U.S. DEPARTMENT OF COMMERCE
Office of Inspector General

TOP TEN MANAGEMENT CHALLENGES

September 2003

MAJOR CHALLENGES
FOR THE
U.S. DEPARTMENT OF COMMERCE

TOP 10 CHALLENGES

1. Strengthen Department-wide information security.

2. Effectively manage departmental and bureau acquisition processes.

3. Successfully operate USPTO as a performance-based organization.

4. Control the cost and improve the accuracy of Census 2010.

5. Increase the effectiveness of marine resource management.

6. Increase fair competition in international trade.

7. Enhance export controls for dual-use commodities.

8. Enhance emergency preparedness, safety, and security of Commerce facilities and personnel.

9. Strengthen financial management controls and systems.

10. Continue to improve the Department's strategic planning and performance measurement in accordance with GPRA.


The Office of Inspector General, in assessing its work at the close of each semiannual period, develops the 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 expenditures, or (4) it requires significant management improvements. Because of the diverse nature of Commerce activities, many of these criteria cut across bureau and program lines. We believe that by addressing these challenges the Department can enhance program efficiency and effectiveness; eliminate serious operational problems; decrease fraud, waste, and abuse; and achieve substantial savings.

You will note that with this *Semiannual Report to Congress* we have revised our list of Top 10 Management Challenges facing the Department to reflect shifting priorities for the various challenges and a new area of concern. We have added controlling the cost and improving the accuracy of Census 2010 as a new challenge, with the hope that attention paid to this issue in the early part of the decade will reap great benefits as the time for the decennial draws near. Finally, instead of having a separate challenge related to the effective management of major Commerce renovation and construction projects, we have folded that challenge into the existing challenge for the effective management of departmental and bureau acquisition processes.

CHALLENGE 1
STRENGTHEN DEPARTMENT-WIDE INFORMATION SECURITY

Many of Commerce's information technology systems and the data they contain have national significance: the Bureau of Industry and Security's (BIS') export license data helps control the release of dual-use commodities to countries and entities of concern; the National Oceanic and Atmospheric Administration's (NOAA's) satellite, radar, and weather forecasting data and systems provide information used to protect lives and property; Economics and Statistics Administration's economic indicators have policymaking implications that can affect the movement of global commodity and financial markets; and U.S. Patent and Trademark Office's (USPTO's) patent and trademark information is essential to administering patent and trademark law, promoting industrial and technical progress, and strengthening the national economy. Loss of or serious damage to any of these critical systems could have devastating impacts, which makes identifying weaknesses and recommending solutions a continuing top priority for this office.

CERT/CC Statistics 1988-2003

Number of Incidents
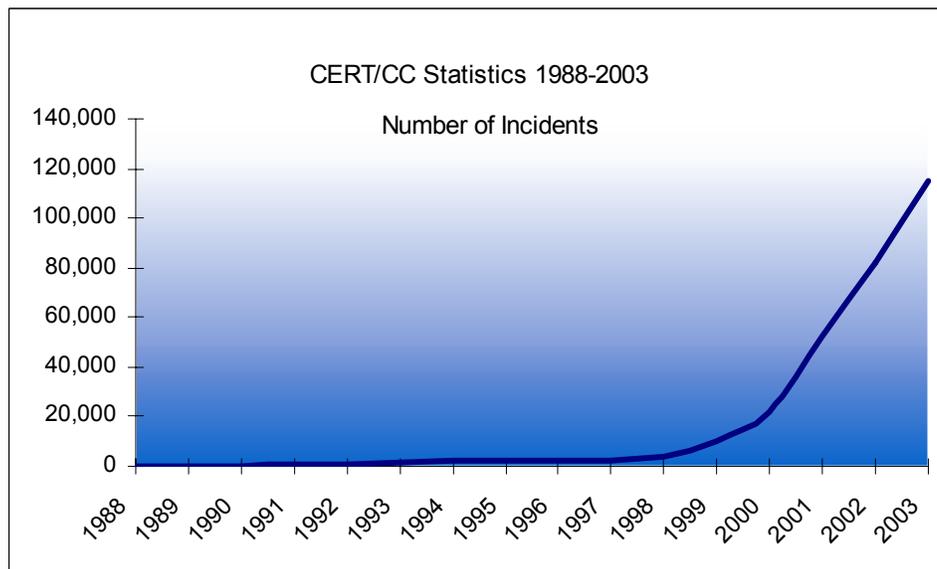
Note: An incident may involve one site or hundreds (or even thousands) of sites. Also, some incidents may involve ongoing activity for long periods of time. The number of incidents reported for 2003 cover January through September. These statistics show the escalating number of reported IT security violations—an indication of the magnitude of the problem posed by insufficient or ineffective IT security.

Source: Carnegie Mellon Software Engineering Institute, Combined Environmental Reliability Test (CERT®) Coordination Center (CERT/CC®). CERT® is a registered trademark and service mark of Carnegie Mellon University. Data used in graph was accessed on November 19, 2003 at http://www.cert.org/stats/cert_stats.html#incidents.

The Federal Information Security Management Act, signed into law on December 17, 2002, provides a comprehensive framework for ensuring that information resources supporting federal

operations and assets employ effective security controls. FISMA requires Offices of Inspector General to perform independent security evaluations of their agencies annually.

Our security reviews found that Commerce's senior management continues to give that issue due attention and priority. With the support of the Deputy Secretary, the Chief Information Officer (CIO) has worked hard to improve information security Department-wide. As we reported in our last semiannual, the Department issued the *Information Technology Security Program Policy and Minimum Implementation Standards* and the *Policy and Implementation Standards for Remote Access Security*, which, together, comprehensively define Commerce's program for protecting agency information systems. In addition, these documents clearly delineate the responsibilities of senior agency officials and CIOs and plainly specify system life-cycle information security requirements. The result is that security is becoming better integrated into the capital planning and investment control process.

The Department's noteworthy progress is moderated, however, by the considerable challenges that persist, the greatest being ensuring adequate security on the hundreds of Commerce systems, including (1) assessing risk and determining appropriate security controls, (2) testing and evaluating these controls, (3) certifying and accrediting systems,[1] and (4) ensuring that personnel with specialized information security responsibilities receive the necessary training.

The Department has reported information security as a material weakness in its *Accountability Report* for the past 2 fiscal years. In our FY 2002 independent evaluation, we stated that the Department should continue to do so until all systems that are part of the critical infrastructure and mission critical have been certified and accredited. The Department, in turn, set a goal for complete certification and accreditation by the end of FY 2003. Although 97 percent of the Department's systems have been reported as certified and accredited, our FY 2003 FISMA evaluation and individual system reviews revealed numerous systems that had been reported as certified and accredited but contained significant deficiencies in their risk assessments, security plans, and contingency plans—i.e., certification and accreditation materials. Most also lacked evidence that security controls had been tested.

We commend the Department on its efforts to certify and accredit its critical systems but believe that information security should continue to be reported as a material weakness for FY 2003. We understand that some certifications and accreditations are being reworked, using improved processes, to meet the requirements of the Department's new information security policy; but until improvements are made, the risk to Commerce IT systems remains.

CONTRACT SECURITY WEAKNESSES

Inadequate security provisions in Commerce IT service contracts also place systems at risk (see September 2002 *Semiannual Report*, page 51). IT expenditures accounted for nearly half ($500 million) of all Commerce's contract/procurement obligations in FY2002, with IT services

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[1] Certification is the formal testing and evaluation of the security safeguards on a computer system to determine whether they meet applicable requirements and specifications. Accreditation is the formal authorization by management for system operation, including an explicit acceptance of risk.

accounting for roughly two-thirds of that amount (approximately $334 million). Our FY 2003 FISMA evaluation found that while some progress has been made in incorporating security provisions into recent IT service contracts,[2] provisions for controlling access to Department systems and networks are generally absent and there is little evidence of contract oversight or of coordination among contracting, technical, and information security personnel in the development of appropriate contract security. We believe these two weaknesses place Commerce systems and data at continued risk.

USPTO INFORMATION SECURITY REVIEW

At USPTO, information security has become better integrated into that agency's capital planning and investment control process, and system life-cycle information security requirements and processes are being improved. In addition, the agency continues to work to ensure that its senior program officials understand and accept their responsibilities for information security, a prerequisite for any effective and long-lived program. Significantly, USPTO is well on its way to having its systems certified and accredited. It does not grant interim accreditations without comprehensive risk assessments, security plans, and testing; and uses a disciplined certification and accreditation process that includes rigorous testing of security controls. Using this approach the agency has gained a great deal of insight into system-specific weaknesses that must be corrected and organization-wide security policies, procedures, and processes that must be improved.

Our last evaluation found that USPTO lacked current certifications and accreditations for its systems and suggested that it report information security as a material weakness until its mission-critical systems are fully certified and accredited. (USPTO has no systems designated as national critical.) The agency did so in its *FY 2002 Performance & Accountability Report* and set a goal of certifying and accrediting all high-risk systems by the end of FY 2003. The agency subsequently revised its system inventory by consolidating more than 100 systems into 19[3]—9 mission critical and the remainder business essential. It planned to have its 9 mission-critical systems and 1 classified system certified and accredited by the end of FY 2003. By the end of the fiscal year, all 10 systems had undergone certification testing; 9 had been granted 120-day interim accreditations and 1 had received final accreditation.

Because of the security weaknesses identified by the certification process and the lack of final accreditations, however, we believe USPTO should continue to report information security as a material weakness for FY 2003.

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[2] The term "contract" includes task orders and delivery orders issued under multiple award contracts and government-wide agency contracts.

[3] After our report was published, USPTO further revised its system inventory, reducing the number of systems to 18.

CHALLENGE 2

EFFECTIVELY MANAGE DEPARTMENTAL AND BUREAU ACQUISITION PROCESSES

Federal acquisition legislation in the 1990s mandated sweeping changes in the way federal agencies buy goods and services. The intent was to reduce the time and money spent on purchasing and to improve the efficiency of the process. Commerce now must focus on effectively managing the acquisition processes those initiatives fostered—balancing the desire to streamline the process with the need to ensure that taxpayer dollars are wisely spent and laws and regulations followed.

Streamlined processes must not come at the expense of basic acquisition principles: careful planning, promotion of competition, prudent review of competitive bids, adept contract negotiations, well-structured contracts, and effective contract management and oversight. Moreover, the Department's increasing reliance on contractors to provide services makes following basic acquisition principles essential. Problems we have identified with service contracting in the past include failure to use performance-based task orders where they would be beneficial; inadequate training in the use of performance-based service contracting; insufficient planning for contract administration and monitoring; and the need to ensure that adequate security provisions are included and enforced in IT service contracts.

The Department agrees that acquisition planning and management need greater emphasis. It notes that efforts by its Office of Acquisition Management (OAM) to improve procurement management include (1) establishing an acquisitions review board to oversee all major acquisitions; (2) evaluating Commerce's delegation and warrant program, with the goal of realigning contracting authorities to increase overall effectiveness and accountability; (3) revising the contracting officer's technical representative (COTR) certification program to improve accountability and training; and (4) assessing these initiatives to determine their effectiveness. We have not evaluated the effectiveness of these actions, however.

The need for increased attention to basic acquisition principles— and for continued improvements and oversight—are highlighted by our recent findings discussed below.

SELECTED ACQUISITION PROGRAMS AND CONTRACTS

In response to a congressional inquiry, we reviewed a major modification to a NOAA/National Weather Service (NWS) contract for a transition power source (TPS) for the NEXRAD weather radar. We found that the modification was executed without adequate negotiation or appropriate review and oversight of the contract, its management, or technical issues by NOAA's Acquisition and Grants Office and NWS, and that NWS paid for defective equipment. These deficiencies resulted in an estimated increase in contract costs of $4.5 million and purchase of a product that may not be the best choice for NEXRAD.

Our review of a NIST contract using simplified acquisition procedures for evaluating and soliciting commercial items revealed weaknesses in the procurement process. Among them, an error in citing the relevant procurement law caused some confusion and, if applied, could have

resulted in unfair penalties being assessed to certain offers. Also, an incomplete explanation the combined solicitation document denied offerors full information about the rules governing the procurement. In response to our review, NIST officials agreed to improve their internal quality assurance program, develop supplemental policy and guidance, and provide training to their acquisition workforce.

PURCHASE CARD PROGRAM

In response to increased scrutiny from this office, Congress, and OMB, and in light of Commerce's increasing use of purchase cards, the Office of Acquisition Management is implementing a purchase card improvement plan that includes mandatory refresher training for all cardholders and approving officials. Under the auspices of the Chief Financial Officer and Assistant Secretary for Administration, an intradepartmental, crossfunctional team was formed to evaluate options to further strengthen the Department's purchase, travel, and fleet card programs. In addition, OAM, along with other agencies and industry, developed the *Seven Steps to Performance-Based Service Acquisition* guide. Similarly, the President's Council on Integrity and Efficiency published *A Practical Guide for Reviewing Government Purchase Card Programs* (see September 2002 *Semiannual Report*, page 59) to ensure the integrity and prudent use of the purchase card by federal cardholders.

Percent of Commerce Small Purchases*
Made Using Credit Cards

Year	Percent
2000	88
2001	92
2002	95
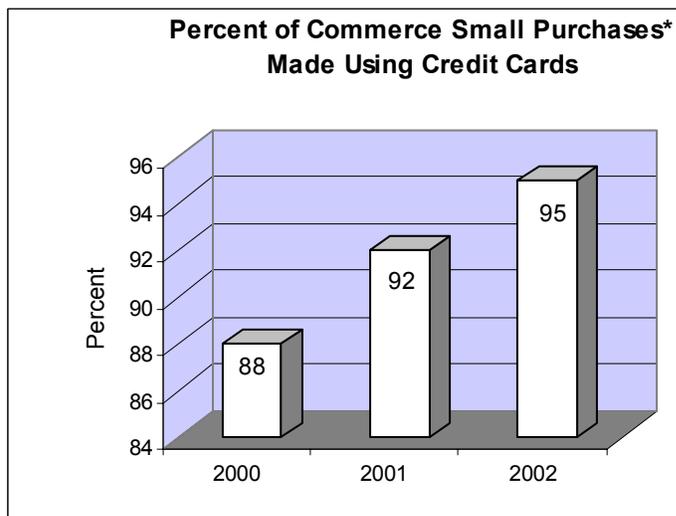
During FY 2002 the government-wide Purchase Card Program came under significant scrutiny from Congress and OMB because of a general need to ensure strong management controls for this decentralized purchasing activity. During that same period Commerce processed more than 360,000 acquisitions of $25,000 or less using purchase cards.

* Purchases costing less than $25,000.

Source: U.S. Department of Commerce. 2003. FY 2002 Performance & Accountability Report, page 81.

During this semiannual period we issued our final audit report on the purchase card program at NOAA's Environmental Technology Laboratory, in Boulder, Colorado. While we noted a number of weaknesses in internal controls and instances of noncompliance with the *Commerce Acquisition Manual*, we found no fraud or material misuse. Many of the internal control weaknesses identified in this review were previously reported (see March 2000 *Semiannual Report*, page 60), but had remained unresolved. NOAA agreed with our recommendations and described actions planned or taken to implement them.

MAJOR CONSTRUCTION AND RENOVATION PROJECTS

Effective management of contracts for construction and/or renovation of Commerce facilities is a critical challenge for the Department because of the numerous inherent risks involved in planning and managing contracts for large, costly, and complex capital improvement and construction projects. Departmental leadership and OIG oversight are needed to maximize Commerce's return on its investment in these projects. Detecting and addressing potential problems during the developmental stages rather than after a project is begun or completed saves time and money. For this reason, we continue to actively monitor the progress of the Department's current and planned contracts for construction projects.

As part of that effort, we are currently reviewing USPTO's progress on the construction of its new headquarters complex in northern Virginia (see Challenge 3, page 8). In addition to USPTO's buildings, the Department has plans for numerous major[4] renovation and construction projects:

- NOAA has 20 projects scheduled or in process including a Marine and Environmental Health Research Laboratory in South Carolina, a Center for Weather and Climate Prediction in College Park, Maryland, and a satellite operations facility in Suitland, Maryland.

- The National Institute of Standards and Technology (NIST) will continue its multimillion-dollar program to upgrade existing laboratories in Gaithersburg, Maryland, and Boulder, Colorado, and to complete construction of the Advanced Measurement Laboratory building in Gaithersburg and a central utilities plant in Boulder. NIST also plans to install a perimeter security fence at the Boulder site.

- Two buildings will be constructed for Census at its Suitland, Maryland, headquarters.

- Commerce is planning to modernize its headquarters, the Herbert C. Hoover Building in Washington, D.C. A Renovation Program Office has been established to plan and monitor this project.

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[4] According to the U.S. Department of Commerce's Office of Real Estate Policy and Major Programs, "major" projects are those costing $2.3 million or more.

NIST'S ADVANCE MEASUREMENT LABORATORY
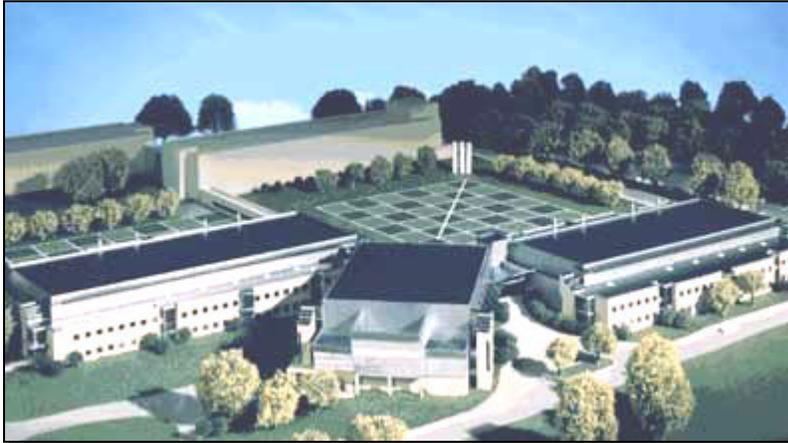
Construction of NIST's Advance Measurement Laboratory, as of September 2003, is shown in the photo below. The artist's rendering (above) shows what the mostly underground facility will look like on completion.

CHALLENGE 3
SUCCESSFULLY OPERATE THE U.S. PATENT AND TRADEMARK OFFICE AS A PERFORMANCE-BASED ORGANIZATION

As a performance-based organization,[5] USPTO has not only expanded control over its budget allocations and expenditures, personnel decisions and processes, procurement, and information

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[5] The American Inventors Protection Act of 1999 established the U.S. Patent and Trademark Office as a performance-based organization, giving greater flexibility and independence to operate more like a business.

technology operations, it also has broader responsibility for managing its operations more like a business.

In response to concerns of its stakeholders USPTO, in June 2002, issued its 5-year, 21st Century Strategic Plan. The plan was intended to help the agency overcome the challenges accompanying its transition to performance-based operations—successfully develop necessary personnel policies; establish procurement and administrative policies as well as performance-oriented processes and standards for evaluating cost effectiveness; and, simultaneously, meet its performance goals under the Government Performance and Results Act (GPRA) in addition to the timeliness standards of the American Inventors Protection Act.

In February 2003 USPTO revised this plan. According to the agency, it is now more aggressive and far-reaching and provides a roadmap for major changes in patent and trademark processes, including steps to (1) move to a paperless environment and promote e-government, (2) enhance employee development, (3) explore competitive sourcing, and (4) improve and maintain quality assurance. The plan also calls for the agency to work with worldwide intellectual property offices to create a global framework for enforcing intellectual property rights.

Our office is currently auditing USPTO's trademark application process as well as its efforts to reduce trademark application pendencies. We are also performing an evaluation of patent examiner production goals, awards, and performance appraisal plans to determine whether they maximize production and reduce patent pendency. We recently completed a review to follow up on complaints regarding patent processing.

As part of our effort to monitor USPTO operations, we are currently reviewing progress on the construction of the agency's new headquarters complex in Alexandria, Virginia. Construction of USPTO's state-of-the-art office complex is one of the federal government's largest real estate ventures. When completed in 2005, the five-building complex will consolidate the majority of the USPTO employees and contractors currently scattered among 18 buildings in Crystal City, Virginia. With construction well under way, USPTO must monitor progress to help ensure the project stays on schedule and to carefully implement the relocation of its facilities to minimize costs and adverse effects on operations, employees, patent and trademark applicants, and the public. We are conducting a follow-up review of USPTO's management of this project, looking at construction costs as well as issues we identified during the project's planning and design phases, such as space planning and allocation, relocation strategies, and actual versus target costs and completion schedules.

We view the successful operation of USPTO as a performance-based organization as being critical to its success and ability to address other challenges we have identified in recent years.

CHALLENGE 4
CONTROL THE COST AND IMPROVE THE ACCURACY OF CENSUS 2010

Few Commerce activities have more ambitious goals, higher costs, or more intensive resource requirements than the constitutionally mandated decennial census. And few are therefore more deserving of the scrutiny of this office.

This decade marks the third in the tenure of the Commerce Office of Inspector General in which we will closely monitor and evaluate the Census Bureau's plans and preparations for conducting its decennial population count. Our goal, as always, is to support and enhance its readiness by identifying problems early on, offering solutions, and informing the decision-making process at all levels—bureau, departmental, and congressional.

With each decade, the decennial becomes more costly, complex, and challenging. Over the course of the three that this office has monitored, for example, costs of $1 billion in 1980 rose to $2.6 billion in 1990, and to $6.5 billion in 2000. For 2010, Census estimates the cost will be between $10 and $12 billion.

Much has changed in the methods and technologies for decennial census taking during our watch, and the population has grown and diversified dramatically. But the primary weaknesses we have noted have remained the same and are at least partially responsible for the ever-increasing decennial expenditures: insufficient planning and upfront funding for an operation that by its very nature requires long-term vision and development and ongoing testing at key points along the way. We advised the Department of these weaknesses as we monitored the decennial process, recommending in 1984 that planning for the 1990 census be reported as a major internal control weakness until the Census Bureau formulated a master plan that addressed cost containment and systems life-cycle development (see March 1985 *Semiannual Report to Congress*, page 18). In 1991 we urged the Department to seek sufficient funding for fiscal years 1992 through 1996 to support early planning for Census 2000 (see March 1991 *Semiannual Report to Congress*, page 8). However, the bulk of funding and a final decision on the design did not come until 1999. To contain costs, the Department originally proposed sending enumerators to only a sample of households that did not return census forms. This proposal was ultimately disallowed by the Supreme Court in January 1999. Surprisingly, given the controversy surrounding the use of sampling, the bureau had done little contingency planning and thus needed a huge infusion of resources to make it possible to visit 50 percent more nonresponding households than originally anticipated and to process this additional data. Numerous operational and accuracy issues reported during Census 2000 were a direct result of these late-stage events.

The Census Bureau has committed to making 2010 different and has already begun working toward that end. In September 2002 it adopted a reengineered framework for 2010, proposing to collect and tabulate long-form data throughout the decade via the American Community Survey; enhance and improve address lists and geographic information databases; and institute a program of early planning, development, and testing for a short-form-only census. The bureau believes these redesigned processes will improve the relevance and timeliness of long-

CENSUS 2010 MAJOR MILESTONES	
2002	Begin planning and develop method for 2004 test
2004	Conduct census test (methodology)
2005	Analyze results and refine methodology
2006	Conduct census test (systems integration)
2007	Analyze results, refine/integrate systems/methods
2008	Conduct dress rehearsal
2009	Begin to implement operations
2010	Conduct census

form data; reduce operational risk; improve the accuracy of census data; and contain costs. The three-pronged strategy is aggressive and intended to capitalize on the latest technology, such as hand-held global positioning system devices and the Internet.

Our work assessing the bureau's efforts to achieve its reengineering goals is under way, against the backdrop of our recommendations for improving the 2010 decennial in light of the Census 2000 experience and in consideration of the concerns of Congress, the General Accounting Office, the National Academy of Sciences, and other oversight organizations.

OIG RECOMMENDATIONS FOR IMPROVING THE DECENNIAL CENSUS

1. Reach early consensus on the 2010 design to facilitate effective planning and obtain sufficient funding. Delays in finalizing the Census 2000 design and obtaining needed funding left insufficient planning, developing, and testing time for many key components.

2. Produce accurate, complete address lists and maps. The bureau's master address file (MAF) and associated mapping system (Topologically Integrated Geographic Encoding and Referencing, or TIGER) contained a higher-than-acceptable level of unreliability, which meant too many forms and too many enumerators could not reach the intended households.

3. Conduct a carefully targeted and aggressive public awareness campaign. The bureau's efforts to increase public awareness of and participation in Census 2000 were successful, enabling the bureau to achieve a response rate of 67 percent—6 percentage points beyond the projected rate of 61 percent. Census needs to further refine its public outreach program to achieve even higher rates in 2010.

4. Strengthen quality control of nonresponse follow-up. Instances of falsified and questionable data in Census 2000 required costly reenumeration and undermined confidence in the overall census results.

5. Implement clear policies and guidance for managing temporary staff. The logistics of hiring, training, and supervising nearly 1 million temporary workers requires strong management policies and procedures.

6. Determine whether sampling has a role beyond measuring coverage. Sampling has been a contentious issue in the past two decennials, and initial plans to use it to improve coverage were ultimately overruled.

7. Implement rigorous system and software development processes and effective information security measures. The bureau's approach to systems and software development for Census 2000 provided inadequate controls, insufficient testing, and poor or no documentation, all of which led to inefficiency and disruptive errors.

8. Upgrade and maintain contracting and program management expertise. The bureau lacked adequate in-house management skills to oversee decennial contracts and contractor-operated programs.

9. Generate timely and accurate management and operational information. The bureau lacked procedures for evaluating operations and thus failed to identify improprieties in a timely manner. Nor did it have expeditious methods for collecting and disseminating information to stakeholders.

10. Mitigate potential disruptions and distractions to the work environment and workforce. The bureau must have plans to counter the potentially negative impacts of two major events: the possible retirement of roughly half of the bureau's decennial staff during this decade, and the anticipated move to new facilities in 2008—the year of the dress rehearsal for Census 2010.

Source: U.S. Department of Commerce Office of Inspector General. Spring 2002. *Improving Our Measure of America: What Census 2000 Can Teach Us in Planning for 2010* (Report No. OIG-14431).

During this semiannual period we assessed the bureau's progress in modernizing its MAF/TIGER processing system. The successful redesign of this system is crucial to improving Census 2010 operations, and must be ready to support the decennial dress rehearsal in 2008. We are concerned that the bureau's late start in establishing a strong project management structure and its lack of a plan for accelerating its software improvement process may delay completion of the new system, preventing it from being thoroughly tested before the dress rehearsal. We will

continue to closely monitor this and other aspects of systems and software acquisition and development throughout the decade, as well as the bureau's actions to ameliorate any problems we identify.

We also concluded work related to the 2000 census that is instructive for 2010, in that it again underscores the need for vigilant management oversight of census operations in order to contain costs. Prompted by information from the General Services Administration (GSA), we audited the bureau's use of and payments for airfreight services to deliver census materials in the field. We identified a failure to follow proper procedures for monitoring and approving charges. As a result, the bureau overpaid some $2 million for these services during an 11-month period.

Our focus will intensify in subsequent semiannual periods as the bureau's plans and preparations continue to unfold; and we have set a broad agenda for review that will cover such areas as the following:

- completeness of the plan for the 2010 census as well as the coordination and integration of its elements;

- systems/software acquisition, development, testing and security;

- correction of address and map information;

- field tests in 2004 and 2006;

- planning for incorporation of the American Community Survey;

- approach to measuring data quality;

- conduct of the 2008 dress rehearsal;

- impact of construction and occupancy of Census' new headquarters on decennial scheduling; and

- implementation of decennial operations beginning in 2009.

We will report on the bureau's progress in these areas as its work proceeds through the decade.

CHALLENGE 5
INCREASE THE EFFECTIVENESS OF MARINE RESOURCE MANAGEMENT

The National Marine Fisheries Service (NMFS) must balance two competing interests: (1) promote commercial and recreational fishing as vital elements of our national economy and (2) preserve populations of fish and other marine life. Eight regional fishery management councils, along with NMFS, are responsible for developing plans for governing domestic fisheries in federal waters. Their combined goal is to prevent overfishing, rebuild overfished stocks, and protect, restore, and promote the long-term health and stability of U.S. fisheries.

Developing conservation and management measures requires collecting, analyzing, and reporting demographic information about fish populations via stock assessments. These reports are a key element of the fishery management process; they are used to determine whether additional regulations are necessary to rebuild fish stocks or whether greater fishing opportunities can be

allowed. Because of their potential impact on commercial and recreational fishing, these assessments are often controversial, and the methods used to create the estimates typically undergo intense scrutiny by fishers and conservation groups.

During this semiannual period we reviewed data collection processes and equipment an NMFS science center used to survey New England groundfish, specifically addressing concerns about the calibration of sample-collection equipment.

In addition, OIG recently evaluated the enforceability of fishing regulations and the enforcement methods used by NMFS' Office for Law Enforcement (OLE) and found many of the regulations are too complex and lack sufficient clarity for viable enforcement. We also found that NMFS' joint enforcement initiative with coastal states and territories is beneficial in supplementing federal enforcement efforts (see March 2003 *Semiannual Report*, page 25).

We are currently reviewing NMFS' observer program. Observers deployed on U.S. commercial fishing vessels collect catch statistics, monitor bycatch and protected species interactions, and perform biological sampling to obtain information for use by NMFS as well as industry and academic researchers. Their reported data is used to supplement research and aid in the management of living resources. We are reviewing how NMFS ensures data quality, and whether the data is meeting research and fishery management needs. We expect to report our findings in the next issue.

CHALLENGE 6
INCREASE FAIR COMPETITION IN INTERNATIONAL TRADE

To compete effectively in today's global marketplace, many U.S. companies need help identifying and taking advantage of new or expanded export market opportunities as well as addressing unfair trade practices, trade disputes with foreign firms, noncompliance with or violations of trade agreements, inadequate intellectual property protection, and other impediments to fair trade. Commerce must ensure that its export promotion assistance and trade compliance and market access efforts adequately serve U.S. exporters, and that its import assistance helps eliminate unfair competition from imports priced at less than fair market value or subsidized by foreign governments.

To help meet the challenges in highly competitive world markets, Commerce and its International Trade Administration (ITA) work with the Office of the U.S. Trade Representative, the Departments of State and Agriculture, and numerous other federal agencies to monitor and enforce trade agreements. The number and complexity of those agreements have increased substantially in recent years, and the Secretary of Commerce has made monitoring and enforcing trade agreements a top priority for ITA and the Department as a whole. Commerce received additional funding for trade compliance activities in FY 2001 and redirected other resources so that it could place additional officers at select overseas posts and in Washington to specifically monitor market access and compliance issues. Arecent OIG audit found that with the increased funding, ITA's Market Access and Compliance unit was able to effectively recruit and hire sufficient staff for critical trade and compliance positions (see March 2003 *Semiannual Report*, page 20).

Commerce has numerous mechanisms to monitor and help enforce U.S. trade agreements and review trade complaints from a variety of sources. When warranted, its Trade Compliance Center forms a compliance team to follow up on complaints and bring them to satisfactory conclusion, although we found that the center needs to improve its coordination within ITA. (See page 50 of our March 2002 *Semiannual Report to Congress* for an inspection report on the Trade Compliance Center.) In addition, ITA's overseas U.S. & Foreign Commercial Service (US&FCS) offices and other operating units perform a substantial amount of market access and trade compliance work. Overall ITA's approach to trade compliance and market access is to engage the issue at the working level wherever possible—avoiding formal dispute settlement structures such as the World Trade Organization, which can take years to resolve trade disagreements. The Department also pursues important policy issues—including intellectual property rights protection, standards development, trading rights, and distribution services—in government-to-government negotiations. For example, the Secretary and ITA officials recently met with senior Chinese officials to press for full implementation of trade agreements, market access, and a level playing field for U.S. products and services.

Commerce's extensive network of overseas US&FCS offices and domestic Export Assistance Centers also identifies specific export market opportunities or trade leads for U.S. companies, especially small and medium-size firms that are new to exporting or looking to expand their overseas markets. During this semiannual period, we reviewed the operations of the US&FCS office in Greece to assess its effectiveness in assisting U.S. companies increase sales in the Greek market. This review was similar to one we recently completed in Turkey (see March 2003, page 19), but the review in Greece was specifically requested by the U.S. ambassador to that country who had concerns about the adequacy of management controls in place. We also are currently reviewing US&FCS' domestic network of U.S. Export Assistance Centers.

We will continue our oversight of the Department's promotion of U.S. exports and also look at Commerce's administration of the antidumping and countervailing duty regulations and other efforts to track, detect, and combat unfair competition to U.S. industry in domestic markets.

CHALLENGE 7
ENHANCE EXPORT CONTROLS FOR DUAL-USE COMMODITIES

The effectiveness of export controls is an ongoing issue. Advancing U.S. national and economic security interests through export controls is a significant challenge for the parties involved, particularly for Commerce's Bureau of Industry and Security, which oversees the federal government's export licensing and enforcement system for dual-use commodities (goods and technologies that have both civilian and military uses). Strengthening dual-use export licensing and enforcement requires new, comprehensive legislative authority to replace the expired Export Administration Act of 1979 and appropriately address current export control needs and realities. Passed during the Cold War, the act sought to prevent the export of critical goods and technologies to Communist bloc countries. In today's political climate, hostile countries and terrorist groups seeking weapons of mass destruction and the systems to deliver them pose new threats to global security and U.S. foreign policy goals. Legislation is needed to address these threats as well as to bolster BIS' regulatory authority, strengthen penalties for violations, and

demonstrate America's commitment to maintaining strong export controls while encouraging other countries to do the same.

Given the importance of export controls to national security, we have devoted considerable attention to the challenges facing BIS. The National Defense Authorization Act (NDAA) for Fiscal Year 2000, as amended, directed the inspectors general of the Departments of Commerce, Defense, Energy, and State, in consultation with the directors of the Central Intelligence Agency and the Federal Bureau of Investigation, to report to Congress by March 30, 2000, and annually until the year 2007, on the adequacy of export controls and counterintelligence measures to prevent the acquisition of sensitive U.S. technology and technical information by countries and entities of concern. In addition, NDAA for FY 2001 requires the IGs to discuss in their annual interagency report the status or disposition of recommendations made in earlier reports submitted in accordance with the act. To date, we have completed four reviews of export controls in compliance with the act as well as three separate follow-up reports. Together with the other IGs, we have also issued four interagency reports on export controls for dual-use items and munitions.

CURRENT REVIEW OF DEEMED-EXPORT CONTROLS

To comply with NDAA's 2004 requirement, the IGs[6] agreed to conduct an interagency review to assess whether the current deemed-export control laws and regulations[7] adequately protect against the illegal transfer of controlled U.S. technologies and technical information by foreign nationals to countries and entities of concern. Our efforts will focus on the effectiveness of the dual-use, deemed-export regulations and policies, including their implementation by BIS, and on compliance with the regulations by U.S. industry (particularly federal contractors) and academic institutions. We will also follow up on prior OIG findings and recommendations from our March 2000 report, *Improvements Are Needed in Programs Designed to Protect Against the Transfer of Sensitive Technologies to Countries of Concern* (IPE-12454-1), as appropriate.

FOCUSED PRIORITIES

An important element needed to enhance export controls remains enactment of a new Export Administration Act, while BIS, the administration, and Congress (1) work to target federal licensing and enforcement efforts on exports that present the greatest proliferation and national security risks and (2) streamline or eliminate controls that unnecessarily hamper trade and do not augment national security or foreign policy concerns. We will continue to monitor BIS' efforts to improve dual-use export controls through the annual reviews required by the National Defense Authorization Act.

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[6] This year's review includes the participation of the Department of Homeland Security's OIG.

[7] According to the Export Administration Regulations, any release to a foreign national of technology or software subject to the regulations is deemed to be an export to the home country of the foreign national (unless the foreign national is a U.S. permanent resident). These exports are commonly referred to as "deemed exports," and may involve the transfer of sensitive technology to foreign visitors or workers at U.S. research laboratories and private companies.

CHALLENGE 8

ENHANCE EMERGENCY PREPAREDNESS, SAFETY, AND SECURITY OF COMMERCE FACILITIES AND PERSONNEL

Since our March 2002 report on the status of emergency preparedness and security programs at a cross-section of Commerce facilities in the Washington, D.C., area and across the nation, the Department has made significant improvements, although more needs to be done. Heightened security requires a variety of measures: infrastructure risk assessments, emergency backup sites, upgraded physical security, and employee awareness and training, to name a few. With this complexity of measures, Commerce will have to regularly revisit its procedures for ensuring the safety and security of its employees and operations, and modify them as needed.

In its efforts to enhance security, thus far this year Commerce

- increased in-house security expertise to allow for close coordination with the Department of Homeland Security, the FBI's Joint Terrorism Task Force, and various intelligence agencies;

- created an emergency operations center—a central location for receiving critical information from other emergency centers and coordinating necessary responses during and after an emergency event;

- completed some continuity of operation plan (COOP) exercises to help improve communication and operations capabilities; and

- modified occupant emergency plans (OEP) to incorporate shelter-in-place guidance, revised procedures addressing special-needs individuals, and conducted periodic tests and assessments of emergency preparedness capabilities and related systems.

Given the size of its workforce and the geographical spread of its 481 facilities nationwide and more than 150 locations overseas, complying with recent security-related guidance is a complex, resource-intensive undertaking for Commerce. In recent inspections of overseas posts operated by the U.S. and Foreign Commercial Service, we identified the need for more timely security upgrades, improved oversight of security operations, and better management of resources. We believe Commerce is making progress on many of these fronts, but the challenge is massive. We will continue to monitor its efforts and report our findings accordingly.

CHALLENGE 9

STRENGTHEN FINANCIAL MANAGEMENT CONTROLS AND SYSTEMS

The Chief Financial Officers Act of 1990, the Government Performance and Results Act of 1993, the Government Management Reform Act of 1994, and the Federal Financial Management Improvement Act of 1996 require that agencies prepare information needed by Congress, agency executives, and the public to assess the management of federal programs and operations. An entity's financial position and results of operations, presented in findings of audits of the agency's financial statements, help determine whether an agency's financial management systems comply with federal requirements.

The Department as a whole has made substantial improvements in financial management; however, maintaining a clean audit opinion remains a major challenge, especially under the accelerated financial reporting dates mandated by the Office of Management and Budget (OMB). On its FY 2002 consolidated financial statements, the nonfederal auditors gave the Department an unqualified (clean) opinion—the fourth consecutive year for this accomplishment despite continuing obstacles including the absence of a single, integrated financial management system. Although the Department resolved most of the financial management and reporting weaknesses noted in the previous year's audit, the audit of the Department's FY 2002 statements identified two reportable conditions (one of which is considered a material weakness[8]) and several instances of noncompliance with laws and regulations, all of which are repeat findings (see March 2003 *Semiannual Report to Congress*, page 34). We retained an independent certified public accounting firm to audit the Department's consolidated financial statements for FY 2003 and review the adequacy of information technology security controls over financial systems. Their results will be presented in our March 2004 *Semiannual Report to Congress*.

The Department has made significant progress in implementing the Commerce Administrative Management System (CAMS).[9] The Bureau of the Census and NOAA use CAMS as their financial system of record. When fully deployed in 2003 CAMS will be the single system of record for Census, NIST, NOAA, and 10 of the Department's operating units whose accounting functions are handled by either NIST or NOAA. NOAA services the Bureau of Industry and Security. NIST services the Bureau of Economic Analysis (BEA), Economic Development Administration (EDA), Economics and Statistics Administration (ESA), Minority Business Development Agency (MBDA), National Telecommunications and Information Administration (NTIA), Technology Administration (TA), Office of the Secretary, Office of Computer Services (OCS), and Office of Inspector General.

Three of the Department's operating units will not use CAMS— International Trade Administration, U.S. Patent and Trademark Office, and National Technical Information Service. These will submit data, along with other units, into a Commerce-wide database that serves as the source for the Department's consolidated financial reports. The Department expects that CAMS, in conjunction with the database, will bring Commerce into compliance with federal financial systems requirements, including that for a single, integrated financial management system.

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[8] Material weaknesses are serious flaws in the design or operation of an internal control component that increase the risk that errors, fraud, or noncompliance in material amounts may occur and not be readily detected.

[9] CAMS is a software package based on a commercial off-the-shelf accounting system application that was extensively modified and substantially augmented with capabilities to support both departmental accounting and financial management needs as well as individual Commerce unit requirements.

CHALLENGE 10

CONTINUE TO IMPROVE THE DEPARTMENT'S STRATEGIC PLANNING AND PERFORMANCE MEASUREMENT IN ACCORDANCE WITH THE GOVERNMENT PERFORMANCE AND RESULTS ACT

Congress and agency managers require relevant performance measures and credible performance data to effectively fulfill their oversight responsibilities with respect to federal programs. The Government Performance and Results Act of 1993 was designed to ensure the availability of such data by mandating that agencies set goals for program performance and report outcomes measured against those goals. As the government moves toward integrating budget and performance information and using performance data to make funding decisions, the validity of reported performance results will be increasingly important.

Although we believe the Department has made progress toward meeting the challenge of measuring its performance, significant opportunities for improvement remain for meeting GPRA and other reporting requirements. One such opportunity concerns data quality: Commerce should more clearly articulate the level of reliability that can be placed on the performance data it provides in its annual *Performance & Accountability Report*.

Another opportunity for improvement involves performance measures: our audits of several such measures used by departmental units over the past few years have identified the need for stronger internal controls to ensure accurate reporting of performance data and improved explanations and disclosures of results. For example, procedures should be established to ensure that (1) reported information is reconciled against supporting data and (2) only appropriate data is included in performance results.

These issues again emerged in our recent audit of selected performance measures at NOAA. We are concerned that—for the measures we evaluated—NOAA needs to (1) improve internal controls, (2) restate data that was incorrectly reported in the past, (3) provide additional performance measures to more clearly articulate results, (4) provide additional disclosures and explanations of performance results, and (5) assess the value of certain measures to determine whether they should be revised or dropped.

We will continue to evaluate performance measurement and reporting at NOAA and other bureaus and, as warranted, make recommendations to the Department and its operating units regarding the accuracy, appropriateness, reliability, and usefulness of accumulated performance data.