
Office of Inspector General
Audit Report

**WEAK PROCESSES HAVE LED TO A BACKLOG OF
FLIGHT STANDARDS CERTIFICATION
APPLICATIONS**

Federal Aviation Administration

Report Number: AV-2014-056

Date Issued: June 12, 2014





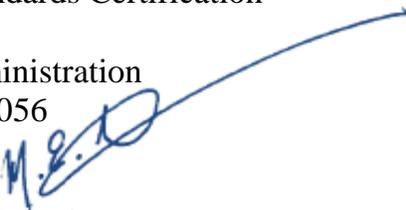
Memorandum

U.S. Department of
Transportation

Office of the Secretary
of Transportation
Office of Inspector General

Subject: **ACTION:** Weak Processes Have Led to a
Backlog of Flight Standards Certification
Applications
Federal Aviation Administration
Report No. AV-2014-056

Date: June 12, 2014

From: Matthew E. Hampton 
Assistant Inspector General
for Aviation Audits

Reply to
Attn. of: JA-10

To: Federal Aviation Administrator

Each year, hundreds of commercial air carriers, aircraft repair stations, pilot schools, and other entities apply to the Federal Aviation Administration (FAA) for certificates authorizing them to operate in the National Airspace System (NAS). FAA's Flight Standards District Offices (FSDO) are responsible for reviewing and approving these new applications, in addition to their primary duty of maintaining the safety of existing operators and entities. FAA's certification process is one of many important layers of controls to ensure the safety, reliability, and efficiency of the NAS. However, lengthy delays in certification approvals can present barriers to companies seeking to operate in the NAS, potentially limiting the economic growth of the aviation industry.

In a May 2013 letter to our office, Congressman Cory Gardner expressed concerns that the Denver FSDO had been negligent in processing new certification applications for both commercial and agricultural aviation operations. According to Congressman Gardner, one of his constituents based in eastern Colorado had been waiting 2 years for FAA approval of a Part 137 certificate to allow the company to operate aircraft for agricultural use. Based on the concerns raised by Congressman Gardner, we conducted a review of certifications at the Denver FSDO and examined whether similar issues existed at other FAA district offices and regions. Our audit objectives were to (1) review the status of aviation certification applications at the Denver FSDO and nationwide and (2) identify the causes for certification delays at the Denver FSDO and determine their potential impact nationally.

We conducted this review in accordance with generally accepted Government auditing standards. Exhibit A details the scope and methodology we used to conduct this audit.

RESULTS IN BRIEF

The Denver FSDO and other FAA field offices face a significant backlog of aviation certification applications. Currently, there are 42 applicants on the waiting list for certification at the Denver FSDO—one of the longest waitlists in the country.¹ We determined that this office has not certified a new air operator since August 2010,² raising concerns regarding whether the Denver FSDO, and the FAA Northwest Mountain Region to which it reports, are doing enough to alleviate a growing number of waitlisted applicants. Additionally, FAA has an extensive certification backlog across all its regions. As of October 2013, there were more than 1,000 entities awaiting certification across the United States, with 138 applicants delayed for more than 3 years.

A number of weaknesses in FAA's certification process and management have contributed to delays at the Denver FSDO, some of which also impact FAA's certification efforts nationwide. First, the Denver FSDO has faced challenges in determining how many inspectors it needs to perform certification work, but has not requested assistance from its regional office. Second, FAA lacks a standardized approach to prioritize and track new certificate applications for air operators and repair stations. Instead, the Agency uses a first come-first served approach to performing certifications. As a result, many applicants may be significantly delayed if more complex certifications are ahead of them in the queue. In addition, FAA's current guidance does not include a process that managers should use to re-evaluate resources and initiate the certification of waitlisted applicants. Finally, competing priorities and frequently changing guidance from FAA headquarters and regional offices regarding the Agency's certification policy has resulted in workflow interruptions and diminished incentives for inspectors to expedite new certification applicants. For example, the Denver FSDO was instructed to halt all new certifications twice during a 1-year period beginning in July 2012. According to FAA representatives at both the regional and district office levels, these cessations in certifications were due in large part to ongoing budget issues, as well as the need to maintain safety oversight of existing operators. As a result, new aircraft operators and repair stations may face continued delays entering the industry.

We are making four recommendations to improve the efficiency of FAA's certification process at the Denver FSDO and nationwide.

¹ There are 85 FAA field offices with applicants awaiting certification.

² At least one applicant was transferred to the Denver FSDO and certificated outside of the standard process.

BACKGROUND

FAA's Flight Standards Service promotes safety in air transportation, flight, and of air commerce.³ This is accomplished, in part, by setting standards for air operators and repair stations, and by performing certification and oversight of those organizations. Flight Standards relies on its field offices across eight regional divisions to issue new certificates and to ensure the continued operational safety of certificated organizations.

FAA's Certification Services Oversight Process (CSOP) provides a standard set of guidance for communication, resource evaluation, and certification workload determination for new applicants. FAA field offices receive applications, summarize and input the information into the CSOP database, and perform a resource evaluation that must be approved by the regional office. The field office can initiate the certification process for new applicants when FAA managers have determined that resources are available. Otherwise, the regional office should determine whether resources are available at an alternate field office or whether the applicant should be placed on a waiting list.

FAA'S FLIGHT STANDARDS SERVICE FACES A LARGE BACKLOG OF CERTIFICATION REQUESTS

FAA faces a backlog of Flight Standards certifications both at its Denver FSDO and on a national level. The backlog has resulted in delays to effective and efficient certification of new aircraft operators, flight training schools, and repair stations.

The Denver FSDO Has One of the Longest Waitlists in the Country

The Denver FSDO currently faces a substantial backlog of aircraft operators and repair stations awaiting certification. For example, the agriculture company cited in Congressmen Gardner's letter to us, which first applied for a certification in April 2011, is currently number 30 of 42 applicants on the Denver FSDO's waiting list. Of these 42 waitlisted applicants, 19 are Part 135 commercial air carriers⁴ and 13 are repair stations—both of which can be complex certifications.

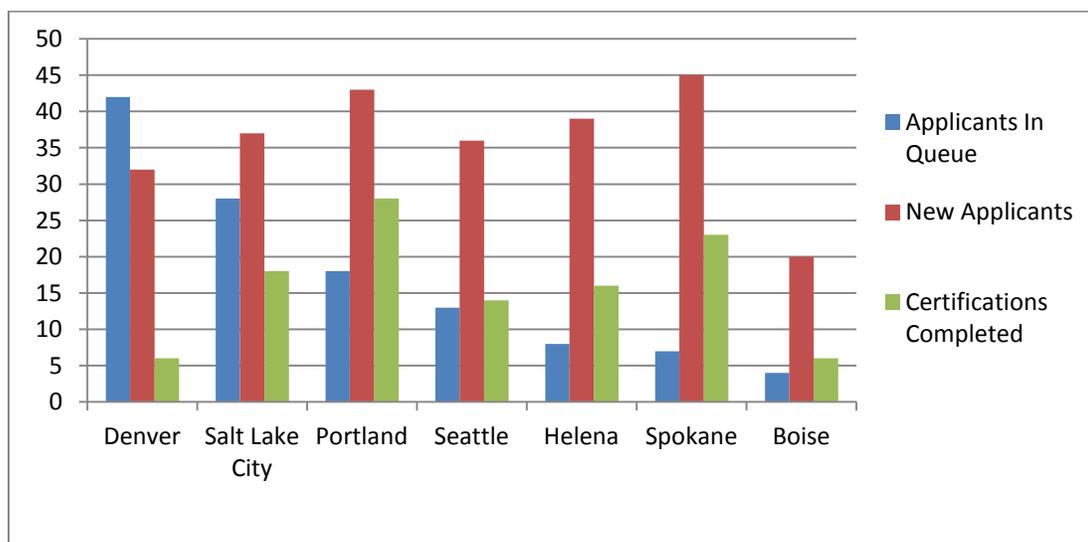
The Denver FSDO has not certificated a new air operator since August 2010 or a repair station since November 2011. The office attributed this stagnancy to staffing shortages; however, the identified vacancies did not occur until July 2012. Further, the office has issued only 6 certifications to new applicants in 4 years—

³ Federal Aviation Reauthorization Act of 1996 (PL 104-264 Section 401).

⁴ Part 135 air carriers operate smaller aircraft that are configured for 30 passengers or less or under 7,500 pounds of payload; most fly on-demand (i.e., at the request of their customers).

compared to 105 for the other 6 district offices within the Northwest Mountain Region combined (see figure 1).

Figure 1. Comparison of Certifications by Northwest Mountain Region FSDOs, Fiscal Years 2010–2013



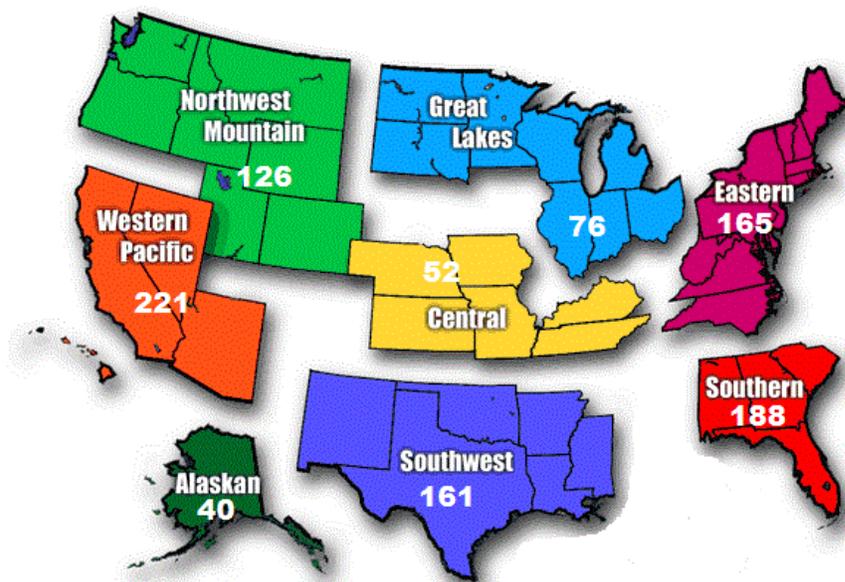
Source: OIG analysis of FAA’s certification process data.

FAA Faces a Certification Backlog Nationwide

Given the challenges at the Denver FSDO, we analyzed the data from other FAA offices and found they face certification backlogs as well. As of October 2013, there were 1,029 new air operator, flight training schools, and repair station applicants awaiting FAA certification across the country.⁵ This backlog spans all eight FAA regions (see figure 2).

⁵ According to FAA’s Certification Services Oversight Process database.

Figure 2. Applicants Awaiting Certification in FAA Regions



Source: OIG analysis of FAA data as of October 2013.

Of those awaiting certification, 138 applicants have been delayed for more than 3 years, with one applicant waiting since August 2006.

CERTIFICATION PROCESS, RESOURCE MANAGEMENT, AND CHANGING GUIDANCE HAVE DELAYED CERTIFICATIONS

A number of factors have contributed to the certification backlog at the Denver FSDO, including resource management, the certification process itself, competing priorities, and constantly changing guidance from headquarters and regional offices. These factors could also be the cause for the backlog at other FAA district offices and regions nationwide. As a result of these certification issues, new air operators and repair stations face barriers to entering the aviation industry.

Resource Management Issues Have Contributed to the Backlog at Denver FSDO

According to Denver FSDO managers, the office's stagnant certification record is a result of staffing shortages. The office has had three vacancies for FAA inspectors since 2012. However, no new air operator certifications have been completed since August 2010—almost 2 years prior to the identified shortages. This indicates that the Denver FSDO may have more longstanding issues with determining how many inspectors it needs to perform certification work. While the

number of Denver FSDO inspectors is comparable to other similarly sized offices⁶ within the Northwest Mountain Region (see figure 3), the Denver office has processed the least number of certifications since October 2009. The assistant manager attributed this to a more demanding workload for unplanned activities, such as reviews of pilot deviations,⁷ than other offices face. However, despite these staffing challenges and complaints from waitlisted applicants, the Denver FSDO has not approached the Northwest Mountain Regional management for additional resources. Additionally, FAA guidance gives the Region the authority to assign resources or redistribute certification activities to other FAA offices. However, Region Office management has not performed an evaluation of available resources at local FSDOs and has left it up to each individual FSDO to manage its own resources and workload.

Figure 3. Denver FSDO and Staffing Compared to Similar Offices

	Certificates Managed	Number of Inspectors	Certifications Completed FY 2010 – FY 2013
Seattle	220	26	14
Portland	215	19	28
Denver	178	15	6

Source: OIG analysis of FAA data for general aviation inspectors and the number of certificates those inspectors oversee.

FAA Does Not Effectively Prioritize or Track Certification Projects Performed by Its FSDOs

FAA uses a first come-first served approach to processing certification requests, which, according to office managers, could result in significant delays if more complex certifications are first in the certification queue. For example, a large Part 135 carrier applicant that requires extensive inspector staff time and effort due to the size and complexity of the operation could delay all new certifications behind it.

FAA guidance provides field offices with the option to pass over applicants when specific resources are not available to perform the certification so that the offices can continue processing other less-complex applications lower in the queue. While this flexibility would allow less complicated certifications to move quickly through the backlog, the process is seldom used. For example, the Assistant Manager at the Denver FSDO stated he was aware of this alternative, but had never asked the region for approval to allocate resources to more simple

⁶ Compared to Seattle and Portland, based on the number of certificates managed and the number general aviation inspectors.

⁷ Pilot deviations occur when the actions of the pilot results in a violation of a Federal Aviation Regulation, such as failure to maintain assigned altitude.

certifications. According to the Senior Technical Advisor for Flight Standards Service Field Operations, the Agency intends to update its guidance to better streamline less-complex operator certifications. However, because this update is still early in the planning stages, it remains unclear what impact these policy clarifications will have on future certifications.

FAA also does not have an established process to track new certification applicants. Currently, when inspectors receive new applications, they enter them into CSOP—FAA’s certification management system—and categorize them as either an air organization or a repair station. However, there is no method to sequence applications or assign tracking numbers within the system. Instead, inspectors create a separate tracking sheet that organizes each application by the date it was received. FSDOs maintain these tracking sheets outside of the database, which limits transparency at the regional and national levels. As a result, FAA Headquarters and regional office personnel can not readily assess the workload of individual FSDOs and determine what resources may be needed.

FAA Does Not Effectively Manage Inspector Resources To Initiate Certifications of Waitlisted Applicants

FAA has not provided an objective method or national guidance for determining if and when enough inspectors are available to initiate new certifications at offices with waiting lists. According to FAA guidance, when a FSDO receives new applications, the office manager should perform an evaluation of available inspector staff to determine whether the certification process can proceed. If resources are not available, applicants would be placed on a waiting list. However, there is no requirement for FAA field or regional offices to later re-evaluate the resources needed for these certifications or the availability of inspector resources. Moreover, FAA does not forecast resource availability for future certification activities. Without such evaluations or forecasts, FAA will remain unaware of the specific resources needed for completing new certifications and will be unable to adequately schedule its staffing needs for this process.

Alternatively, FAA guidance allows regional offices to transfer applications to a different field office with more work capacity. Transferring certification applications to other offices with available resources could help reduce certification delays. For example, even though many FSDOs face backlogs, there is potential for other offices to handle additional work now, or as they complete certifications in progress. We found that 29 of 85 (34 percent) Flight Standards field offices have 5 or fewer applicants awaiting certification. Further, 25 offices currently do not have a waiting list for new certifications. However, according to our interviews with FAA staff, the Northwest Mountain Region has not been using the transfer process, in part because they do not have information regarding the

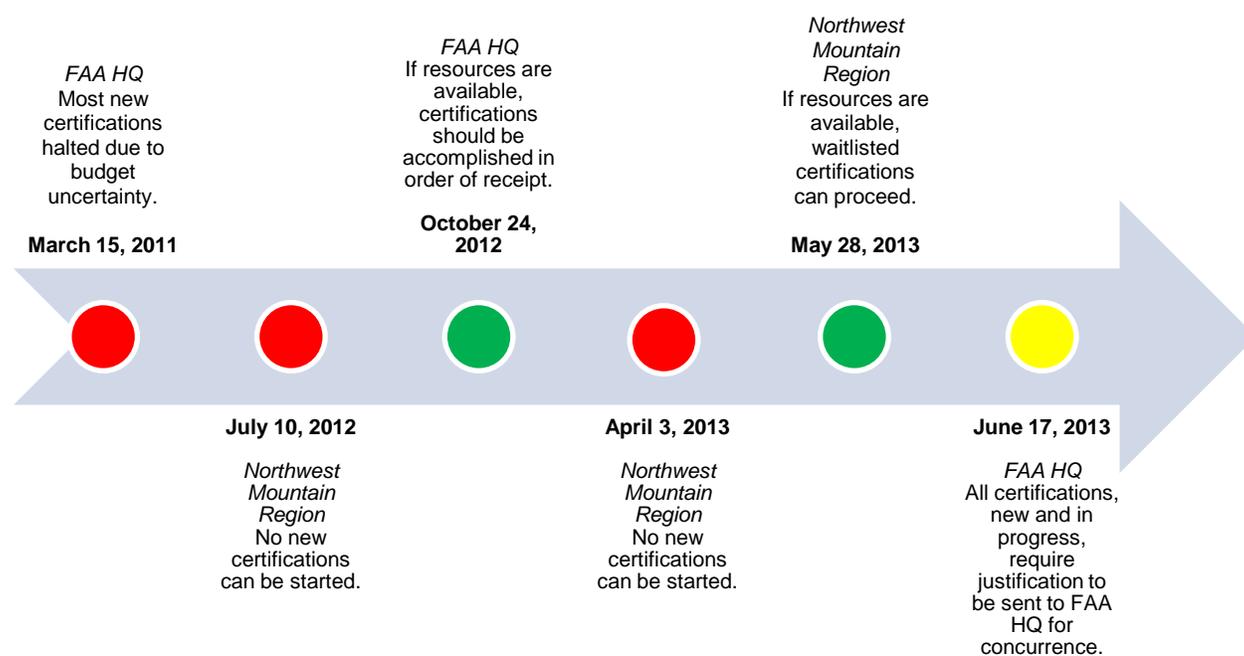
resources at each location and therefore leave it up to each individual FSDO office to manage its workload.

Frequently Changing Guidance and Competing Priorities Have Interrupted the Certification Workflow

Over the last 3 years, changes to guidance from Headquarters and the regional office on whether to initiate new certifications has resulted in workflow interruptions and diminished incentive for inspectors to expedite new certification applicants. In addition to managing workflow interruptions, FAA inspectors are challenged with ensuring that existing operators continue to operate safely while also balancing the need to certify new operators.

While FAA states it has never formally suspended all certification work, there has been conflicting communications between Headquarters and the field regarding when to perform and when to halt certification efforts. For example, in March 2011, FAA halted most new certification activity nationwide. In addition, the Northwest Mountain Region (to which the Denver FSDO reports) stopped new certifications twice over a 1-year period. Also, in June 2013, FAA stated that Headquarters must approve any new certification work at field offices. See figure 4 below for a timeline of FAA's frequently changing communications regarding certifications.

Figure 4. FAA Communications Regarding New Certifications



Source: OIG analysis of FAA data.

According to FAA representatives at regional and district office levels, these cessations in certifications were due in part to ongoing budget issues, sequestration, and the need to ensure the safety of operators they already oversee.

CONCLUSION

FAA's certification responsibilities are an important component of the Agency's mission to ensure safe operations in the NAS and support the growth of the aviation industry. However, FAA is currently facing greater industry demand and its current certification and resource management processes cannot keep pace. This has led to a backlog of entities awaiting certification that will only continue to grow if FAA does not take immediate steps to address it. FAA is currently working to revise guidance to streamline the certification process for less complex applications in the queue. However, the Agency must find better ways to prioritize and track its certification workload, as well as more effectively manage and maximize the inspector resources it has to meet its oversight and certification needs. While ensuring the safety of current operators necessarily remains FAA's top priority, excessive or prolonged delays to certifying new operators and repair stations hinders the industry's expansion and our nation's economic growth.

RECOMMENDATIONS

To improve the efficiency and effectiveness of FAA's Flight Standards certification process, we recommend that FAA:

1. Clarify and disseminate Agency guidance that allows field offices to establish priorities and pass over applicants when specific resources are not available to perform the certification.
2. Require the Northwest Mountain Regional Office to evaluate resources across its district offices and determine whether certification services can be shifted to other offices with greater resource availability and assess the extent to which this applies to other offices.
3. Develop a tracking number and sequencing system within CSOP to enhance reporting and visibility of certification activities to Flight Standards management.
4. Develop a standardized approach for District Offices to continually monitor and evaluate whether resources are adequate to initiate new certifications.

AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

We provided FAA with our draft report on April 7, 2014, and received its formal response on May 22, 2014, which is included in its entirety as an appendix. FAA concurred with all four of our recommendations and has taken swift action to address our concerns at both the regional and field office levels. Based on FAA's response, we consider recommendations 1, 3, and 4 resolved but open pending completion of planned actions. We are requesting additional information for recommendation 2.

For recommendation 2, FAA described the process regional offices use to reassign certification activities to other field offices, and stated it recently implemented new procedures for waitlisted applicants. These procedures incorporate a monthly review of all field office waitlists and an evaluation of their certification capacity. According to FAA, this review will facilitate certifications in order to achieve approximately equal wait times across all field offices. The intent of our recommendation was to have the *Region* conduct the monthly review; however, FAA's response states that the monthly review will be performed at the field office level. Therefore, we are concerned FAA still would not have a process for field offices to alert regional offices of capacity, thereby limiting the benefits of the new approach. We are requesting that FAA clarify how the Region will participate in the monthly evaluations to determine whether resources are available to perform new certifications.

ACTIONS REQUIRED

FAA's planned actions for recommendations 1, 3, and 4 are responsive, and we consider these recommendations resolved but open pending completion of the planned actions. For recommendation 2, we request that FAA provide additional information as described above. In accordance with Department of Transportation Order 8000.1C, we request that FAA provide this additional information within 30 days of this report. Until we receive this information, we consider recommendation 2 open and unresolved.

We appreciate the courtesies and cooperation of FAA representatives during this audit. If you have any questions concerning this report, please call me at (202) 366-0500 or Tina Nysted, Program Director, at (404) 562-3770.

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cc: DOT Audit Liaison, M-1
FAA Audit Liaison, AAE-100

EXHIBIT A. SCOPE AND METHODOLOGY

We conducted our work from July 2013 through April 2014 in accordance with generally accepted Government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

To assess the status of pending certifications at the Denver FSDO, we met with FAA Flight Standards officials at the Headquarters, regional, and local level that are directly responsible for the certification of new air operator and repair station applicants. We visited the Denver and Seattle FSDOs along with the Northwest Mountain Region Office to interview managers and staff involved in the certification process. We also reviewed the status of pending certifications nationwide. This information and analysis was included as part of a hearing before the House Subcommittee on Aviation held on October 30, 2013. We utilized FAA's certification database in conjunction with interviews to determine the number of applicants awaiting certification.

EXHIBIT B. MAJOR CONTRIBUTORS TO THIS REPORT

<u>Name</u>	<u>Title</u>
Tina Nysted	Program Director
Travis Wiley	Project Manager
Marshall Anderson	Senior Analyst
Audre Azuolas	Writer/Editor



Federal Aviation Administration

Memorandum

Date: May 22, 2014

To: Matthew E. Hampton, Assistant Inspector General for Aviation

From: H. Clayton Foushee, Director, Office of Audit and Evaluation, AAE-1 

Subject: Federal Aviation Administration's (FAA) Response to Office of Inspector General (OIG) Draft Report: Backlog of Flight Standards Certification Applications

The FAA plays a central role in ensuring that the United States aviation system continues to be the safest in the world. This responsibility covers almost every facet of aviation, including the certification of air carriers, aircraft, and airmen; the operation and maintenance of aircraft; aircraft manufacturing; and the approval of new aircraft design. The Flight Standards Service (AFS) provides initial certifications and ongoing oversight and surveillance of both existing and newly certificated entities.

The FAA fully recognizes that its obligation to the American public requires the agency to undertake certification projects with existing resources. Last year's budget required AFS to be especially judicious in evaluating its ability to take on new certification projects, not only because of the lengthy resource commitment required for the initial certification process, but because of ongoing higher priority oversight and surveillance activity to validate operators' ability to manage risk and to achieve safety objectives. These constraints adversely affected certification projects. The AFS management team is actively working to reduce the backlog and to find innovative ways to enhance our efficiency and agility in handling both certification and other core functions. The agency takes the findings of this audit very seriously and plans to have all updates to the Certification Services Oversight Process (CSOP) completed by December 31, 2014.

To this end, AFS has initiated an expedited review of the Northwest Mountain CSOP Wait-List Advancement Procedures. The goal of this review is to incorporate applicable elements of the non-sequential certification advancement process into revised and updated national guidance. This change will help to reduce the nationwide certification backlog by offering a nationally-standardized process and criteria by which field offices can certificate an applicant even if that applicant is not next on the CSOP wait list.

Concurrently, the heavily impacted AFS Northwest Mountain Region (ANM) is taking steps to determine how certification services can be shifted to other offices with greater resource availability. ANM is also working with Headquarters management to develop a CSOP tracking

number and sequencing system, as well as a nationally-standardized approach for field offices to continually monitor and evaluate whether resources are adequate to initiate new certifications.

RECOMMENDATIONS AND RESPONSES

Recommendation 1: Clarify and disseminate Agency guidance that allows field offices to establish priorities and pass over applicants when specific resources are not available to perform the certification.

FAA Response: Concur. To address this issue in the most heavily impacted region, the Northwest Mountain Region Flight Standards Division (ANM-200) has just implemented Local Technical Document, AFS-ANM-200-016, *Northwest Mountain Region Certification Services Oversight Process (CSOP) Wait-List Advancement Procedures*. AFS-ANM-200-016 outlines a process for Northwest Mountain Region field offices to certify applicants when that office has resources for the activity, even if the applicant is not next on the CSOP wait list. This process is intended to address and reduce long wait times for applicants whose certification requires fewer resources for both initial certification and continuing operational safety oversight.

To address this issue nationally, AFS will review by May 31, 2014, the process documented in AFS-ANM-200-016, modify as needed, and incorporate applicable provisions into revised national policy for nationwide use. AFS will complete modifications to national policy and publish the national process no later than December 31, 2014.

Recommendation 2: Require the Northwest Mountain Regional Office to evaluate resources across its district offices and determine whether certification services can be shifted to other offices with greater resource availability and assess the extent to which this applies to other offices.

FAA Response: Concur. The national CSOP process, AFS-002-900-S1, *Certification Services Oversight Process Standard Operating Procedure (CSOP SOP)*, outlines a process for review (*Regional Office Responsibilities*, paragraph 2.4.3.3). In ANM-200, the Technical Standards Branch – General Aviation (ANM-230), is responsible for this review. Through the process, AFS-ANM-200-016, ANM-230 incorporates a monthly review of all ANM's field office CSOP wait lists and an evaluation of their certification capacity. The purpose of this additional review is to facilitate distribution of certifications in order to achieve approximately equal wait times across ANM field offices. ANM-230 will use AFS-ANM-200-016 to strengthen its practices and consistently follow the CSOP SOP by June 30, 2014.

To help ensure consistent application of both AFS-002-900-S1 and AFS-ANM-200-016 processes, the regional Safety Analysis and Evaluation Branch, ANM-290, will develop a job aid to support data collection that documents regional compliance with the two processes. ANM-290 will also audit compliance with both processes and prepare a report for review and any needed action by the ANM Flight Standards Division Manager by September 30, 2014.

Recommendation 3: Develop a tracking number and sequencing system within CSOP to enhance reporting and visibility of certification activities to Flight Standards management.

Appendix. Agency Comments

FAA Response: Concur. AFS will revise the CSOP SharePoint site functionality to implement this recommendation for tracking numbers and a sequencing system. The CSOP SharePoint site will be revised as described above by December 31, 2014.

Recommendation 4: Develop a standardized approach for District Offices to continually monitor and evaluate whether resources are adequate to initiate new certifications.

FAA Response: Concur. ANM-200 has proposed that language be added to the national CSOP SOP. This new language will require office managers to perform a monthly review of their CSOP wait lists and determine whether new certifications can be accommodated. AFS-ANM-200-016 also provides additional guidance for field offices to facilitate and monitor non-sequential advancement of certification applications. To develop a standardized approach, AFS has established a working group comprised of both headquarters and field subject matter experts to review and revise national certification policy. As part of this effort, the working group will review the baseline process documented in AFS-ANM-200-016 and as appropriate, AFS will adapt and incorporate these concepts and principles into revised national guidance by December 31, 2014.