costs grow by 25 percent, the act requires the Secretary to certify in writing that the program is essential to national security and the most cost-effective option, the new cost estimate is reasonable, and a management structure is in place to adequately control unit costs.

In November 2005, an estimate prepared for NPOESS by Defense showed that cost growth had exceeded 25 percent, triggering the Nunn-McCurdy certification requirement. Failure to provide the certification will terminate DOD's involvement in the program and have a devastating impact, given that DOD provides half the program's funding.

Despite these huge cost and schedule overruns, the prime contractor has collected millions of dollars in incentive payments ("award fees"). Our initial audit findings suggest that the award fee structure is seriously flawed because it allows the contractor to collect incentive payments even for unsatisfactory performance, and that management failed to question optimistic program assessments when progress reports indicated serious cost and schedule overruns.

### **Oversight of GOES-R Development Under Way**

GOES-R is the next-generation Geostationary Operational Environmental Satellite series scheduled for initial launch in 2012. This new series will have enhanced sensing capabilities that offer an uninterrupted flow of high-quality data to support weather forecasting, severe storm detection, and climate research vital to public safety. The fiscal year 2006 through 2010 cost is projected to be about \$2 billion.

Building a new satellite series within schedule and budget constraints requires a structured acquisition process. When key steps are skipped, schedule and cost can dramatically increase. In acquiring the GOES I-M series in the 1980s and 1990s, NOAA made technical assumptions without assessing ways to reduce risks—a major reason why completing the acquisition took twice as long as expected and cost an additional \$1 billion.

<sup>9</sup> 10 USC § 2433.

For GOES-R, NOAA is following a three-phase acquisition process—concept development, program definition and risk reduction, and acquisition and operations. Another big change is that NOAA is issuing and managing the prime system contract—a role NASA handled in the GOES I-M and follow-on GOES N-P acquisition. For GOES-R, NASA will continue to focus on the technical aspects of the acquisition as the manager of contracts for satellite sensors. The Department will monitor the program and has approval authority for advancing to the next acquisition phase. GOES-R is currently in the program definition and risk reduction phase, with contract award for acquisition and operations scheduled for late 2007.

In October 2005, NOAA awarded three contracts for the program definition and risk reduction phase. Each contractor will refine the GOES-R concept, design strategies for managing risk, and develop baseline plans for implementation. We intend to monitor contract activities, identify key early stage program challenges, and determine whether NOAA is taking appropriate measures to meet them.

## **Challenge 7**

### **Promote Fair Competition in International Trade**

The Department of Commerce accomplishes its goals of promoting trade, opening overseas markets to American firms, and protecting U.S. industry from unfair competition by imports primarily through the work of the International Trade Administration. Over the past several years, OIG has focused a number of reviews on the Department's efforts to increase U.S. market opportunities, provide assistance to U.S. exporters, and overcome trade barriers in difficult foreign markets.

#### **U.S. Trade with China**

China has one of the world's fastest growing economies, making its market an attractive one for U.S. businesses. While U.S. exports to China have increased rapidly in the past 3 years, this growth has not kept pace with the growth in Chinese imports. Between 2002 and 2005, the U.S. trade deficit with China almost doubled, reaching \$201.6 billion in calendar year 2005.<sup>10</sup> This deficit is a major concern of the U.S. government and business sectors, both of which find that China's intellectual property rights enforcement, currency valuation, technical barriers to trade, restrictions on

<sup>10</sup> U.S. Census Bureau, Trade in Goods (Imports, Exports and Trade Balance) with China, see [www.census.gov/foreign-trade/balance/c5700.html](http://www.census.gov/foreign-trade/balance/c5700.html), accessed February 13, 2006.



Source: <http://www.export.gov/china/images/mainpic.gif>

trading and distribution rights, and closed regulatory environment contribute to the continuing U.S.-China trade imbalance.

During this semiannual period, we focused on Commerce's trade-related activities in China. (See page 23.) We visited China in September 2005 to review the U.S. Commercial Service (CS) offices in Beijing, Shanghai, Guangzhou, Chengdu, and Shenyang. We evaluated the effectiveness of CS' coordination with other Commerce bureaus operating in China, as well as its cooperation with other governmental and nongovernmental stakeholders. We also reviewed the post's claimed export success statistics, efforts in the area of intellectual property rights and market access, the new American Trading Center initiative, and other programmatic and administrative issues.

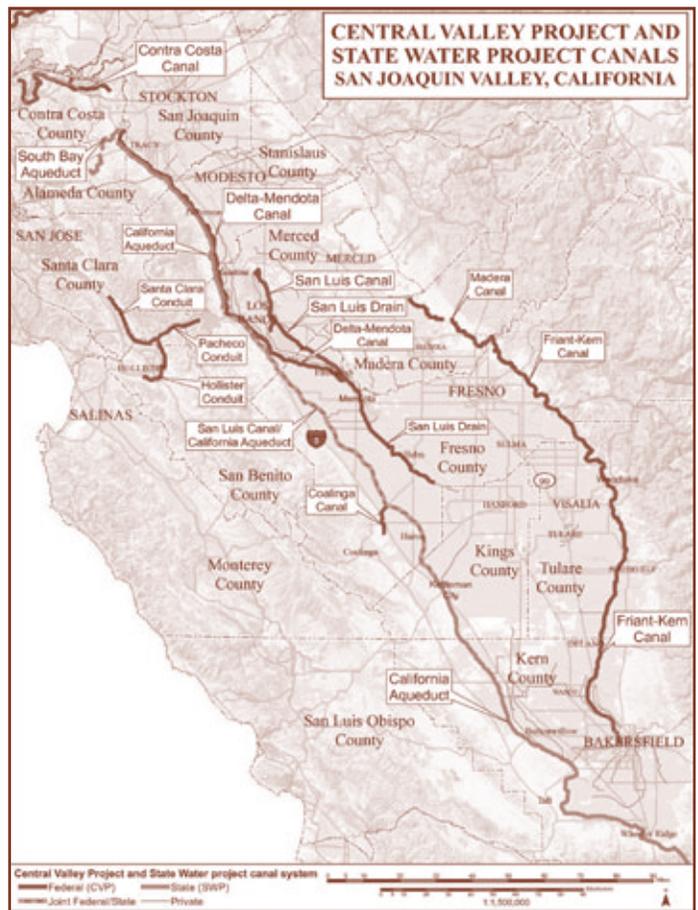
Overall, we found that the post is generally doing a good job of providing export assistance to U.S. companies and collaborates well with its trade partners, other components of the U.S. mission, the Department, and other government agencies, but we did identify a number of issues that warrant management attention. We issued 3 recommendations to the Secretary and more than 32 to the Under Secretary for International Trade and Assistant Secretary and Director General of CS that we believe will improve Commerce's operations in China.

## Challenge 8

### Effectively Manage NOAA's Stewardship of Ocean and Living Marine Resources

The National Oceanic and Atmospheric Administration is charged with monitoring the health of our nation's ocean, coastal, and Great Lakes resources; administering civilian ocean programs; and protecting and preserving the nation's living marine resources through scientific research, fisheries management, enforcement, and habitat conservation. NOAA also will have to deal with impacts from the 2005 storms on Gulf Coast aquatic ecosystems for many years to come, from assessing the hurricanes' effects on habitat and fisheries to recording the diminished numbers and redistribution of native species and damage to coastal wetlands.

During this semiannual period, we followed up on our audit of the National Marine Fisheries Service's (NMFS') preparation of



The California Central Valley Project is one of the largest water projects in the nation. Begun in 1935 by the federal government to irrigate and protect California's central valley, it provides water to irrigate 3.7 million acres and its power plants can produce up to 1.4 million kilowatts of electricity.

Source: [http://esrpweb.csustan.edu/gis/maps/cvp\\_sw\\_p\\_sjv.jpg](http://esrpweb.csustan.edu/gis/maps/cvp_sw_p_sjv.jpg)

a biological opinion for California's Central Valley Project, one of the nation's major water conservation efforts (see September 2005 *Semiannual Report*, page 21). In response to our audit recommendations, NOAA commissioned two independent scientific reviews of the opinion, both of which found the scientific information used in the biological opinion was not the best available. In light of these findings, we asked NOAA officials to submit to us a plan that identifies actions they will take to address the deficiencies and implement the related recommendations made by the independent review organizations.

We also continued our series of reviews of salmon recovery programs, auditing a tribal subgrantee funded by NOAA's Pacific Coastal Salmon Recovery Fund. Much like the audits we detailed in our 2004 and 2005 semiannual reports, we questioned costs and noted some administrative weaknesses. (See page 30.)

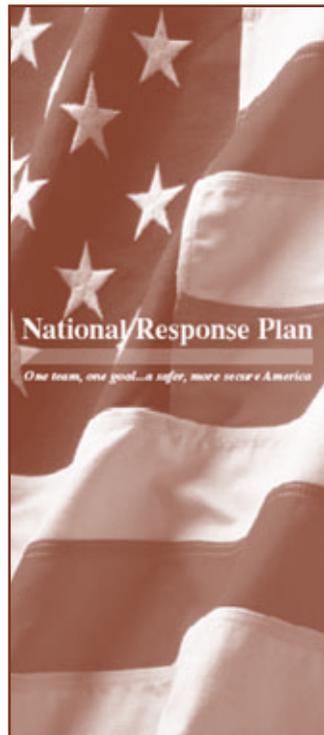
Future challenges include NOAA's efforts as a steward of marine resources, the agency's consultation process, and its management of fisheries and marine mammals.

## Challenge 9

### Aggressively Monitor Emergency Preparedness, Safety, and Security Responsibilities

The damage and disruption caused by the Gulf Coast hurricanes last summer intensified scrutiny of federal preparedness to a level not seen since 9/11. These disasters rightly raised serious questions about the nation's readiness to respond to emergencies—whether natural or man-made—given the attention and resources dedicated to security and preparedness by all levels of government over the past 4 years. They underscored the need for and responsibility of agencies to maintain robust emergency preparedness programs and disaster recovery plans to protect their employees, facilities, and critical operations.

Source: [http://www.dhs.gov/interweb/assetlibrary/NRP\\_Brochure.pdf](http://www.dhs.gov/interweb/assetlibrary/NRP_Brochure.pdf)



The Department of Commerce has a dual responsibility in this arena: not only must it be ready to protect 35,000+ employees and hundreds of facilities, but because several Commerce programs are critical to national preparedness and recovery efforts, it must support U.S. efforts to prepare for, respond to, and promote recovery from major disasters. The President's National Response Plan assigns responsibilities to several Commerce agencies. For example, NTIA gives on-call support to the federal emergency communications coordinator and keeps radio frequencies open during emergencies. NOAA issues long- and short-term forecasts about severe weather events and assesses areas of greatest marine or atmospheric hazard in their aftermath. The Economics and Statistics Administration assesses the economic impacts of major natural and manmade disasters.

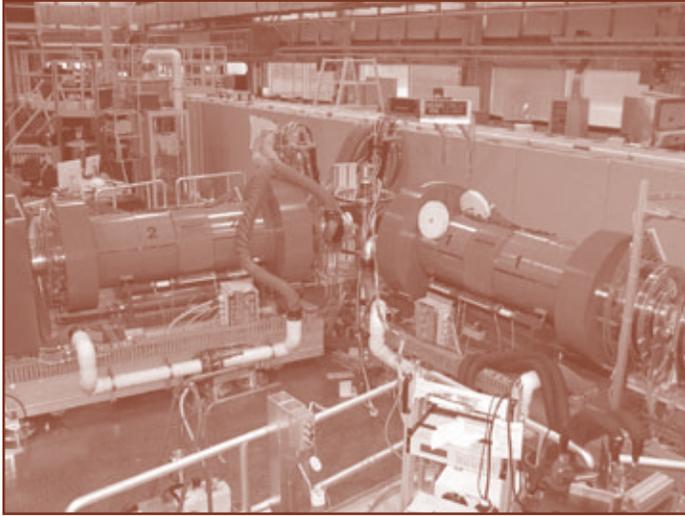
We continue to monitor Commerce's progress in resolving departmental emergency preparedness and security weaknesses we identified in assessments conducted in 2002 and 2005 (see March 2002 and September 2005 semiannual reports, pages 77 and 37, respectively). Although Commerce has made significant improvement in emergency preparedness to address vulnerabilities, we found, among other things, the need for better departmental guidance and oversight of emergency programs, risk assessments, occupant emergency plans, and security forces at its domestic operations, as well as better oversight of security upgrades and greater attention to security at its overseas offices.

## Challenge 10

### Enhance Export Controls for Dual-use Commodities

The Bureau of Industry and Security (BIS) administers the U.S. dual-use export licensing and enforcement system designed to prevent hostile nations and terrorist groups from acquiring technologies and materials that have both civilian and military applications. But how effective are existing export controls? And how can we prevent export control policies and practices from hampering U.S. trade opportunities and competitiveness but still protect U.S. national security and foreign policy interests? Striking an appropriate balance remains a significant challenge for BIS and Commerce.

The National Defense Authorization Act (NDAA) for FY 2000 directed the inspectors general of Commerce, Defense, Energy, and State, in consultation with the directors of the Central Intelligence Agency and Federal Bureau of Investigation, to report to Congress each year through 2007 on the adequacy and effectiveness of existing export controls and whether they effectively prevent entities of concern from acquiring sensitive U.S. technologies. (The Office of Inspector General at the Department of Homeland



*Components of the high-tech Neutron Spin Echo Spectrometer at the NIST Center for Neutron Research in Gaithersburg, Maryland, are controlled for national security reasons, but they are tightly encased and could not be easily observed.*

Source: NIST

Security also has participated since its establishment in 2003.) In addition, NDAA for FY 2001 required the inspectors general to report on the status or disposition of recommendations made in prior NDAA reports.

### **China's Military Plans Cause Concerns About Export Controls**

With six of the eight required reviews completed, Commerce OIG turned its attention to an area of immense concern to meet the NDAA's FY 2006 requirement—evaluating the effectiveness of U.S. controls on exports of dual-use goods and technology to

China. According to the former acting Under Secretary for Industry and Security, the security concerns the U.S. has about China stem from the risk of diverting sensitive dual-use items and technology to Chinese military programs as the country carries out its stated plan to modernize its conventional military forces. He further stated that the prospect of “immense potential benefits from expanding trade” heightens such concerns and intensifies the challenges to U.S. dual-use export controls, which were never intended to be connected to economic policy.<sup>11</sup>

Our 2006 review also assessed whether (1) the federal agencies that handle the dispute resolution process for review of license applications for exports to China coordinate effectively, (2) there is potential for diversion of sensitive commodities from Hong Kong to China, and (3) the end-use check program is effective. The 2006 review also examined what activities Commerce bureaus are engaged in pursuant to the 1979 U.S. and China Science and Technology Agreement and whether they are adhering to export control regulations. (See page 13.)

Our review determined that the various federal export licensing agencies coordinate adequately during the dispute resolution process for China export license applications, but we identified a number of weaknesses in BIS' administration of export controls involving that country. We recommended some actions we believe will address these weaknesses. The bureau generally agreed and outlined some of the work it already is doing to improve them.

As part of our follow-up, we also examined the status of recommendations from our six prior reviews and determined that 24 recommendations remain open, but BIS and other Commerce bureaus have made significant progress on a number of them since our March 2005 report. We will continue to monitor BIS' efforts to improve dual-use export controls in FY 2007, when we complete the last of these reviews.

<sup>11</sup> Testimony of former Acting Under Secretary for Industry and Security Peter Lichtenbaum at the U.S.-China Economic and Security Review Commission Hearing, June 23, 2005. Accessed April 4, 2006, at <http://www.bis.doc.gov/news/2005/USChinaReview.htm>.