REVIEW OF THE FAA'S PROGRESS IN IMPLEMENTING THE FAA MODERNIZATION AND REFORM ACT

(113–15)

HEARING

BEFORE THE

SUBCOMMITTEE ON
AVIATION

OF THE

COMMITTEE ON
TRANSPORTATION AND
INFRASTRUCTURE
HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRTEENTH CONGRESS

FIRST SESSION

MAY 16, 2013

Printed for the use of the
Committee on Transportation and Infrastructure

Available online at: http://www.gpo.gov/fdsys/browse/committee.action?chamber=house&committee=transportation

U.S. GOVERNMENT PRINTING OFFICE

80–937 PDF WASHINGTON : 2013

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2104 Mail: Stop IDCC, Washington, DC 20402–0001

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

BILL SHUSTER, Pennsylvania, *Chairman*

DON YOUNG, Alaska
THOMAS E. PETRI, Wisconsin
HOWARD COBLE, North Carolina
JOHN J. DUNCAN, JR., Tennessee, *Vice Chair*
JOHN L. MICA, Florida
FRANK A. LOBIONDO, New Jersey
GARY G. MILLER, California
SAM GRAVES, Missouri
SHELLEY MOORE CAPITO, West Virginia
CANDICE S. MILLER, Michigan
DUNCAN HUNTER, California
ERIC A. "RICK" CRAWFORD, Arkansas
LOU BARLETTA, Pennsylvania
BLAKE FARENTHOLD, Texas
LARRY BUCSHON, Indiana
BOB GIBBS, Ohio
PATRICK MEEHAN, Pennsylvania
RICHARD L. HANNA, New York
DANIEL WEBSTER, Florida
STEVE SOUTHERLAND, II, Florida
JEFF DENHAM, California
REID J. RIBBLE, Wisconsin
THOMAS MASSIE, Kentucky
STEVE DAINES, Montana
TOM RICE, South Carolina
MARKWAYNE MULLIN, Oklahoma
ROGER WILLIAMS, Texas
TREY RADEL, Florida
MARK MEADOWS, North Carolina
SCOTT PERRY, Pennsylvania
RODNEY DAVIS, Illinois
VACANCY

NICK J. RAHALL, II, West Virginia
PETER A. DEFAZIO, Oregon
ELEANOR HOLMES NORTON, District of Columbia
JERROLD NADLER, New York
CORRINE BROWN, Florida
EDDIE BERNICE JOHNSON, Texas
ELIJAH E. CUMMINGS, Maryland
RICK LARSEN, Washington
MICHAEL E. CAPUANO, Massachusetts
TIMOTHY H. BISHOP, New York
MICHAEL H. MICHAUD, Maine
GRACE F. NAPOLITANO, California
DANIEL LIPINSKI, Illinois
TIMOTHY J. WALZ, Minnesota
STEVE COHEN, Tennessee
ALBIO SIRES, New Jersey
DONNA F. EDWARDS, Maryland
JOHN GARAMENDI, California
ANDRÉ CARSON, Indiana
JANICE HAHN, California
RICHARD M. NOLAN, Minnesota
ANN KIRKPATRICK, Arizona
DINA TITUS, Nevada
SEAN PATRICK MALONEY, New York
ELIZABETH H. ESTY, Connecticut
LOIS FRANKEL, Florida
CHERI BUSTOS, Illinois

SUBCOMMITTEE ON AVIATION

FRANK A. LOBIONDO, New Jersey, *Chairman*

THOMAS E. PETRI, Wisconsin
HOWARD COBLE, North Carolina
JOHN J. DUNCAN, JR., Tennessee
SAM GRAVES, Missouri
BLAKE FARENTHOLD, Texas
LARRY BUCSHON, Indiana
PATRICK MEEHAN, Pennsylvania
DANIEL WEBSTER, Florida
JEFF DENHAM, California
REID J. RIBBLE, Wisconsin
THOMAS MASSIE, Kentucky
STEVE DAINES, Montana
ROGER WILLIAMS, Texas
TREY RADEL, Florida
MARK MEADOWS, North Carolina
RODNEY DAVIS, Illinois, *Vice Chair*
BILL SHUSTER, Pennsylvania *(Ex Officio)*

RICK LARSEN, Washington
PETER A. DEFAZIO, Oregon
ELEANOR HOLMES NORTON, District of Columbia
EDDIE BERNICE JOHNSON, Texas
MICHAEL E. CAPUANO, Massachusetts
DANIEL LIPINSKI, Illinois
STEVE COHEN, Tennessee
ANDRÉ CARSON, Indiana
RICHARD M. NOLAN, Minnesota
DINA TITUS, Nevada
SEAN PATRICK MALONEY, New York
CHERI BUSTOS, Illinois
CORRINE BROWN, Florida
NICK J. RAHALL, II, West Virginia *(Ex Officio)*

CONTENTS

Page

Summary of Subject Matter iv

TESTIMONY

Hon. Michael P. Huerta, Administrator, Federal Aviation Administration 8

PREPARED STATEMENTS AND ANSWERS TO QUESTIONS FOR THE RECORD SUBMITTED BY WITNESSES

Hon. Michael P. Huerta:
- Prepared statement 22
- Answers to questions from the following Representatives:
  - Hon. Frank A. LoBiondo, of New Jersey 35
  - Hon. Sam Graves, of Missouri; responses include "A White Paper on the National Aeronautical Charting Office (NACO) High Performing Organization (HPO)," Federal Aviation Administration (June 30, 2008) 56
  - Hon. Rodney Davis, of Illinois 124
  - Hon. Rick Larsen, of Washington 126
  - Hon. André Carson, of Indiana 131
  - Hon. Ann Kirkpatrick, of Arizona 138

SUBMISSIONS FOR THE RECORD

Hon. Larry Bucshon, a Representative in Congress from the State of Indiana, request to submit letter from the Indiana congressional delegation to Hon. Ray LaHood, Secretary, U.S. Department of Transportation and Hon. Michael P. Huerta, Administrator, Federal Aviation Administration, which urges Mr. LaHood and Mr. Huerta to consider the application of the Ohio/Indiana Unmanned Aircraft Systems Center and Test Complex to serve as one of the six Unmanned Aircraft Systems test sites required by the FAA Modernization and Reform Act of 2012 5

Committee on Transportation and Infrastructure
U.S. House of Representatives

Bill Shuster
Chairman

Washington, DC 20515

Nick J. Rahall, II
Ranking Member

May 10, 2013

Christopher P. Bertram, Staff Director

James H. Zoia, Democrat Staff Director

SUMMARY OF SUBJECT MATTER

TO:	Members, Subcommittee on Aviation
FROM:	Staff, Subcommittee on Aviation
RE:	Subcommittee Hearing on "Review of FAA's Progress in Implementing the FAA Modernization and Reform Act"

PURPOSE

The Subcommittee on Aviation will meet on Thursday, May 16, 2013, at 2:00 p.m. in 2167 Rayburn House Office Building to receive testimony in order to re-examine the progress that the Federal Aviation Administration (FAA) has made in implementing portions of the FAA Modernization and Reform Act of 2012 (the Reform Act) (P.L. 112-95). The Subcommittee will hear from the agency on the progress it has made and the steps it has taken in implementing the Reform Act.

BACKGROUND

The FAA reauthorization bill, the FAA Modernization and Reform Act of 2012 (P.L. 112-95) was signed into law by the President on February 14, 2012. This key piece of legislation contained multiple provisions to provide for a modern, safe and efficient civil aviation system now and into the future. The Reform Act provides the funding necessary for the Administration to operate the air traffic control system at the highest standards of safety and to modernize the Nation's air traffic control system. It provides policy direction for the FAA's critical safety and air traffic control modernization programs and implements reforms that will allow the FAA to become a more efficient, results-oriented safety organization. In addition, the Reform Act contains provisions that will address passenger service improvements. The Reform Act also includes multiple provisions that assist the FAA's safety oversight role. After five years of short term extensions, the Reform Act provides the FAA with the necessary guidance and stability it needs.

Safety

The United States aviation system is the safest in the world due to the hard work and commitment of government, industry and other stakeholders to provide safe air travel. The aviation system is a key part of the Nation's infrastructure and economy and it is the top priority of the FAA, stakeholders, and Congress to ensure the safety of the aviation system. Several important safety issues are addressed in the Reform Act by requiring the FAA to develop rules, on air ambulance operations, maintenance providers, foreign repair stations, and commercial aircraft personnel training requirements. The Reform Act requires the FAA to report to Congress on topics such as runway safety, flight standards, and foreign repair stations to ensure that regulations are being complied with and address any weaknesses in the system. To help foster the safety of the national airspace system (NAS) the Reform Act also requires studies on FAA staffing needs and models and addresses a variety of training issues. The FAA is behind on meeting the deadlines for the many provisions outlined above, but it is continuing to make some progress on addressing the requirements.

Unmanned Aircraft Systems

The Reform Act requires the FAA to allow for the safe integration of civil unmanned aircraft systems (UASs) into the NAS by December 2015. Ultimately, it is the FAA's call whether civil UASs can be safely integrated by this date. Currently, public UASs, such as those operated by Federal, State, and local government entities, including law enforcement agencies, are operating in the NAS, but only with FAA authorization. The Reform Act requires the FAA to work with government entities to expedite the authorization process while still ensuring safety. Government entities are seeking to use UASs for such missions as: search and rescue, wildlife and weather research, mapping, firefighting, border patrol, and law enforcement efforts.

Not later than 180 days after enactment, the FAA is directed to establish a program to safely integrate UASs into the NAS at six test ranges. Due to privacy concerns, the FAA is currently behind on implementation. The FAA issued a Screening Information Request on February 14, 2013, for the test ranges and is currently going through the process of selecting the test ranges with the hopes it can announce selections by the end of 2013. The establishment of test ranges will allow the FAA to collect valuable data on the operation of UASs and decide how and if UASs can be safely integrated into the NAS.

The Secretary of Transportation shall determine if certain UASs may operate safely in the NAS prior to completion of the comprehensive plan and guidance required by the Reform Act. In making the determination, the Secretary will decide the types of UASs, if any, as a result of their size, weight, speed, operational capability, do not create a hazard to users of the NAS or the public or pose a threat to national security. In addition, the Secretary will decide whether a certificate of waiver, certificate of authorization, or airworthiness certification is required for the operation of small UASs. If the Secretary determines that certain UASs may operate safely in the NAS, the Secretary is required to establish requirements for the safe operation of such aircraft systems.

Finally, in regard to the operation of model aircraft, the Reform Act prohibits the FAA from promulgating any rule or regulation regarding a model aircraft or an aircraft being developed as a model aircraft, as long as the model aircraft is flown for hobby or recreational use

and adheres to the other requirements of the law. While the FAA has made steps to achieve the UAS requirements in the law, it has run into several problems that have delayed implementation, including addressing privacy concerns.

Passenger Service Improvements

The Reform Act acknowledges that airline passengers are critical stakeholders in the airline industry and contains provisions to address passenger concerns. It includes provisions that instruct the Secretary, FAA, U.S. Department of Transportation (DOT) Inspector General (IG), and Government Accountability Office (GAO) to conduct studies and reports and take other actions to improve passenger service. Such provisions include a requirement DOT require air carriers to provide a monthly report on diverted flights. Additionally, to ensure that passengers receive proper treatment during delays, DOT is required to ensure that all air carriers develop emergency contingency plans at airports the carriers serve. DOT is also directed to establish an advisory committee on consumer protection to advise the Secretary of Transportation when the Secretary is carrying out airline customer service improvements. The IG and GAO are required to conduct reviews and study issues that affect aviation passengers, such as flight delays, cancellations, and delayed baggage. All of the studies will provide valuable data to assist Congress in future decisions. The FAA and DOT have made progress in carrying out the passenger service improvement requirements, similarly the GAO and IG are on schedule with the majority of their studies and reviews.

Good Governance

Through the Reform Act, Congress recognizes the importance of ensuring the FAA is an efficient, streamlined, and effective government agency. The Reform Act encourages the FAA to reform and streamline its offices, regulations and processes and to seek greater cost efficiencies. In fact, the Reform Act requires the FAA to undertake a review of all programs, offices, and organizations to identify duplicative positions or programs, wasteful practices, redundant functions, and inefficient processes or policies. The FAA is then directed to submit a report to Congress. This report was due to be completed earlier this year. The FAA is also given the authority to take any actions necessary to address the findings of its review and report.

Another important reform provision directs the FAA to develop a facilities realignment and consolidation report. The report is to be comprehensive, include labor and industry participation, and outline recommendations to support the transition to Next Generation Air Transportation System (NextGen) and to reduce capital costs without adversely affecting safety. After a public review process, the report is to be submitted to Congress. The Administrator may not carry out the recommendations included in the report if a joint resolution of disapproval is enacted by Congress within 30-days after the submission of the report to Congress. The FAA is still developing the facilities realignment and consolidation report and is delayed in meeting the timelines outlined in the Reform Act.

Another important provision in the Reform Act addresses concerns by industry and other stakeholders related to inconsistent interpretations of regulations by FAA staff and Regional offices. To address the concerns, the Reform Act directs the FAA to form an advisory panel to

determine the root cause of inconsistent interpretations and to develop recommendations to improve consistency among FAA offices. The report was due one year after enactment and is currently overdue.

Finally, the Reform Act requires the FAA to review and reform its aircraft certification process by conducting an assessment, developing recommendations to improve efficiency, reduce costs, and streamline and reengineer the certification process. A report was due six months after enactment and the FAA is directed to begin implementing the recommendations not later than one year after enactment. The FAA is still in the process of developing these requirements.

NextGen

Under our current air traffic system, controller workload, voice communication congestion, limitations of air traffic control radar accuracy, and the coverage and accuracy of ground-based navigational signals impose limitations on the capacity and efficiency of air traffic, particularly in busy terminal areas near major airports and metropolitan areas. According to the FAA, by 2025 our air traffic system will need to handle roughly 1 billion passengers per year and, including general aviation flights, more than 79,000 flights every day. It is widely acknowledged our current system will not be able to meet future demands.

For nearly a decade, the FAA has been trying to transition from legacy air traffic systems to NextGen. These efforts include transitioning from a ground-based radar system to a satellite-based surveillance system, developing data communications capabilities between aircraft and the ground to reduce controller and pilot workload, improving aviation weather forecasting and monitoring systems, and creating shared and distributed information technology architectures. When it is properly implemented, NextGen will reduce delays and operating costs, improve safety and efficiency, increase capacity, and lessen aviation's impact on the environment. This will ensure that the United States aviation system maintains its global competitiveness as other nations modernize their own air traffic control systems.

However, NextGen suffers from a lack of accountability, significant cost overruns, and numerous project delays. To address underlying shortfalls and unforeseen challenges, Congress enacted numerous NextGen reforms in the Reform Act, which include requiring the FAA to establish a Chief NextGen Officer, responsible for overseeing the entire NextGen program and held accountable by Congress. In addition, it elevated the position of the Director of the Joint Planning and Development Office (JPDO) to Associate Administrator, reporting directly to the Administrator and responsible for inter- and intra-agency coordination. It granted the FAA authority to streamline the environmental review process required for the development and implementation of performance-based navigation procedures. It authorized the establishment of an avionics equipage incentive program and required the FAA to identify operational incentives for equipage. In addition, it required the FAA to establish and track NAS performance metrics to track the agency's progress in implementing NextGen.

Unfortunately, to date the FAA does not have a Chief NextGen Officer and has not elevated the head of JPDO to Associate Administrator. Further, the agency has not implemented

a plan to make use of its new authority to expedite the environmental review process, has not established financial or operational equipage incentives, and has not completed its work on establishing and tracking NAS performance metrics.

Conclusion

It has been over a year since the FAA Modernization and Reform Act of 2012 became law, which created a vital four year framework for the FAA and industry. It is the Aviation Subcommittee's responsibility to ensure that the FAA is properly implementing the provisions contained in the Reform Act. In addition, given the important work that the FAA is responsible for, it is critical that the Subcommittee ensure the FAA is properly organized and structured. The Reform Act set forth dozens of deadlines that the FAA was required to achieve; some of those deadlines have been met, while the FAA is still in the process of meeting others. While the FAA may not have met all deadlines, some progress has been made in areas that were facing stagnation or inefficiencies. The FAA must be attentive in its efforts to implement the mandates and goals of the FAA Modernization and Reform Act of 2012.

WITNESS LIST

The Honorable Michael P. Huerta
Administrator
Federal Aviation Administration

REVIEW OF THE FAA'S PROGRESS IN IMPLEMENTING THE FAA MODERNIZATION AND REFORM ACT

THURSDAY, MAY 16, 2013

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON AVIATION,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
Washington, DC.

The subcommittee met, pursuant to call, at 2:54 p.m., in Room 2167, Rayburn House Office Building, Hon. Frank A. LoBiondo (Chairman of the subcommittee) presiding.

Mr. LOBIONDO. The committee will come to order. Good afternoon. Apologies. Series of votes. Longer than expected. Yada, yada, yada. But we apologize.

As a followup to our February hearing we are again going to attempt to examine what progress the FAA has made in implementing the Modernization and Reform Act that was signed into law on February 14th of 2012. The reform act was passed after 5 years—5 excruciating years—of short-term extensions, but it created a stable 4-year framework for the FAA, industry, and other stakeholders. The act makes important reforms to the aviation system and to the FAA in order to increase efficiency and modernize the system, and ensures that we maintain a safe, modern, and efficient civil aviation system for now and into the future. Ensuring implementation of the FAA reauthorization is and will remain a top priority of the subcommittee.

NextGen is a central part of the reform law. I am extremely fortunate to represent New Jersey's Second Congressional District, which happens to include the FAA's premier technical center. So I have seen firsthand the work that goes on there and I have been able to learn more about why NextGen is important to the FAA, the aviation industry, and the traveling public.

What has become clear is that we must attempt to do more—we must do more—to provide certainty for the FAA and the stakeholders, which is why the reform act requires the FAA to appoint a chief NextGen officer for a term of 5 years. This is going to help with the technology and accelerates deployment of the performance-based navigation procedures for large, medium, and small airports. The reform act also requires the FAA to include FAA employees, such as air traffic controllers, in the modernization process, and requires the FAA, with input from the industry, to identify operational incentives to encourage the aviation industry to equip with necessary avionics.

The FAA is making progress with some of these efforts, and I want to thank Administrator Huerta for his efforts. But we know that we still have a long way to go together. Since the subcommittee's last hearing, the Aviation Subcommittee has held the first in a series of listening sessions broadly focused on implementation of NextGen. We were able to hear from industry stakeholders about various issues of concern in the implementation of NextGen air traffic control procedures.

Next week we are holding a second NextGen listening session. This will give the subcommittee an opportunity to hear from the FAA and industry stakeholders in a less formal setting. We, of course, intend to use what we learn in the listening sessions to help us, industry, and FAA achieve near-term real world benefits, measurable benefits from NextGen.

Today, I look forward to hearing from Administrator Huerta what the plan is for the FAA to fully implement the reform act. In particular, I am interested in learning how the FAA is complying with the various safety modernization, reform, and good governance provisions included into law.

The FAA has had some successes in implementing the act. However, similar to NextGen, the FAA has also faced some challenges and is behind on some of its deadlines. Administrator Huerta will testify that the FAA is on track to meet or has met 80 percent of the deliverables, including the FAA reauthorization law, and has currently completed half of that.

But I think, Mr. Huerta, even you would agree that not all of the reauthorization requirements are created equal. The FAA has yet to complete some of the most important and challenging requirements of the law, including the Unmanned Aircraft Systems, UAS, integration plan to allow for safe integration of UAS by 2015. The small UAS rulemaking, the facility realignment and consolidation plan, and reforming and streamlining certification processes. Completion of these requirements are delayed. And I look forward to hearing from Administrator Huerta on what we can expect, when we can expect to see more progress, and what we may be able to do to help be a force multiplier for you.

Before we turn to Administrator Huerta for a statement, I would like to ask unanimous consent that all Members have 5 legislative days to revise and extend their remarks and include extraneous material for the record of this hearing.

Without objection, so ordered.

Mr. LOBIONDO. I now would like to yield to Mr. Larsen for any statement you may have.

Mr. LARSEN. Thanks, Chairman LoBiondo, for calling today's hearing to review the FAA's progress in implementing the reauthorization law. For the past several weeks, budget sequestration and its effect on the FAA have distracted the subcommittee's oversight on reauthorization. And I just want to make a few brief remarks on that and refocus on the agency's implementation of FAA reauthorization, which contains several important provisions.

First, last month we took action to end air traffic controller furloughs and airline delays throughout the system. That said, the public should understand that this action was only a temporary solution. Sequestration will have lingering effects this fiscal year that

we need to better understand, and the bill ending the furloughs that passed last month does come at a cost. Lost funding for the Airport Improvement Program means less investment in our Nation's airports and less long-term competitiveness for our economy.

Our country already does not have a top 25 airport, according to annual rankings that came out last month, and cutting AIP makes that climb tougher. Moreover, if we don't pass or enact a longer term comprehensive and balanced solution to cut the deficit and end sequestration, then none of my colleagues should act surprised when we are backed into another crisis in the aviation sector this October.

Mr. Chairman, a key feature of the FAA reauthorization law was the new policy direction it provided for the FAA's NextGen initiative and development of new technologies. The subcommittee must provide vigorous oversight to ensure these provisions are effectively implemented. For example, theFAA reauthorization sought to increase leadership and accountability over NextGen by creating a chief NextGen officer position. Congress created this position to break through bureaucratic barriers at the FAA and to unify the agency's NextGen efforts, but it has been vacant for over a year. So I am pleased that yesterday the administration announced that it would appoint a new deputy administrator who will fill the role of chief NextGen officer.

Section 212 of the reauthorization requires the FAA to implement more fuel-efficient, performance-based navigation procedures at the Nation's top 35 airports and to report to Congress on its progress. Yet to date the FAA has not produced the implementation plan and the report required by law that is several months overdue.

The FAA is also working with the RTCA NextGen Advisory Committee and industry stakeholders to analyze nontechnical barriers to implementing performance-based navigation. I look forward to hearing an update from Administrator Huerta regarding the FAA's efforts to implement these procedures.

Aviation manufacturing and technology development are major economic drivers in my home State of Washington. Therefore, I am pleased with the FAA reauthorization, that it contained important provisions to improve the FAA's processes for certifying airplanes, engines, and other products. To address these issues raised by the GAO, section 313 required the FAA to convene an advisory panel to address inconsistent interpretations of flight standards and aircraft certification regulations. Unfortunately, that report to Congress on this effort is overdue.

The FAA reauthorization also requires the agency to develop a plan for safely integrating Unmanned Aircraft Systems into the National Airspace System by December 2015. The FAA's Joint Planning and Development Office has collaborated with industry stakeholders and other Federal agencies to develop and finalize a comprehensive UAS implementation plan. Additionally, the FAA will select six test sites this year to gather data on how UAS operations may impact air traffic operations.

I would like Administrator Huerta to identify some of the technical issues that need to be tested and resolved so that unmanned systems can safely and routinely operate in civil airspace. These

are all critical issues for maintaining an American leadership in the aviation sector. And I am hopeful that the FAA and this subcommittee will continue to work together to meet the challenges that we have ahead of us.

Thank you. I look forward to hearing from our witness. And I yield back.

Mr. LOBIONDO. Thank you, Mr. Larsen.

Mr. LOBIONDO. Normally we don't go to Members for opening sessions, but Mr. Bucshon has a special circumstance with needing to manage the floor, so he has asked for 1 minute. And with the committee's indulgence, you are recognized.

Dr. BUCSHON. Thank you for your indulgence, Mr. Chairman.

Thank you for coming back today, Mr. Huerta. As you know, the FAA reauthorization, in that we authorized several test sites for Unmanned Aircraft Systems. Indiana and Ohio have jointly applied to be a test site. I just want to submit for the record the letter that the entire Indiana delegation sent to the DOT regarding our application and put in a plug for our State. It is a great place to do business. We would love to work with the FAA on this issue.

Thank you, Mr. Chairman. I want to submit this for the record.

Mr. LOBIONDO. Without objection, so ordered.

[The information follows:]

Congress of the United States

Washington, DC 20510

May 06, 2013

The Honorable Ray LaHood
Secretary
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

The Honorable Michael Huerta
Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Dear Secretary LaHood and Administrator Huerta:

We are writing to urge you to give full consideration to the application of the Ohio/Indiana Unmanned Aircraft Systems (UAS) Center & Test Complex. The states of Ohio and Indiana have both the military and civil resources necessary to be a leader in the emerging UAS sector, and the Ohio/Indiana Unmanned Aircraft Systems (UAS) Center & Test Complex is well suited to serve as one of the six UAS Test Sites required by the FAA Modernization and Reform Act of 2012 (Public Law 112-95).

The Ohio/Indiana proposal fulfills the Federal Aviation Administration's (FAA) goal to develop regulatory standards to foster UAS technology and operational procedures and also will add to the data the FAA requires to permit future UAS operations in the National Airspace System (NAS). This joint effort focuses critical resources on UAS research, development, testing, manufacturing and training to the benefit of Federal, State and commercial users. The Ohio/Indiana proposal is uniquely suited to carry out its efforts in close proximity to a diverse and powerful team of FAA partners already conducting research and development work for UAS integration, including the Air Force Research Laboratory (AFRL), the National Aeronautics and Space Administration (NASA) Glenn Research Center, and the Naval Surface Warfare Center Crane Division (NSWC Crane). By locating significant UAS research and development in proximity to these facilities and their contractor base, the Ohio/Indiana proposal creates a new and efficient airspace model that leverages the existing ground infrastructure and research, development, and technologies needed for the integration of UAS technologies into the NAS. These include sense and avoid technologies at AFRL; secure command, control and communication technologies at NASA Glenn Research Center; and intelligence and information technologies at NSWC Crane.

The Ohio/Indiana proposal also fulfills the FAA's need for geographic and climactic diversity in its testing area. The Ohio and Indiana region represents a broad array of weather conditions, allowing for adequate testing of aircraft and equipment in any weather conditions they may experience throughout the national airspace. The region currently hosts robust UAS operations utilizing existing access to restricted airspace and existing Memorandums of Agreement (MOA) and certificates of waiver or authorization (COA). With more than 1,000 sorties flown in the proposed airspace last year alone, the knowledge base of area pilots, researchers and engineers

already operating in the UAS aeronautical specialties brings extraordinary understanding, commitment and a proven track record of performance and safety. In addition, because academic involvement is vital to maintaining next generation technology, the Center has partnered with 11 universities, comprising most of the major institutions of higher education, in Ohio and Indiana.

The UAS industry is projected to become a $94 billion industry by 2020, and the industry projects job growth in the field will grow at 3.5% to 4.5% a year through 2025. The Ohio/Indiana proposal projects that key research and development activities associated with a test site will attract additional suppliers and manufacturers, contributing to significant economic development and job creation not only in Ohio and Indiana but throughout the Midwest.

As you know, the FAA Modernization and Reform Act of 2012 establishes a tight schedule for the development of plans to integrate UASs into the National Airspace System. The selection of the Ohio/Indiana UAS Center & Test Complex would significantly enhance the FAA's ability to create the policies needed to meet the diverse national interests associated with these aircraft in a safe and timely manner. Thank you for your consideration of our views, and we stand ready to assist you or your staff in any way should you have additional questions.

Sincerely,

Dan Coats
United States Senator

Joe Donnelly
United States Senator

Pete Visclosky
Member of Congress

Jackie Walorski
Member of Congress

Marlin Stutzman
Member of Congress

Todd Rokita
Member of Congress

Susan Brooks
Member of Congress

Luke Messer
Member of Congress

André Carson
Member of Congress

Larry Bucshon
Member of Congress

Todd Young
Member of Congress

Dr. BUCSHON. Thank you. I yield back.

Mr. LOBIONDO. Thank you.

Mr. LOBIONDO. Mr. Huerta, once again, we apologize for the delay. And you are recognized.

TESTIMONY OF HON. MICHAEL P. HUERTA, ADMINISTRATOR, FEDERAL AVIATION ADMINISTRATION

Mr. HUERTA. Thank you. Chairman LoBiondo, Ranking Member Larsen, and members of the subcommittee, a year ago Congress reauthorized the Federal Aviation Administration after 4½ years of uncertainty and stopgap measures. The biggest benefit of reauthorization was that it would provide predictability and allow us to invest with greater certainty in the future. So we are grateful for your effort on this and we have been working very diligently in the past year to implement the provisions of reauthorization.

As we move forward, the number one mission of the FAA is safety. This will always be our priority. In the last few years, Congress has given us much guidance on how to advance aviation safety and we have accomplished a great deal. The FAA overhauled flight and duty rules to guarantee that airline pilots have the opportunity to get the rest they need to operate safely, and we are raising the required numbers of hours of experience before a pilot can operate the controls on any airline flight.

We are also finalizing a rule that will require more rigorous training so that flight crews can better handle rare but serious scenarios. We are also improving our safety culture at the FAA and throughout the industry by voluntarily reporting hazards before they could become a problem and by adopting safety management systems. Internally, we created the Aviation Safety Whistleblower Investigation Office. One of the cornerstones of our safety culture is to ensure that employees can provide information without fear of reprisal.

While we are enhancing the safety of the system that we know today, we are also working to deliver the benefits of new technology to create the aviation system of tomorrow through NextGen. We are working to safely integrate Unmanned Aircraft Systems into our airspace. Earlier this year, as directed by Congress in reauthorization, we requested proposals to host six test sites across the country to test Unmanned Aircraft Systems.

This is a matter of significant public interest. We need to better understand operational issues to safely integrate these aircraft into our national airspace. We need to explore pilot training and make sure that unmanned aircraft sense and avoid other aircraft. And if they lose the link to their ground-based pilot, these aircraft need to operate safely.

If we are going to continue to move aviation forward and remain a world leader, we need to collaborate across the FAA as well as with other Government agencies and also with industry. Reauthorization asked us to do this, and we have made great strides in collaborative efforts.

Chairman LoBiondo, as you know, Atlantic City is a leader in NextGen research. The William J. Hughes Technical Center plays a key role in fostering NextGen, and we appreciate your support.

We have worked with our labor unions, with industry, airports, and others, to address the problem of congested airspace over busy metropolitan areas. We are producing satellite-based procedures much more quickly and we are using these NextGen procedures right now to reduce the miles that aircraft must fly to create more direct routes, to cut delays, and to reduce fuel burn and cut greenhouse gas emissions.

I am pleased that the President has announced his intent to appoint Michael Whitaker as Deputy Administrator of the FAA. Mr. Whitaker is a veteran of the airline industry and will serve as the FAA's chief NextGen officer, responsible for fostering the transformation of our national airspace.

The FAA has an initial set of NextGen metrics available on our Web site, and we expect to publish additional performance metrics in the coming months. Our NextGen performance snapshots show that NextGen is happening now. For example, in Chicago we have been able to reduce delays at O'Hare International Airport in bad weather, thanks to NextGen. O'Hare and nearby Midway Airport have overlapping airspace at times. We made better use of this congested airspace in the last 2 years with a satellite-based procedure that aircraft use when flying into Midway. This procedure has allowed O'Hare to improve its arrival rate by 8 to 12 aircraft per hour when it is rainy or foggy and the ceilings are low. And aircraft flying into Midway travel fewer miles and save fuel. This is one of the many positive effects of NextGen and the type of improvement that reauthorization supports.

The reauthorization laid out a vision to address the future needs of our Nation's aviation system, and these needs have not gone away. It is important for us to work together to protect the great contribution that civil aviation makes to our economy of $12.3 trillion and 10 million jobs.

As you know, we are again facing fiscal uncertainty and unpredictability. The sequester is requiring the FAA to make sizable budget cuts that affect our operations and our future. While we are very grateful that Congress found a temporary solution to the FAA furloughs, this measure does not end the sequester. We will not enjoy the benefits or the stability that reauthorization provides until we find a solution to the sequester and find a sensible long-term solution. I sincerely hope that we can work together to ensure that America continues to operate the safest and most efficient aviation system in the world.

Mr. Chairman, this concludes my prepared remarks. I would be pleased to answer any questions you may have.

Mr. LOBIONDO. Thank you, Mr. Huerta. I am sure we will have.

Mr. LOBIONDO. In starting off, as you had indicated in your opening statements and statements that have been made in the past, the FAA Technical Center that I represent is the test and integration facility for NextGen. I understand now the Florida test bed also reports through the Technical Center, and I am wondering if it is appropriate to assume that the soon-to-be-named six UAS test sites will also report to the Technical Center.

Mr. HUERTA. We haven't made a determination of the reporting because the test sites would actually be privately operated. What we are providing as part of the unmanned aircraft test site des-

ignation is a designation for them to operate and to perform research and analysis so that we can understand how these integrate into the national airspace.

Currently, the process of selection of the test sites is administered through a joint program office that is jointly administered by our Aviation Safety Organization and our Air Traffic Organization. As we get later in the year we will make some further determinations and decisions regarding the selection of the test sites. We will make some decisions as to how best to integrate them into our organization.

Mr. LOBIONDO. So then the final testing and integration collaboration from the six test sites for UAS into the national airspace remains to be seen whether that will be done at the FAA's Technical Center?

Mr. HUERTA. I think what we have to see is what the proposals put forward and then how we best leverage that data across the whole FAA.

Mr. LOBIONDO. I, obviously, have a keen interest in this.

Moving on to another topic, the FAA is currently behind on providing Congress with a National Facilities Consolidation and Realignment Report. Can you give us a status of the report and can you tell us will it be comprehensive and include all of the FAA's facility consolidation and realignment projects?

Mr. HUERTA. Yes. As you know, the consolidation of facilities has been something that has been a high priority for the agency. Reauthorization provided us important tools to address how we look at consolidation of facilities. One of the things that has bedeviled us in the past as we have looked at this has been that the agency used inconsistent technical approaches in evaluating whether or not and how best to achieve benefits associated with consolidation. We have been working collaboratively with our stakeholders and partners to work through a process of how we would look across the full scope of facilities that exist across the country. And while it has taken longer certainly than was anticipated by the committee and certainly longer than I would like to see, I think that the benefits of this collaboration have been quite fruitful.

We are expecting to finalize an approach that we would like to share with the committee at a point in the future and talk about what the way forward would look like. But we are looking at the full scope of FAA facilities.

Mr. LOBIONDO. Any idea at what point in the future?

Mr. HUERTA. In the coming couple of months.

Mr. LOBIONDO. Couple of months.

Last question for now. You may be aware that several Members have recently introduced a bill called the Small Airplane Revitalization Act of 2013. The legislation is intended to remove some outdated regulatory barriers to streamline certification processes and improve the well-being of general aviation industry, all while keeping a keen eye to improving safety. Have you at all been familiar with this legislation or have you seen it or had a chance to look after it?

Mr. HUERTA. I have seen the legislation. And as you know, Mr. Chairman, we have been working on safety improvements for small airplanes regulated under part 23 for quite some time now. We

have had an Aviation Rulemaking Committee composed of industry experts that have been working since August of 2011 to review our regulations and processes and to provide actionable recommendations to the FAA.

We are expecting that we would soon be receiving the ARC's recommendations and we will able to evaluate them for implementation planning and assigning resources and establishing timelines. I am not able to comment on the pending legislation, but should this legislation become law, the FAA will, of course, implement its provisions, as we do with any other mandate.

Mr. LOBIONDO. We would be interested if you and your team have an opportunity to take a look at this and if you have any suggestions you can offer us about how we can dovetail in so that we are sort of working together on this and not have the committee working on something, that you can see some improvements that can be suggested with.

Mr. HUERTA. We can certainly do that. On a high level, the approach that, as I understand the legislation, does acknowledge the work that has been ongoing. And I think that there is a great deal of convergence there. But we can take a look at it.

Mr. LOBIONDO. OK. We would appreciate that. Thank you.

Mr. Larsen.

Mr. LARSEN. Thank you, Mr. Chairman.

Administrator, earlier this year Chairman LoBiondo and I met with families of Colgan flight 3407. In February as well I asked you about the FAA's progress finalizing a rule on pilot qualifications due this August and another pilot training rule due in October. How would you assess the progress on both of those rules at this time?

Mr. HUERTA. We are making good progress. We are still expecting that we would publish the first rule in August and the second in October, as I testified in February.

Mr. LARSEN. Yeah. All right. Thanks.

Chairman LoBiondo mentioned next week that we will be having a listening session. Our first one had focused on NextGen, and some stakeholders stressed the need for the agency to move more rapidly to deploy PBN routes into airports. Section 213 of the authorization requires FAA to report to Congress on its plan to implement PBN at the top 35 airports, but to date, we have not received that report. Can you update the subcommittee on your efforts to implement PBN at the top 35 airports.

Mr. HUERTA. Well, PBN has certainly been a high priority for the agency. It is the centerpiece of our initiative that we call Metroplex. And that is a collaborative process that we are implementing across the country that is very much focused on what we can do to advance and ensure the use of advanced navigation procedures throughout the National Airspace System.

The report that you mention is a report that we are finalizing our work in now. It is now in executive coordination. I hope to be able to provide it to the committee soon.

Mr. LARSEN. Thank you. With regards to the collaboration, are there certain factors that are helping that collaboration and other factors that are inhibiting that collaboration?

Mr. HUERTA. Well, the major thing that characterizes the Metroplex initiative and problems that we have had in the past, I think it is fair to say that in advancingperformance-based navigation years ago the focus was on quantity rather than quality. And by that, I mean that there was a lot of discussion about how do we develop and publish advanced navigation procedures and we weren't really focusing on how they were being used or what the operational challenges were with actually enabling air carriers and other users of the system to take advantage of them.

What has changed is we are now very focused on these second two pieces, how do we ensure that they are actually being used so that we can get the benefit and how do we ensure that we are taking all the steps that are necessary to ensure that they can be operationalized. That includes an understanding by all of the users of the systems—pilots, controllers, airports—if there is military airspace, how does it fit into the Defense Department's particular requirements, what is the mix of traffic that might exist in a particular metropolitan area. All of that is crucial to being able to develop a procedure that is going to work for the users in the metropolitan area as a whole.

There are also issues that we identified. We have had an effort where we have looked at the operational barriers. That has focused us on things such as the air traffic controllers handbook. We had an activity underway over the last year which really focused on what are specific things that we need to do to update and amend the air traffic controllers handbook. Fifteen specific changes were recommended as a part of that. We are expecting that we are going to complete work on about 10 of them by the end of this fiscal year. The others are more complex and will require longer term work to get them implemented. But the focus is on what can we do to ensure that these procedures are actually operational.

Mr. LARSEN. Thanks. The bill created severalmilestones for the safe integration of Unmanned Aircraft Systems in the civil airspace, and your written testimony notes that you requested to host six test sites around the country. In addition to some of the privacy issues that I tend to hear more about from folks when it comes to unmanned aerial vehicles and systems, what technical issues, so the top three or four technical issues, need to be resolved before we can see some safe integration into the NAS?

Mr. HUERTA. Well, the things that we are looking at relate to the types of things that I talked about in my opening statement. How does an aircraft operate, for example, when it loses link with its ground-based station and what are the rules under which that aircraft would operate until link could be reestablished? That is a different way of looking at the traditional aviation practice of sense and avoid. But since the pilot is in the remote location, if link is lost between the ground station and the aircraft that is flying above, then you have to have a clear set of procedures in place of what happens so that that aircraft can avoid other aircraft.

We also need to understand how these characteristics actually operate in different types of airspace, different weather conditions, and with particular purposes in mind. For example, a lot has been suggested as the potential for the use of unmanned aircraft for such things as aerial surveys, environmental monitoring. And those

raise questions about how do we ensure that those activities can be conducted safety in conjunction with other aircraft operating within the National Airspace System.

Weather characteristics and how they operate in inclement weather is also a factor that we need to understand. And so while there is always bad weather everywhere around the country, we also have to understand, are there particular issues that come up in different climate conditions? The legislation anticipates that and suggests that we look at geographic diversity in the award of the six test sites.

So those are some of the factors that we are focused on: the technical factors of how these aircraft operate, the human factors of how the operators actually would interact with other operators within the system, and then some of the questions relating to the use of these.

Mr. LARSEN. Great. Thanks.

Mr. Chairman, I will have a second round, but I will yield back for other Members. Thank you.

Mr. LOBIONDO. Mr. Meadows.

Mr. MEADOWS. Thank you, Mr. Chairman.

And thank you for coming to testify. I want to pick up a little bit on what the chairman had touched on briefly with regards to the Small Aircraft Revitalization Act. I know you don't want to comment on that. But I think earlier this week you convened a general aviation safety summit there, where you talked about it. And part of that would be really a rewrite of part 23. So that is your opinion, that we need to rewrite that. Is that correct?

Mr. HUERTA. Well, that is what we have been working on, what can we do to improve part 23 to achieve the objectives that the industry wants to see in terms of streamlining and faster response time.

Mr. MEADOWS. If you were to highlight three areas that you say, Congressman Meadows, these three areas, if we could have legislative assistance on those three, what would those three areas be?

Mr. HUERTA. I am not sure that we are at a point, since we are still working through the process with industry to identify what the priorities are, and we expect to receive that report from them later on this summer, but the thing that I hear consistently is that things just take too long, that the industry is very interested in what can be done to streamline the process of achieving a certification for new products coming to market. There are two dimensions to that. One is that it greatly reduces the amount of time for a manufacturer to get products into the marketplace, but there is also a cost-benefit associated with that, that it reduces the cost of these.

And one of the things that we have heard loud and clear from the general aviation industry is that, while they see huge potential for improvements in safety as a result of adopting these technologies, they can be expensive. So what can we do through this process that would help bring the cost down?

Mr. MEADOWS. So what would you say is the greatest barrier to that? Is that the National Safety Transportation Board? I mean, is the enemy us or is it just technology in general?

Mr. HUERTA. That is exactly what we are looking at right now, to try to develop a better understanding of what are those barriers, where can we reduce time. I think the big thing is time, that the requirement for certification is there for a good reason. You want to ensure that if you are installing equipment in aircraft, that it will promote safety and not have unintended consequences. Everyone is very interested in doing everything that we can to promote safety, but at the same time we have to make sure that we are not doing things that are duplicative, redundant, and take more time than they need to.

Mr. MEADOWS. All right. And any specific recommendations that you have, I am sure the committee would love to hear those from you. And so if you could submit those along with your record.

But let me pick up on one other thing. You talked about rewriting the controllers handbook.

Mr. HUERTA. Sure.

Mr. MEADOWS. And we had a roundtable that the chairman kind of convened and I sensed a level of frustration—and that may be a harsh word—but a level of concern on the part of some of the airlines where they have installed NextGen equipment and yet they are saying the real barrier is FAA controllers that are operating under an old set of rules, and even though we might be able to adopt the new rules in some of the lower trafficked airspaces, the higher traffic that controls so much of the hub and spoke kind of arrangement. What are we doing to change that, and is there a date certain on when that might be changed?

Mr. HUERTA. Well, that is exactly the concern that I have heard, and that is why we have decided that where we need to focus is in metropolitan areas, and that is what Metroplex is really all about. We need to look at an entire metropolitan area, bring all the stakeholders together, and understand what it is that is really going on within that particular metropolitan area and what can we do to ensure that, first of all, we know what the priorities are. What are the ones that the industry would like to see most?

The second point is, how do we ensure that they will actually get used once they are published? That raises the operational things like the controllers handbook and the operational details associated with that.

The final point is we have to track what their utilization is, because you are putting them in place for a particular reason: You want to yield benefit. We are all in a much better place if we actually have solid data on their actual utilization. There is a lot of folklore that is out there of whether or not they are being used, and it is important that we actually have real data to do that. That is what we are trying to do through this initiative and why we focus it on metro areas.

Mr. MEADOWS. So bringing those stakeholders together, do have you any kind of a timeframe, date certain when that is going to happen in terms of getting everybody together?

Mr. HUERTA. Well, it is rolling timetables that we are working through specific metropolitan areas. Like, for example, we had convened two to start, one in north Texas and one here in Washington. And we are actually taking advantage of procedures in both of

those metropolitan areas that have been developed. Later, we started development in other metropolitan areas.

And so what we are trying to do is separate out the development of new procedures into two buckets: What are things that we could do right now, what are others that are going to require more analytic and perhaps environmental work in order for us to get through the process. We have initiatives in a wide variety of metropolitan areas and they are all operating under difference schedules.

Mr. MEADOWS. I appreciate the Chair's indulgence, and I yield back.

Mr. LOBIONDO. Thank you.

Mr. DeFazio.

Mr. DEFAZIO. Thank you, Mr. Chairman.

Mr. Administrator, good to see you.

In the testimony, you talked about the consolidation, realignment of your facilities and said that you are engaging your employees. Now, as you know, there has been some controversy in this area before about whether or not it was real and meaningful involvement. Can you just give us a little bit of an idea what is going on and how engaged the line staff are in this?

Mr. HUERTA. Well, you know, I would ask them to answer that question as well. But I will say this. Yesterday I participated in a meeting of well over an hour where there were representatives of all of our employee organizations that would be affected by this and where they were making a consolidated presentation to me of where they are in the process.

I think the thing that I was most impressed by was that as you worked your way around the table, if you didn't know the people, you wouldn't know who was representing the controllers or the specialists or the technicians or the facility management because they were all providing in a very collaborative way meaningful information of how do we get through this. And they were listening to one another, they were respecting one another's positions, and they were coming to me with what looked like a lot of thought. It was very clear that these people had been working together very closely for a long time.

I thought that was a good sign. I had a bunch of questions. They had a lot of good answers. There are some things that they are continuing to work on as we are trying to move this forward. But certainly from my standpoint it looks like the collaboration is working quite well.

Mr. DEFAZIO. Right. Over a number of years the committee has expressed concern about overseas foreign repair stations. And there was a reauthorization that mandated the implementation of a safety and assessment system. I know sometimes you have problems dealing with the State Department and other issues on this. Where are we at in terms of the oversight of foreign repair stations?

Mr. HUERTA. Well, as it relates to the specific State Department issue, the issue here related to drug testing and the reauthorization of the requirement that we require that at facilities both inside and outside of the United States, which raises territorial issues. And so the Secretary of State and the Secretary of Transportation wrote a joint letter last fall to the International Civil Aviation Organization membership asking for their willingness to support such

an approach, and we are continuing to engage ICAO to work through developing an international agreement on how we move forward.

Mr. DEFAZIO. OK. So not so much progress.

Mr. HUERTA. When we are dealing with international oversight, as you know, you have to have the consent of the host countries. Those are the things that we need to work through.

Mr. DEFAZIO. Well, yeah, we do, except that we can also prohibit our people from using facilities that we haven't been able to certify meet our standards.

Mr. HUERTA. Well, I think that we have an approach that has served us very well in terms of in other parts of the world relying on the certification authorities there, just as they rely on us for certification of facilities that take place in this country. That is a process that has served the aviation industry quite well. But we do recognize that we need to continue to push the envelope on oversight, and we are doing that.

Mr. DEFAZIO. Yeah, I mean, I am pretty confident in our oversight, although we have had hearings on that issue also in terms of how often you can get to each of these facilities, whether you are doing real inspections or whether you are inspecting paperwork that certifies inspections, et cetera. So, anyway, it is an ongoing concern with me and perhaps other members of the committee.

And then finally a question about your certification process. We obviously have become somewhat more reliant upon the manufacturers themselves to self-certify and test things, and we had a recent concern regarding the new Boeing plane. So are you revisiting that in any way?

Mr. HUERTA. Yes. As part of the Boeing effort we undertook two things. One was a detailed review of the specific systems related to the battery. As you know, on April 19th we did recertify the battery system and the aircraft are now being modified and gradually returned to flight.

Earlier, we had announced a review of the certification process related to the 787, and that review is ongoing. And it is one that we think is extremely important because what we want to understand is the whole process, are there issues that we need to take another look at and rethink.

I will say this, though. Certification has always been all about bringing the best technical minds together to surface issues, to identify what do we need to do to ensure the highest levels of safety. But it is ultimately the FAA that has to issue the certification, and that is something that we take very seriously.

Mr. DEFAZIO. OK. Well, and I appreciate the fact you are reviewing the process, and we don't need to add unnecessary layers of review and bureaucracy, but we want an effective and safe process. So thank you.

Thank you, Mr. Chairman.

Mr. LOBIONDO. Thank you.

Mr. Williams.

Mr. WILLIAMS. Thank you, Mr. Chairman.

Mr. Administrator, thank you for being here. Appreciate your testimony.

Mr. HUERTA. Thank you.

Mr. WILLIAMS. I fly into DFW every Sunday. I am rooting for you. OK? But I am a business guy. I come from the business sector. Still have a business. And I hear your testimony, and streamlining and reforming are two key words in the FAA. And I guess what I would like to say—and you have touched on this a little but, just as a reminder, ask this question—are you prepared, as the private sector is prepared always, to deal with cutting these expenses, wasteful spending, so we are not in a crisis management mode like we have seen here in the past, that we get on a level of spending that we can still give the service but also not have a crisis situation every day.

Mr. HUERTA. Absolutely, sir. We have done an awful lot of work to try to reduce the cost of operating the agency. The agency has been able to make due with flat budgets for a number of years now, at the same time, we are trying to make significant investments in new technology while reducing the cost of operating the National Airspace System that we have today.

There has been a lot of focus on areas such as acquisition and technology. We have seen a lot of cost savings. We will continue to see cost savings in that area. We are also, as we talked about in the last few minutes, reducing the costs associated with providing the regulatory oversight that we provide through the streamlining of processes that enable us to bring new products to market more quickly. We have had a lot of focus on what we can do to improve our acquisition processes to take advantage of the fact that we are a large purchaser. And, yes, this is something that I take very seriously.

Mr. WILLIAMS. When you go to cutting costs, don't forget the customer.

Mr. HUERTA. OK.

Mr. WILLIAMS. Thank you for your testimony.

Mr. HUERTA. Thank you, sir.

Mr. WILLIAMS. I yield back.

Mr. LOBIONDO. Mr. Nolan.

Mr. NOLAN. Thank you, Mr. Chairman.

And, Mr. Huerta, I apologize for coming in late, and thank you for your patience. I am sure they told you we had a bunch of votes that came up. Our schedule got somewhat conflicted. But congratulations for the work that you have done to implement the major new Federal legislation and reauthorization. I certainly believe that you are to be commended for the splendid job that you have done.

Mr. HUERTA. Thank you.

Mr. NOLAN. We are proud of you.

Together with Congressman Pompeo and several other members of this committee, I am one of the sponsors of H.R. 1848, the Small Aircraft Revitalization Act of 2013. And as you know—and I saw mention of it in your testimony, and I appreciate that—this bill will require that the FAA complete a rewrite of the Federal regs governing small craft by no later than 2015. If that bill were enacted today with your existing funding and authority do you anticipate you would have a problem with this deadline or do you feel that it is doable?

Mr. HUERTA. Well, I may have mentioned this before you came in, sir. This is something that we have been focused on, working collaboratively with industry under an Aviation Rulemaking Committee since August of 2011. I think at a high level this is very consistent with the approach that we have been taking. We are expecting this rulemaking committee to provide their report to the agency later on this summer and at that point we will see what the specific recommendations are that they are looking at and we will be in a much better place to assess the timetables associated with it at that point.

Mr. NOLAN. Very good. That is very helpful. Thank you.

I didn't see any mention of the Essential Air Service program, which serves several airports in my district and throughout the country. And it has been very, very valuable, very helpful to our regional economic development and the strong regional centers. Do you anticipate that sequester will have an impact on this critically important program?

Mr. HUERTA. Well, while the Essential Air Service program is carried in the FAA budget, it is actually administered by the Department of Transportation under the Assistant Secretary for Aviation and International Affairs. And so I am not familiar with what their plans are for this year, but we can certainly get you a response for the record.

Mr. NOLAN. OK. That would be very helpful.

And, lastly, I know you are looking at half a dozen different sites to be considered for the Unmanned Aircraft Systems test sites around the country?

Mr. HUERTA. That is correct.

Mr. NOLAN. And how many sites are you looking at? Where are you at in that process?

Mr. HUERTA. Well, we are in a competitive process where the final submissions were presented to the agency in the last couple of weeks. We received 25 distinct submissions from about half of the States, and what the legislation provides is for us to designate six. And we are in the evaluation process now. We expect to complete that process by the end of this calendar year.

Mr. NOLAN. OK. Thank you very much, Mr. Huerta. And, again, thank you for your work.

Mr. Chairman, I yield the balance of my time.

Mr. HUERTA. Thank you.

Mr. LOBIONDO. Mr. Davis.

Mr. DAVIS. Thank you, Mr. Chairman.

Thank you, Administrator Huerta. First off, I want to say thank you. And also to Secretary LaHood, my friend from Illinois, please offer my thanks to him for administering our recent legislation very quickly, especially to save some air towers in my district, and also to address the furlough issue.

I am happy with that response. And as a new Member of Congress, it shows me that you did well when the time came for us to pass that legislation, and I have to commend you.

I came in a little late. I got off the floor, I guess, a little later than some of the other Members here. So if I am redundant with my first question, I apologize, but it is in regards to the required

navigation performance procedures. What is the FAA's plan to push for beneficial required navigation performance procedures?

Mr. HUERTA. Yes, this is an initiative that is a very high priority for us because it is something that a lot of air carriers are already equipped to be able to take advantage of. This is really the centerpiece of our effort that we call Metroplex, which is focused on major metropolitan areas where we bring together the users of the system and the operators of the system in a collaborative process with the intent of identifying what are priorities for development of navigation procedures, how can we get them implemented as quickly as possible, and then once implemented, how do we ensure that they are actually being used.

It raises a host of operational issues and challenges that we need to work through as a group. It also raises significant things that we need to do on our end as well as the operator needing to do on their end.

I think before you came in we were having some conversations about the controller hand book as illustrative of some of the things that we needed to work through. But it is as a result of bringing the stakeholders together that we identify, hey, we have got a problem with the controller handbook and we need to actually make some revisions to it. And so I think it is a process that has served us very well.

It started with a program that we had in north Texas, as well as here in Washington. We have since expanded it to include most major metropolitan areas of the country. And that work is a very high priority for the agency.

Mr. DAVIS. Great. And third parties are being used to expedite the delivery of these benefits?

Mr. HUERTA. Yes. Reauthorization did request that we consider the use of—it provided direction to us to allow for third-party development of these advanced navigation procedures. We did make a contract award under that, and that work is ongoing, and we actually think it is progressing quite well.

Mr. DAVIS. OK. Thank you for ending with you think it is progressing quite well, because that was my next question, what do you think this experience is. But I will yield back the balance of my time, but I do want to say thank you again.

And thank you, Mr. Chairman.

Mr. HUERTA. Thank you.

Mr. LOBIONDO. Mr. Larsen. Oh, I am sorry, Dan. I didn't see you there.

Mr. WEBSTER. I have no questions, Mr. Chairman.

Mr. LOBIONDO. No questions? OK. Apologies.

Mr. LARSEN. Administrator, the GAO previously reported on the need for greater consistency in the FAA's interpretation of standards for certification and approval decisions. And so in section 313 the bill required the FAA to establish an advisory panel to develop recommendations to address some of those issues raised by the GAO. What is the status of that particular advisory committee's work and when can Congress expect to see that report?

Mr. HUERTA. Now, the section 313 report is something that has certainly been, I think, of great importance. This is one of the things that I hear a lot about and it is one of the things that we

need to figure out how we can do a better job of ensuring that we have consistency across the NAS.

The report that we have developed, we do have a draft of the report. It is circulating within the Administration in executive review. And we are working through some comments on that and we will have to complete that coordination process before we can present it to Congress. But we have a good draft that we are working with.

Mr. LARSEN. Do you have a timeline on that?

Mr. HUERTA. I would like to say that I do.

Mr. LARSEN. I would love for you to say that you do.

Mr. HUERTA. Unfortunately, I can't really predict how long it is going to take to get all the comments and then to be able to respond to all of them.

Mr. LARSEN. Well, I think as you are communicating with the folks in the Administration and the executive review, letting them know that the committee is extremely interested as well in this report and the sooner that we can hear back, the better.

Mr. HUERTA. We will certainly do that.

Mr. LARSEN. Not to prolong the discussions on sequestration, but I am wondering if you have all done any sort of analysis yet of the impact of moving that $253 million out of AIP and what that will mean practically. I mean, theoretically we knew what that would mean. Do we know yet practically what that will mean in terms of a second round of AIP grants for this fiscal year?

Mr. HUERTA. Yeah. For this fiscal year the $253 million will come out of discretionary grants that we would award at the end of the year. At this point we don't have a good sense of what that actually means in terms of specific projects because those projects tend to come in very late in the year.

Having said that, I think it is reasonable to expect that you would see some delays or that there might be some requests that would come in for AIP funding at the end of the year that we would not be able to meet as a result of this transfer.

Mr. LARSEN. Yeah, but it is still a little early——

Mr. HUERTA. It is still a little early, yeah. Everyone is still receiving their formula allocation, and so the entitlement funds they receive. It is really the final round of discretionary that would be affected.

Mr. LARSEN. OK. Just a moment.

Yeah. In your written testimony you noted that you are working on the ICAO to find some solutions to address aviation greenhouse gas emissions and you are encouraged by the EU decision to stop the clock on the application of the ETS. Can you update the committee on the progress that FAA is making at ICAO on this issue?

Mr. HUERTA. Well, as you know, it is a complicated international negotiation, but the United States is a very active participant in those discussions. The expectation is that this will be one of the central discussions that will take place at the ICAO General Assembly, which is scheduled for later on this fall. There is a great deal of focus on the part of all of the members of ICAO to present actionable recommendations for consideration by the General Assembly this fall.

Like any large body or semi-legislative body such as ICAO, agreements tend to emerge very late in the process. What we are seeing right now is a lot of discussion back and forth, a lot of the concerns that have been raised by developing countries versus developed countries. But I think that what does unify everyone is a sense that the only thing that is going to work is a global solution rather than the regional solution that had been proposed originally by the Europeans. So we are making progress. It is a very slow process. But something will need to be resolved in time for the general assembly this fall.

Mr. LARSEN. Thank you.

Thank you, Mr. Chairman.

Mr. LOBIONDO. OK. That is it. Mr. Huerta, we thank you very much. I am sure we will be following up.

And the committee stands adjourned.

Mr. HUERTA. Thank you, sir.

[Whereupon, at 3:37 p.m., the subcommittee was adjourned.]

STATEMENT OF MICHAEL P. HUERTA, ADMINISTRATOR, FEDERAL AVIATION ADMINISTRATION, BEFORE THE COMMIITTEE ON TRANSPORTATION AND INFRASTRUCTURE, SUBCOMMITTEE ON AVIATION ON A LOOKBACK ON REAUTHORIZATION – ONE YEAR LATER, MAY 16, 2013.

Chairman LoBiondo, Congressman Larsen, Members of the Subcommittee:

Thank you for the opportunity to speak to you today. When we last met to discuss the subject of this hearing in February, the focus of our conversation was, understandably, not on the subject of the hearing, but rather on the anticipated effects sequestration would have on Federal Aviation Administration (FAA) employees and services. Since that time, Congress passed a law that provides FAA with the flexibility to transfer funds of up to $253 million in fiscal year 2013. The newly enacted transfer authority provides FAA the ability to end the furlough of our employees across the country and restore normal operations in the National Airspace System (NAS). Nonetheless, we remain obligated to cut $637 million from FAA's budget by the end of the fiscal year. As a result, other, significant spending restrictions remain in place, such as a hiring freeze, limitations on travel and training, and cancelling or modifying certain contracts. These restrictions will, undoubtedly, have long term impacts on the agency and airports which we must continue to try to mitigate. The immediate effects on air traffic that were felt across the country as a result of the furloughs are now over. Since some of the funding used to end the furloughs came from planned airport construction projects, we must make sure that these critical projects can still proceed. We are working with airports now to determine which projects can be funded this year and which may be delayed.

There are a number of important ongoing aviation safety-related initiatives that I know are of interest to this Committee. We are working hard to meet the future demands of aviation. From transitioning to NextGen to integrating Unmanned Aircraft Systems (UAS) into the national airspace system (NAS), the goals we are striving to meet are challenging, especially in light of the existing fiscal constraints. But our workforce is dedicated and very aware that these goals are vital to FAA's ability to continue leading the world in aviation safety and innovation.

The Federal Aviation Reauthorization Modernization and Reform Act of 2012 (Reauthorization) was enacted into law on February 14, 2012. As the returning Members of this Subcommittee may recall, passage of the bill was a long odyssey that involved 23 extensions before a comprehensive bill was passed. During that period, I spoke with members individually about the impact the short-term extensions were having on our programs. The Airport Improvement Program (AIP) was adversely impacted without the stability of a long-term authorization. Airports across the country postponed important capital projects due to the concern that funding was being authorized in very small amounts due to the short length of the extensions. As a consequence, there was uncertainty about committing to projects of all sizes, ranging from safety improvements to crucial infrastructure preservation to environmental impact mitigation, such as sound insulation. During extension periods, those impacts affected the ability of engineers, construction contractors, material and equipment suppliers to place orders and conduct work. Only small amounts of funding were made available in accordance with the short-term extensions, so committing to long-term investments was problematic. We very

much appreciated the passage of a comprehensive authorization that promised important stability and predictability.

Reauthorization required over 200 separate deliverables, nearly half of which were due within the first year of enactment. FAA is on track to meet or has met approximately 80% of those action items required to date in the law. We have currently completed about half of the deliverables in the law. Now, as I'm sure you can appreciate, all action items are not created equal. Some are very complex and require a good deal of input from our workforce and industry partners. I believe that meaningful collaboration is the only way to achieve a workable path forward. Doing what we need to do to get the most effective work product is our goal, although we recognize that may mean some deadlines are not met.

Safety

Safety is FAA's number one mission, and our system has never been safer. There has not been a fatal commercial passenger accident in the United States since 2009. I am proud of the hard work that has gone into providing a basis for achieving this level of safety.

We need to make aviation safety interventions smarter through risk based approaches. The best way to prevent accidents before they happen is to accurately identify risk areas and work to mitigate them. That is one reason we are working hard to improve runway safety areas (RSAs) at commercial service airports. Some of the RSA improvements include the installation of the Engineered Materials Arrest System (EMAS). This soft

concrete block system has been installed in RSAs at 45 airports in the U.S. These EMAS systems have already stopped eight overrunning aircraft with no fatalities or serious injuries to passengers. Voluntary incident reporting for both FAA and industry employees, safety management systems (for both FAA and industry) and the creation of the Aviation Safety Whistleblower Investigation Office have also helped to improve the level of safety in our aviation system, by providing us with additional data and incident information that we may not have had access to previously. More information results in FAA being able to see trends and take action to mitigate the associated risks. Adjusting the safety culture to ensure employees that they can provide information without fear of reprisal is a cornerstone of our approach to safety.

Prior to Reauthorization, we had been working on the requirements of the Airline Safety and Federal Aviation Administration Extension Act of 2010. That act mandated rulemakings to revamp flight and duty time regulations to better address the issue of pilot fatigue, to increase the required number of hours of flight experience before a pilot can qualify to be a commercial pilot, and to revise pilot training to better simulate challenging conditions so that pilots can better handle serious, but rare situations. We completed the flight and duty time rulemaking just over a year ago, and plan to complete our work on the final pilot qualification rulemaking (New Pilot Certification and Qualification Requirements) by August 2013 and pilot training (Qualification, Service, and Use of Crewmembers and Aircraft Dispatchers) by October 2013.

With respect to other safety directives in Reauthorization, FAA commissioned an Aviation Rulemaking Committee (ARC) to develop recommendations to improve our aircraft certification process: we delivered our Report to Congress on that effort in August of last year and have begun implementation of the report's recommendations. We also established an ARC consisting of government and industry experts to develop recommendations on improving the consistency of regulatory interpretations. We are in the process of finalizing a report informing Congress of the recommendations presented to the FAA.

Reauthorization also required a number of safety-related reports. We have delivered the report required on runway safety alert systems and the first annual report of the Aviation Safety Whistleblower Investigation Office summarizing the disclosures the office has received and how they were handled. We published the report on Research and Bird-Detecting Radar. In the upcoming weeks, we expect to issue reports on the Air Carrier Evaluation Program, night vision goggles for helicopter pilots, improved pilot licenses, and limiting access to the cockpits in all cargo aircraft. We are also finalizing a report to Congress on common sources of distraction on the flight deck.

Pursuant to Congressional direction, we have also worked with the Occupational Health and Safety Administration (OSHA) to draft a statement of policy which permits some OSHA standards to be applied to improve workplace safety for aircraft cabin crew. We published a draft policy statement in the Federal Register in December of 2012 for comment, and are in the process of reviewing those comments.

Also in accordance with reauthorization, in October of last year, the FAA, in conjunction with the Department of State, issued a cable regarding international drug and alcohol standards for foreign repair stations. An advanced notice of proposed rulemaking (ANPRM) is currently in executive review.

Delivering Technology

Our goal in the area of delivering technology is to efficiently and sustainably deliver benefits to our stakeholders and society. One of the responsibilities of the Deputy Administrator is to serve as our Chief NextGen Officer, so that is one of many reasons I hope to appoint a Deputy relatively quickly.

Throughout Title II of the Reauthorization, there is a theme that modernization of the system must be done in collaboration with our industry partners. FAA wholeheartedly agrees with this concept. Imposing technological changes without the input of the users would be a recipe for failure. We continue to improve the efficiency of our Nation's airspace through our work with Optimization of Airspace and Procedures (OAPM) initiatives, which are being done in close collaboration with industry and stakeholders. OAPM work has begun in nine of the 13 metroplexes identified in Phase 1 of the program. Of these, one of the metroplexes (Houston) is currently in the implementation phase with an additional site (Washington, DC) planned to start implementation of additional new procedures later this fall. We continue to assess the best way forward to produce benefits at metroplex sites in light of sequestration impacts. The metroplex

initiative optimizes procedures in a geographic area where there are a number of airports, rather than focusing on each airport separately. Through this initiative, we are untangling our busiest airspace and creating more direct routes, cutting fuel, and becoming more environmentally friendly. In the congested airspace in the skies above our busiest metropolitan areas, these new modifications are being put in place in about three years, much more quickly than the five to ten years it had taken previously. We are also actively engaged with our industry and government partners in the development of NextGen through the NextGen Advisory Committee (NAC). This group is helping to guide many aspects of our air traffic modernization work. The NAC also works with FAA on developing and tracking performance metrics and advising on the technical challenges of one of the new categorical exclusion provisions included in Reauthorization. FAA has an initial set of NextGen metrics available on our websites and expects to publish additional performance in the coming months. On our NextGen Performance Snapshots (NPS) site we are making the information more robust in order to better report on performance as a result of NextGen implementation.

Reauthorization also provides FAA with the ability to consider using operational and financial incentives for commercial and general aviation operators to equip their aircraft with NextGen technology. We are actively engaging aircraft operators and potential private partners to assess interest and receive feedback on equipage incentive programs and how use of this authority could attract additional investment in NextGen technologies and training.

FAA has completed a departure queue management pilot program that was required in the statute in order to continue to advance plans to enhance surface management at airports. Also, in accordance with Reauthorization, we will be issuing guidance for AIP funding eligibility that supports the importance of sustainability initiatives in the way that airports do business, in 2013. We have also initiated a new study on the National Plan of Integrated Airport Systems (NPIAS), which is a long-established process for identifying and prioritizing strategic investments. The new study will ensure we are making the best use of available data in supporting our decisions to advance safety, capacity, efficiency, and sustainability initiatives.

Finally, in February, pursuant to Reauthorization, the FAA requested proposals for interested state and local governments, eligible universities, and other public entities to develop six Unmanned Aircraft Systems (UAS) test sites around the country, which will gather information to help inform research, development, operational and privacy issues. We expect to select the six sites by the end of the year. These sites will conduct critical research that will help determine how best to integrate UAS into the NAS. Once the sites are operational, we expect to learn how UAS operate in different environments and how they impact air traffic operations. I know this Committee is very interested in UAS integration. Use of the six sites will provide us with essential information to facilitate integration of UAS into the NAS and to address outstanding issues, such as privacy. Prior to finalizing the FAA's UAS five-year "Roadmap", the FAA is coordinating the roadmap with other UAS stakeholder agencies and ensuring alignment of that roadmap

with the Joint Planning and Development Office's (JPDO) Interagency Comprehensive UAS Plan.

Empower and Innovate FAA's Workforce

In the current fiscal climate, we have to find a way for FAA's employees to work smarter and enhance our productivity. You tasked us to undertake a thorough review of each program, office, and organization within the agency. Our report on FAA Review and Reform highlights 36 initiatives to improve and update processes, eliminate duplication and waste, and make the agency more efficient and effective. The initiatives identified cover many aspects of our operations and include improvements to cost analysis, governance, acquisition processes, standard operating procedures, and human resources. Of the 36 initiatives, 22 have been implemented and 14 are in progress. In addition, we are actively engaging our employees in the development of recommendations for facilities consolidation and realignment.

At your direction, we are looking closely at improvements to staffing and training for our employees. Four studies are underway looking at frontline manager staffing requirements, technician staffing, air traffic controller staffing and air traffic training and scheduling. As required by law, the FAA submitted interim Aviation Safety and traffic Controller workforce plans to Congress on March 31, ten days prior to the FY 2014 budget submission which was sent on April 10. Due to the requirement to produce these plans by March 31, 2013, the workforce plans do not reflect the effects of sequestration, as modified by the recent change to FAA budget reprogramming authority. In addition,

the reports do not reflect the restrictions in place as a result of sequestration, such as the hiring freeze and reduced contract training support and travel. The FAA will adjust the actual staffing and hiring forecasts to reflect future funding levels as they become available. Finally, in accordance with Reauthorization, we developed staffing and scheduling plans for New York City and Newark air traffic control facilities.

Develop and Fund the Efficient FAA of the Future

FAA must not only meet our day to day responsibilities, we must also look to the future and figure out how to shape the agency to meet the demands and opportunities of the future. As noted earlier, the U.S. aviation system is going through significant, even revolutionary changes. NextGen is a major transformation which will increase our efficiency and safety, reduce delays and reduce fuel consumption. UAS have the potential to change the face of aviation. We are also looking at ways to restructure our small airplane certification rules so new safety standards and technologies can be introduced more quickly while, at the same time, we reduce the overall costs of certifying general aviation airplanes. In the midst of these changes, budget pressures are making us ask hard questions about what the FAA needs to deliver in the coming years to ensure the safety and efficiency of the NAS and how to do it most cost-effectively.

In addition, we will face major changes in our workforce in the coming years. About one third of FAA employees will be eligible to retire starting 2014. So for us, succession planning remains a crucial aspect of the agency's focus, and we realize that we will begin to lose a vast amount of corporate knowledge in the coming years. To prepare for that,

we must impart this knowledge to today's emerging leaders and experts to ensure a successful agency in the 21st century. We need to embrace innovation and to work efficiently.

Efficiencies are not just for the future. FAA has worked very hard to find cost savings and we have been quite successful. In fiscal year 2012, FAA efficiencies and cost cutting resulted in $81 million in savings. As part of our ongoing efforts to reduce our costs, we had set a target of $91 million in cost savings for fiscal year 2013, including aggressive targets for IT spending reductions and strategic sourcing initiatives. As you can see, cost savings are part of our ongoing program and are helping us meet cuts needed for sequester. However, larger cuts as a result of sequestration are challenging and will have impacts to the maintenance of the NAS, certification of new systems, and the development of NextGen programs.

Finally, we must chart innovative and collaborative ways to engage with all segments of the aviation sector, from airlines to association groups, to general aviation, to unions. We must embrace the opportunity to make long-lasting changes together that ensure a vital and vibrant aviation industry that serves the needs of this nation.

Advance Global Collaboration

The world is increasingly interdependent, so international collaboration is essential if we want to move forward effectively. FAA needs to continue to work with international partners to improve global aviation safety and sustainability. This effort will require us

to improve the harmonization and interoperability of new technology with international aviation standards and procedures to improve safety on a global basis. We need to work to ensure the roadmaps agreed to by the International Civil Aviation Organization (ICAO) to advance communications, navigation, and surveillance improvements for global air navigation are compatible with our NextGen concepts and implementation and our domestic regulatory plan. We are working at ICAO to find practical and collaborative solutions to address aviation's greenhouse gas emissions and are encouraged by the European Union decision to "stop the clock" on application of their emissions trading system on foreign airlines. Our international partnership will require us to develop and begin to implement a strategic plan for technical assistance, training, and other activities to maximize the value of FAA's expertise and United States resources. The FAA is committed to working proactively with countries around the world to create the initiatives and achieve the outcomes we need in the areas of safety, air traffic management, and the environment to foster a safe, efficient and sustainable global aviation sector.

Conclusion

Let me conclude by saying that it is essential to the effective management of FAA's programs to have programmatic and funding stability and predictability that can be relied upon. The many extensions over the last few years took a toll on FAA's work in certain areas, and unfortunately the current sequester also reintroduces the uncertainty that we had hoped the passage of reauthorization would address. All of us in this room want the same things. We want to get better at what we do, think smarter, improve safety,

streamline certification, and remain the agency that can work collaboratively with the world to develop safer and more efficient practices. Even without furloughs, funding restrictions are preventing us from hiring and training our next generation workforce and are forcing us to rely on employee attrition to meet required deficit targets. Identifying and implementing processes that help us do more with less is always a valuable exercise, but our ability to meet the long-term goals of reauthorization will be in jeopardy.

Mr. Chairman, that concludes my statement. I will be happy to take questions at this time.

The House Committee on Transportation and Infrastructure's Subcommittee on Aviation
Hearing on Review of FAA's Implementation of the FAA Modernization and Reform Act
Thursday, May 16, 2013
First Set of Questions for the Record, May 21, 2013, for FAA Administrator Michael Huerta
Frank A. LoBiondo – New Jersey 2nd District

Question:

1.The FAA Reform Act tasked the FAA with working with industry to review, assess and reform the certification and approval process for aircraft and aircraft engines and parts. In conducting the assessment, the FAA was to make recommendations to improve efficiency and reduce costs through streamlining and re-engineering the certification process and provide Congress with a report by August 2012 and implement the recommendations by February 2013. What is the status of these recommendations?

Answer:

The report was submitted to Congress on Aug 13, 2012. The FAA Aircraft Certification Service developed an implementation plan that is responsive and on-track to address the reforms identified as mandated in Section 312 of the FAA Modernization and Reform Act of 2012.

Question:

2. Has the FAA established the Advisory Panel, mandated by the Reform Act, to determine the root causes of inconsistent interpretations of regulations and to develop recommendations to improve consistency and communication? If so, what is the status of this panel's activities and when can we expect the report which was due in February?

Answer:

The FAA established the Consistency of Regulatory Interpretation Aviation Rulemaking Committee (CRI ARC) in accordance with P.L. 112-95 (Section 313) to determine the root causes of inconsistent application/interpretation of regulations, and develop recommendations to improve consistency and communication. The CRI ARC has completed its analysis and submitted six recommendations to the FAA. The FAA Report to Congress now in executive

review details the ARC's recommendations, as well as the FAA's evaluation and proposed implementation plan to address each recommendation.

Question:

3. Following the FAA's submission of its report on the review of each program, office and organization within the FAA identifying duplication, wasteful practices, redundancies, inefficiencies, and outdated policies, the FAA was required to undertake such actions as may be necessary to streamline and reform the Agency. The Act specifically gives you the authority to take those actions necessary. What actions have you undertaken to date? What actions are planned in the near future?

Answer:

The FAA Modernization and Reform Act of 2012, Section 812, requires the Federal Aviation Administration (FAA) to undertake a thorough review of each program, office, and organization within the Agency to improve and update processes, eliminate duplication and waste, and make the Agency more efficient and effective. The FAA was then to take the actions necessary to address the issues found, using the authority granted under the Section, and report to Congress on the actions taken. The report submitted in January 2013, was organized according to each FAA organization for which actions were identified for process improvement. It highlighted 36 major projects and recommended solutions from across the FAA. Of the 36 projects listed, 16 are implemented and complete and 20 are in-progress. All of the implemented or in-progress initiatives identified in this report were completed or are presently being executed in FY 2013 and are described in more detail in the attached summary file.

Problem	Solution	Status
2.1 Office of Finance and Management (AFN)		
2.1.1 Shared Services Optimization (Finance) Finance functions are performed in many FAA organizations resulting in lack of standardized processes, inadvertent duplication of effort, lack of economies of scale, difficulty of oversight and cost control, and/or created	Financial functions previously performed in the Air Traffic Organization moved to the Office of the Chief Financial Officer. Finance resources from the Regions and Center,	Implemented.

unclear lines of authority and responsibility.	Acquisitions, and Information Technology organizations moved to the Office of the Chief Financial Officer (CFO). A portion of the Office of Aviation Safety (AVS) workforce planning positions moved to the CFO as well.	
2.1.2 Shared Services Optimization (Acquisitions) FAA's Acquisition Executive is responsible for all of the FAA's acquisitions but was housed in the Air Traffic Organization (ATO) and Contracting Officers were in different organization too.	Centralize Acquisition functions and identify areas of process improvements.	Implemented.
2.1.3 Shared Services Optimization (Information Services/CIO) There are duplicative information services, systems, and infrastructures making it difficult to integrate the information systems, achieve economies of scale, provide efficient server usage, consolidate data processing facilities and maintain cyber security across multiple platforms/organizations.	Centralize Information Technology (IT) functions and establish Memorandums Of Agreements shifting the supervision of full-time IT professionals to the centralized information services organization.	In-Progress. 2014 President's Budget includes base transfer to complete the transition to one centralized IT Shared Services organization.
2.1.4 Shared Services Optimization (Service Level Agreements) Customer organizations need a way to set levels of expected services.	Establish Service Level Agreements (SLA).	Implemented.

2.1.5 Shared Services Optimization (Property Management) Property Management responsibilities reside in many FAA organizations.	Consolidate Property functions (assets inventory and real property) into Regions and Center Operations (ARC) (Assets inventory and real property).	Implemented.
2.1.6 Shared Services Optimization (Administration Management) Administration functions performed across the AFN organizations varied.	The Administration functions within Employee Services, Operational Services, and Performance Management were centralized in the new AFN Administration and Field Integration organization.	In-Progress. The Division of Administration and Field Integration Services (AFN 100) was established June 5, 2012.

Problem	Solution	Status
2.1.7 Shared Services Optimization (Common Timekeeping) Employees being transitioned into AFN from the ATO have been using a different timekeeping system and labor reporting system.	Implement a common timekeeping system within AFN.	Implemented.
2.1.8 Records Management Reform The FAA Records Management environment is out-of-date, lacks automation, and is not fully compliant with all National Archives and Records Administration requirements.	Modernize records management via the Electronic Records Management and eDiscovery Initiative.	In-progress. Issued a FOIA/eMail search policy May 2013.
2.1.9 Cost Reductions The Executive Order on efficient spending has identified opportunities to find savings through efficiencies in six targeted categories.	Implement a broad-based set of initiatives to reduce cost across FAA in support of the Executive Order on Efficient Spending.	Implemented. Agency achieved $81M in cost savings in FY2012. As part of our ongoing efforts to reduce costs. We had a target savings of $91M for FY2013, including aggressive targets for IT spending reductions and strategic sourcing initiatives.
2.1.10 Governance A review of the FAA's cross-organizational executive committees showed inefficient use of executives' time with overlapping committees.	Executive level committees were reviewed, consolidated, and streamlined; roles and responsibilities were clarified.	Implemented.
2.1.11 Regional International Organization for Standardization (ISO)	Executive Operations will collaborate with the Office of the Regional	Implemented. Executive Operations and the

Implementation There is a lack of standardization of each Region's Executive Operations Division key functional area processes and staffing inconsistencies.	Administrators to develop Standard Operating Procedures (SOP), implement ISO and conduct a staffing study.	Logistics Service Areas are ISO certified.
2.1.12 Cost/Price Analysis Internal and Office of Inspector General (OIG) reviews of FAA acquisitions identified weaknesses in cost and price analysis.	Establish a Cost/Price Analysis Services group within Acquisitions.	Implemented.
2.1.13 Strategic Acquisitions Strategic acquisition initiatives dispersed among multiple organizations.	Consolidate strategic sourcing, purchase card program, and other strategic initiatives into a new Strategic Acquisitions Organization.	Implemented.
2.1.14 FAA Academy iPad Pilot Create a paperless efficient learning environment.	The Academy will use the iPad tablets and other technology to present course materials, training aids, and equipment documentation.	Implemented.

Problem	Solution	Status
2.2 Office of Human Resources Management (AHR)		
2.2.1. Back to Basics and Office of Human Resources Transformation Lines of Business (LOB) and services/offices were not satisfied with the level of service they were receiving from Human Resources (HR).	HR continues to work with our line of business customers. Collaborated with customers to identify the 15 core HR functions considered critical to success. Surveyed customers in FAA's LOB to identify suggestions for improvements and to baseline current service to measure future improvements.	In-Progress. Project is no longer called "Back to Basics"; has been renamed "Customer Service."
2.2.2. HR Training Redundancies in purchasing training.	HR and the Training and Development Council conducted a training audit that identified redundancies in training efforts.	In-Progress.
2.3 Office of NextGen (ANG)		
2.3.1. NextGen Initiative An assessment of the current state of NextGen, and the location and role of the NextGen office within the FAA showed that internal structures and operating models needed to improve in order to ensure successful implementation of NextGen.	Processes - improve the concept-to-program process to include program management best practices, enhanced transparency, and clear ties to the FAA Acquisition Management System (AMS). Governance – establish critical decision points throughout the concept-to-program process to	Implemented.

	elevate information for senior level decisions. Operating Model – establish an FAA NextGen staff office (via an appropriations reprogramming of the ATO NextGen office) to report directly to the FAA's Deputy Administrator.	
2.3.2. NextGen Initiative Transform the National Airspace System (NAS) through NextGen activities.	Create a centralized organization (NAS Lifecycle Integration Directorate) to drive a NAS-wide focus for instituting changes.	Implemented.
2.3.3. NextGen Initiative Transform the NAS with a structured, coordinated, collaborative process to enable NextGen activities.	Refine and implement Ideas 2 Implementation (I2I) Process related initiatives to ensure cross Agency alignment on NextGen Implementation.	Implemented. I2I was completed in March 2013.
2.3.4. NextGen Initiative Current acquisition process show that NextGen programs and activities are not adequately managed.	Institutionalize I2I process.	Implemented. I2Iwas integrated into AMS in April, 2013.

Problem	Solution	Status
2.4. Office of the Administrator (AOA)		
2.4.1. Office of Audit and Evaluation Hotline Consolidation Multiple data collection points existed for safety concerns and whistleblower contributions.	Consolidate hotline reporting functions to make interactions with Office of the Inspector General/Government Accountability Office/Office of Special Counsel (OIG/GAO/OSC) more productive.	Implemented.
2.5 Policy, International Affairs & Environment (APL)		
2.5.1. FAA Greening Initiative The FAA has a large number of employees, buildings, facilities, and vehicles to support and maintain the NAS.	The Office of Environment and Energy (AEE) facilitates Agency-wide sustainability program that promotes energy efficiency increases and improved stewardship of natural resources, resulting in cost savings.	In-Progress.
2.6 Office of Airports (ARP)		
2.6.1. Geographic Balancing Effort Field staff overload due to 96% increase in grants and safety workload, with only an 8% increase in staff positions.	Standardizing field office structure(s) and balancing field work load within the Office of Airports.	In-Progress.
2.6.2. Standardization and Standard Operating Procedures (SOP) Development Lack of standardization creates internal confusion, adds additional workload, and	Standardize the field operations by developing Standard Operating Procedures of core functions, allowing stakeholders to expect consistent delivery from	In-Progress.

lacks corporate risk management.	region to region.	
2.7 Security & Hazardous Materials Safety (ASH)		
2.7.1. Security Awareness Virtual Initiative (SAVI) Pretest Training Option Employees who took the annual SAVI Training wanted an opportunity to have an option to test out of the annual requirement that results in a more efficient manner of meeting this requirement.	ASH established a test out option for employees to complete this annual mandatory training.	Implemented.
2.7.2. Safety Management System Integration Currently AVS and ASH have two separate systems used to collect safety data. This results in duplicative programs and inefficiencies.	Collaborate with Flight Standards to integrate Hazardous Materials inspection data into a central safety management system.	In-Progress.
2.7.3. Emerging Role of ASH Internal FAA customers have come to ASH requesting various activities which we believe are not within ASH's responsibilities. This may result in using resources on functions that are duplicated elsewhere within the FAA.	Review core functions to ensure they are properly aligned towards ASH's mission, business plan objectives, and Destination 2025 goals.	Implemented.

Problem	Solution	Status
2.8 Office of Commercial Space Transportation (AST)		
2.8.1. Reorganization Increasingly varied and complex space launch systems and increased workload requirements demand that AST become more efficient in meeting its operational requirements.	Create a new division and staff offices; shift focus to specialized functions within divisions.	Implemented.
2.8.2. Staff Relocations to Field Offices AST inspectors and technical staff must travel from FAA HQ in Washington, DC, to perform their safety functions at the various space launch facilities across the United States.	Move inspectors and engineering staff to field offices to reduce travel costs.	In-Progress.
2.9 Air Traffic Organization (ATO)		
2.9.1. ATO Realignment: Project Management Office (PMO ATO System acquisitions were distributed throughout several operational service units.	The PMO was created to consolidate programs which were previously embedded in several air traffic offices. Placing the responsibility for the program management of major ATO system acquisitions into a single organization is facilitating work with the NextGen organization on NextGen related air traffic system acquisitions and their integration into air traffic operations.	Implementation complete and fully functional.

2.9.2. ATO Realignment: Safety & Technical Training Safety and Technical Training for the entire ATO Operational workforce were conducted separately, and risk management was not well enough connected to ensure the development of a well-trained workforce.	Following industry best practices, Safety and Technical Training were aligned into one organization to help the Service Units identify risk better and maintain a well-trained workforce.	Implemented.
2.9.3. ATO Realignment: Management Services Strategic labor relations, human capital management, employee and organizational development, communications, business and administrative, fiscal prioritization and contract functions were distributed across all service units.	Strategy and Performance was transitioned into Management Services to combine redundant organizations into one location, and to provide shared business and administrative operations support.	Implementation completed for most of the Management Services Functions. In particular, Labor Relations, Business and Administration, and Fiscal Prioritization.

Problem	Solution	Status
2.10 Office of Aviation Safety (AVS)		
2.10.1. Unmanned Aircraft Systems Integration Office Stand-Up Integration of Unmanned Aircraft Systems (UAS) into the NAS is a top agency priority and is a complex effort.	Establish a new UAS Integration Office in Flight Standards dedicated to integrating UAS operations safely into the NAS within a NextGen context. Create a single focal point for UAS operations under the direction of one executive.	Implemented. The Administrator assigned executive level leadership in March 2012 and officially approved the UAS Integration office on Jan 11, 2013.
2.10.2. Office Consolidation The Office of Safety Analysis (ASA) provided the data analysis capability while the Office of Accident Investigation (AIA) investigated the accidents .	The two offices were merged and their functions combined to create the Office of Accident Investigation and Prevention (AVP).	Implemented.
2.10.3. Office Closure Flight Standards Service is examining its "international office footprint" to improve the efficiency of its service delivery.	Close London International Field Office (IFO). Office responsibilities transferred to Frankfurt IFO and IFO in NY.	Implemented.
2.11 FAA – Joint Resources Council (JRC) Review of investments		
FAA – Joint Resources Council (JRC) Review of investments The FAA has not always systematically prioritized its investment decisions on capital projects and operations and maintenance requirements given competing funding	Review acquisitions and FAA investment strategy to optimize the use of the funding received and anticipated.	In-Progress.

demands for FAA resources.		

Question:

4. The Reform Act required the FAA to redesignate the Director of the Joint Planning and Development Office, currently Dr. Karlin Toner, to Associate Administrator, has this been done? If not, why not?

Answer:

Action regarding the Chief NextGen Officer and the redesignation of the JPDO position has been pending the appointment of a new Deputy Administrator. During this time, the JPDO has continued to function as the primary body to consider long-term concepts for NextGen, as well as take the lead for interagency coordination on NextGen and other select issues. While the JPDO Director currently reports to the Chief Operating Officer for daily operations, she meets regularly with the Secretary of Transportation and FAA Administrator in her role as principal advisor on strategic policy, as well as industry and intergovernmental issues relating to NextGen. The new Deputy Administrator took office on June 3. As deputy, he will fulfill the position of Chief NextGen Officer and will have broad responsibilities for NextGen within the agency. Among his priorities, will be addressing the reauthorization NextGen requirements including the JPDO Director redesignation.

Question:

5. The FAA has indicated that in January 2013, the Agency granted "pay increases" to a quarter of the agency's 45,000 employees. When were these increases approved, and what was the total dollar amount provided in January? (Please provide details on the breakout by appropriations account and by line of business.)

Answer:

Approximately 11,000 FAA employees were approved to receive performance-based pay increases in January 2013 under FAA's Core Compensation Plan. This group consists primarily of FAA employees not covered by collective bargaining agreements and field supervisors for air traffic and aviation safety personnel. These increases, which were approved in January, averaged 1.6% and include the OSI (Organizational Success Increase) based on FAA performance and the SCI (Superior Contribution Increase) based on individual performance. In aggregate, FAA estimated that the FY13 cost of these pay increases would be approximately $19 million across all budget accounts.

Question:

6. According to FAA statements, the recently enacted "Reducing Flight Delays Act of 2013" will allow the FAA to transfer sufficient funds to end employee furloughs and keep the 149 contract towers originally slated for closure in June open for the remainder of the fiscal year 2013.

- Which accounts and lines of business received additional funding (please break out how much will be transferred to end the furloughs and how much to keep the contract towers open.)
- How much did FAA save from furloughs?
- Were there any costs incurred by State or local communities who had intended to continue the contract tower program at their respective airports?

Answer:

The agency intends to transfer $253 million from the Grants-in-Aid airports account to the FAA operations account ($247.2 million) and the Facilities and Equipment account ($5.8 million). The transfer will allow FAA to end employee furloughs and keep 149 low-activity contract towers, originally slated for closure in June, open for the remainder of FY 2013. The FAA will also minimize cuts and delays in core NextGen programs and partially restore infrastructure support activities in the national airspace system, thereby reducing the risk of delays.

FAA estimates that one week of furloughs from April 21, 2013 to April 27, 2013 resulted in an estimated savings of $8.7 million.

Finally, the FAA is unaware of costs incurred by airport authorities or local communities who had planned to continue to operate these towers at their airports.

Question:

7. According to the FAA statements, the "Reducing Flight Delays Act of 2013" will also allow the FAA to put $10 million towards reducing cuts and delays in core NextGen programs and approximately $11 million to partially restore the support of infrastructure in the national airspace system.

- Which accounts will receive the additional funding?
- What programs and activities will be funded?
- How were these programs impacted by the sequester?
- Will these funds be obligated in FY 2013?

Answer:
The additional $10 million provides for $5 million to fund operational personnel backfill, overtime, and travel to support key modernization systems and activities related to NextGen. These include continued support for the delivery of ERAM to the field including key NextGen capabilities, such as the teams that support surveillance data processing in support of ADS-B and strategic weather reroutes that link ERAM with our strategic flow, the teams supporting the TAMR program, and the teams necessary to design and implement PBN procedures in the OAPM program.

The other $5 million supports the NextGen ERAM D-position program, more accurately named System and Sector Enhancements. In the near term, this program provides improvements to enroute automation that have been identified while the original program was in its three releases. These improvements are identified through the normal operations and were addressed every 12-18 months. These improvements, which support NextGen goals, have been on hold for several years. This additional funding will allow not only the investment decision to be completed this year and but also engineering efforts to begin with the upgrades hitting the field in 2015. This matches our ERAM deployment schedule completion and meets our commitment to the workforce to begin providing these additional capabilities.

Question:

8. What is the status of International Civil Aviation Organization (ICAO) talks related to international aviation emissions?

Answer:

In November 2012, the International Civil Aviation Organization (ICAO) Council established a High-Level Group of Senior Government Officials to provide recommendations for further action on addressing aviation greenhouse gas emissions in advance of the upcoming Assembly in September. As of April 2013, this group has met three times and provided input to the ICAO Council for consideration in advance of the Assembly. The focus of the group includes further work on market-based measures, such as cap-and-trade, but also includes consideration of technology, operational improvements and alternative fuels. The U.S. Government is actively engaged in efforts to shape the eventual outcome of the ICAO Assembly in order to achieve U.S. objectives of making further progress on climate change.

Question:

9. Do you believe the Small Airplane Revitalization Act will better utilize FAA resources, decrease the cost of certification, and improve safety?

Answer:

The Administration has not taken a position on proposed legislation. In this case, we note that the proposal closely aligns with recommendations we have received from industry to improve our certification process.

Question:

10. The Small Airplane Revitalization Act essentially implements the recommendations of the Part 23 Aviation Rulemaking Committee (ARC). Do you know when this ARC is scheduled to complete its report and make their recommendations?

Answer:

The ARC final report is expected to be completed by this summer.

The House Committee on Transportation and Infrastructure's Subcommittee on Aviation
Hearing on Review of FAA's Implementation of the FAA Modernization and Reform Act
Thursday, May 16, 2013
Second Set of Questions for the Record, May 24, 2013, for FAA Administrator Michael Huerta
Frank A. LoBiondo – New Jersey 2nd District

Question:

1. Mr. Huerta, last month we saw airline delays and cancellations nearly double due to your decision to furlough air traffic controllers. Despite repeated requests, you failed to provide this Subcommittee with the agency's plan for implementing the sequester cuts that led to the disruption of our National Airspace System for nearly a week last month. I assume you are already making plans to implement FY 2014 sequester cuts. Can you assure the committee that the agency will provide Congress and affected stakeholders a detailed impact analysis of controller furloughs, control tower closings, or any other sequester related budget cuts that will impact the National Airspace System in an appropriate timeframe?

Answer:

While the flexibility in the Reducing Flight Delays Act allowed the FAA to maintain its core safety functions, the reductions made to system modernization projects and airport improvement projects are unsustainable. Without additional congressional action, on October 1, FAA will again face the prospect of reductions to aviation services in order to achieve the long-term funding reductions called for in the Budget Control Act. The FAA will again be faced with making difficult choices in order to operate at this reduced funding level in FY 2014. Given the large percentage of the Operations budget devoted to payroll and the comparably small amount devoted to variable non-payroll costs, FAA will be forced to reduce compensation costs and make significant reductions to contracts. FAA will be unable to continue the same level of services to the flying public under a continued sequester in FY 2014 and we will make reductions to programs which will have the least impact to the largest number of flying passengers. That is why the FY 2014 President's Budget replaces the across the board spending cuts required by sequestration with a balanced approach to solving our Nation's budgetary challenges.

Question:

2. Section 213 directs the FAA to streamline the environmental review process and issue more categorical exclusions when a performance-based navigation procedure will result in a reduction in fuel consumption, carbon emissions and noise on an average per flight basis. What is the status of the FAA's implementation of Section 213(c)?

Answer:

There are two subsections under Section 213(c). Section 213(c)(1) provides a categorical exclusion for certain required navigation performance and area navigation procedures. The FAA has issued guidance for implementing this provision. Section 213(c)(2), referred to above, requires a determination of three measurable reductions—fuel consumption, carbon dioxide emissions, noise—on a per flight basis. The FAA has conducted an assessment of existing methodologies for determining noise and has to date not been able to identify a sound approach for making the noise determination on a per flight basis. In September 2012, the FAA asked the NextGen Advisory Committee (NAC) for assistance in further exploring how to make use of this categorical exclusion. The NAC is in the process of finalizing their work

for reporting back to the FAA. The timeline going forward depends on the outcome of the NAC work and FAA's assessment of their recommendation.

Question:

3. Mr. Huerta, the FAA has mandated that aircraft operators equip for ADS-B Out by 2020. What initiatives do you plan to undertake to effectively layout the business case for ADS-B In and other long-term NextGen programs to ensure sufficient buy-in by commercial airline and general aviation operators?

Answer:

The national deployment of ADS-B is steadily progressing and the FAA continues work on ADS-B procedures and applications for both Air Transport and General Aviation users that that will bring further near-term improvements to the NAS. To date, more than 550 radio stations have been installed throughout the NAS, of which 481 are currently operational. The operational radios are:

- Providing traffic and weather information to more than 1,400 properly equipped aircraft on the East Coast, West Coast, and in Alaska (ADS-B In)
- Supporting ATC separation services at 8 en route sites and 36 terminal sites (ADS-B Out)
- Supporting surface advisory services at 17 sites (ADS-B Out)

National deployment of the ADS-B ground infrastructure will complete in FY2014.

Air Transport Initiatives:

The FAA is using Other Transaction Agreements (OTAs) to help expedite early adoption of ADS-B by air carriers. Through OTAs with industry partners, the agency is able to demonstrate real benefits of advanced ADS-B In applications and procedures while allowing the FAA to share costs and risks with the participants. The use of ADS-B In applications will give the agency and airlines detailed cost and benefit data, and encourage other airlines and operators to equip early to capitalize on ADS-B benefits.

Any ADS-B-In application operational benefits validation activity requires at least one fleet operator to be willing to take the risk of being the "early adopter" to adequately exercise the application. Based on FAA's experience, this typically requires the Government to provide financial incentives via FAA funding of the Non-Recurring Engineering to develop and certify the initial ADS-B-In avionics and some number of these systems to reduce the operator's financial exposure. The FAA must also engage with resources in Air Traffic and Aviation Safety to ensure that controller and flight crew procedures are in place to enable operations.

One example is the agency's partnership with United Airlines to demonstrate an ADS-B In-Trail Procedures application in the Oakland Oceanic Flight Information Region. An operational evaluation of this capability is ongoing. In May 2012, the FAA made the decision to fund the integration of In Trail Procedures into the automation system for use by air traffic controllers, which will be operational in 2017.

In addition, the agency plans to continue the evaluation and business case development of additional ADS-B In applications that were previously recommended by the user community through the ADS-B-In Aviation Rulemaking Committee (ARC). Based on ADS-B-In application research and feedback from the

ARC, the major near-term benefits from ADS-B-In will be generated by Interval Management applications[1].

Current FAA plans call for Initial Investment Decisions for changes to the automation systems to support Interval Management to occur by the end of FY14, with Final Investment Decisions to occur by mid-FY16. If these investment decisions are made on this schedule, then FAA would expect to be able to commence support of Interval Management operations by 2019-2020. Interval Management avionics should be available in the 2016-2019 timeframe.

General Aviation Initiatives:
For the general aviation community, an agreement was signed in 2007 with Alaska Aviation Organizations and Alaska Aircraft Operators for safety enhancements, aircraft equipage, and airport improvement in the State of Alaska. As an extension of this agreement, the FAA recently awarded a contract to FreeFlight Systems to upgrade the aircraft previously equipped (ADS-B Out and In) under the legacy Capstone program with rule-compliant DO-282B avionics. In addition, the FAA is working with the University of North Dakota through the Center for Excellence for General Aviation Research (CGAR) to develop and certify an ADS-B In Portable Electronic Device (PED) for use in helicopters.

Lastly, the FAA has been investing in the development of standards and prototype avionics for an ADS-B In application known as Traffic Situational Awareness with Alerts (TSAA). This application provides pilots of non-TCAS II equipped aircraft with enhanced traffic situation awareness in all classes and domains of airspace by providing timely alerts of qualified airborne traffic operating in their vicinity (alerts using voice annunciations and visual attention cues). The avionics standards for this application are scheduled to be completed in late 2013.

Note that Sequestration funding cuts and other impacts are still being assessed and understood at the program level within FAA.

Question:

4. Mr. Huerta, the Administration has issued a series of regulatory reform executive orders. Among the common themes of these orders is the directive that the regulatory programs Of federal agencies should be less burdensome. Are you committed to assuring that future regulatory initiatives at FAA will be fact- and science-based, and can be justified on a cost-benefit basis, and do you plan to eliminate inefficient and costly rules that do not impact safety or the passenger experience?

Answer:
The FAA will continue to develop and implement Congressional mandates and rules required for safety, on a data-derived and cost effective basis. We will continue our efforts to eliminate rules that are no longer effective in meeting their safety purpose.

---

[1] During Interval Management, the controller assigns the flight crew to manage a time/distance interval from the lead aircraft using ADS-B-In capabilities. Having the controller give an instruction to maintain a specific time or distance interval, as opposed to multiple tactical speed, altitude, or vector maneuvers should decrease controller workload and enable more accurate delivery of aircraft to the runway, with the net effect of reducing arrival delay.

In response to Executive Order 13563, Improving Regulation and Regulatory, and Executive Order 13610, Identifying and Reducing Regulatory Burdens, the FAA has identified 10 rules, 3 of which have been issued, through the Retrospective Regulatory Review (RRR) that would streamline the regulations.

Questions for FAA Administrator Michael Huerta
The House Committee on Transportation and Infrastructure's Subcommittee on Aviation
Thursday, May 16, 2013
Sam Graves – Missouri 6th District

Question:

FAA Reauthorization, Section 816 – Historical Aircraft Documents

Administrator Huerta, could you please give me a status update on the implementation of Section 816 of the FAA Reauthorization Act, which deals with the preservation of Historical Aircraft Documents?

Answer:

The FAA is now developing internal guidance to facilitate responses to FOIA requests pursuant to Section 816 of Pub. L. 112-95, for Historical Aircraft Documents. The guidance will include a clear explanation of the meaning of the limitation that all such releases are subject to a ". . . prohibition on use of the documents for commercial purposes."

Question:

TFRs

I am sure that you are aware of the Temporary Flight Restrictions (TFRs) that currently exist over certain sports stadiums and theme parks.

- If not mandated to do so under current statute, would the FAA be inclined to issue similar TFRs for these theme parks and sports industries today if they received such a request from them?

Answer:

No. The current Disney and stadium NOTAMS are statutory mandates detailed in Section 352 of Public Law 108-7 and as amended by Section 521 of Public Law 108-199 and were issued to address security of the venues and the potential for a terrorist attack upon the facilities. The Disney properties do not meet the criteria for any of the TFR's available under 14 CFR part 91. Please note, however, that 14 CFR section 91.145, "Management of Aircraft Operations in the Vicinity of Aerial Demonstrations and Major Sporting Events", contain provisions for TFR's over some sporting events. These TFR's are issued if the FAA determines that such action is needed for the management of aircraft operations and/or to prevent the congestion of aircraft in the vicinity. The rule is not intended to address security concerns nor would it be practical to issue a TFR for the hundreds of sporting events that take place around the country.

Question:

- Would the FAA be inclined to support a legislative fix that would allow for air shows, taking place concurrently while sporting events are taking place and within the restricted airspace, to be granted an exemption to the TFRs?

Answer:

The Administration has not taken a position on legislation. Should new legislation be drafted that amends the current legislation and contains specific recommendations, we will provide technical assistance if requested.

Question:

Living History Flight Experience – Part 91 Exemption

The Living History Flight Experiences (LHFE) is a FAA program authorized under Exemption No. 6802, which allows FAA approved organizations to carry passengers for compensation or hire for historical flight experiences. These operations include flights aboard our nation's most prestigious and well-known military aircraft, such as the P-51 Mustang. However, FAA modifications to Exemption No. 6802, specifically Condition 25 and Condition 29, will adversely affect the ability of these dedicated organizations to offer truly historic flight experiences.

For two decades, the LHFE program has allowed individuals to safely experience historical and vintage military aircraft in flight. The pilots and mechanics that fly and maintain these aircraft are often military-trained or otherwise extremely capable of performing their job. This in-flight experience cannot be replicated in a classroom, observing a flyover, or viewing a static display.

Condition 25 prohibits the pilot in command (PIC) from "*performing aerobatic flights while passengers are aboard the aircraft*," and Condition 29 states that "*No persons other than the assigned flight crewmembers may be permitted to manipulate the flight controls during flight operations*."

Unfortunately, the FAA fails to recognize, or chooses to ignore, the fact that LHFE customers want to experience aerobatics in vintage aircraft and want to manipulate the controls under the supervision of the pilot. Prohibiting qualified organizations to provide this experience will seriously affect the viability of the LHFE industry and the ability to keep these aircraft flying for future generations to enjoy.

- What was the basis for or justification the FAA used in imposing Condition 25 and 29 to the LHFE program?

- Would you give any consideration to removing those conditions?

Answer:

The FAA must be able to ensure the safety of the pilot, passengers and the public during the conduct of aerobatics. These aircraft were not designed for aerobatics but for aerial combat. Many have performance characteristics that make aerobatics hazardous unless the pilot is familiar with the aerobatic limitations on the aircraft. In addition, these historic aircraft range from extensively restored to minimally airworthy. Other concerns include:

- Aircraft design limitations that may not be mitigated by civil operators;
- The military set requirements for pilot training, proficiency, and currency to conduct combat flying, similar to aerobatic maneuvers, for many of these historic aircraft. The FAA only has pilot requirements for aerobatic flight at air shows;
- Degradation of the aircraft's original structural limitations (e.g., a 1955 aircraft should not be pushed to its limits); and
- Inadequate inspection procedures because (a) basic maintenance and inspection requirements not met; and (b) continued operations beyond design limits (e.g., age, number of hours) were not contemplated.

Restrictions on passenger manipulation of controls are based on the requirement for the LHFE holder to train and check any pilot who is flying a LHFE flight. The passenger has not been trained to serve as a crewmember and should not be manipulating the flight controls. In some aircraft there may be functions in the passenger cockpit that can jeopardize the safety of flight since the pilot would be unable to take corrective action.

Question:

Navigational Charts

It's my understanding that the FAA is the primary source for compiling the data that ends up on sectional charts or VFR charts. Additionally, I am aware that the FAA also prints these charts.

- Could you please tell me or provide this committee with the annual budget for this program including costs to produce, revenue generated, use of surplus funds from revenue generated, and the number of FAA personnel assigned to this process?

Answer:

The Federal Aviation Administration (FAA) has had the legislative authority to recover the cost of aeronautical charts and related products for over 13 years (Public Law 106-181, dated April 5, 2000, which was later codified in 49 USC Section 44721). Even as far back as 1926, when the Aeronautical Charting Program was under the Department of Commerce, the Program operated as a fee based Program. This legislation provides "The price of an aeronautical product sold to the public shall be not more than necessary to recover all costs attributable to: (i) data base management and processing; (ii) compilation; (iii) printing or other types of reproduction; and (iv) dissemination of the product." The current fee structure is established to ensure the FAA realizes full allowable cost recovery in accordance with this legislative authority.

AeroNav Products cost for producing VFR Charts in FY12 was approximately $16M. The actual revenue collected was approximately $7.6M, therefore, no surplus funds were received. The personnel assigned to the accomplishment of compiling, database management, printing and distributing VFR Charts represents approximately 71 Full-time Equivalent (FTE) personnel resources.

Question:

I am additionally aware that after the FAA compiles this data, there appears to be a two week delay by FAA in releasing the finalized chart data to private sector firms that also print sectional charts. This lag gives the FAA a two week head start, and as such, is an impediment to private sector printing capacity.

- Can you explain to me why this lag in providing data to the private sector is happening?

Answer:

Digital sectional charts are available to customers via e-commerce and electronic download as soon as they are compiled and printed, which is two weeks in advance of the chart effective date. The same Sectional charts are placed for free use for flight planning purposes on the FAA public web site 24 hours prior to the chart effective date. Any company desiring a two week advance version of the Sectional charts for use in reprinting, can purchase the digital Sectional product via e-commerce and electronic download.

Question:

As currently the FAA performs this printing service for navigational charts, I would like some more information as to why the FAA would engage in the business of producing these charts when there are commercially available producers in the private sector?

- Has a cost analysis been conducted by the FAA to determine if savings could be achieved by outsourcing production of these navigational charts to the private sector? If so, could you please provide me and the committee with this analysis?

Answer:

In the fall of 2007, a High Performing Organization (HPO) Team composed of members from the FAA's Office of Enterprise Solutions (OES), National Aeronautical Charting Organization (NACO) – now known as Aeronautical Navigation (AeroNav) Products, and at that time NACO's parent organization, Aviation System Standards (AVN), began a comprehensive assessment of the organization, building on previous studies. The assessment included an evaluation of NACO's business model, workload analysis, and a benchmarking study of other, similar printing operations to identify best practices.
Attached is a copy of the High Performing Organization White Paper, which includes the findings from the benchmarking studies. The White Paper established an implementation strategy, allowing the Printing Operation to remain in-house while achieving a more efficient level of operation. The HPO Plan was a five-year plan and will be successfully completed by

September 2013. Since the baseline year of 2007, the Printing Operation has achieved over a 35% cost savings.
Although the Printing Operations has achieved significant savings over the last 5 years, as the market moves toward reduced paper sales and as program requirements change, a program review and cost study is currently on-going with the intent for a decision for next steps to be made within the next 6 months.

Question:

- If a cost savings could be achieved through outsourcing to the private sector, then would you not agree, given our current budgetary climate, that this would be preferable to reducing hours, closing towers, or enacting furloughs?

Answer:

At this time, we have no plans for outsourcing this function.

Question:

Air Traffic Controllers Report

Administrator Huerta, recognizing concerns for the quality of Air Traffic Controller training and attrition rates after finishing their entire training program at the academy and their facility, the committee directed you in the FAA Reform Act (specifically section 607) to report to us the graduation rates of FAA certified controllers with a Control Tower Operator Certification from an educational entity. It is my understanding that the FAA has not yet begun this study which would evaluate the effectiveness of hiring qualified controllers with a CTO certificate.

- Can you please give me an update on this process?

Answer:

The FAA is well underway with the analysis required to complete this report as outlined in Section 607 of the FAA Reform and Modernization Act of 2012 (P.L 112-95). The report to Congress is due not later than two years from the enactment of P.L. 112-95.

Question:

Information Technology

- In these challenging budget times, how does the FAA plan to use information technology as a way to drive cost savings?

Answer:

FAA will leverage technologies corporately, including cloud, collaboration, mobility, video conferencing, etc to drive cost savings across the agency. As we consolidate applications, FAA will have a greater focus on data and information to serve the agency's mission needs and requirements.

Question:

- It is my understanding that the FAA is planning to consolidate and modernize a significant portion of the agency's IT systems. What is the planned process for conducting this consolidation? Please provide the committee with a timeline, including plans for any procurement of goods and services.

Answer:

FAA is consolidating 720 IT professionals into one IT organization. We are also creating agency-wide IT services (e.g. email, cloud, VTC, security, etc.). Through the consolidation, FAA will maintain a single applications inventory which will be used as a basis for eliminating redundant applications and/or redundant data sources. Consistent with the FY 2014 Budget request, we plan to stand up the new IT Shared Services organization effective October 1, 2013.

Question:

- Will this consolidation also look to utilize new technology, including cloud computing, as a way to achieve cost savings?

Answer:

Yes, our consolidation efforts will look to utilize new technologies to achieve cost savings. FAA released a draft Screening Information Request for enterprise cloud services in April 2013. The estimated timeframe for contract award is FY 2015. FAA awarded a Software-as-a-Service private cloud contract in May 2013 for email services. Implementation will be completed in Q4 FY 2013. FAA is planning to implement a mobile computing Bring Your Own Device (BYOD) pilot in late FY 2013, allowing employees to use their personal devices to securely access the FAA network.

Question:

- When the FAA does move forward with procurements around the IT consolidation effort, how are you ensuring that the agency will perform a robust search to evaluate all possible solutions, including the latest in cloud computing?

Answer:

FAA anticipates awarding approximately five major contracts in support of IT services. These acquisitions will follow the FAA Acquisition Management System, conducting Market Surveys and soliciting marketplace information through Screening Information Requests. As an example, FAA's enterprise cloud services initiative released a draft SIR in April 2014 seeking industry input on cloud services.

Question:

- Can you ensure that these critical IT solutions will be obtained without any arbitrary limits or preferences placed around these procurements?

Answer:

Yes, FAA's acquisition policy prescribes that business needs, or requirements, be defined and that viable alternatives be considered for meeting those needs. The Contracting Officer participates during acquisition process to ensure the acquisition is fairly administered and promotes competition.

Question:

Agriculture Aviation

- In its attempts to integrate Unmanned Aircraft Systems (UAS) into the airspace, what is the FAA doing to ensure other, long-standing users of low-level airspace, such as aerial applicators, are protected from mid-air collisions and other operations that may prevent them from safely and effectively treating crops, protecting the public health, and conducting forest fires at low-levels?

Answer:

Authorized UAS operations currently fall into three categories 1) Public aircraft operations under a Certificate of Waiver or Authorization or 2) Civil aircraft authorized to fly in an experimental category and 3) Model aircraft . Currently, the FAA does not authorize commercial UAS operations for hire. Operators operating under category 1 or 2 must provide specific operating parameters, must identify risks posed by their operations and must have FAA-approved risk mitigation procedures in place. Among the risks that the FAA would expect to be identified in an application to conduct a UAS operation are the risks associated with conducting UAS operations in the vicinity of other long-standing users of low-level airspace, such as aerial applicators. In reviewing the application, the FAA would expect to see proposed risk mitigation procedures to protect those other users of low-level airspace from mid-air collisions and interference with operations such as treating crops, protecting the public health, and conducting fire-fighting at low-levels. All UAS operations, regardless of category, including those that operate in low-level airspace, must comply with FAR 14 CFR Part 91.13, which states that "no person may operate an aircraft in a careless or reckless manner so as to endanger the life or property of another." Reported violations of FAR 14 CFR Part 91.13 are investigated by the FAA

Question:

The aerial application industry consists of both turbine and piston engine aircraft that use Jet A and Avgas fuel, respectively. With the President's user-fee proposal it could potentially levy a fee on a turbine aircraft used to conduct aerial application activities by as much as $5,000-$6,000 a day since they take off and land frequently to treat farmer's crops. This is not something fair for farmers, aerial applicators or food consumers.

- Would the Administration include an exemption for all aerial application activities to user fees to prevent such a handicapping tax on a vital American industry and small businesses?

Answer:

Aircraft conducting aerial application activities and that fly outside of controlled airspace, like those used in agricultural aviation, would not pay the proposed flight surcharge fee. The proposal would create a per flight fee by aviation operators who fly in controlled airspace only.

Question:

- Has sequestration delayed the feasibility study FAA is conducting on the development of a database that would show the location of free-standing and guy-wired towers below 200 feet? This was part of the FAA Reauthorization Bill that was enacted last year.

Answer

No, the FAA has completed the analysis as directed in Section 219 of the P.L. 112-95. Our report is in final executive review and will be delivered to Congress in the near future.

Question:

- Will sequestration delay the publication of AC No.70/7460-1, which includes new, important safety guidance on marking meteorological evaluation towers (METs) below 200 feet? The changes were published in the Federal Register the summer of 2011, but the actual guidance document still has not been published. FAA has stated that it will be published this summer but will that be further delayed now?

Answer:

No. In consultation with industry representatives and the public, the FAA has provided guidance on voluntary marking of Meteorological Evaluation Towers (METs) erected in remote and rural areas that are less than 200 feet above ground level in order to increase the conspicuity of the towers for low level operations. These structures often fall under the threshold, specified in 14 Code of Federal Regulations (CFR), *Aeronautics and Space, Part 77, Safe, Efficient Use, and Preservation of the Navigable Airspace*, and are not subject to the notice requirements therefore do not trigger an aeronautical study by the FAA. In order to increase awareness of this voluntary guidance we are incorporating these recommendations into the next update of the Obstruction Marking and Lighting Advisory Circular (AC) 70/7460-1. In addition to the voluntary guidance there are several other changes being incorporated into the update of this document. We have experienced some delay in getting this AC published due to the complexity of the issues surrounding some of the other updates. However, our goal is to have it published by the end of 2013. It is important to note that the publication of this updated Advisory Circular does not impact the actual recommended guidance as it became final with the publication of the Federal Register notice.

Question:

Agricultural aviation interests have requested that the FAA expand AC No. 70/7460-1 to include marking guidance not just for METs under 200 feet but for all towers—freestanding and guy-wired.

- Will sequestration or any other FAA issues delay the Agency from considering this expansion of the AC?

Answer:

Requirements to file notice under 14 CFR Part 77 generally do not apply to structures at heights lower than 200 feet unless close to an airport environment. METs under 200 feet do not meet the provisions of Part 77 and the FAA does not conduct aeronautical studies to determine whether these structures are obstructions or whether they adversely impact air navigation. However, the FAA acknowledged that METs in remote, rural agricultural areas may be difficult to see by low-level agricultural flights operating under visual flight rules. It was the combined factors of these structures being in rural, remote areas, the speed of their construction, and skeletal composition that led to additional, limited marking guidance. Guidance was not applicable to METs that are erected in urban areas and far removed from rural agricultural spraying operations.

The request to expand marking guidance for structures other than METs is not based on safety of flight issues. The guidance used for METs is not feasible or warranted for other structures under 200 feet. Other structures do not carry the same visibility concerns of skeletal METs, and additional marking guidance may cause an undue burden on the public.

Question:

Washington, D.C. Metropolitan Area Special Flight Rules Area

The FAA Reauthorization bill required the FAA to submit to Congress a plan for the D.C. Metropolitan Area Special Flight Rules Area. The plan is to include specific changes that will decrease operational impacts and improve general aviation access to airports in the National Capital Region that are currently impacted by the zone.

- What's the status of this plan which was due 6 months ago?

Answer:

The FAA has been working extensively with our other agency partners and the General Aviation community to improve access to airports in the National Capital Region. The plan is in final executive review in the FAA. A 60 day trial is scheduled to begin May 31, 2013. This trial will allow TSA-vetted general aviation pilots to conduct practice approaches and pattern work at Potomac Airfield, Washington Executive/Hyde Field and College Park Airport.

Question:

- Do you agree that more can be done to improve GA access in the DC area?

Answer:

The FAA is always looking at ways to improve access to airspace in the National Capital Area,

and continues to meet regularly and work with its interagency security partners and the general aviation community presenting proposals to expand general aviation access to the Washington, D.C., area. These proposals are subject to agreement by the National Capital Region interagency security partners.

Question:

NextGen

As you know, the FAA bill includes a provision on NextGen public private partnership and the establishment of an avionics incentive program for facilitating the acquisition and installation of equipment that is deemed to be in the interest of achieving NextGen capabilities in commercial and general aviation aircraft.

- Does the FAA have experience in public private partnerships?

Answer:

The agency has many agreements with private companies, airport authorities, and others. Most particularly, the agency is working with several air carriers to validate the business case for early adoption of NextGen avionics equipment. These efforts are governed by memorandums of agreement in which both the government and the air carriers contribute—a public private partnership.

Additionally, the FAA has met with colleagues in the Department of Transportation regarding the Railroad Rehabilitation and Improvement Financing (RRIF) and Transportation Infrastructure Finance and Innovation Act (TIFIA) programs—two long-standing public private partnerships facilitating infrastructure financing.

Question:

- What is the status of the program?

Answer:

The agency continues evaluating and assessing feedback received from various stakeholders, researching previous public-private partnerships, and assessing ways to reduce risk. The FAA held two public meetings, solicited stakeholder feedback via two market surveys, and held various one-on-one meetings with stakeholders. The FAA identified two avionics equipage bundles focused on operators: one for air carriers, flying in the busiest metroplexes, and one towards operators that fly elsewhere.

Additionally, before the FAA issues any loan guarantees, consistent with the Federal Credit Reform Act, additional authority in an appropriation is needed

Question:

- Will you ensure that general aviation aircraft will not be left out of any incentive program?

Answer:

Yes.

Federal Aviation Administration

A White Paper on the
National Aeronautical Charting Office
(NACO)
High Performing Organization (HPO)

June 30, 2008

Federal Aviation Administration

< This page intentionally left blank >

EXECUTIVE SUMMARY

The National Aeronautical Charting Office (NACO) is an organization within the Federal Aviation Administration (FAA) whose mission is to promote safe and efficient air travel by producing and disseminating aeronautical navigation charts and data to both public and private customers. In the spring of 2007, the FAA's leadership elected to pursue a High Performing Organization (HPO) designation for NACO as part of the FAA's Commercial Services Management program[1] and an alternative to a public-private competition. The main objectives of the HPO effort were to identify and realize savings from a more efficient organization, to increase performance and quality, to re-focus the organization on its core mission of disseminating aeronautical information, to re-align NACO with the FAA's broader goals, and to prepare NACO to meet its long-term challenges.

In the fall of 2007, an HPO Team composed of members from the FAA's Office of Enterprise Solutions (OES), NACO, and NACO's parent organization, Aviation System Standards (AVN), began a comprehensive assessment of the organization, building on previous studies. The assessment included an evaluation of NACO's business model, workload analysis, and a benchmarking study of other, similar printing operations to identify best practices. In addition, AVN established new Integrated Information Technology (IT) and Data Services Teams to focus on business process re-engineering (BPR) and integration opportunities as part of the HPO.

Since its transition from the National Oceanic and Atmospheric Administration (NOAA) to the FAA in 2001, NACO had initiated several improvements to its business processes. However, the HPO Team identified a number of key challenges still facing NACO as well as additional opportunities for improving the organization's efficiency and effectiveness. Despite technological advancements in cartography and printing, NACO continued to utilize costly and labor-intensive manual processes in its Aeronautical Charting and Reproduction Teams. NACO's chart agent distribution network numbered over 2,500 agents, many of which were not compliant with the sales provisions of their contractual agreements. In addition, although NACO's authorizing legislation allowed it to charge customers for its products and recover a significant portion of costs, NACO lacked a structured pricing methodology. NACO also lacked a strategy for responding to an expected long-term shift in demand from paper to digital products. Finally, the integration of database systems presented a significant opportunity to eliminate redundant work processes and ensure the consistency of source data by combining parallel activities within AVN.

The HPO Core Team concluded its organizational assessment and adopted the following key recommendations for implementation of the NACO HPO:

- Integrate AVN database systems to significantly improve operational efficiencies and ensure the use of consistent and quality data across AVN;
- Establish International Organization for Standardization (ISO) quality objectives and metrics in the AVN Quality Management System to measure improvements in the quality of products and services;
- Shift operational control for IT and Applications to the AVN Integrated IT and Data Services Team. The deployment of new systems and applications is critical to the success of the HPO.

[1] In May 2008, the Competitive Sourcing initiative was superseded by a broader program known as Commercial Services Management.

Close collaboration and coordination is essential for the development of these highly specialized IT Applications. AVN's IT Application support currently resides in Acquisition and Business Services;

- Combine NACO with the National Flight Procedures Office (NFPO) and integrate data compilation activities and database systems to eliminate redundant processes and improve the quality of aeronautical navigation data;
- Replace manual, paper-based cartography with computer-to-plate (CTP) technology and digital mapping to eliminate contracting costs, increase efficiency, and enhance the quality and precision of NACO's aeronautical products;
- Reform the chart agent distribution model to reduce costs, increase efficiency, and promote e-commerce;
- Institute a new pricing methodology for paper products that links prices to costs to produce charts, increasing and maximizing revenue collected as provided for in the authorizing legislation;
- Establish a new discount structure for federal customers to increase NACO cost recovery, to increase customer accountability and to reduce waste;
- Consolidate facility space in Glenn Dale, Maryland and turn over unused space to the General Services Administration (GSA);
- Manage continuous improvement of the organization throughout and beyond the HPO time frame.

The HPO Team projects savings to gradually increase along with implementation progress from around $2.8M during the first year (FY09) to an annual savings of approximately $15.2M by FY13 and beyond. This savings represents a **28% reduction** from the COMPARE baseline cost estimate of $55.1M. In addition, the new pricing structure is expected to increase revenues by approximately $8.9M. The total yearly financial benefit (cost savings plus increased revenue) from implementation of all HPO initiatives is expected to reach close to $24M by FY13. To ensure that the projected cost savings are realized by FY13, the initiatives must be implemented prior to the end of FY12. Furthermore, an estimated implementation cost of $17.3M must be funded by FY11 in order to realize the projected benefits by FY13. The Core Team recommends the use of NACO's retained receipts to fund the implementation cost.

As part of the integration of NACO and NFPO, the organization will assume new and increased work requirements during the HPO period. These new requirements will require an additional 47 FTEs at a cost of around $5.7M annually. Due to NACO becoming an HPO, it is expected that the additional 84,020 annual labor hours will be met by shifting resources through the efficiency gains rather than increasing resources.

In June 2008, the HPO Team began working with NACO and FAA leadership to develop an implementation plan for the HPO. To minimize the disruption to NACO's business processes, and considering the size of this implementation, full implementation of the NACO HPO is not expected to be completed until FY13. Careful management of the transition will enable NACO to reduce staffing levels through attrition.

In summary, the NACO HPO is projected to save the Federal Government a total of approximately $45.5M during the five-year HPO performance period (not including the increased revenues increasing NACO's receipts by an estimated $44M over five years), and an estimated $15.2M per year thereafter. The new organization will be better positioned to serve the

needs of the FAA and meet future challenges. ***As an HPO, NACO will remain focused on safety, while delivering higher quality aeronautical navigation products and service to its customers in the aviation community.***

< This page intentionally left blank >

SECTION 1: RATIONALE FOR BUSINESS PROCESS REENGINEERING (BPR)/ PURSUIT OF A HIGH PERFORMING ORGANIZATION (HPO) 8

1.1 Background 8
1.2 Rationale and Benefits 8

SECTION 2: DESCRIPTION OF CURRENT ORGANIZATION 10

2.1 Overview of NACO Operations 10
2.2 Current Products and Services Offered and Customers Served 10
2.3 Current Funding and Expenditures 13
2.4 FY07 Organizational Chart and Staffing 17
2.5 Identified Challenges 18

SECTION 3: DESCRIPTION OF ENVISIONED ORGANIZATION 22

3.1 Work Processes and Performance Improvements 22
3.2 Organizational Chart and Staffing 42
3.3 Business Model and Strategy 43

SECTION 4: EXPECTED SAVINGS, PERFORMANCE TRACKING AND CONTROL, IMPLEMENTATION, AND CONTINUOUS IMPROVEMENT 50

4.1 Expected Savings/Financial Impact and Costs 50
4.2 Performance Tracking and Control 51
4.3 HPO Implementation 52
4.4 Continuous Improvement Management Plan 53

SECTION 5: MILESTONES 56

< This page intentionally left blank >

SECTION 1: RATIONALE FOR BUSINESS PROCESS REENGINEERING (BPR)/ PURSUIT OF A HIGH PERFORMING ORGANIZATION (HPO)

1.1 Background

In December 2005, the Federal Aviation Administration (FAA) Administrator directed the Office of Enterprise Solutions (OES), which is part of the Air Traffic Organization's Finance Service Unit, to analyze the functions performed by the National Aeronautical Charting Office (NACO). The analysis included an examination of the functions and services performed by NACO, the costs associated with these functions and services, and the revenue generated through the sale of NACO products to the public.

The assessment of NACO uncovered potential areas for improvement and in August 2006, OES presented a series of near-, mid- and long-term recommendations to the Administrator. Under the Administrator's direction, OES began implementing the near and mid-term recommendations in September 2006. Due to the success of the implementation efforts and the potential for substantial and sustainable long-term cost savings, FAA leadership determined in the spring of 2007 that NACO was a suitable candidate for the High Performing Organization (HPO) designation. OES was charged with the development of an HPO business case. Since July 2007, OES has been extending the original assessment of NACO to include a more refined look at the NACO business model, an assessment of NACO processes and activities, and the calculation of NACO baseline costs.

In the fall of 2007, the FAA leadership appointed an HPO Core Team consisting of Aviation System Standards (AVN), NACO, and OES members to begin assessing the current state of NACO through cost analysis, workload analysis, examination of the existing business model, best practices benchmarking and analysis of current processes. The team planned to finalize the assessment of the current state and the design of a future, more cost effective organization by the end of FY08.

1.2 Rationale and Benefits

The rationale for NACO's pursuit of a High Performing Organization is the desire to realize tangible and sustainable benefits, such as cost and performance improvements, while meeting the goals of the President's Management Agenda (PMA). The rationale and benefits of achieving HPO status include:

- *Lack of Suitable Private Sector Competitors* – Market research determined there were too few responsible available competitors due to the highly specialized nature of the work.
- *Address Human Capital Issues and Secure Future for NACO* – The NACO HPO provides a framework for the proactive management of operational challenges including obsolete technology and retirement/attrition of staff.
- *Increased Efficiencies* – Efficiency improvements will allow NACO to better utilize limited resources, increase performance, and meet the needs of future workload increases.

- *Savings and Performance Improvements* – As an HPO, NACO can yield savings and performance improvements comparable to public-private competition, but with lower implementation costs and less disruption to the workforce.
- *Recognition of Accomplishments* – As FAA's first HPO, NACO would be recognized for efficiency gains and model business practices.
- *Commercial Services Management*[2] *Credit* – Receiving the HPO designation will provide the Department of Transportation (DOT), the FAA and NACO with credit in meeting PMA objectives.

[2] In May 2008, the Competitive Sourcing initiative was superseded by a broader program known as Commercial Services Management.

SECTION 2: DESCRIPTION OF CURRENT ORGANIZATION

2.1 Overview of NACO Operations

In 2000, NACO was transferred from the National Oceanic and Atmospheric Administration (NOAA) to the FAA by the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century. NACO's function and mission is to compile, print, and distribute aeronautical navigation charts, data, and related publications.[3] In addition, NACO supports the global aviation community by supplying other countries with aeronautical chart products and participating in national and international aeronautical committees. Involvement in these committees and with the International Civil Aviation Organization (ICAO) helps set the strategic direction and U.S. position for the standardization of international aeronautical charts and flight information products. In addition, NACO provides chart seminars and participates in community outreach programs to support aviation safety.

2.2 Current Products and Services Offered and Customers Served

2.2.1 Products and Services Offered

NACO offers an array of products and services to the aviation community, the U.S. Department of Defense (DoD), internal FAA customers, and to other government agencies.

2.2.1.1 Aeronautical Charts

NACO compiles, prints, and distributes paper and digital aeronautical charts. These charts are reproduced and distributed to the FAA, the military and to the commercial and general aviation communities through direct sales (by telephone, fax, and e-commerce), retail outlets (chart agents), and intergovernmental requests. NACO aeronautical charting products include:

- Visual Flight Rules (VFR) charts
- Airport/Facility Directory (A/FD) and other flight supplements
- Instrument Approach Procedures (IAP) charts
- Instrument Departure and Arrival charts
- Instrument Flight Rules (IFR) High and Low Altitude Enroute charts
- Controller charts
- Controller Radar Video Maps (RVMs) and Minimum Vectoring Altitude (MVA) data

Figure 2.1 illustrates the production process for aeronautical charting product.

[3] Definition of compile: creation of new charts, processing and updating of information on charts including removal of obsolete information, and the collection and addition of data to the charts.

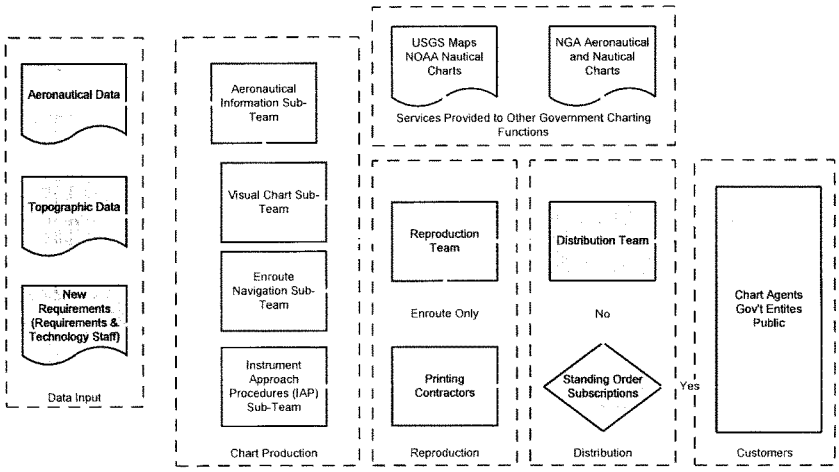


Figure 2.1: NACO Process Flow – Aeronautical and Nautical Charts

2.2.1.1.1 Visual Flight Rule (VFR) Charts

NACO is the only producer of original U.S. VFR charts, which are updated every six or twelve months (with the exception of Helicopter Route Charts, Special Charts and some isolated area Alaskan charts). VFR charts are updated using data from a variety of sources including the National Flight Data Digest (NFDD), the Weekly Obstruction List, U.S. Geological Survey (USGS) topography maps, road atlases, railroad maps, county/state highway maps, aerial photography, flight edit updates, airspace dockets, U.S. Coast Guard Marine Light lists and input from map users.

The compilation of aeronautical data for VFR charts is currently a manual process. Modifications are done by hand and verified by cartographers before VFR charts are sent to the Reproduction Team for printing. The handwritten changes to the VFR charts are then added to the printing negatives by negative engravers using computer cartography. Once all the changes are complete, the negatives are used to create printing plates. Once printing and other finishing processes are complete the VFR charts are transferred to the Distribution Team for storage and distribution to customers.

2.2.1.1.2 Instrument Flight Procedure (IFP) Charts

The Instrument Approach Procedures (IAP) Sub-Team produces IAP, Arrival, and Departure procedure charts. IFR charts are compiled using data from the National Flight Procedures Office (NFPO), National Flight Data Center (NFDC) and other FAA sources. Compilation of each IFP chart is a semi-automated process utilizing computer-aided design (CAD) as opposed to a fully automated database driven process.

After IFP charts are updated, the CAD files are converted to Portable Document Format (PDF) files and sent directly to the printing contractor (the Reproduction Team does not handle IFP

charts). The contractor fills subscription and chart agents' standing orders before sending the remaining inventory to the Distribution Team for storage and further distribution in response to future sales.

2.2.1.1.3 Enroute Charts

Approximately 75% of Enroute charts are purchased by the Department of Defense (DoD) with the public accounting for the remaining 25% of charts produced. These charts are updated digitally and changes are sent directly from the NACO Aeronautical Chart Team to the printing contractor. As of FY08, the Reproduction Team does not handle Enroute changes. The contractor fills standing orders and subscription sales before sending the remaining inventory to the Distribution Team.

2.2.1.2 Digital Data Products

NACO provides aeronautical information in digital form to NACO charting Sub-Teams, the aviation community and to FAA Air Traffic Control, NFDC and DoD. Digital products include:

- Radar Video Maps (RVMs) – These digital maps, including Minimum Vectoring Altitude Maps (MVA), are provided to 410 Air Traffic Control facilities. NACO maintains over 7,000 map files and must provide the information in five data formats due to lack of standardization at ATC facilities.
- Minimum Safe Altitude Warning System (MSAW) – This system is maintained in accordance with FAA orders and provides controllers with the information they need to warn pilots of terrain or obstruction hazards. NACO maintains 323 MSAW sites and provides updates to FAA and DoD through the Internet.
- Digital Obstacle File (DOF) – The DOF contains all reported man-made obstructions for 29 different structure types within the U.S. and in areas of the Caribbean, Mexico, Canada and the Pacific. Weekly DOF updates are sent to DoD and FAA offices while the 56-day DOF is available by subscription to government agencies and the aviation community.
- National Flight Database (NFD) – The NFD contains information to support Enroute and Terminal GPS navigation including: information on instrument procedures, airspace, airways, fixes, navigational aids (NAVAIDs) and airports. Information can be provided directly to a pilot or the Flight Management System of an aircraft. The FAA Enroute Automation Modernization (ERAM) Program is currently evaluating the NFD for use as source aeronautical data in future ERAM releases.
- Digital Terminal Procedures Publication (dTPP) – This DVD product contains all U.S. IFPs and airport diagrams that are contained in the printed TPP volumes. The dTPP product is updated every 28 days.
- NAVAID Digital Data File – This file provides a current listing of NAVAIDs in the U.S., Puerto Rico, and the Virgin Islands and select locations in Canada, Mexico, the Atlantic and Pacific. This file is updated every 56 days.
- Digital Aeronautical Chart Supplement (DACS) – This CD provides digital airspace data not otherwise available. The DACS is primarily an Air Traffic Control (ATC) data product, but is also provided to the general public. DACS is updated every 56 days.
- Digital Aeronautical Information compact disc (CD) (DAICD) – This CD contains the DACS, the DOF and the NAVAID Digital Data File.

- Sectional Raster Aeronautical Chart (SRAC) product – This three set DVD product contains Geo-referenced digital VFR charts for the U.S. including Alaska, Hawaii and Puerto Rico. The SRAC is updated every 28 days.

2.2.1.3 Other Products

NACO produces the Airport/Facility Directory (A/FD) which contains airport data including information on NAVAIDs, communications data, weather resources, special notices, and hours of operation, lighting codes, VFR waypoints and runway data. The directory also contains airport diagrams and sketches. NACO also produces a Pacific and Alaska Supplement Publication.

In addition, NACO produces the Aeronautical Chart Users Guide, which is a VFR/IFR teaching aid, a reference document, and an introduction to the wealth of information provided on FAA's aeronautical charts and publications. It includes explanations of chart terms and symbols, and a comprehensive display of aeronautical charting symbols organized by chart type.

2.2.1.4 Services Offered

In addition to producing its own products, NACO provides printing and distribution services to other government agencies. In FY07, NACO printed USGS maps[4], printed and distributed NOAA nautical charts, and distributed DoD aeronautical and nautical charts.

2.2.2 Customers Served

NACO serves both the general public (via direct sales and chart agents) and the government. Table 2.1 shows a breakdown in the number of paper charts sold to each customer in FY 2007.

Table 2.1: Breakdown of Customers Served

Customer	Charts Purchased	Percent of Total Charts Purchased
Public – Direct Sales	1,251,796	11.5%
Public – Chart Agent Sales	3,031,669	27.9%
DoD	5,515,304	50.7%
FAA[5]	753,246	6.9%
Other Government	324,640	3.0%
Total Charts Purchased	**10,876,655**	**100%**

2.3 Current Funding and Expenditures

2.3.1 Funding

2.3.1.1 Operations

NACO receives operations funding through its parent organization, AVN. When NACO was transferred to the FAA in 2000, AVN initially funded the Personnel Compensation & Benefits (PC&B) expenses for all of NACO's employees. In FY03, AVN and NACO agreed that NACO would fund PC&B expenses for 24 FTEs from its retained receipts account, thus reducing the amount of operations funding received from AVN. As shown in Figure 1, AVN funded 270 of NACO's 294 FTEs in FY07, which amounted to $27.4M in operations funding. NACO applied $0.95M from the retained receipts account to cover PC&B expenses for the remaining FTEs. The

[4] As of FY08, NACO no longer prints USGS maps.
[5] At present, FAA receives charts from NACO at no cost.

Air Traffic Organization (ATO) provided NACO with an additional $2.3M in operations funding in exchange for the production of RVMs.

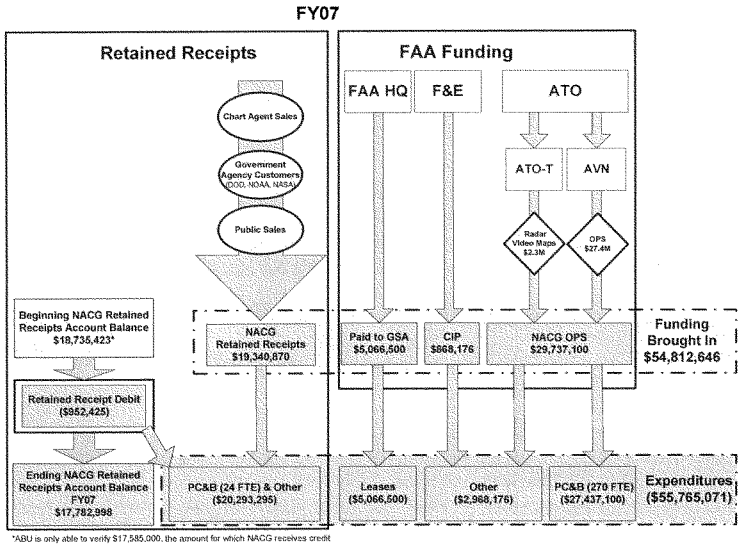


Figure 2.2: FY07 NACO Funding and Retained Receipts Flow

Since the allocation from AVN covers PC&B for only 270 FTEs, charges from the OPS account must be transferred to the retained receipts account to fund the remaining FTEs.

2.3.1.2 Retained Receipts

The retained receipts account contains the proceeds from the sale of NACO, DoD and NOAA maps to the public (via direct sales or through chart agents) and other Government agencies.[6] Retained receipts are used to fund PC&B not covered by operations funding and all other expenditures including printing and distribution contracts and supplies. Starting in FY06, this account funded capital improvements. The balance of funds in the retained receipts account is carried over from year to year.

In FY07, NACO generated $19.3M in revenue. Total obligations in FY07 exceeded total appropriated funds and revenue from the sale of aeronautical products. The difference between the amount received from sales and appropriated funds and the total amount of obligations was funded from the remaining balance of the retained receipts account. Figure 2.2 above illustrates the drawdown of the retained receipts balance in FY07. At the beginning of FY07 the balance of the retained receipts account was $18.7M. During that year, $952,425 was withdrawn to cover

[6] Regarding DoD and NOAA charts, NACO is only authorized to recover the cost of producing and distributing DOD and NOAA charts; proceeds above and beyond those costs must be returned to Treasury.

the remaining obligations. The balance at the end of FY07 was $17.8M. In the future, NACO will continue to use retained receipts to fund modernization efforts.

2.3.2 Expenditures

Table 2.2 shows NACO actual expenditures for FY07 (excluding expenditures for United States Postal Services (USPS) mailings). Building expenditures of $5,066,500 are based on the cost of the Silver Spring and Glenn Dale facilities (but is shown separate from Rent, Communications and Utilities since it is paid directly to GSA by ATO).

Table 2.2: NACO Expenditures

NACO FY07 Expenditures			
	Percent of Total		Total
Total PC&B	**52.35%**	**$**	**29,362,335**
Total Non-Labor	**47.65%**	**$**	**26,724,325**
Travel	0.28%	$	155,872
Transportation	3.45%	$	1,934,787
Rent, Communications & Utilities	0.04%	$	19,761
Printing	17.99%	$	10,087,232
Other Services	12.15%	$	6,812,830
Supplies	3.44%	$	1,927,930
Equipment	0.69%	$	389,413
EEO Settlements	0.59%	$	330,000
Other Rent Expenditures*	9.03%	$	5,066,500
Total Expenditures	**100.00%**		**$56,086,660**
*NACO facility expenditures are paid directly to GSA by ATO, but are nonetheless a NACO expense.			

Table 2.3 provides an overview of the services and supplies for which NACO has contracts.

Table 2.3: FY07 NACO Support Contracts

NACO FY07 Service Contracts		
Contractor Name	**Amount**	**Description**
GPO/Evolution Impressions	$400,000	Coast Pilot Perfect Bound Printing & Distribution
GPO/Cenveo	$43,000	Miscellaneous Publications Printing & Distribution
GPO/Bindagraphics	$35,000	NOAA Nautical Recreation Chart Printing & Distribution
GPO/NPC, Inc.	$4,100,000	U.S. & Alaska TPP Printing & Distribution
GPO/Fry Communication	$900,000	A/FD, PCS, & SA Typesetting Printing & Distribution
William & Heintz Map	$2,100,000	Enroute Charts Printing & Distribution
JAD Business Services, Inc.	$60,000	Courier Service
K-Ton Mapping Corp.	$170,000	Aeronautical Chart Drafting Support
APT Services	$1,050,000	Administrative Support Services
Esher Grad Tech	$94,000	Service contract for Escher Grad 9400 Imagesetters
NOAA – DOC	$926,000	Building Services
TerraGo	$10,580	SRAC: GeoTIFF to GeoPDF
NFD – Consulting	$95,000	Bendixen
NFD – Coding	$766,475	AeroNavData
ESRI	$207,000	Consulting, Enroute Customization, AIB Tool
D2A Tool	$2,500	DAFIF to ARINC Converter Tool Programming
Service Contracts Total	**$10,959,555**	
NACO FY07 Supply Contracts		
National Graphic Supply	$263,976	Photo Imaging Supplies
Anocoil	$87,000	Lithographic Printing Plates and Chemical Supplies
Finzer Roller, Inc.	$16,000	Recover Printing Press Rollers
Sun Chemicals	$90,000	Ink
G&K Services	$20,500	Towels and uniforms
KC Color Management	$27,003	Color Proofing System and Supplies
Supply Contracts Total	**$488,495**	
Total Contracts	**$11,448,050**	

2.4 FY07 Organizational Chart and Staffing

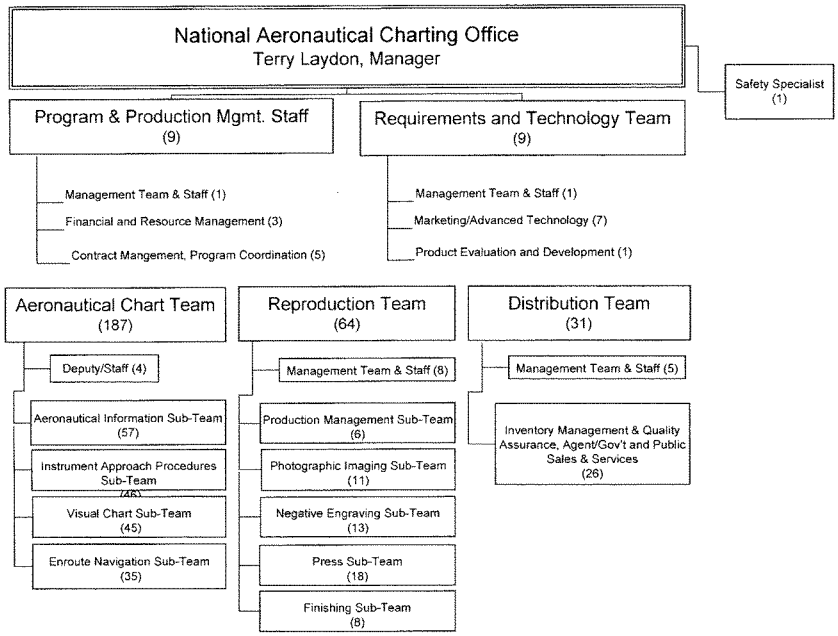


Figure 2.3: NACO Organizational Structure (Number of FTEs)

2.4.1 Program and Production Management Team

The Program and Production Management Team:

- Manages NACO Human Resource functions
- Provides financial management
- Determines procurement requirements
- Coordinates and processes personnel actions
- Manages property and facilities
- Monitors and reviews contracts
- Evaluates production capacities
- Coordinates special projects and requests
- Coordinates and monitors interagency agreements
- Determines basis for chart and product pricing

2.4.2 Requirements and Technology Team

The Requirements and Technology Team:

- Provides organizational technical guidance and long range planning
- Establishes and validates NACO charting requirements

- Coordinates product development and/or enhancements
- Performs product evaluation functions
- Represents NACO on government and industry aviation standards and advisory committees and working groups
- Manages Marketing Program
- Conducts pilot seminars on chart use and symbols
- Manages the NACO Internet site

2.4.3 Aeronautical Chart Team

The Aeronautical Chart Team:

- Supports the NACO mission directly by converting, validating and compiling aeronautical data received from a variety of sources
- Produces VFR and IFR charts and maintains aeronautical charting databases using validated data
- Provides cartographic support to FAA Air Traffic Service
- Produce a wide range of hardcopy and digital products to general aviation and military pilots and to FAA facilities including: VFR charts, IFR charts, the A/FD, controller charts, RVM and NFD

2.4.4 Reproduction Team

The Reproduction Team:

- Provides pre-press work including negative engraving and photo servicing
- Prints and finishes VFR, USGS and NOAA nautical charts (as of FY08, NACO no longer supports USGS products)

2.4.5 Distribution Team

The Distribution Team:

- Oversees warehouse and shipping contractors
- Maintains product sales accounting and payment collections
- Manages direct to public charts sales (one-time and subscription) and sales to chart agents, DoD and other government agencies
- Determines print quantity levels
- Approves and monitors authorized chart agents

2.5 Identified Challenges

2.5.1 NACO and AVN Integration

Since arriving at the FAA from NOAA in 2000, NACO's processes and systems have not been optimally integrated with those of its parent organization, AVN. To address these integration issues, Integrated Information Technology (IT) and Data Services Teams (Integrated Teams) were established to focus on opportunities that would increase NACO's integration with its parent organization AVN and improve data services throughout the AVN organization.

2.5.2 Product Pricing

2.5.2.1 Structure

During the original assessment of the NACO organization, OES found that NACO's prices had not been adjusted since the organization was transferred from NOAA to the FAA in October 2000. At the time of the assessment, prices remained at the level set by NOAA authority prior to FY01. While a part of NOAA, NACO had adjusted prices regularly based on the products' unit costs. Since its transfer to the FAA in 2000, however, NACO no longer had a system in place to calculate and analyze unit costs. In FY07, NACO increased the prices for all of its products by an average of 8% as a short-term measure to keep pace with rising costs.

Following the original assessment, the OES team worked closely with the FAA's legal counsel to determine which costs could be recovered through product pricing under NACO's authorizing legislation (Public Law 106-181). On the basis of the legal interpretation, OES collaborated with NACO and AVN staff to develop a methodology for collecting cost data and classifying costs as recoverable or non-recoverable for each product. The OES team then began the development of a pricing model that would yield updated product prices that maximize the recovery of allowable costs, in accordance with the legislation. Table 2.4 shows NACO's total revenue and costs for FY07. NACO's revenue fell short of the costs it was allowed to recover in FY07 by approximately $14M (recoverable production costs minus total receipts).

Table 2.4: Cost of Production vs. Receipts

FY 07 Costs and Receipts for All Products		
Total Receipts	Total Cost of Production	Recoverable Production Costs
$22,265,215	$45,515,297	$36,602,563

2.5.2.2 Discount Rates

NACO offers a range of discounts by customer group, product, and type of order. Table 2.5 summarizes the discounts offered to major customer groups.

Table 2.5: NACO Product Discounts

NACO Discounts	
Customer	Discount
Individual on-time sales & subscriptions	0%
Chart agents	40%
Federal Aviation Administration	100% (free)
Department of Defense	Ranges from 17% to 90% (average of 86%)
Libraries, schools, & scientific institutions	10%
Members of Congress	100 free charts, full price after 100
Other government agencies	40%
National Archives, Depository Libraries, & Library of Congress	100% (free)

2.5.2.2.1 DoD Discounts

NACO offers multiple discount rates to DoD. Not only do DoD's discounts vary by product, NACO also offers DoD a lower set of discounts for unscheduled orders than for scheduled (advance) orders to reflect higher costs. Consequently, DoD received discounts ranging from 16% to 90% in FY07, with an average weighted discount of slightly more than 86%. Just as for

the prices offered to NACO's other customers, the prices offered to DoD were not changed between October 2000 and the start of FY07.

2.5.2.2.2 Chart Agent Discounts

NACO sells its products at a 40% discount to approximately 2,500 aeronautical and nautical chart agents, who resell them to retail customers at no more than NACO's full prices. In the retail industry, offering a standard discount to product vendors is common practice. The NACO discount rate has varied over time but has not been changed in approximately 30 years.

2.5.3 Product Sales

In FY07, NACO received approximately $19.34M in revenue from the sale of approximately 11 million NACO paper and digital products. The majority of NACO products were purchased by chart agents and DoD. These customer groups also received the largest discounts (with the exception of the FAA), which significantly reduced the proportion of costs recovered through product sales (these customers purchase a large proportion of NACO products, but generate a smaller proportion of total revenue).

2.5.3.1 Returns

NACO allows chart agents to return all unsold expired charts within 60 days of the expiration date for a full refund to their chart agent accounts. As part of the agreement that chart agents sign with NACO, agents must keep their return rate below 20% or face cancellation. Accounts are reviewed annually to identify vendors with return rates exceeding 20%. In December 2006, letters were sent to agents that were not compliant with the 20% ceiling on returns. Enforcement of this policy was subsequently reviewed, as some chart agents remained non-compliant. In FY07, NACO's chart agents returned a total of 848,541 items with a total sales value of $2,584,664. Nearly 50% of chart agents had return rates above 20%, with the total weighted average return rate equaling approximately 24% in FY07. The average return rate for those agents above the 20% limit equals 39.8%.

2.5.3.2 Condemnation of Expired Charts

The production level for each NACO product is based on historical sales figures. Aeronautical products not sold before their expiration date are kept within the distribution facility and discarded ("condemned") to ensure that obsolete aeronautical information is not made available to the public. In FY07, 266,455 aeronautical products including visual charts, digital products, Enroute charts and books were produced but not sold. This represented a condemnation rate of about 3%.

2.5.4 Digital Product Sales

NACO is not currently able to protect its products from unauthorized reproduction. NACO's digital products are widely shared and can be obtained from unauthorized third party sources at little or no cost. As demand for digital products increases and paper sales decline, it is likely that NACO will have difficulty in sustaining a revenue stream from additional digital product sales.

If NACO were to expand its digital product offering, without copyright protection, to meet changing technology and customer needs, it is possible that NACO would experience a decline in retained receipts as revenue from the sale of digital products may not compensate NACO for

the decrease in the sale of paper products. If NACO is not able to secure copyright protection, other strategies for maintaining this revenue stream will have to be examined. If NACO is not able to maintain this revenue stream, it will experience a decrease in retained receipts and become more dependent on operations funding.

2.5.5 Workforce Retirements/Shortage

Like many federal agencies, NACO faces the challenge of an aging workforce. Approximately 30% of NACO's employees will be eligible to retire by FY13. Without proper assessment and planning, NACO could face a staffing shortage or staffing misalignment in the next several years. Figure 2.3 depicts the number of staff eligible for retirement by the FY13.

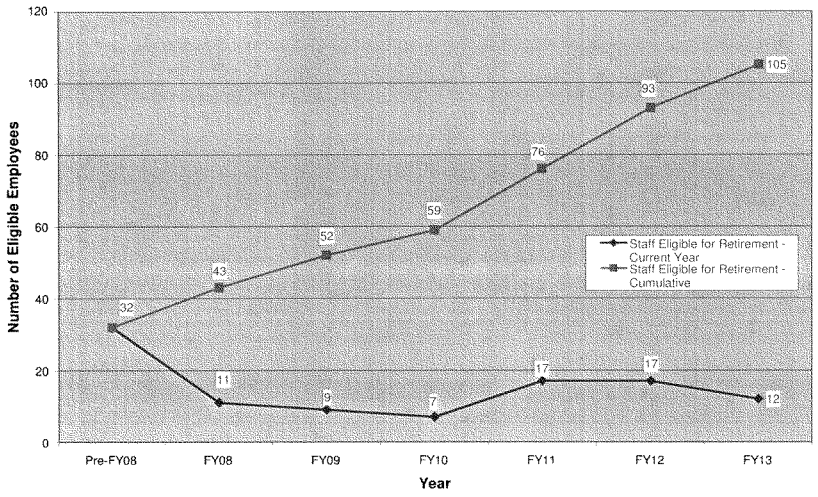


Figure 2.3: NACO Staff Eligible for Retirement

SECTION 3: DESCRIPTION OF ENVISIONED ORGANIZATION

3.1 Work Processes and Performance Improvements

In addition to the analyses performed by the NACO HPO Team, AVN established Integrated IT and Data Services Teams to identify business process re-engineering opportunities across AVN. The teams analyzed current processes and evaluated their alignment with the mission, vision, and goals of the FAA and ATO. Based on these assessments, they developed recommendations for new business processes and a new organizational structure that will significantly improve the efficiency of the organization and its ability to fulfill its mission within AVN.

This section describes the envisioned organization based on the assessments of the HPO Team and Integrated Teams. It is divided into the following three sections:

- **AVN Integration** – Although AVN Integration touches all parts of NACO, this section mainly describes changes to the Aeronautical Chart Team, the Program and Production Management Team, and the Requirements and Technology Team.
- **Reproduction Team** – This section describes all process improvements recommended for the Reproduction Team. It includes some changes recommended by the AVN Integrated Teams but is separated for clarity.
- **Distribution Team** – This section describes the process and staffing changes in the envisioned organization. Changes to the chart agent model are described in Section 3.3.2.

3.1.1 AVN Integration

3.1.1.1 AVN Gold Standard National Flight Data (NFD) Implementation

The AVN "Gold Standard" is an integrated process that will ensure that the data used for the design and development of Instrument Flight Procedures (IFPs) and the associated coded Flight Management System (FMS) data is the same data that is flight inspected, provided for rule making, and published in the NFD. The Gold Standard process will improve the quality and safety of the NFD by ensuring the consistency and integrity of the data throughout the IFP process. The implementation of the Gold Standard will also result in significant cost savings.

In the current process, a commercial contractor provides coded NFD terminal procedures data to NACO employees, who assure the quality of the data. The current contract, which includes the maintenance of RNAVs, SIDs, and STARs, costs $700K annually and requires 4,500 in-house staff hours for quality assurance. Expanding the current process to include all IFPs (which is planned with the Gold Standard Process) would cost an estimated additional $500K in contract costs alone. The Gold Standard process will expand the use of IT tools funded through the Instrument Flight Procedures Automation (IFPA) Capital Investment Plan (CIP A14) across AVN. In the new process, the NFD will be maintained from data that is generated using established business rules from a database system that has been quality assured as part of the procedure development and flight inspection processes. See Attachment 1 in Appendix for visual depictions of the current process and the AVN Gold Standard NFD re-engineered process.

Implementation of the Gold Standard Process is already under way, and is nearly complete for RNAV IFPs. To monitor quality improvements with the Gold Standard process, International Organization for Standardization (ISO) quality objectives are being added to the AVN IFP Quality Management System and metrics are being established to measure performance against these quality objectives.

Table 3.1: AVN Gold Standard NFD HPO Savings Summary

Initiative	Current Labor Hours	Savings (%)	Labor Hour Savings	Efficiency Savings	Contract Cost Savings	Supplies/ Equipment Savings
AVN Gold Standard NFD Implementation	14,080	32%	4,500	$306,000	$700,000	
AVN Gold Standard NFD Implementation*				$500,000		
Total Annual Savings (beginning in FY13)					**$1,506,000**	
*Cost efficiency from the elimination for additional contracts for ILS and other conventional IFPs not currently under contract. Note: All costs are based on FY08 dollars.						

Implementation Cost for Initiative: In order to realize this significant annual benefit, as shown in the table above, by FY13, the implementation cost of this initiative must be funded prior to the close of FY11.

Table 3.2: AVN Gold Standard NFD HPO Implementation Costs Summary

Initiative	Hardware	Software Procurement	Software Development/ Conversion	Labor/ Contract	Training	Total
AVN Gold Standard NFD Implementation				$225,000	$50,000	$275,000

3.1.1.2 Enroute Chart Automation

NACO currently uses an outdated manual compilation process that relies on contractor support to produce Enroute products. Automating the Enroute production process will improve the accuracy and quality of Enroute products, eliminate the need for contracted compilation support, and reduce labor costs.

The current process for Enroute charting is paper-based and incorporates an extensive amount of manual compilation. Cartographers manually review and apply changes in writing to paper standards. These standards are sent to a contractor who applies the changes and prints the charts. Phase one of this initiative includes creating digital Enroute charts using CAD software. This will enable NACO to compile and maintain the files digitally and provide updates directly to the Reproduction Team. Maintaining these charts digitally will allow NACO to rely on its own resources instead of the current drafting contractor used to maintain the standards. The Reproduction Team will not have to create negatives to support Enroute charting.

The second phase will consist of the creation of a centralized geo-referenced database, which will allow NACO to replace and update multiple production processes. Once this is accomplished, there will no longer be a need for individual databases and individual data maintenance tools. With a central geo-database and a common set of GIS tools, NACO will be able to more easily adapt to new requirements, products and services, and a more demanding digital customer.

The current workload is accomplished by a team of 17 cartographers that maintain the entire Enroute series of charts. Phase one will allow NACO to use in-house resources instead of a drafting contractor, reducing Reproduction Team labor hours and material costs. Once database-driven chart technology has been fully implemented, the same workload will be accomplished with only 10 cartographers, realizing a 41% savings in labor hours. See Attachment 2 in the Appendix for a visual depiction of the Enroute Chart Automation re-engineered process (current and "to-be" workflow).

Table 3.3: Enroute Chart Automation HPO Savings Summary

Initiative	Current Labor Hours	Savings (%)	Labor Hour Savings	Efficiency Savings	Contract Cost Savings	Supplies/ Equipment Savings
Enroute Chart Automation – Phase I	29,920	6%	1,898	$129,064	$74,750	$23,790
Enroute Chart Automation – Phase II	29,920	41%	12,267	$834,170		
Total Annual Savings (beginning in FY13)					**$1,061,774**	
Note: All costs are based on FY08 dollars.						

Implementation Cost for Initiative: To ensure the cost efficiency benefit of this initiative is realized by FY13, the implementation cost of this initiative must be funded prior to the close of FY11.

Table 3.4: Enroute Chart Automation HPO Implementation Costs Summary

Initiative	Hardware	Software Procurement	Software Development/ Conversion	Labor/ Contract	Training	Total
Enroute Chart Automation	$110,000	$500,000	$3,125,000	$750,000	$100,000	$4,585,000

3.1.1.3 Airport/Facility Directory Automation

As in the production of Enroute charts, the current process for maintaining and producing the Airport/Facility Directories (A/FD) and supplement products requires extensive manual compilation and contractor support. Automation of the A/FD will utilize commercial off-the-shelf (COTS) software tools to streamline the process, improving quality, reducing in-house labor costs, and eliminating the need for contractor support.

The current process for maintaining the A/FD and supplements involves extensive data review and manual drafting. Aeronautical Information Specialists manually review source data and apply changes in writing to paper standards or manuscripts. These standards are sent to a production contractor that makes all the changes for the next edition of the publication. The current process is not only inefficient, but can lead to multiple errors. Consequently, this process requires additional levels of quality assurance. The re-engineered process will use proven COTS tools to extract data from the FAA's databases and send completed electronic files to the contractor for printing. See Attachment 3 in the Appendix for a visual depiction of the re-engineered process for the A/FD and supplement products (current and "to-be" workflow).

Table 3.5: A/FD Directory Automation HPO Savings Summary

Initiative	Current Labor Hours	Savings (%)	Labor Hour Savings	Efficiency Savings	Contract Cost Savings	Supplies/ Equipment Savings
Airport/Facility Directory Automation	21,120	50%	10,560	$718,080	$200,000	
Total Annual Savings (beginning in FY13)					**$918,080**	
Note: All costs are based on FY08 dollars.						

Implementation Cost for Initiative: To begin to realize the annual cost savings benefit as shown in the table above, by FY13, implementation of this initiative must be funded no later than FY11.

Table 3.6: A/FD Directory Automation HPO Implementation Costs Summary

Initiative	Hardware	Software Procurement	Software Development/ Conversion	Labor/ Contract	Training	Total
Airport/Facility Directory Automation	$55,000	$31,250	$312,500	$1,000,000	$100,000	$1,498,750

3.1.1.4 Common Airport Mapping Initiative (CAMI)

The Common Airport Mapping Initiative (CAMI) will combine separate airport mapping activities in NACO into a single team, improving the quality of several products and reducing labor costs. Subsequently transitioning to COTS Geographic Information System (GIS)-based technology will provide NACO with the capability to support new FAA requirements for airport mapping products.

Three of NACO's sub-teams currently perform duplicate airport mapping activities in support of separate NACO products. The Instrument Approach Procedures Sub-Team produces airport diagrams and airport sketches using separate production processes to support the Terminal Procedures Publication. The Aeronautical Information Sub-Team produces airport sketches in support of the A/FD. The Visual Chart Sub-Team produces airport patterns to support visual chart products. This organizational structure results in considerable duplication of effort in the evaluation and application of airport inspection and survey data and the quality assurance of the separate products. Even with strict quality assurance processes in each sub-team, inconsistencies in critical airport data still occur.

The CAMI will improve quality and result in considerable efficiency gains by eliminating duplicative processes (see benefits table 3.7). Using GIS-based technology, a common graphic will be used to generate various airport map products. This will improve product quality by providing consistency in airport data across all chart products. CAMI will also support the creation of new products for use in modern cockpit display systems. These new products would meet existing requirements and directly support the FAA's goal of reducing runway incursions and improving safety. See Attachment 4 in the Appendix for a visual depiction of the Common Airport Mapping re-engineered process (current and "to-be" workflow).

Table 3.7: CAMI HPO Savings Summary

Initiative	Current Labor Hours	Savings (%)	Labor Hour Savings	Efficiency Savings	Contract Cost Savings	Supplies/ Equipment Savings
Common Airport Mapping Initiative	10,560	33%	3,520	$239,360		
Total Annual Savings (beginning in FY13)					**$239,360**	
Note: All costs are based on FY08 dollars.						

Implementation Cost for Initiative: To begin to realize the annual cost savings benefit as shown in the table above, by FY13, implementation of this initiative must be funded no later than FY11.

Table 3.8: CAMI HPO Implementation Costs Summary

Initiative	Hardware	Software Procurement	Software Development/ Conversion	Labor/ Contract	Training	Total
Common Airport Mapping Initiative	$22,000	$15,000			$10,000	$47,000

3.1.1.5 Integrated AVN Production Tracking Systems

The integration of the Procedure Tracking System (PTS) and Consolidated Production Control System (CPCS) processes will eliminate redundant databases and data entry procedures, resulting in considerable efficiency gains and improving data quality.

PTS is a centralized database for tracking and managing all IFP projects and tasks. Service area Flight Procedures Offices (FPOs) currently enter data for these projects and tasks into PTS, which tracks them from development through quality assurance, flight inspection, and charting. When the projects and tasks reach the charting stage, NACO's Charting Team manually enters the project data into the CPCS, which is used to track production, cross-reference data, and assemble the chart data for reproduction. By integrating PTS and CPCS, the IFP data will be transferred electronically from the PTS to the CPCS, eliminating manual data entry and resulting in a faster processing time and greater data accuracy. See Attachment 5 in the Appendix for a visual depiction of the AVN PTS Integration re-engineered process (current and "to-be" workflow).

Table 3.9: Integrated AVN Production Tracking Systems HPO Savings Summary

Initiative	Current Labor Hours	Savings (%)	Labor Hour Savings	Efficiency Savings	Contract Cost Savings	Supplies/ Equipment Savings
Integration of AVN Production Tracking Systems	3,500	98%	3,420	$232,560		
Total Annual Savings (beginning in FY13)					**$232,560**	
Note: All costs are based on FY08 dollars.						

Implementation Cost for Initiative: To begin to realize the annual cost savings benefit as shown in the table above, by FY13, implementation of this initiative must be funded no later than FY11.

Table 3.10: Integrated AVN Production Tracking Systems HPO Implementation Costs Summary

Initiative	Hardware	Software Procurement	Software Development/ Conversion	Labor/ Contract	Training	Total
Integration of AVN Production Tracking Systems			$625,000		$75,000	$700,000

3.1.1.6 Digital Topographic Maps across AVN

Replacing NACO's manual obstacle plotting procedures with digital processes will reduce the labor hours required for chart production, increase the accuracy of obstacle data, and enable cross-referencing of data with other digital datasets.

NACO currently uses paper quadrangles for plotting obstacle information, extracting elevation data, obtaining city shapes, and charting cultural and physical features. Using paper quadrangles for these activities requires labor-intensive manual manipulation and physical storage space. The USGS Digital Raster Graphics (DRGs) are electronic topographical maps that can be manipulated using a graphical software application. By replacing paper quadrangles with DRGs, NACO will eliminate the need to maintain physical quadrangles and enable cartographers to plot and update obstacle data in digital files. DRGs are maintained electronically and can be replaced as new DRGs become available, eliminating the need for physical storage space. DRGs are also geo-referenced, which makes plotting easier and more accurate and will allow cross-referencing with other digital graphics. See Attachment 6 in the Appendix for a visual depiction of implementing the use of digital topographic maps across AVN (current and "to-be" workflow).

Table 3.11: Digital Topographic Maps HPO Savings Summary

Initiative	Current Labor Hours	Savings (%)	Labor Hour Savings	Efficiency Savings	Contract Cost Savings	Supplies/ Equipment Savings
Digital Topographic Maps across AVN	32,500	13%	4,160	$282,880	$8,000	$56,300
Total Annual Savings (beginning in FY13)					**$347,180**	
Note: All costs are based on FY08 dollars.						

Implementation Cost for Initiative: To begin to realize the annual cost savings benefit as shown in the table above, by FY13, implementation of this initiative must be funded no later than FY11.

Table 3.12: Digital Topographic Maps HPO Implementation Costs Summary

Initiative	Hardware	Software Procurement	Software Development/ Conversion	Labor/ Contract	Training	Total
Digital Topographic Maps across AVN	$220,000	$62,500	$300,000		$50,000	$632,500

3.1.1.7 AVN Database Integration

As a data-driven organization, NACO's long-term success depends on the reliability and capacity of the technology it uses. In the context of comprehensive organizational change, NACO will undertake a database integration and system upgrade initiative that will strengthen the organization by eliminating redundant processes and replacing antiquated IT infrastructure with modern systems that are more reliable, easier to operate, have greater functionality, and are compatible with the agency's IT architecture. The AVN Database Integration initiative will improve the production processes and the overall quality of products that rely on the following source data:

- Obstacle Data
- Airport Data
- NAVAID Data
- Fix/Waypoint Data
- Military Training Route (MTR) Data
- Preferred, Terminal Enroute Control (TEC), and North American Route (NAR) Data
- Airspace Data
- Standard Instrument Departures (SID) and Standard Arrival (STAR) Data

The replacement of the Civilian Airspace Route System (CARS) is a key component of this initiative. CARS is critical to the creation of the DACS and the NavInfo file, which are included on the DAICD. It is also used to generate reports and files in support of NACO charting. CARS is a legacy system that runs on an unsupported VAX 4300 server. The system's antiquated COBOL programming makes troubleshooting extremely time consuming, imposes limitations on integrity checks needed for quality assurance, reduces the precision of data output, and requires frequent system maintenance. A new version of CARS would utilize data maintained by AVN for airports, NAVAIDs, fixes, airways, SIDs, and STARs as the source for DACS.

The second component of the AVN Integration initiative is the consolidation and enhancement of redundant database systems maintained by NACO and NFPO. NACO currently relies on National Airspace System Resources (NASR)/NFDD, NavCanada, and the National Geospatial-Intelligence Agency (DoD) for the airport and runway data used to create charts, publications, and digital products. The National Flight Procedures Office uses similar sources to maintain the AIRNAV/AVNIS, obstacle, and airspace fix databases in support of flight inspection and flight procedures development. Consolidation of these databases will eliminate redundant data collection and allow AVN to focus efforts on the integrity of fewer data sets. Modernization of these databases to meet AVN requirements is already underway. Once completed, system's enhanced capabilities will yield significant labor savings and its automated integrity checks will provide an additional layer of quality assurance. The upgrade will also streamline NACO's procedures for tracking charting updates. Completion of this modernization initiative is

scheduled for 2009. See Attachments 7 thru 14 in the Appendix for a visual depiction of these re-engineered processes (current and "to-be" workflow). System enhancements that will automate and streamline the compilation of MTR, Enroute, airspace, SID and STAR data will result in higher data quality and additional labor savings.

Table 3.13: AVN Database Integration HPO Savings Summary

Initiative	Current Labor Hours	Savings (%)	Labor Hour Savings	Efficiency Savings	Contract Cost Savings	Supplies/ Equipment Savings
AVN Database Integration – Airport Data	606	100%	606	$41,208		
AVN Database Integration – NAVAID Data	780	94%	730	$49,640		
AVN Database Integration – NAVAID Radar Data	168	42%	70	$4,760		
AVN Database Integration – NAVAID Data (CARS Replacement)	280	60%	168	$11,424		
AVN Database Integration – Fix/Waypoint Data	1,580	55%	865	$58,820		
AVN Database Integration – Military Training Route (MTR) Data	484	58%	282	$19,176		
AVN Database Integration – Preferred	1,350	43%	585	$39,780		
AVN Database Integration – TEC and NAR Data	130	38%	50	$3,400		
AVN Database Integration – Airspace Data	10,962	33%	3,648	$248,064		
AVN Database Integration – SID, STAR Data	4,500	100%	4,500	$306,000		
AVN Database Integration – Obstacle Data (Obstructions added, updated, dismantled OTMS)	32,500		21,396	$1,454,928		
AVN Database Integration – Obstacle Data (Documentum)	9,750		3,250	$221,000	$60,000	
Total Annual Savings (beginning in FY13)					**$2,518,200**	
Note: All costs are based on FY08 dollars.						

Summary of Implementation Cost for AVN Database Integration Initiative: Table 3.14 summarizes the implementation cost for the eight sub-initiatives, which fall under the category of AVN Database Integration. The cost reflects an estimated one-time cost, which will ensure the

implementation of the recommended initiative, in order to realize the total annual benefits identified in Table 3.13. To begin to realize the annual cost savings benefits by FY13, implementation of this initiative must be funded no later than FY11.

Table 3.14: AVN Database Integration HPO Implementation Costs Summary

Initiative	Hardware	Software Procurement	Software Development/ Conversion	Labor/ Contract	Training	Total
AVN Database Integration	$412,500		$4,875,000	$1,425,000	$90,000	$6,802,500

3.1.1.8 VFR Digital to Plate

NACO currently relies on labor-intensive manual compilation, contractor drafting support, and the use of film negatives to create VFR products. Automation of the VFR production process will improve the precision and quality of visual products, eliminate the need for contracted drafting support, enable NACO to sustain operations as older technology becomes obsolete, and reduce costs from labor and materials.

The current process for visual chart compilation requires NACO's cartographers to review and apply changes to paper standards by hand. The standards are then sent to a drafting contractor, who compiles the changes and prepares the next edition of each publication. When ready, the Charting Team sends the standards to NACO's Reproduction Team for the creation of single-line film negatives. Automation of the VFR production process will enable NACO's Visual Chart Sub-Team to compile visual charts digitally and provide them directly to the Reproduction Team, eliminating the need for contractor support. The use of digital files will also eliminate the negative engraving processes and the need for film, which has become scarce due to innovation in printing technology. See Attachment 15 in the Appendix for a visual depiction of VFR Digital to Plate re-engineered process (current and "to-be" workflow).

Table 3.15: VFR Digital to Plate HPO Savings Summary

Initiative	Current Labor Hours	Savings (%)	Labor Hour Savings	Efficiency Savings	Contract Cost Savings	Supplies/ Equipment Savings
VFR Digital to Plate (Charting Team)	280	100%	280	$19,040	$125,000	
VFR Digital to Plate (Reproduction Team)	Reproduction Team Savings Accounted for in Section 3.1.2					
Total Annual Savings (beginning in F13)	**$144,040 (not including Reproduction Savings)**					
Note: All costs are based on FY08 dollars.						

Implementation Cost for Initiative: To begin to realize the annual cost savings benefit as shown in the table above, by FY13, implementation of this initiative must be funded no later than FY11.

Table 3.16: HPO VFR Digital to Plate Implementation Costs Summary

Initiative	Hardware	Software Procurement	Software Development/ Conversion	Labor/ Contract	Training	Total
VFR Digital to Plate		$25,000		$200,000	$20,000	$245,000

3.1.1.9 Standardized Use of Sectional Aeronautical Chart (SRAC) AVN-Wide

NACO currently produces data files for the Instrument Approach Procedures Automation (IAPA) system using a specialized process that requires the creation of a custom color proof. The paper used to create the proof is no longer manufactured and is in limited supply. However, NACO already produces the Sectional Raster Aeronautical Chart (SRAC), a product for public sale that is very similar to the final files used for IAPA. By processing the SRAC for use in the current IAPA/future Instrument Procedures Design System (IPDS) system, NACO will realize savings in labor hours for processing and reproduction as well as materials and conserve its supply of scarce materials. See Attachment 16 in the Appendix for a visual depiction of the use of SRAC re-engineered process (current and "to-be" workflow).

Table 3.17: Standardized Use of SRAC HPO Savings Summary

Initiative	Current Labor Hours	Savings (%)	Labor Hour Savings	Efficiency Savings	Contract Cost Savings	Supplies/ Equipment Savings
Standardized Use of SRAC	370	100%	370	$25,160		$1,900
Total Annual Savings (beginning in FY13)					**$27,060**	
Note: All costs are based on FY08 dollars.						

Implementation Cost for Initiative: Benefits from this initiative can be realized without any initial investment in the implementation of the new re-engineered process.

3.1.2 Reproduction

3.1.2.1 Pre-Press Process

The pre-press function can achieve significant savings over a five year time frame through its transition from a manual film production process to a digital/Computer-to-Plate (CTP) process. Currently, a large portion of production is associated with manual film processes with an HPO plan to transition to all digital/CTP processes within two to three years. NACO has already started to systematically transition their pre-press production to digital/CTP, with the expectation that all pre-press production will be digital/CTP by FY11. In doing so, NACO will reap significant savings in both labor and material costs. Furthermore, NACO will realize several benefits to the quality and consistency of their products.

Computer-to-plate is an imaging technology used in modern printing processes. This technology allows an image that's created in a desktop publishing application to be output directly onto a printing plate. Among the many advantages of CTP, other than cost savings, include improved image quality, registration, and consistency, as well as increased productivity.

Going digital while utilizing CTP technology will effectively eliminate all manual processes in the pre-press production process (reducing process cycle time) accounting for approximately

11,000 annual process hours (see Table 3.18). The negative engraving process cycle time (PCT) will be effectively reduced by 23%, the Photo Imaging PCT reduced by 79%, and the Lithography PCT by 62% when the transition is complete (for a total pre-press PCT reduction of 35%). Table 3.18 summarizes the projected processing time reductions throughout the HPO performance period.

Table 3.18: Pre-Press Baseline Cycle Time vs. HPO Cycle Time Requirements

Pre-Press Process Description	Baseline Processing Time (Hrs)	HPO Annual Process Time Requirements					Total Processing Time Reduction (Hrs)	Total PCT Reduction (%)
		Year 1 (Hrs)	Year 2 (Hrs)	Year 3 (Hrs)	Year 4 (Hrs)	Year 5 (Hrs)		
Negative Engraving / Imaging	22,908	21,634	21,108	17,689	17,689	17,689	5,219	23%
Photo Imaging	4,842	2,984	1,435	1000	1000	1000	3,842	79%
Lithography	2,969	1,250	1,115	1,115	1,115	1,115	1,854	62%
Total	**30,719**	**25,868**	**23,658**	**19,804**	**19,804**	**19,804**	**10,915**	**35%**
Percent Reduction	--	**16%**	**23%**	**35%**	**35%**	**35%**	--	--

3.1.2.2 Press/Printing Process

As part of the HPO effort, the HPO Team conducted a benchmarking study to identify best practices in the printing industry. The team observed press operations at two peer organizations, Jeppesen, a commercial producer and distributor of aeronautical charts, and the Department of the Treasury's Bureau of Engraving and Printing (BEP), and collected data on presses from Williams & Heintz, a commercial printer that specializes in maps. Press specifications for each organization are included in Attachment 17 in the Appendix.

NACO's press equipment consists of two five-color sheet-fed offset presses and one two-color sheet-fed offset press. Among the equipment for which data was collected, NACO's presses are the oldest and have the lowest level of automation. Consequently, NACO's presses require more pressmen to operate and have a lower printing capacity than those included in the study. Refurbishment or replacement of NACO's presses would entail significant expenditures. Therefore, in light of the expected long-term decline in demand for paper products, the HPO Team does not recommend additional capital investment.

The optimal staffing level for press operation depends on a combination of factors related to the workload, the characteristics of the products, the number of presses, and the type of presses used. In regard to the type of presses, the level of automation is a critical overarching feature in determining the staffing requirements. While NACO's presses compare unfavorably to the presses of peer organizations in terms of press speed, paper size, the number of safety features, and level of automation, the HPO Team concluded that the efficiency of NACO's press staffing could be improved. NACO employed more pressmen per press than any of the peer organizations, in some cases more than twice as many. The HPO Team has determined the following as the optimal staffing level while maintaining safety standards in the press area:

- Reduce the number of full-time press operators of both five-color presses from five to four with one rotating alternate press operator to assist with adjustments, fill in for absent press operators, and provide floor support.

- Decommission the two-color press. Transfer work currently performed on the two-color press to the five-color presses. Eliminate two press operator positions for the two-color press.

Table 3.19 shows the baseline vs. the HPO press area staffing.

Table 3.19: Baseline vs. HPO Press Area Staffing

Description	Baseline FTE	HPO FTE	Comments
2-Color Harris Press	2	0	Press will no longer be used
5-Color Harris Press #1	5	4	Reduced by 20%
5-Color Harris Press #2	5	4	Reduced by 20%
Backup Pressmen	0	1	Back-up added
Supervisor	1	1	No changes
Total	**13**	**10**	**23% Total FTE Reduction**

Refer to Table 3.21 for the projected reduction in press area FTE's over the entire HPO performance period.

3.1.2.3 Quality Assurance Process

The baseline staffing for the quality assurance (QA) function includes a total of four (4) FTEs. Based on the elimination of USGS workload and more efficient QA practices, it has been determined that the QA function's most efficient staffing level is two (2) FTEs. Table 3.21 shows the projected reduction in QA staff over the entire HPO performance period.

3.1.2.4 Finishing Process

The baseline staffing for the finishing function includes a total of seven (7) FTEs working on one cutting machine and two folding machines. The staffing in this area is based on the minimum staffing required to operate the machines safely. The capacity of the machines dictates the operational efficiency regardless of staffing. Based on scheduling and minimum staffing required for the machines, the appropriate staffing level is five (5) FTEs (reducing the staff by 2 FTEs) operating the three pieces of equipment. Table 3.21 shows the projected reduction in FTE's over the entire HPO performance period.

3.1.2.5 Maintenance Process

The baseline staff-hours required for the maintenance function is approximately 4,687 hours. These hours include maintenance duties in negative engraving, photo imaging, lithography, press area, finishing, and Environmental Occupation Safety and Health (EOSH) commitments. In conjunction with NACO's transition to all digital/CTP processes, an approximate 25% reduction in the maintenance hours from the baseline requirement is anticipated. This digital transition will enable the maintenance group to achieve an optimal staffing level of two (2) FTEs by FY10. Table 3.20 summarizes the approximate change in maintenance workload hours from the baseline to the HPO.

Table 3.20: Baseline vs. HPO Maintenance Requirements

	Baseline			HPO		
Function	% of Time	Hours	FTE	% of Baseline Time	Hours	FTE
Negative Engraving	5%	234	0.13	5%	234	0.13
Photo Imaging	25%	1,172	0.66	0%	0	0.00
Lithography	10%	469	0.26	15%	703	0.40
Presses	50%	2,344	1.32	45%	2,109	1.19
Finishing	5%	234	0.13	5%	234	0.13
EOSH	5%	234	0.13	5%	234	0.13
Total	**100%**	**4,687**	**2.64**	**75%**	**3,515**	**1.98**

3.1.2.6 Management and Support Processes

The baseline staffing level for the management and support of the Reproduction Team was nine (9) FTEs. Due to the Reproduction Team's overall improvement in work processes, reduction in staffing to the most efficient levels, and work consolidation/reassignment, the appropriate management support staff level in the NACO HPO will be five (5) FTEs (a reduction of 4 FTEs). A projected timeline of this reduction is shown in Table 3.21.

3.1.2.7 Staffing Plan

Based on the reduced process cycle times and an analysis of the work requirements over the HPO performance period, NACO's HPO will be able to reduce the total FTEs by 33 (a net 47% reduction from the baseline). This will yield a savings of approximately $3.4M annually (60% cost reduction) once the transition to the new staffing plan is complete (targeted for FY11). Table 3.21 summarizes the FTE requirements and savings over the HPO five-year performance period in each of the reproduction processes. For a detailed staffing plan by position over the performance period, refer to Attachment 18 in the Appendix.

Table 3.21: Reproduction Baseline vs. HPO Staffing Plan & Projected Savings

Process Description	Baseline	HPO Annual FTE Requirements & Projected Savings						
	FTE	Year 1 FTE	Year 2 FTE	Year 3 FTE	Year 4 FTE	Year 5 FTE	Total FTE Reduction	Total % FTE Reduction
Negative Engraving / Imaging	16	13	12	12	10	10	6	38%
Photo Imaging	13	6	3	2	2	2	11	85%
Lithography	4	4	2	1	1	1	3	75%
Management & Support	9	6	5	5	5	5	4	44%
Presswork	13	10	10	10	10	10	3	23%
Quality Assurance	4	3	2	2	2	2	2	50%
Finishing	7	6	5	5	5	5	2	29%
Maintenance	4	3	2	2	2	2	2	50%
Total FTE	**70**	**51**	**41**	**39**	**37**	**37**	**33**	--
Percent % Reduction from Baseline	--	**27%**	**41%**	**44%**	**47%**	**47%**	**47%**	**47%**
Total Cost (millions)	**$5.68**	**$4.28**	**$3.72**	**$3.76**	**$3.74**	**$3.89**	--	--
Cost Reduction from Baseline (millions)	--	**$1.89**	**$2.71**	**$2.94**	**$3.24**	**$3.38**	--	--
% Cost Reduction from Baseline	--	**33%**	**48%**	**52%**	**57%**	**60%**	--	--

3.1.2.8 Materials and Equipment Savings

In addition to the process cycle time reduction from CTP, the digital technology will allow for savings in the maintenance of pre-press equipment and material/supply costs. Total projected HPO annual savings in maintenance and material/supply costs of approximately $430,000 by FY11 as summarized in Table 3.22:

Table 3.22: Reproduction Materials & Equipment Savings

Cost Driver	HPO Annual Materials & Equipment Savings				
	Year 1 Savings	Year 2 Savings	Year 3 Savings	Year 4 Savings	Year 5 Savings
Maintenance – Image Setters	$0	$0	$105,000	$105,000	$105,000
Materials – Film	$100,263	$200,525	$300,788	$300,788	$300,788
Materials – Film Chemicals	$7,380	$14,760	$22,140	$22,140	$22,140
Total	**$107,643**	**$215,285**	**$427,928**	**$427,928**	**$427,928**

3.1.2.9 HPO Implementation Costs for Reproduction

The transition from manual pre-press processing to the use of CTP technology will require the purchase of an additional CTP machine by FY10 to support NACO's current transition schedule. At an estimated cost of $300,000, NACO is expected to recover the investment in less than one year through maintenance contract and materials savings directly attributable to CTP, as shown in Table 3.22.

3.1.3 Distribution

3.1.3.1 Inventory Management and Quality Assurance (IMQA)

The baseline staffing for IMQA consists of a total of five (5) FTEs. This includes four (4) Inventory Specialists and one (1) Team Leader. IMQA is responsible for managing the warehouse inventory for FAA aero, DoD aero, DoD nautical and NOAA nautical, and forecasting print quantities for FAA aero and NOAA nautical products. There are currently two (2) Inventory Specialists responsible for DoD aero and DoD nautical products, along with other FAA products. With the elimination of DoD aero and DoD nautical products in FY10, IMQA will have a decrease in workload resulting in a reduction in staff by one (1) FTE, leaving a total of four (4) FTEs in FY11. Refer to Table 3.23 for the projected reduction in FTEs over the entire HPO performance period.

3.1.3.2 Agents/Government Sales and Services Sub-Team

The Agents/Government Sales and Services Sub-Team is responsible for the all aspects of the product ordering process, including setting up chart agent or Government agency accounts, processing orders, and collecting payments. The baseline staffing for the Agents/Government Sales and Services Sub-Team is 12 FTEs. There are 10 sales representatives in the group—seven (7) in charge of chart agent accounts and three (3) in charge of government agency accounts.

As of FY07, NACO's chart agent network is comprised of approximately 500 nautical and 2,000 aeronautical chart agents located throughout the U.S., as well as in a number of other countries. As part of this HPO, a new chart agent model, which will reduce a number of agents, is described in Section 3.3.2. Implementing these recommendations will allow the Agents/Government Sales and Services Sub-Team to reduce by seven (7) FTEs, yielding an average annual savings of $440,000 by FY11. Table 3.23 in the Staffing Plan section shows the projected reduction in FTEs over the entire HPO performance period. For more information regarding the proposed chart agent model, refer to 3.3.2.

3.1.3.3 Public Sales and Services Sub-Team

Streamlining the ordering process towards utilizing e-commerce will reduce the time intensive ordering options such as phone, email and fax orders. This will increase efficiency for public sales representatives to process orders and decrease their workload. This decrease workload will result in a projected reduction of three (3) FTEs in the Public Sales and Services Sub-Team by FY11. Table 3.23 in the Staffing Plan section shows the projected reduction in FTEs over the entire HPO performance period.

3.1.3.4 Distribution Team Support Staff

The Distribution Team support staff consists of management and support staff for all functions of the Distribution Team. The baseline staffing for the Distribution Team is a total of seven (7) FTEs. This includes one (1) Distribution Analyst Supervisor, two (2) Distribution Analysts, one (1) Financial Analyst, one (1) Management & Program Analyst, one (1) Logistics Management Supervisor and one (1) Traffic Management Specialist. Since the baseline period, one of the Distribution Analysts left the team and the position was not backfilled. With the reductions in the other groups, the Distribution Team will be able to reduce staffing by one (1) FTE (Distribution Analysis) for a total of six (6) FTEs and will continue with the current staffing level through FY11. The reorganization of NACO and NFPO into the National Aeronautical Information

Service (NAIS) is planned within FY09/FY10 time frame (see Section 3.2.3), eliminating duplicative staff positions. Therefore it is estimated that two (2) of the administrative positions will be eliminated after the reorganization to NAIS by FY13, which brings the original Distribution Team support staff to three (3) FTEs. Table 3.23 in the Staffing Plan section shows the projected reduction in FTEs over the entire HPO performance period.

3.1.3.5 Staffing Plan

Based on the proposed chart agent model, the requirement that chart agents use e-commerce for placing orders, and the anticipated increase of online orders from the public, NACO will be able to reduce the Distribution Team staff by 14 FTEs within the HPO performance period. This equates to a 39% reduction in staff and a savings of $1,094,323 over the five-year period, which is a 43% cost savings from the baseline. Table 3.23 summarizes the FTE requirements and savings over the HPO five-year performance period in each of the Distribution processes. For a detailed staffing plan by position over the performance period, refer to Attachment 19 in the Appendix.

Table 3.23: Distribution Baseline vs. HPO Staffing Plan & Projected Savings

	Baseline	HPO Annual FTE Requirements & Projected Savings						
Process Description	**FTE**	**Year 1 FTE**	**Year 2 FTE**	**Year 3 FTE**	**Year 4 FTE**	**Year 5 FTE**	**Total FTE Reduction**	**Total % FTE Reduction**
Distribution Team	7	6	6	6	6	4	3	43%
IMQA	5	5	5	4	4	4	1	20%
Agents/Government Sales & Services Group	12	10	8	6	5	5	7	58%
Public Sales & Services Group	12	11	10	9	9	9	3	25%
Total FTE	**36**	**32**	**29**	**25**	**24**	**22**	**14**	**--**
Percent % Reduction from Baseline	**--**	**11%**	**19%**	**31%**	**33%**	**39%**	**39%**	**39%**
Total Cost (millions)	**$2.51**	**$2.44**	**$2.36**	**$2.18**	**$2.21**	**$2.12**	**--**	**--**
Cost Reduction from Baseline (millions)	**--**	**$0.29**	**$0.48**	**$0.78**	**$0.87**	**$1.09**	**--**	**--**
% Cost Reduction from Baseline	**--**	**12%**	**19%**	**31%**	**35%**	**43%**	**--**	**--**

3.1.4 New and Increased Work Requirements

Beginning in FY09 and continuing beyond FY13, NACO/AVN will be able to meet documented growth in existing work, as well as, meeting requirements for new products and services. Furthermore, this additional and significant increased workload will be met without increasing existing resources. The annual labor hour savings described in Section 3.1.1, AVN Integration, will be re-directed towards the new and increased workload requirements. Without the HPO

labor hour savings, NACO would need to increase staff by a substantial amount, subsequently increasing its operating cost. The following describes the new and increased work requirements.

3.1.4.1 Enroute Automation Modernization (ERAM)

The ERAM Development Contractor (Lockheed Martin) has specified that Enroute aeronautical data be provided in an industry standard ARINC 424 data format for support of the ERAM system. The AVN produced NFD product is in this format, but additional enhancements/additions are required for the NFD to meet the ERAM requirements for international data for Mexico, Canada, the Caribbean, Pacific, and Atlantic. In order to accomplish this additional workload, resources will need to be shifted to this activity (see Table 3.24 for level of effort). Although not included as part of the NACO HPO savings benefit, this NACO initiative will result in a considerable cost savings to the FAA ERAM Program Office. This agency savings is based on eliminating the ERAM Program Office having to procure the data from commercially available data sources at a very high cost of over $850K annually. The additional annual workload requirements to be funded within the AVN program are shown in Table 3.24.

Table 3.24: Additional Annual ERAM Workload Requirements and Cost

FY13 and Beyond Requirements	Annual Labor Hours	Annual Cost of New Workload
Enroute Automation Modernization (ERAM)	1,040	$70,720

3.1.4.2 Common Airport Mapping Initiative (CAMI)

There is a critical need to reduce runway incursion accidents and incidents, and this target has been reflected in FAA Flight Plan Goals for a number of years. One of the key cornerstones to reducing runway incursions is for aircraft crews to have up-to-date airport surface movement diagrams/maps to use while taxiing in low visibility, low light, or unfamiliar conditions. For optimum safety, these surface movement diagrams should also be provided in an electronic display showing the aircraft's position on highly accurate airport surface diagrams. Creation of such needed digital detailed airport surface movement charts is a significant safety benefit, and will provide the airport surface information necessary to directly support high level FAA Flight Plan Goals for reduction of runway incursions. The additional annual workload requirements to be funded within the AVN program are shown in Table 3.25.

Table 3.25: Additional Annual CAMI Workload Requirements and Cost

FY13 and Beyond Requirements	Annual Labor Hours	Annual Cost of New Workload
Common Airport Mapping Initiative	3,520	$239,360

3.1.4.3 Obstacle Repository System (ORS)

Within the FAA there is a critical need for comprehensive obstacle data to support instrument procedure design, charting, and air traffic control required MSAW and MVA production. Although different, all of these products are dependent on a comprehensive obstacle information source. Within AVN there are currently two different obstacle databases, which contain (with some overlap) obstacles of interest for specific production needs. In addition, there is a significant backlog of obstacle accuracy determinations for obstacles, which impact procedure

design and also have charting impact. In order to meet AVN production requirements in an efficient manner, AVN needs to integrate obstacle databases, resolve conflicts between internal obstacle databases, and make progress on resolving the current growing back-log of existing unverified obstacles that impact instrument procedure design and charting. The additional annual workload requirements to be funded within the AVN program are shown in Table 3.26.

Table 3.26: Additional Annual ORS Workload Requirements and Cost

FY13 and Beyond Requirements	Annual Labor Hours	Annual Cost of New Workload
ORS Increasing Workload	11,958	$813,144
ORS Backlog of Obstacle Input	17,936	$1,219,648
Total	**29,894**	**$2,032,792**

3.1.4.4 New Aeronautical Chart Products

Due to changes to the NAS and as the result of new FAA charting requirements there will continue to be a need to develop new aeronautical chart products to support both air traffic operations and U.S. aviation needs. Some recent examples of new charting requirements include the development and support of FAA IFR Enroute charts to replace DoD canceled charts of the Caribbean, Pacific and Atlantic areas, development of new VFR Terminal Area Charts, and development of new off-shore IFR charts to support efforts such as the West Atlantic Route System (WATRS). These on-going chart development requirements will continue to demand NACO support in the future. The additional annual workload requirements to be funded within the AVN program are shown in Table 3.27.

Table 3.27: Additional Annual Workload from New Aeronautical Charts

FY13 and Beyond Requirements	Annual Labor Hours	Annual Cost of New Workload
New Aeronautical Chart Products	922	$62,719

3.1.4.5 Radar Video Maps (RVM)

Production of RVMs is critical for supporting Terminal Air Traffic operations. The production of RVMs, which is funded by ATO-T, has been expanding for many years. The increase in the number of RVMs produced each year is attributed to the introduction of Performance-Based Navigation (PBN) terminal procedures into the NAS, as well as the deployment of new Air Traffic Control (ATC) systems to high impact airports (e.g., STARs), and the shifting of older ATC systems to smaller airports not previously serviced by radar. NACO has been tracking the number of RVMs produced for many years, and based on this historical data they have projected that the workload will increase by about 300 RVMs a year for the next 5 years. NACO's projection is substantiated by planned increases in FAA Flight Plan goals for PBN terminal procedures over the next several years. The additional annual workload requirements to be funded outside the AVN program through separate Ops Funding are shown in Table 3.28.

Table 3.28: Additional Annual RVM Workload

FY13 and Beyond Requirements	Annual Labor Hours	Annual Cost of New Workload
Radar Video Maps (RVM)	14,256	$969,408

3.1.4.6 Increase in New and Amended Instrument Flight Procedures and Non-Procedures Revisions

Due to the growth in the aviation industry, National Airspace System (NAS) traffic is expected to continue increasing over the next 20 years, increasing the risk of flight delays, schedule disruptions, choke points, and inefficient flight operations, particularly when inclement weather and other factors impact airport capacity.

Through NextGen, the FAA is addressing the impact of traffic growth by increasing NAS capacity and efficiency while simultaneously improving safety, environmental impacts and user access to the NAS. The FAA is implementing new routes and procedures that leverage emerging aircraft navigation capabilities.

In support of increasing the capacity of the NAS and the Agency's NextGen initiative, the Agency is requesting to increase the current production rate of Performance-Based Navigation IFPs (i.e., Required Navigation Performance – RNP, Wide Area Augmentation System – WAAS) as early as 2008 and is expected to continue expanding at an increasing rate over the next 20 years.

After the publication of the IFP, AVN is responsible for life-span maintenance of the procedure. An IFP must be continually maintained until it is cancelled. IFP amendments are an integral part of the continual maintenance activity. Amendments or revisions are issued based on various changes, which occur after an IFP is published. Examples are user/customer request changes, criteria changes, new obstacle constructions, airport infrastructure changes, magnetic variation changes, and navigational aid facility relocations.

As IFP production increases and inventory continues to expand, the number of required amendments will increase at an equivalent rate. Historically, the NFPO has accumulated a large backlog of IFP maintenance workload. As the IFP development and revision process is automated, this backlog will be accomplished by increasing the current rate of production to be worked by NACO.

Based on a historical trend on the increase of non-procedural revisions over the last several years, a 12% increase is expected for at least the next 20 years. Factors that play a role in the need to make a non-procedural change to a chart product are as follows: any change at an airport; a communication type of change; airport construction; or an enhancement to a communication system; etc.

With the efficiency gains realized from the process re-engineering activities identified in this document, this additional workload can be accomplished without any additional staffing, thus creating a cost avoidance as shown in Table 3.29.

Table 3.29: Additional Annual Workload from IFP and Non-IFP Revisions

FY13 and Beyond Requirements	Annual Labor Hours	Annual Cost of New Workload
Increase in Original IFP Workload	4,200	$285,600
Increase in IFP Amendment Workload	8,610	$858,480
Increase in Non-Procedural Revision Workload	21,578	$1,467,314
Total	**34,388**	**$2,338,394**

3.2 Organizational Chart and Staffing

3.2.1 NACO / NFPO Process Integration

The NACO HPO will merge with the NFPO by FY10, creating a new organizational structure. This new structure will be an integral part of the implementation of the AVN Integration Initiatives described in Section 3.1.1. Business process re-engineering efforts supported by developing and planning for new information technologies will facilitate the integration of most activities within NACO and NFPO. Sophisticated IT systems with built in business rules will require staff in both organizations to have a common set of higher IT and aeronautical information skills, and less manually-oriented specialized cartographic and procedures development skills. Through this initiative, the number of FTEs in these organizations will be reduced. The resulting integrated organization will reduce costs, increase production capacity, and improve quality. Integration will also result in shorter delivery times to customers, and lower unit costs for products and services. The NACO HPO and NFPO combination will occur in two phases.

3.2.2 Phase One – HPO Organization Chart and Staffing

Phase one of the HPO will occur in FY09. This phase of the integration effort will combine all IT planning, data services, and digital product planning and development into a single Integrated IT and Data Services Team (refer to Attachment 20 in the Appendix for the Phase 1 'to be" organizational chart). This organizational structure will support all IT planning and development necessary to support this HPO Plan. It will ensure that AVN systems and processes are properly integrated and designed consistent with the NAS IT Enterprise Architecture and future FAA/ATO data stewardship/federated database model requirements. This organizational structure is also necessary to support many of the re-engineered processes presented in the HPO Plan, which eliminate duplicate data maintenance work/processes and streamline production processes of digital products.

3.2.3 Phase Two – NACO HPO/NFPO Integration

The second phase, to be implemented in FY10, will integrate all production components and associated staff support in NACO and NFPO. This organizational structure supports a next level of business process re-engineering where all activities from development through publication (except flight inspection) involving Terminal and Enroute Instrument Flight Procedures as well as Visual Aeronautical Charts and support products are integrated in a single team (refer to Attachment 21 in the Appendix for the Phase 2 "to be" organizational structure). This organization, to be called the National Aeronautical Information Service (NAIS), will support a further reduction in FTEs beyond the initiatives presented in the HPO Plan through more efficient allocation of work and the elimination of overlapping activities. Work activities currently divided into specialized skill areas with some overlapping activities, can be assigned to a single team with common IT and aeronautical information skill sets. These streamlined processes will also improve quality by ensuring that consistent data is used throughout the production process.

The current process for Enroute airways is a good example of how NACO and NFPO have overlapping activities. Currently, NACO receives requests from the ATO-Airspace and Rules Group to validate airway change proposals prior to Notice of Proposed Rule-Making publication. In addition to providing certification of the proposed description, NACO also provides air traffic with graphics of the proposed changes. NACO reviews airway changes throughout the regulatory

process and upon final rule publication in the Federal Register updates its airway data files in support of DACS, NFD, and NACO charting. NACO reviews all supporting airway data such as fixes, NAVAIDs, and altitudes to ensure accurate and timely publication concurrent with airway publication. The NACO Airspace Section is also required to identify all NACO charts and create/provide the charting sections with airway change lists confirming published changes. At about the same time NACO is working airway proposals, specialists at the NFPO are using TERPS to certify airway requirements prior to flight check and publication of airway changes. This responsibility includes creation of 8260-2 and 8260-16 forms for airway fixes and altitudes. The current processes are not in harmony with each other and need to be improved.

Combining administrative support staffs within NACO, and between NACO and NFPO, would recognize further reductions in FTEs. There are currently three separate administrative groups within NACO alone performing similar administrative services, in addition to the duplication between NACO and NFPO. Through the elimination and restructuring of the current management levels at NACO, additional FTE's could be reduced, further meeting the FAA organizational guidelines. See Attachment 21 in the Appendix for a depiction of Phase II.

Benefits: An annual cost savings benefit of $1.54M will be realized as early as FY13 by implementing the proposed re-organization. Implementing the proposed organization in phases will allow for a phased reduction in FTE for a total reduction of 12 in NACO (18 total) by FY13.

Implementation Cost for Initiative: The implementation cost for this initiative is primarily to cover an increase in PC&B, which will occur with the proposed restructuring of management, position types, and position grades. The cumulative cost for this initiative covering the period from FY09 through FY13 will be $2.2M. The increased PC&B will be a phased increase and is offset by a planned phased attrition rate beginning in FY11.

3.3 Business Model and Strategy

3.3.1 Pricing Model – Paper Based Products

To account for an FY07 recoverable cost shortfall of approximately $14M, the HPO Team developed a pricing methodology and recommended new prices for NACO's line of paper products. The team also recommended new, standardized discount rates for customer groups, subscriptions, and product sets to simplify pricing, increase revenues, reduce waste, and encourage bulk and advance orders.

3.3.1.1 Pricing Model Methodology

The pricing model methodology developed by the HPO Team is based on the principle of recovery of allowable costs pursuant to Public Law 106-181. Using production, sales, and cost data from FY06 and FY07, the team calculated prices for NACO's paper products that would fully recover allowable costs for sales to public customers. The team then adjusted each product's price according to two factors: how far below the calculated price the current price was, and the estimated price sensitivity of the product's primary customer groups. In the long term, the HPO Team envisions that NACO will continue to evaluate prices annually, adjusting them as necessary to minimize the gap between recoverable costs and revenues.

3.3.1.2 New Discount Structure by Customer Segment

During FY07, NACO offered discounts ranging from 10% to 100% (free) to customer groups representing three major categories—the general public, DoD, and the FAA (internal customers). The HPO Team reviewed the discount structure for each customer group and proposed several changes with the goal of increasing total revenue.

3.3.1.2.1 DoD Discount Structure

The DoD is NACO's single largest customer group, purchasing nearly 50% of NACO products during the last two years. In FY07, DoD received a weighted average discount of 86% on paper products. While NACO produces some products on behalf of DoD and benefits from DoD's cooperation in the production of others, the HPO Team was unable to justify offering a higher discount to DoD than to other federal agencies. Consequently, the team recommended that DoD's discount be reduced to 40%, the rate offered to NACO's other federal customers.

3.3.1.2.2 Chart Agent Discount Structure

Chart agents, who purchase products from NACO and resell them for profit, represent the single largest public customer group and benefit from a 40% discount on NACO products. Although the discount structure remains the same for chart agents, the model as a whole has been improved significantly for the HPO. Section 3.3.2 contains a complete description of the changes made to the chart agent agreement.

3.3.1.2.3 FAA and Other Government Agencies Discount Structure

Prior to the HPO initiative, FAA customers received NACO products at no cost and without restriction. As a result, NACO filled a significant number of standing orders from FAA customers without being able to verify receipt or use of the products. Furthermore, NACO was forced to bear the full cost of products ordered for FAA use. In order to increase accountability and reduce waste, it was recommended that NACO institute a pricing structure for internal customers at a 40% discount beginning in FY09. NACO stands to benefit from increased revenues and the expected reduction in unused charts will reduce costs to the FAA as a whole. The 40% discount for FAA internal customers will be the same discount offered to all other federal agencies.

3.3.1.2.4 Special Price Groups

Among the other customer groups, there was little opportunity for a significant increase in revenue through changes to the discount structure. Federal law requires that free charts be distributed to the Federal Depository Libraries, the Library of Congress, Congressional offices, and the National Archives. The team recommends, where products are available on digital media, NACO should provide these products in the format with the lowest cost. Public schools and libraries represent a very small percentage of sales with a 10% discount. All other public customers, including private citizens and commercial enterprises, pay full price for NACO products.

3.3.1.3 New Pricing Structure for Subscription and Sets

Prior to the HPO initiative, NACO offered a range of discounts on subscriptions. Subscriptions are orders for multiple editions of a single product or a set of products to be issued over a period of six months or a year. They require payment at the time of sale. Subscription sales require less effort in terms of customer service support and payment collection than processing multiple one-time sales from the same customer. Recognizing this, the HPO Team sought to raise prices and standardize subscription discounts while at the same time maintaining prices at a level that would

encourage purchases of subscriptions. To reduce order processing time and costs, the team also instituted a discount for full product sets.

The process for adjusting subscription prices involved two steps. First, the team recalculated subscription prices based on the new prices established for constituent products. The team then applied a discount of 0% (no discount), 10%, 20%, or 40% to the subscription price depending on the following factors: the number of editions or items in the subscription, the price sensitivity of the primary customer groups, the availability of alternatives, and the discount currently offered for the subscription. As a result of this process, the average discount on subscriptions increased from 12.3% to 14.6%. A 10% discount was applied to full product sets.

3.3.1.4 Projected Impact of New Pricing Structure

Production, sales, and cost data for paper products from FY06 and FY07 were used to estimate the effect of changes to the pricing structure on revenues given historical demand. The team projects the new pricing structure will increase revenues by up to $11.8M (if demand remains stable), thus reducing the recoverable gap from approximately $12.3M down to nearly zero, maximizing overall allowable cost recovery. The $11.8M revenue projection is based on the new pricing and discount structure against the FY07 demand for each customer group. However, to account for the transition time/delays to the new structure and any decreased demand, a more conservative revenue projection of $8.9M (75% of maximum revenue projection) is anticipated. The increased revenue projection and reduced recoverable gap is in-line with the legislation mentioned earlier (Public Law 106-181) on what NACO is allowed to recover. Table 3.30 summarizes the projected impact of the new pricing structure on paper products.

Table 3.30: Projected Impact of New Pricing Structure

Customer Group	FY07 Production Cost (A)	FY07 Recoverable Cost (B)	FY07 Non-Recoverable Cost (C)	FY07 Revenue (D)	FY07 Recoverable Gap (B + D)	Projected Revenue (E)	Projected Recoverable Gap (B + E)
FAA	($2,663,072)	($2,103,042)	($560,030)	$0	($2,103,042)	$2,492,836	$389,794
DoD	($14,596,624)	($11,332,513)	($3,264,111)	$3,863,610	($7,468,903)	$8,566,231	($2,766,282)
Chart Agents	($14,804,015)	($11,307,845)	($3,496,170)	$10,568,897	($738,948)	$11,542,452	$234,607
Public (Full Price)	($4,915,097)	($3,993,060)	($922,037)	$2,969,185	($1,023,874)	$6,438,577	$2,445,517
Public 40%	($471,505)	($375,044)	($96,462)	$201,338	($173,705)	$399,134	$24,090
Public 10%	($31,798)	($25,704)	($6,093)	$20,783	($4,921)	$40,792	$15,088
Free and Replacement	($1,023,793)	($759,482)	($264,311)	$0	($759,482)	$0	($759,482)
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

3.3.2 Chart Agent Model

To meet the goals of aeronautical safety first, NACO's products are currently available to public customers worldwide through mail, telephone and Internet orders. NACO's chart agent network increases the distribution of aeronautical products by providing additional points of sale in areas frequented by NACO's customers, such as airports and flight schools. This model allows chart retailers to determine the extent of additional distribution. However, they are not allowed to sell to other businesses that will resell the products (known as Sub-Agents). Furthermore, chart agents are free to determine which NACO products they sell without restriction to the public.

Currently, NACO offers chart agents a 40% discount, which creates an opportunity for profit, and the ability to return obsolete merchandise for credit, which reduces the risk to the agent from fluctuations in sales. The credits from returned merchandise are applied towards future agent purchases, thus reducing NACO's revenue.

3.3.2.1 Evaluating the Current Chart Agent Model

In FY07, NACO's chart agent network was comprised of approximately 500 active nautical and 2,000 active aeronautical chart agents located throughout the U.S., as well as in a number of other countries. Average net sales per aeronautical chart agent in FY07 were just under $4,700, an increase of about $150 over FY06. However, sales in both years were heavily weighted toward the largest aeronautical chart agents. In FY07, the highest-selling 3% of aeronautical chart agents accounted for 50% of all aero chart agent sales, with the six highest-selling agents alone accounting for about 30% of sales. Net sales per nautical chart agent were $4,348 in FY07, a slight decrease from FY06. Nautical chart agent sales were also weighted toward the largest agents, with the five highest selling agents accounting for 32% of sales.

3.3.2.1.1 Average Return Rate

In FY07, nearly half of all aeronautical chart agents (1,021) had returned more than 20% of products purchased, reducing NACO revenue and violating the chart agent agreement. The average return rate among all aeronautical chart agents was greater than 24% in FY07. The average return rate for those agents above the 20% limit equals 39.8%. Since returns cannot be resold, NACO bears the full cost of initial production and distribution of those charts returned. In FY07, the cost of returns above the 20% level was approximately $750,000 for aeronautical chart agents.

3.3.2.1.2 Number of Agents below Sales of $500

In FY07, approximately 20% of all aeronautical chart agents had yearly net sales below $500. This number represented an improvement of about 3% from the previous year. Slightly more than 30% of nautical agents had less than $500 in sales in FY07, also an improvement from FY06. The administrative expenses of maintaining the chart agent model consist of sales materials, the production of agent newsletters, new agent kits, special notices, other communication, and shipping costs.

3.3.2.2 HPO Chart Agent Model

NACO recognizes that a wide dissemination of aeronautical and nautical navigation data is critical to ensuring the safety of air and sea travel. Therefore, in addition to selling products directly to the public through NACO's web site, NACO maintains a network of chart agents to ensure that aeronautical and nautical navigation products are widely available. In order to enhance the chart agent model to run in a lean and efficient manner in-line with HPO goals, the following changes will be made:

- Ensure strict compliance with the current return policy by denying credit to chart agents that return 20% or more of merchandise ordered. Based on FY07 quantities, this will achieve an estimated savings of nearly $750,000 per year.
- Increase chart agents' minimum sales requirement from $500 to $5,000 per year. By increasing the minimum sales requirement, NACO will provide agents with an incentive to

increase sales. This change will also reduce the total number of agents, thereby reducing the number of staff NACO needs for contract administration and records maintenance.

- Require chart agents to place orders online. This will consolidate sales records and eliminate the need for customer service representatives to take orders by telephone.
- Permit chart agents to create Sub-Agent networks allowing smaller businesses, which do not meet the new minimum requirements, to continue to sell NACO products. Chart agents are currently prohibited from reselling NACO's aeronautical and nautical products to other vendors.
- Conduct a survey every six months to solicit feedback and monitor chart agents' satisfaction with NACO's service. Chart agents are a significant component of NACO's current public distribution strategy and are uniquely able to collect information about the public's demand for aeronautical and nautical products. NACO should utilize chart agents to increase the NACO's responsiveness to public demand as well as to ensure that NACO is providing the agents themselves with the resources they need to distribute NACO's products.

The team recommends a phased implementation of the changes above to ease the chart agents' transition to the new requirements. As a first step, the Distribution Team will begin notifying chart agents of the impending changes to the chart agent agreement by October 1, 2008. Chart agents will be given one year to demonstrate their ability to comply with the new requirements. Beginning on October 1, 2009, agents will be required to sign and abide by the new agreement. The projected HPO savings from this new chart agent model are summarized in Table 3.31.

Table 3.31: Agent Model Projected Annual HPO Savings

Expense Type	HPO Annual Savings
Returns above 20%	$750,000
Distribution Staff FTE	$375,000
Administrative Expenses	$107,800
TOTAL	**$1,232,800**

3.3.3 Miscellaneous

3.3.3.1 DoD Catalogs

By the beginning of FY10, NACO will no longer sell DoD aeronautical or nautical products. NACO currently produces and distributes a catalog for both DoD aeronautical and nautical products at an annual cost of nearly $100,000. Based on the FY07 figures, the expected annual savings from discontinuing the DoD catalogs is expected to be approximately $100,000 over the HPO period (starting FY10). Table 3.32 summarizes the savings from the elimination of DoD catalogs.

Table 3.32: DoD Catalog Elimination Savings Summary

DoD Catalog Description	FY 2007 Quantity	FY 2007 Costs	Cumulative Expected Savings (FY 2010-13)
DoD Aeronautical Catalog	5,052	**$8,707**	**$34,828**
Production		$6,668	
Distribution		$2,039	
DoD Nautical Catalog	34,844	**$90,536**	**$362,144**
Production		$47,389	
Distribution		$43,147	
Total	**39,896**	**$99,243**	**$396,972**

3.3.3.2 Facility Space Savings

NACO's printing and distribution operations are currently housed in a 142,810 ft^2 facility in Glenn Dale, Maryland. The building is owned by the General Services Administration (GSA) and leased by NACO at a cost of $2.97M per year. Approximately 29,008 $ft.^2$ of NACO's warehouse space is currently occupied by DoD products, which NACO currently distributes, and supplies for the Reproduction Team's Photo Imaging Sub-Team. The annual cost of this space is nearly $605,000. As of FY10, NACO will no longer distribute DoD products, and the changes to NACO's pre-press processes will eliminate the need for photo imaging supplies. NACO will be able to return the unoccupied space to the GSA for an annual savings of approximately $605,000. Table 3.33 summarizes the savings.

Table 3.33: Space Savings Summary

Space Description	Square Footage	Annual Cost
Glenn Dale Facility (DoD warehouse space and Reproduction space)	29,088	$604,956

3.3.3.3 Facility Services Savings

NACO currently provides space in its Glenn Dale and Silver Spring facilities to the FAA ATO-A. Although ATO-A currently pays NACO for the use of the space, ATO-A does not pay for any portion of the services associated with these facilities, such as security and on-site health care. The HPO Team recommends that NACO begin charging ATO-A for these services in proportion to the amount of space leased and the number of employees on-site. In doing so, NACO would save approximately $194,000 annually beginning in FY09. Table 3.34 shows the potential benefit to NACO from recovering these facilities service costs.

Table 3.34 Facility Service Costs Summary

Facility Service	Total Cost	ATO-A Share (%)	ATO-A Share ($)
Glenn Dale, MD Facility			
Service Contract Cost	$512,528	18.85%	$96,624
Nursing Service Cost	$9,784	10.28%	$1,006
Glenn Dale Sub-total	**$522,312**		**$97,630**
Silver Spring, MD Facility			
Security Service	$641,388	9.59%	$61,504
Security System Maintenance	$23,203	9.59%	$2,225
Security System Service Center	$25,757	9.59%	$2,470
Health Unit Services	$24,255	8.44%	$1,995
Above Standard Electrical	$211,000	9.59%	$20,233
SSMC Operating Costs	$38,845	9.59%	$3,725
Internal Mail Service	$31,630	15.23%	$4,819
Silver Spring Sub-total	**$996,078**		**$96,971**
TOTAL	**$1,518,390**		**$194,601**

SECTION 4: EXPECTED SAVINGS, PERFORMANCE TRACKING AND CONTROL, IMPLEMENTATION, AND CONTINUOUS IMPROVEMENT

4.1 Expected Savings/Financial Impact and Costs

4.1.1 Expected Savings/Financial Impact

The NACO HPO will realize significant savings throughout the five-year time frame, with year five realizing the most savings. The year five annual savings of $15.2M is expected to continue on an annual basis beyond the HPO performance period. In addition, the new pricing structure will increase revenues annually by a projected $8.9M. As NACO implements the HPO initiatives, an annual total financial impact of approximately $24M (cost savings plus increased revenue) is projected by FY13. Over the entire five year HPO performance period, estimated cumulative impact is projected at $90M. The final year savings from the baseline cost estimate is approximately 28%. The increased revenue from the new pricing model is expected to continue after the five year HPO time frame at least in the short term until further analysis of digital pricing impact can be achieved. Table 4.1 summarizes the entire HPO projected cost savings and total financial impact, and Table 4.2 summarizes the FTE savings.

Table 4.1: Summary of Total HPO Savings and Financial Impact

		Projected Annual and Cumulative Benefit from HPO (millions)					
Section	Description	Year 1 (FY 2009)	Year 2 (FY 2010	Year 3 (FY 2011)	Year 4 (FY 2012)	Year 5 (FY 2013)	Total 5 year ($)
3.1.1	AVN Integration	$0.30	$1.80	$3.00	$5.00	$7.00	$17.10
3.1.2	Reproduction	$2.00	$2.93	$3.37	$3.67	$3.80	$15.77
3.1.3	Distribution	$0.29	$0.48	$0.78	$0.87	$1.09	$3.51
3.2.3	NACO/NFPO Integration	$0.00	$0.00	$0.00	$0.40	$1.54	$1.94
3.3.2	Chart Agent Model	$0.00	$0.86	$0.86	$0.86	$0.86	$3.44
3.3.3.1	Catalog Elimination	$0.00	$0.10	$0.10	$0.10	$0.10	$0.40
3.3.3.2	Facility Space	$0.00	$0.60	$0.60	$0.60	$0.60	$2.40
3.3.3.3	Facility Services	$0.19	$0.19	$0.19	$0.19	$0.19	$0.95
	Total Savings	**$2.78**	**$6.96**	**$8.90**	**$11.69**	**$15.18**	**$45.51**
3.3.1	Increased Revenue/Pricing Model	$8.9	$8.9	$8.9	$8.9	$8.9	$44.50
	Total Benefit	**$11.68**	**$15.86**	**$17.80**	**$20.59**	**$24.08**	**$90.01**

Table 4.2: Summary of Total HPO FTE Savings

		Projected Annual and Cumulative Benefit from HPO (In FTEs)					
Section	Description	Year 1 (FY 2009)	Year 2 (FY 2010	Year 3 (FY 2011)	Year 4 (FY 2012)	Year 5 (FY 2013)	Total 5 year ($)
3.1.2	Reproduction	19	10	2	2	0	33
3.1.3	Distribution	4	3	4	1	2	14
3.2.3	NACO/NFPO Integration	0	0	0	3	7	10
	Total Benefit	**23**	**15**	**6**	**6**	**9**	**57**

4.1.2 Implementation Costs Summary

Nearly all of the implementation costs are associated with the AVN Integration described in Section 3.1.1. To ensure the cost savings are realized by FY13, the envisioned organization must be implemented prior to the end of FY12. Therefore, the estimated implementation cost of $17M must be funded by FY11. The Reproduction implementation cost of $0.30M for an additional CTP machine should be funded by FY10 for the full benefit. Table 4.3 summarizes the projected HPO implementation costs.

Table 4.3: Summary of Projected HPO Implementation Costs

Initiative	Hardware/ Equipment	Software Procurement	Software Development/ Conversion	Labor / Contract	Training	Total
AVN Integration	$0.82 M	$0.63 M	$9.24 M	$5.77 M	0.54 M	$17.0
Reproduction	0.30 M	$0	$0	$0	$0	$0.30
Total	**$1.12 M**	**$0.63 M**	**$9.24 M**	**$5.77 M**	**$0.54 M**	**$17.3 M**

4.1.3 Additional Workload Cost Summary

As mentioned in Section 3.1.4, NACO/AVN will realize new and increased work requirements in addition to the baseline requirements during the HPO time frame. These new requirements represent an equivalent of approximately 47 FTE's costing around $5.7M annually. Due to the NACO HPO changes, it is expected that the additional 84,020 annual labor hours will be met using the significant amount of resource savings through the efficiency gains described in Section 3. Approximately $1M will be funded separately for the additional RVM and ERAM workload and the remaining $4.6M cost avoidance will be achieved with the HPO implementation. Table 4.4 summarizes the additional work requirements and associated costs.

Table 4.4: Additional Workload Requirements Summary

Section	FY13 and Beyond Requirements	Annual Labor Hours	Annual Cost of New Workload
3.1.4.1	Enroute Automation Modernization (ERAM)	1,040	$70,720
3.1.4.2	Common Airport Mapping Initiative (CAMI)	3,520	$239,360
3.1.4.3	Obstacle Repository System (ORS)	29,894	$2,032,792
3.1.4.4	New Aeronautical Chart Products	922	$62,719
3.1.4.5	Radar Video Maps (RVM)	14,256	$969,408
3.1.4.6	Increase in New & Amended IFP and Non-Procedures Revisions	34,388	$2,338,394
	Total	**84,020**	**$5,713,393**

4.2 Performance Tracking and Control

4.2.1 Performance Management Plan (PMP)

A PMP will be created to evaluate the HPO's performance in each of the initiatives described in the Envisioned Organization. The PMP will include, but may not be limited to, a performance management team structure, surveillance/performance evaluation methods and plans, documentation requirements, corrective action plans, reporting requirements, and a work change notification plan. In addition, ISO quality objectives and metrics will be established in the AVN Quality Management System (QMS) to measure improvements in the quality of products and

services. The PMP and ISO QMS will ensure that the HPO implementation and performance goals are met.

4.2.2 HPO Cost and Savings Tracking Report

The HPO Team created an HPO Cost and Savings Tracking Sheet to capture and monitor actual cost and savings against the baseline over the five-year performance period. There are four sections to the tracking report:

- **Actual Costs** – The report allows NACO to track costs and savings by labor and non-labor categories, such as equipment costs, material and supply costs, travel costs, and other costs. This is a higher level report that provides an overview of costs and savings at the agency level.
- **COMPARE Costs** – The baseline and HPO labor and non-labor costs were entered into COMPARE. The tracking sheet covers four sections grouped by COMPARE: Personnel Costs, Material and Supply Costs, Other Specifically Attributable Costs, and Overhead Costs.
- **Initiative Tracking** – Each initiative has its own report which includes a *Before and After Tracking* table with key metrics, costs and revenue, and a *Financials Tracking* table that shows revenue impact, cost savings, and return on investment. Initiatives include the pricing model, Reproduction and Distribution staffing analysis, chart agent model and the AVN Integrated initiatives.
- **Actual Savings Summary** – This sheet summarizes the costs savings and impact on revenue for each initiative across the five year HPO performance period.

4.3 HPO Implementation

4.3.1 Implementation Plan

The overarching objective of the HPO implementation will be to transform NACO from its current state to the envisioned organization efficiently and without any negative impact on NACO's sustained performance of core activities. The HPO Team was mindful of the feasibility of implementation in developing recommendations for the NACO HPO. The HPO Team and NACO's leadership will jointly develop an implementation plan that identifies clear and achievable goals, specifies a realistic timetable for the change initiatives, and delineates clear roles and responsibilities for NACO/AVN staff. As a long-term initiative, NACO staff will begin to monitor organizational performance more closely through the use of performance metrics. As part of the HPO effort, the tools created to enable NACO staff to track progress toward the envisioned organization will be explicitly linked to implementation milestones. Full implementation of the envisioned organization is expected to be complete by the fifth year of the HPO period (FY13).

Managing the workforce transformation required to implement the HPO is a critical element of the effort. Since the beginning of the process, avoiding a costly and disruptive reduction in force has been a principal concern of the FAA leadership. The HPO Team recognized early on that the high number of NACO employees that would become eligible for retirement during the HPO period represented both a threat and an opportunity for the organization. By communicating the organization's plan effectively to their employees, the HPO Team anticipates that the NACO leadership will be able to achieve the necessary workforce reduction through attrition. To reach

the Reproduction Team's optimal staffing levels within the projected time frame, the HPO Team recommends that NACO pursue buy-out authority.

4.3.2 Training Program

An enhanced training program is critical to ensure a successful transition to the Envisioned Organization. Formal training will be needed to transition the workforce from their current skill sets into an Aeronautical Information Specialist role in support of the HPO plan. The HPO Team recommends that NACO establish a formalized training program, which should include a training team carved from the current resources (FTEs) and also convert the current server room (space) in Silver Spring Metro Center (SSMC). This space should be converted into a training room/collaborative meeting space.

4.4 Continuous Improvement Management Plan

In addition to the measures described in detail in this document, the HPO Team recommends that NACO undertake several initiatives to meet future challenges and sustain organizational improvement during and beyond the HPO period. An HPO Continuous Improvement Management Plan (CIMP) will be created to ensure continuous progress, forward planning, and further efficiencies throughout the HPO time frame. The CIMP will include a review committee structure to evaluate, approve, and track improvements as part of the HPO. As an example, the HPO Team makes the following continuous improvement recommendations to be undertaken during the HPO performance period:

- Pursue to shift the USPS budget authority and funding currently allocated to FAA Printing, Distribution and Mail Program, APF-001 over to NACO to provide flexibility in procuring the best value for small parcel shipping. Currently the small parcel shipping options for NACO's distribution program are FAA mandated options of U.S. Postal Service (USPS) and Federal Express (FedEx). Current annual shipping costs are approximately $2M, and substantial savings (estimated at 10% of current expenses) could be realized by allowing NACO to obtain alternative shipping services to include other sources such as the United Parcel Service (UPS) to provide for competitive pricing.
- Convene a working group to study and develop a strategy to address the expected long-term decline in demand for paper products and growth in demand for digital products. As electronic navigational equipment becomes more widely available and accepted, NACO faces a shift in demand that will entail fundamental changes to its business model. The HPO Team recommends that a working group be created to forecast the long-term trends in demand for NACO's products, establish a pricing methodology for NACO's digital products, and identify strategies for efficiently and effectively meeting the aviation community's need for reliable aeronautical information in the future environment.
- Implement robust data collection and analysis processes to more accurately forecast demand in the short and mid term. Improved forecasting processes could reduce waste from overproduction, prevent costly re-prints, and help managers anticipate fluctuations in revenue and costs.
- Implement an electronic data interchange (EDI) system to standardize and streamline commercial interactions with chart agents. Once established, an EDI system could

significantly reduce NACO's need for clerical and administrative support for the distribution unit and ensure the integrity of NACO's accounting records.

- Implement best practices in procurement. NACO currently relies on contractor assistance at the data transfer, production, and distribution stages. NACO should re-evaluate its current contract arrangements to ensure that they offer the best available combination of price and service. Specifically, all future and existing printing support contracts need to be evaluated for nationwide competition and elimination of unnecessary requirements. This will prevent high cost sole-sourced printing contract awards. NACO will realize the best value from future procurement by specifying contract requirements clearly and targeting them to NACO's needs and by facilitating competitive, nationwide solicitations.

< This page intentionally left blank >

SECTION 5: MILESTONES

Table 5.1 lists key HPO milestones along with scheduled completion and current status.

Table 5.1: Key HPO Milestones

Milestone	Schedule Completion	Status
Establishment of BPR/HPO Team		Completed
Calculation of baseline costs reflecting full costs of government performance	February 2008	Completed
Development of improved work activities/processes and business model	May 2008	Completed
Final HPO White Paper & Briefing for OMB	September 2008	Early (June) Completion
Implementation of BPR/HPO	September 2008	On-schedule
Performance tracking	FY 2009 and later	On-schedule

The House Committee on Transportation and Infrastructure's Subcommittee on Aviation
Hearing on Review of FAA's Implementation of the FAA Modernization and Reform Act
Thursday, May 16, 2013
Questions for the Record for FAA Administrator Michael Huerta
Rodney Davis – Illinois 13th District

Question:

(1) What is the status of the report that details the FAA's plans to develop and implement Required Navigation Performance (RNP) procedures specifically at 35 mid-sized commercial airports, which is required under Section 213(b)?

Answer:

The Report to Congress on Section 213 has been completed and is currently in coordination within the Agency and the Department of Transportation before publication.

Question:

(2) Can you please explain the level of stakeholder involvement in the development of the two reports required under Subsections 213(a) and (b)?

Answer:

As part of the process for developing the reports required by 213 (a) and (b), a comprehensive review of airports was completed and resulted in the focus of accelerated PBN efforts at 30 core (formerly titled Operational Evolution Partnership airports, or OEP) and 35 non-OEP airports. The results of the review, by airport, have been provided to all stakeholders via the FAA public website. As we move forward, stakeholder participation is paramount to success of PBN development. Therefore, stakeholder inclusion and participation during workgroups is a vital part of procedure development.
https://www.faa.gov/air_traffic/flight_info/aeronav/procedures/reports/

Before and since enactment of the FAA Modernization and Reform Act, the FAA has been actively collaborating with the parties listed in Section 213 about the acceleration of NextGen technologies. In addition, representatives of these stakeholders are an integral part of several working groups and initiatives designed to accelerate NextGen implementation. Airport industry groups, Airlines for America (A4A), and air carriers are members of the NextGen Advisory Council (NAC) and the RTCA Operational Capabilities Working Group (OCWG). Aircraft and avionics manufacturers are also part of the NAC. Qualified third party vendors and the Aircraft Owners and Pilots' Association (AOPA) and National Business Aircraft Association (NBAA) belong to the RTCA Airspace and Procedures Working Group. Air carriers and aircraft and avionics manufacturers are part of the Performance-Based Operations Aviation Rulemaking Committee (PARC). On January 14, 2013, FAA sent letters to representatives of these groups summarizing the information available on the FAA's Instrument Flight Procedures Information Gateway, a public website listing all PBN instrument flight procedures. Existing and proposed procedures are identified on the website and individuals can sign up for alerts about future procedures.

Question:

(3) During the hearing we talked about how the FAA is currently utilizing the services of third party designers to help develop RNP procedures at a handful of smaller commercial airports. What are the FAA's plans to use third parties to comply with Section 213?

Answer:

On May 10, 2012, the FAA awarded the Third Party Vendor Performance Based Navigation (PBN) Demonstration contract to GE-Naverus, ITT-Excelis teammate for the demonstration of third party development and delivery of two (2) public Required Navigation Performance (RNP-AR) procedures at five (5) FAA-selected mid-size airports (Syracuse NY, Milwaukee WI, Anchorage AK, Dayton OH, and Buffalo NY). In this demonstration project, the 3rd Party Vendor is solely responsible for all aspects of the full life-cycle development, design, and implementation of the RNP Procedures.

They are delivering a total of 10 RNP Procedures (two for each airport) within two (2) years of the Contract Award (May 11, 2012 to May 10, 2014). The Vendor is tasked with conducting feasibility studies, sites outreach, and environmental assessments to include the preparation of all environmental paperwork, and providing pre and post implementation support at each location.

To date, none of the procedures have been fully implemented. The FAA developed a draft Plan to conduct reviews and assessment of the Pre and Post Implementation Reports, Environmental Study Reports, and the Final Procedure Design Review Package. The Plan also includes coordination with the Systems Analysis & Modeling Division to identify measurable benefits and develop metrics criteria to track and report progress.

After the procedures are developed and implemented at all five sites, the FAA will conduct an assessment of the Demonstration Program to determine the efficiency and benefits of using third parties to expedite the delivery of Performance Based Navigation benefits. The results of this demonstration project will be evaluated to determine future 3rd Party involvement in FAA RNP procedural development.

Question:

(4) What is the status of the FAA's implementation of the procedural streamlining provisions under Section 213(c)? In particular, please explain how the FAA plans to use its expanded categorical exclusion authority in circumstances when a performance-based navigation procedure will result in reduced fuel consumption, carbon emissions and noise on an average per flight basis?

Answer:

There are two subsections under Section 213(c). Section 213(c)(1) provides a categorical exclusion for certain required navigation performance and area navigation procedures. The FAA has issued guidance for implementing this provision. Section 213(c)(2), referred to above, requires a determination of three measurable reductions—fuel consumption, carbon dioxide emissions, noise—on a per flight basis. The FAA has conducted an assessment of existing methodologies for determining noise and has to date not been able to identify a sound approach for making the noise determination on a per flight basis. In September 2012, the FAA asked the NextGen Advisory Committee (NAC) for assistance in further exploring how to make use of this categorical exclusion. The NAC has provided a recommendation to the FAA, as approved at a June 4 meeting and the FAA is evaluating the recommendation.

Committee on Transportation and Infrastructure
U.S. House of Representatives

Bill Shuster
Chairman

Washington, DC 20515

Nick J. Rahall, II
Ranking Member

Christopher P. Bertram, Staff Director

James H. Zoia, Democrat Staff Director

May 20, 2013

The Honorable Michael P. Huerta
Administrator
Federal Aviation Administration
800 Independence Avenue S.W.
Washington, D.C. 20591

Dear Administrator Huerta:

I thank you for your testimony before the Subcommittee on Aviation on May 16, 2013, regarding implementation of the *FAA Modernization and Reform Act.* I would also appreciate your written response to the following questions for the hearing record.

As part of the Federal Aviation Administration's (FAA) NextGen program, the agency intends to require that the majority of aircraft be equipped with Automatic Dependent Surveillance-Broadcast (ADS-B) systems by 2020 (14 CFR Part 91). The FAA exerted its global leadership in aviation technologies by adopting ADS-B as a cornerstone of the next generation of air traffic control, making use of GPS technology to determine and share aircraft location information. ADS-B is intended to improve upon and replace today's current system of radar based navigation.

Because almost all aircraft will be equipped with ADS-B to comply with FAA's 2020 mandate, some have argued that using space-based ADS-B to extend uninterrupted coverage over oceanic environments could provide benefits well beyond the traditional limitations of the ground-based radar system — including important environmental benefits through fuel consumption optimization by allowing for efficient routes and flight altitudes.

As you are aware, the President recently signed into law the *Reducing Flight Delays Act of 2013*, which provides your agency with additional fund transfer authority to implement sequestration. The intent of this legislation was primarily to end air traffic control furloughs and to avoid the closure of 149 contract air traffic control towers.

(1) Do you envision transferring any funds from NextGen programs to cover furlough-avoidance and contract tower costs?

(2) What effect will this have on the FAA's consideration and possible adoption of oceanic ADS-B?

I would appreciate your written responses no later than May 31, 2013. Thank you again for your testimony.

Sincerely,

Rick Larsen

RICK LARSEN
Ranking Democratic Member
Subcommittee on Aviation
Committee on Transportation and Infrastructure

The House Committee on Transportation and Infrastructure's Subcommittee on Aviation
Hearing on Review of FAA's Implementation of the FAA Modernization and Reform Act
Thursday, May 16, 2013
Questions for the Record for FAA Administrator Michael Huerta
Rick Larsen - Washington 2nd District

QUESTION:

As you are aware, the President recently signed into law the Reducing Flight Delays Act of 2013, which provides your agency with additional fund transfer authority to implement sequestration. The intent of this legislation was primarily to end air traffic control furloughs and to avoid closure of 149 contract air traffic control towers.

Do you envision transferring any funds from NextGen programs to cover furlough avoidance and contract tower costs?

ANSWER:

The Reducing Flight Delays Act of 2013 (P.L. 133-9) provided FAA with the budget flexibility needed to end employee furloughs across the agency and keep 149 low-activity contract towers originally slated for closure in June open for the remainder of fiscal year 2013.

Section 2(a)(1) of this legislation permits FAA to transfer up to $253 million from the Grants-In-Aid for Airports (AIP) account pursuant to section 47117(f) of title 49, United States Code. The FAA therefore intends to transfer $247.2 million to the FAA Operations account and $5.8 million to the Facilities and Equipment account. The first transfer of at least $100 million will occur on July 1 and the remaining balance will be transferred on August 15. Funds will only be transferred out of the AIP account, not out of any NextGen programs.

In fact, in addition to ending furloughs and keeping contract towers open, the transferred funds will also minimize cuts and delays in core NextGen programs and partially restore infrastructure support activities in the national airspace system, thereby reducing the risk of delays. As such, our overall NextGen efforts will benefit from this budget transfer.

QUESTION: As you are aware, the President recently signed into law the *Reducing Flight Delays Act of 2013,* which provides your agency with additional fund transfer authority to implement sequestration. The intent of this legislation was primarily to end air traffic control furloughs and to avoid closure of 149 contract air traffic control towers.

What effect will this have on the FAA's consideration and possible adoption of oceanic ADS-B?

ANSWER:

The FAA has been evaluating various approaches for improving separation services by providing surveillance coverage in Oceanic Flight Information Regions (FIRs) and remote domestic airspace via a satellite-based solution, including, but not limited to, Space Based Automatic Dependent Surveillance – Broadcast (ADS-B). In 2012, the agency began an Investment Analysis of various alternatives to determine technical feasibility, validate concepts, and develop a detailed benefit and cost analysis.

The work on this analysis was not impacted by Sequestration and the analysis is still ongoing. However, given the agency's current budget constraints, we have not yet reached a final decision of whether or not to financially commit to the Space Based ADS-B initiative.

In addition to the Space Based ADS-B activity described above, the FAA is currently conducting operational flight evaluations of the ADS-B In Trail Procedures (ITP) concept on United Airlines aircraft in revenue service, on oceanic routes between the Oakland Flight Information Region (FIR) between the U.S. west coast and Australia, using certified avionics equipment. The data collected

will be used to validate operational performance and economic benefits of ITP, validate safety requirements and assumptions and monitor operational hazards. This data collection was not impacted by Sequestration or furloughs and is expected to end in April 2014.

The House Committee on Transportation and Infrastructure's Subcommittee on Aviation
Hearing on Review of FAA's Implementation of the FAA Modernization and Reform Act
Thursday, May 16, 2013
Question for the Record for FAA Administrator Michael Huerta
André Carson, Indiana 7th District

Questions:

During our last hearing, I expressed my concerns about the integration of Unmanned Aircraft Systems, or UAV's, into civilian airspace leading up to the issuance of regulations by FAA in 2015. Since that hearing, I have become even more concerned about reports regarding the inappropriate commercial use of drones, including a number of disturbing incidents of "drones for hire." In fact, a local television station in Indianapolis hired such a "drone for hire" which flew over a Department of Defense facility in my district and collected video images during this flight. Mr. Chairman, I'd ask unanimous consent to offer an article about this incident into the record. Mr. Administrator, these unauthorized flights pose a threat to public safety, and as a former law enforcement officer, I have urged unauthorized operators to stop breaking the law. But I am particularly concerned about the instances where the FAA issued cease and desist orders against commercial operators of drones and they were ignored. So, Mr. Administrator, I have a couple of questions:

a) To what extent are cease and desist orders being enforced? In situations where they have not been enforced, can you tell us why?
b) How many cease and desist orders have been issued regarding unauthorized use of drones? How many of these were commercial or non-recreational operators? How many of these cases have been referred for prosecution or have had fines assessed?
c) Does the FAA need additional staffing to adequately investigate these problems? Or can the FAA utilize assistance from DHS, FBI or other federal agencies? Is this happening?

Answers:

The FAA has not needed to issue any UAS cease and desist letters to date. We have issued three Letters of Investigation (LOI) and three Enforcement Investigative Reports (EIR). None of the LOIs or EIRs were issued to "commercial" operators as a commercial operations category is currently not authorized. The operators who received the LOIs and EIRs are considered uncategorized as they did not fall into one of the three authorized categories: 1) Model aircraft, 2) Public aircraft operating under a Certificate of Waiver or

Authorization, or 3) Civil aircraft authorized to fly in an experimental category. There are three EIRs proposed fines; two are pending and one is in abeyance due to incarceration of the recipient.

Our resources are sufficient to deal with current enforcement needs. Should the FAA need to expand its enforcement actions related to UAS operations, we welcome coordinated assistance from other government agencies, such as DHS/DOJ/FBI.

Question:

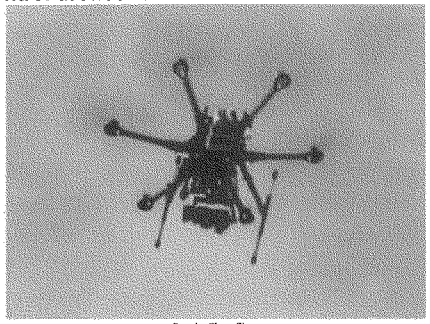
d) Finally, please tell us about the status of the preliminary UAV guidelines due this summer? Can you tell us when these guidelines will be released? And what will be the general provisions of these guidelines?

Answer:

The FAA and DOT are coordinating a Notice of Proposed Rulemaking (NPRM) to address requirements for small UAS, which is targeted for release later in 2013.

Indiana pilots call drones for hire a growing threat

FAA struggles to control drones for hire



Regular Photo Size

SHARETHIS

Stephen Dean | Email Me

TheIndyChannel.com Staff | Email Me

INDIANAPOLIS - A hidden camera investigation from the Call 6 Investigators found a growing threat from illegal business flights of drones nationwide, prompting concerns from Indianapolis pilots and calls for action in Congress.

While the Federal Aviation Administration has not approved a single drone flight for business purposes anywhere in the country, the Call 6 Investigators found many businesses and entrepreneurs flying drones for aerial photography, including several that advertise drone flights in Indiana.

The Call 6 Investigators also pushed for the release of new documents from the FAA that show a rising number of safety complaints from pilots, as well as several drone companies that continue to fly after being warned by the FAA that their flights are illegal.

"I hope that the FAA gets involved in this and we get this stopped. This is a dangerous situation," Indianapolis pilot Roger Tomey said in response to the Call 6 Investigators' report.

Drones, or Unmanned Aircraft Systems (UAS), are only legal for hobbyists to fly under 400 feet of altitude and away from airports and populated areas, according to standing FAA rule s. The agency has ruled that any time money changes hands or profits are generated from flying a drone, those hobbyist rules no longer allow such flights.

The Call 6 Investigators requested enforcement documents, never before released by FAA, showing a rising number of complaints about drones surprising manned aircraft pilots in the air. The documents also show the FAA frequently issuing cease and desist letters or other warnings to drone services found to be advertising flights for hire, usually to produce aerial photography.

Among the highlights of those enforcement documents reviewed by Call 6 Investigators:

- 23 investigations were launched by FAA over the past two- years in response to complaints or inspectors finding drone flights depicted online
- 10 drone operators received warning letters or advisories that their flights were illegal
- 5 unauthorized drones were spotted by pilots and reported to FAA
- Several drone operators garnered new complaints after having been previously warned by the FAA that their flights were illegal

In some cases, the FAA closed its investigations into illegal drone flights when the suspected drone operators would simply claim that photos posted online were actually taken from licensed and manned planes or helicopters.

"It concerns me greatly. This is an accident waiting to happen," said Tomey. "You"re going to end up causing a very serious situation that could cost somebody their life," he said, calling the Call 6 Investigators reporting "highly upsetting."

FAA enforcement records provided to the Call 6 Investigators also included:

- March 2011 -- The only fine ever issued: A proposed $10,000 fine against a drone operator for an aerial picture-taking flight at University of Virginia (Charlottesville), where FAA inspectors wrote that dangerous maneuvers were performed near bystanders.
- March 2012 -- FAA inspectors wrote that drones were used in filming of "On Dangerous Ground" in Alaska. Case closed when drone operator couldn't be established.
- October 2012 -- FAA asked for Orlando police assistance in locating a drone near an airport. Pictures were posted online, but case was closed when operator couldn't be established.
- Several investigations launched in New York City after photos were posted online or drones were reported by bystanders.
- August 2012 -- Contractor hired to map out evacuation routes for FEMA admitted to flying up to 10,000 feet without any approval by FAA
- November 2012 -- Operator of drone warned to stop after online video showed flight near Winthrop, Mass.
- September 2012 -- Air traffic controller in Warwick, R.I. complains of drone flying in his airspace
- September 2011 -- Pilot in Houston reported spotting drone flying near him along Interstate 10 near downtown
- May 2012 -- Pilot in Fredericksburg, Va. reported seeing drone pass within 100 feet of his wing

In March of this year, an Alitalia airliner made national news headlines when the pilot reported spotting a drone as he was trying to land at New York's JFK Airport.

An Indianapolis pilot of a small plane reported spotting a drone to airport managers in Greenwood. Those managers told Call 6 Investigators that the pilot spotted the drone a few hundred feet below him and flying in the opposite direction at a high rate of speed.

Another Indianapolis pilot, Tom Jeffries, who runs a flight school at the same Greenwood airport, said, "It just puts a whole new dimension on the idea of safety, because we're concerned about birds, we're concerned about other airplanes, and now we're throwing in something that is totally uncontrolled.

"They're not going to appear on radar, you're never going to see them until they hit something," Jeffries said.

"When they suck one of those drones into the engine of an airplane, then it'll get everybody's attention. And they'll have to do something at that point," he said.

Hidden cameras aimed at Indianapolis drone flight

The Call 6 Investigators found several companies advertising drone flights anywhere in Indiana. One company quoted the price of $500 per hour or $2,000 per day for snapping photos or shooting video from a drone.

That company representative said he had flown hundreds of flights for TV commercials and real estate ventures, including a TV commercial last month for a Houston car dealership.

The Call 6 Investigators went undercover to hire another drone company for a flight above a neighborhood on the eastern edge of Indianapolis.

Brandon Spencer, owner of Drone Photo Services of Louisville, offered to snap photos of several parcels of real estate along Post Road and East 56th Street for $300, claiming he'd flown hundreds of other flights.

When he did not know he was speaking to a reporter, Spencer said he could fly at any altitude that a customer would want. He said he "wasn't supposed to" fly above 400 feet, but he sometimes flew above 1,000 feet or higher, depending on the job.

Local pilots pointed out that they often fly at that same altitude in small planes and helicopters. Some pilots expressed concerns about mid-air collisions or "drones for hire" crashing into homes, cars, or people on the ground.

Spencer arrived for the arranged meeting and cameras were rolling as he scouted out a small lot from which to launch his drone. He removed the aircraft from the passenger seat of his pickup truck, strapped on a remote control device on a vest, attached a battery and then took to the air.

Passing motorists barely noticed as the drone rose into the air, clearing the tree line and then hovering more than 300 feet in the air.

After he was paid $300 for the aerial photos, the Call 6 Investigators team emerged to question him on camera.

When asked if he researched the laws on flying drones for profit, Spencer answered, "No … I just got into it thinking I could make a little money."

When asked if he was putting people in danger with flights that were not approved by the FAA, he answered, "Not that I know of."

While his company's website displayed pictures of a water treatment plant, construction sites and a pedestrian bridge in Louisville, he claimed no money changed hands for those flights.

"You're actually my first paying customer," he told the Call 6 Investigators.

"I just figured, you know, they're selling it out there, I can buy it, I can get it and, it's a helicopter. People fly helicopters and planes all the time, put a camera on it and try to make a little bit of money. That's what I thought," he said.

"If I'm going to get in any trouble over it, it's not worth it," said Spencer.

He said he had paid $10,000 for his helicopter-like drone, known as an F800 Hexacopter that was made in China.

Several pilots and other drone operators also mentioned another leading competitor for paid drone flights known as Copter Kids LLC of Reno, Nev. Company representatives did not respond to emails requesting comment.

A spokesman with the FAA's Unmanned Aircraft Systems section, Les Door, said that no commercial flights have ever been permitted anywhere in the country, including those involving real estate agents or news organizations.

Several types of drones were on display for sale earlier this month at the National Association of Broadcasters convention in Las Vegas. Television and news executives saw a number of aircraft that could be used for aerial photography once the FAA establishes guidelines.

Congress has mandated that the FAA come up with regulations for allowing commercial flights of drones in late 2014, but it remains unclear whether training will be required for all drone operators or whether air traffic controllers will be alerted to all flights.

With so many flights taking to the air in advance of those regulations, the Call 6 Investigators asked FAA headquarters whether enough was being done to protect people from unauthorized drone flights.

The agency responded with a written statement (in its entirety):

"The FAA thoroughly investigates possible violations of the agency's regulations by unmanned aircraft operators. In cases where we have verifiable proof of a violation, we do not hesitate to pursue enforcement action. Lacking such proof, we still make sure the operator understands FAA regulations and policy on unmanned aircraft systems. We expect to publish a proposed rule on small unmanned aircraft later this year that will offer regulations for a wide variety of users in the small UAS community, including commercial operators."
U.S. Representative Andre Carson , D-Indianapolis, member of the House aviation subcommittee, said the Call 6 Investigators' reporting has him pushing for action at the FAA and among members of his committee.

He wrote in a statement (in its entirety):

"As a member of the Transportation and Infrastructure Subcommittee on Aviation and as a former law enforcement officer, I am very concerned about the instances where the FAA issued cease and desist orders against commercial operations of drones and they were ignored. Commercial drones, including drones for rent, are not authorized under current law and pose a threat to public safety.

"Even before the new regulations go into effect in 2015, we must ensure the FAA is enforcing current law as vigorously as possible and adequately protecting the safety of air traffic and those of us on the ground. I will be raising these concerns with the committee, as well as the FAA.

"I also encourage all drone operators to do the right thing and stop all flights. Unauthorized drone flights put lives at risk and should not be continued, even when FAA fails to enforce the law."

A trade group that represents industries using robotics or unmanned aircraft, the Association for Unmanned Vehicle Systems International in Arlington, Va., has released a code of conduct for its members who may be testing or designing drones for future use.

"AUVSI condemns the misuse of UAS, and believes that anyone who abuses UAS technology should be held accountable," said the group's Melanie Hinton in an email to the Call 6 Investigators.

She said her group is working with the FAA and others to carve out rules for the safe operation of unmanned aircraft.

"AUVSI expects all users of UAS to abide by FAA guidelines, including receiving an FAA Certificate of Authorization before using the technology," she wrote.

Indiana State University in Terre Haute has actually started its own drone program to train students how to fly unmanned aircraft. The program's leader and another instructor did not respond to requests for comment.

Even local police agencies are not yet approved to fly drones for routine public safety missions. In January 2010, the nation's first-ever test flight of a police drone made headlines worldwide, but the FAA still hasn't drawn up plans for how police drones can be safely integrated into the nation's airspace.

Unlike commercial drones, police agencies can apply for a Certificate of Authorization (COA) from the FAA for specific flights, but very few flights have actually been requested or approved, according to the FAA.

While police use of drones have spurred debate over civil liberties or spying on people without a warrant, the FAA's review of how to regulate police flights has focused solely on airspace safety.

The FAA is poised to announce six drone test sites around the country, including one in Indiana, where police or private commercial ventures will be able to test their aircraft prior to a full battery of regulations being issued for all drone flights.

For Jeffries, the Indianapolis flight instructor, it's a scary notion.

"Everybody could have their own drone. They could do all kind of things from taking pictures, who knows, seeding their yard, anything! I mean, it's just organized confusion," he said. "It has some broad-reaching implications if we don't get some kind of control of what's going on."

http://www.theindychannel.com/news/call-6-investigators/indiana-pilots-call-drones-for-hire-a-growing-threat

Committee on Transportation and Infrastructure
U.S. House of Representatives

Bill Shuster
Chairman

Washington, DC 20515

Nick J. Rahall, II
Ranking Member

Christopher P. Bertram, Staff Director

James H. Zoia, Democrat Staff Director

May 20, 2013

Hon. Michael P. Huerta
Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Dear Administrator Huerta:

On May 16, 2013, the Subcommittee on Aviation held a hearing on "FAA's Progress in Implementing the FAA Modernization and Reform Act."

Attached are questions from Rep. Ann Kirkpatrick for you and your staff to answer for the record. I would appreciate receiving your written response to these questions no later than Friday, May 31st so that they may be made a part of the hearing record.

Sincerely,

Rick Larsen
Ranking Democratic Member
Subcommittee on Aviation

Enclosure

ANN KIRKPATRICK
1ST DISTRICT, ARIZONA

VETERANS' AFFAIRS COMMITTEE
SUBCOMMITTEES
RANKING MEMBER, OVERSIGHT AND INVESTIGATIONS
ECONOMIC OPPORTUNITY

TRANSPORTATION AND INFRASTRUCTURE COMMITTEE
SUBCOMMITTEES
HIGHWAYS AND TRANSIT
WATER RESOURCES AND ENVIRONMENT
ECONOMIC DEVELOPMENT

Congress of the United States
House of Representatives
Washington, DC 20515–0301

330 CANNON HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
(202) 225–3361

405 NORTH BEAVER STREET #5
FLAGSTAFF, AZ 86001

211 NORTH FLORENCE STREET #1
CASA GRANDE, AZ 85122

11555 WEST CIVIC CENTER DRIVE #104A
MARANA, AZ 85653

550 NORTH 9TH PLACE
SHOW LOW, AZ 85901

1400 EAST ASH
GLOBE, AZ 85501

Congresswoman Ann Kirkpatrick
Questions for the Record
May 17, 2013
FAA Modernization and Reform Act Implementation

Question for Administrator Huerta

I would like to acknowledge the hard work the FAA has put into the UAS test site program this past year. The SIR Volumes are quite detailed and impressive; I am sure they will lead to selection of six highly professional test ranges and I appreciate the opportunity for my state, Arizona, to participate in this critically important process. The 2012 Act had finite timelines for the operation of the 6 UAS Test Ranges, with 2017 as the range end-year. The important additional time it took to address range needs and now privacy concerns has contributed to a revision in the original starting timeline. If the Six UAS test ranges are selected by the end of 2013 and become operational 180 days into 2014, do you anticipate that the 2017 timeframe would afford the six ranges sufficient time for a comprehensive research plan and data collection to be fully executed?

The House Committee on Transportation and Infrastructure's Subcommittee on Aviation
Hearing on Review of FAA's Implementation of the FAA Modernization and Reform Act
Thursday, May 16, 2013
Questions for the Record for FAA Administrator Michael Huerta

Ann Kirkpatrick – Arizona 1st District

Unmanned Aircraft Systems (UAS):

QUESTION:

I would like to acknowledge the hard work the FAA has put into the UAS test site program this past year. The SIR Volumes are quite detailed and impressive; I am sure they will lead to selection of six highly professional test ranges and I appreciate the opportunity for my state, Arizona, to participate in this critically important process. The 2012 Act had finite timelines for the operation of the 6 UAS Test Ranges, with 2017 as the range end-year. The important additional time it took to address range needs and now privacy concerns has contributed to a revision in the original starting timeline. If the Six UAS test ranges are selected by the end of 2013 and become operational 180 days into 2014, do you anticipate that the 2017 timeframe would afford the six ranges sufficient time for a comprehensive research plan and data collection to be fully executed?

ANSWER:

UAS industry and academia will conduct research at the test sites and will therefore be responsible for research planning and data collection within the time frame of the program.

○