U.S. Department of Transportation
Office of the Secretary of Transportation

GENERAL COUNSEL

1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

March 31, 2022

The Honorable Henry J. Kerner
Special Counsel
U.S. Office of Special Counsel
1730 M Street NW., Suite 218
Washington, DC 20036

Re: OSC File No. DI-21-000728

Dear Mr. Kerner:

By letter dated September 21, 2021, you referred for investigation two allegations from a confidential whistleblower. The whistleblower alleged that FAA officials failed to ensure that airlines are operating in compliance with FAA policy and safety regulations, by improperly approving operations specifications (OpSpecs) for commercial operations under 14 CFR Parts 121 and 135 that include aircraft with experimental airworthiness certificates. The whistleblower also alleged that this failure created a substantial and specific risk to the public safety.

The Secretary of Transportation has delegated responsibility for matters falling under 5 U.S.C. Section 1213(d) to the General Counsel. As Deputy General Counsel, I have the authority to carry out the functions and duties of the General Counsel. The Federal Aviation Administration's Office of Audit and Evaluation (AAE) prepared the Report of Investigation (ROI) in this matter. I enclose the ROI with this letter.
The investigation substantiated the first allegation. The investigation found 95 aircraft listed in the FAA Aircraft Registry Database with "experimental" class airworthiness certificates that were also listed as approved for commercial service under FAA Operations Specification D085 ("Aircraft Listing"). The investigation partially substantiated the second allegation. Based on a review of a sample of these discrepancies, FAA found that they were administrative in nature and did not create a substantial and specific danger to public safety. However, one of the corrective actions identified in the report calls for a full review of the discrepancies identified, to confirm that none of them present safety risks to the public.

The report includes a total of eight recommendations for corrective action to the Associate Administrator of Aviation Safety (AVS-1). AVS' response to the recommendations is expected by April 20, 2022. Working with the FAA Administrator and, in turn, AAE, my office will ensure that AVS adequately responds to the recommendations.

We have appreciated the opportunity to review this important matter and the whistleblower's diligence in raising their concerns.

Sincerely,

John E. Putnam
Deputy General Counsel

Enclosures

Federal Aviation Administration
Report of Investigation
To the Office of the Secretary of Transportation

In response to:

U.S. Office of Special Counsel (OSC)

File DI-21-000728

Director, Office of Audit and Evaluation (AAE-1)
Federal Aviation Administration
Washington, D.C.

March 29, 2022

Executive Summary

On September 21, 2021, Special Counsel Henry J. Kerner referred to the Secretary of Transportation for investigation a U.S. Office of Special Counsel (OSC) whistleblower disclosure (OSC File No. DI-21-000728).

On February 4, 2022, the Office of the Secretary of Transportation redelegated the investigation to the Federal Aviation Administration's (FAA), Office of Audit and Evaluation (AAE). [1] AAE is an independent office with the statutory authority to conduct impartial investigations of aviation safety-related whistleblower disclosures. This disclosure alleges that the FAA failed to ensure that airlines are operating in compliance with FAA policy and safety regulations. The whistleblower did not consent to the use of their name in the agency report.

The whistleblower alleged that FAA officials failed to ensure that airlines are operating in compliance with FAA policy, and that this failure creates a danger to public safety, specifically that:

- Aviation Safety Inspectors (ASIs) have improperly approved operations specifications (OpSpecs) for commercial operations under 14 CFR Parts 121 and 135 that include aircraft with experimental airworthiness certificates; and
- The FAA's failure to provide adequate oversight of commercial airlines' creates a substantial and specific risk to the public

The first allegation was substantiated. The investigation found 95 aircraft listed in the FAA Aircraft Registry Database as having "experimental" class airworthiness certificates that were also listed on OpSpecs D085[2], Aircraft Listing, for 66 14 CFR Part 121 and 135 certificate holders. AAE partially substantiated the second allegation.

This report includes eight recommendations for corrective action to the Associate Administrator of Aviation Safety (AVS-1), including corrections to the recorded airworthiness status of the aircraft identified in this report. A response to AAE on these recommendations is anticipated from AVS by April 20, 2022. AAE will work with the Administrator and, in turn, the Office of the Secretary (OST), to ensure that AVS adequately responds to these recommendations to OST's satisfaction.

[1] The matter was originally delegated to the Office of Inspector General.

[2] OpSpecs Paragraph D0085, Aircraft Listing, provides a means for certificated operators and the FAA to designate those aircraft that are authorized to be used in commercial operations by that specific operator.

Detailed Findings

***Allegation 1*: Aviation Safety Inspectors (ASIs) improperly approved OpSpecs for commercial operations under 14 C.F.R. Parts 121 and 135 that include aircraft with experimental airworthiness certificates.**

Background:

Airworthiness certificates are issued in two classifications, "Standard" and "Special." With some exceptions for older aircraft, all aircraft operated in air commerce under 14 CFR Parts 121 and 135 must be issued a standard airworthiness certificate.[3]

Special airworthiness certificates are issued for varying circumstances, including the testing of major alterations to certificated aircraft. For example, an air carrier may desire to modify its fleet by installing a new navigation system. If the FAA has not previously approved that new system, it must be installed, thoroughly tested and verified for compliance with all regulatory requirements. A test aircraft is selected, and required tests are accomplished to gain FAA approval. Once approval is gained, the system can be installed on other, similar aircraft without further testing. During the testing phase of a modification project, the aircraft is altered from its original approved design and is no longer considered "airworthy" under a standard airworthiness certificate; this requires the issuance of an "experimental" airworthiness certificate.

Once the testing is satisfactorily completed, the certificate holder has two options to restore the aircraft to a "standard" configuration. The tested system can be completely removed from the aircraft and the standard airworthiness certificate reissued, or the data for the alteration can be submitted to the FAA. Once approved, a new standard airworthiness certificate may be issued with the newly FAA approved system installed.

Typically, a new airworthiness certificate supersedes the one previously issued. There is an exception for experimental certificates. If the alteration project is short term, the existing standard certificate can be held in suspense by the inspector or FAA designee and then returned to the certificate holder upon project completion. In these cases, an inspector or designee should enter the phrase "Do Not Code" in the Coding field on the FAA Form 8130-6 application. If the proper data entry procedures are followed, an experimental certificate would not be recorded in the Aircraft Registry database and the standard airworthiness status will remain in effect. AFB-700 receives and scans the documentation for storage in the Electronic Document Retrieval System (EDRS) and updates the information in the database.

Findings: Substantiated.

[3] The category is dependent on the certification basis of each aircraft, which is based on weight and load capacity.

FAA Aircraft Registry data for 14 CFR Part 121 and 135 certificate holders was evaluated to identify aircraft having experimental airworthiness certificates that were also listed in OpSpec paragraph D085. The comparison identified 95 aircraft listed on OpSpecs for 66 different certificate holders showing an experimental airworthiness classification.

Each of the aircraft identified had been involved in major alteration projects that required an experimental airworthiness certificate. In some instances, the airworthiness record supported a current standard airworthiness certificate while the Aircraft Registry database inappropriately reflected the airworthiness class as experimental. There were also aircraft records that supported the experimental airworthiness class in the database. Those records were confusing and did not reflect the actual airworthiness status of the aircraft.

The major finding of this investigation is that there are multiple deficiencies in the FAA process for recording changes to aircraft airworthiness status. There is a lack of consistency and data quality control when completing and submitting airworthiness certification documents to the FAA Aircraft Registry. In many of the records reviewed, the superseded certificates were not appropriately marked as such, which resulted in inaccurate and out of sequence database updates. In many cases the phrase "Do Not Code" was found to have been entered on the FAA Form 8130-6 application, yet the action of issuing the experimental certificate was erroneously coded in the database record. In other cases, the application should have been marked to indicate "Do Not Code" and was not.

A review of the applicable guidance revealed an absence of concise instructions for adding aircraft to certificate holders' authorized aircraft lists (OpSpecs D085). FAA guidance specifically directs the inspector to validate that the aircraft is properly insured, but does not require that the aircraft registration and airworthiness certificate on file be verified.[4] [5]

There is also a lack of detailed guidance for completing, organizing, and submitting airworthiness certification documentation to the FAA Aircraft Registry. Inspector guidance found in FAA Order 8900.1 directs inspectors to FAA Order 8130.2J for instructions on issuing airworthiness certificates, including the documents required for submission to the Aircraft Registry. The guidance specifies the documents that must be included but does not provide adequate instructions for compiling the documents in a specific order, or sequence, to reflect the activities in the sequence in which they took place. The instructions fail to require that the final and current airworthiness certificate to be recorded is clearly specified in the submission. This lends to confusion for the Aircraft Registry data entry clerk.[6]

Instructions for indicating which airworthiness certificate has been superseded are also vague. The instructions provided in FAA Order 8130.2J, merely state "Superseded, terminated, or cancelled airworthiness certificates must be included and *marked accordingly* if a recurrent

[4] FAA Order 8900.1, Volume 10, Chapter 9, Section 1 and 2 Part 121 and 135 Aircraft Configuration Control Document, Table 10-9-1A and Table 10-9-2C consecutively.
[5] FAA Order 8900.1, Volume 3, Chapter 18, Section 6 - OPSPEC/MSPEC/LOA D085—AIRCRAFT LISTING.
[6] FAA Order 8900.1, Volume 10, Chapter 9, Section 1 and 2 Part 121 and 135 Aircraft Configuration Control Document, Table 10-9-1A and Table 10-9-2C consecutively.

certificate is issued." The instructions do not define what is considered "marked accordingly". Those instructions allow the paperwork to be submitted in random order, giving the data entry clerk no specific direction in recording the final airworthiness certificate status.

Flight Standards (AFX) is also lacking a process to periodically audit and correct deficiencies in its Aircraft Registry and OpSpecs systems. The lack of an audit process contributed to the inaccurate data identified in this investigation.

Allegation 2: FAA failure to provide adequate oversight of commercial airlines' operations specifications created a substantial and specific safety risk to the public.

Background

Operation Specifications (OpSpecs):

FAA certificates issued to air operators include a stipulation that their operations must be conducted in accordance with the provisions and limitations specified in the certificate holder's OpSpecs.[7] The OpSpecs specify the authorizations, limitations, and certain procedures under which each type of operation must be conducted and under which each class and size of aircraft must be operated. OpSpecs may be added or amended whenever necessary (by the certificate holder or the FAA) to address routine changes in fleet composition or operations. A certificate holder may not conduct operations inconsistent with its current OpSpecs.

Web-based Operations System Safety (WebOPSS):

The WebOPSS User Guide (revised 10/2015) states that WebOPSS is the next generation of application software utilized by AFX to collect data on operator activities, to disseminate FAA policies to the certificate holder and inspector communities, and to generate and manage authorizing documents on behalf of the operator, which includes OpSpecs. This system contains some of the most up-to-date data on the airline industry.

OpSpecs Paragraph D0085, Aircraft Listing, provides a means for certificated operators and the FAA to designate those aircraft that are authorized to be used in commercial operations by that specific operator.

Findings: Partially substantiated.

As described in allegation 1 of this report, discrepancies were noted in FAA's management and monitoring of FAA databases, including OpSpecs. The FAA Aircraft Registry Database records reviewed in this investigation did not accurately reflect the actual airworthiness status for the identified aircraft. A sampling of the records for the aircraft identified were reviewed and it was noted that even though database showed that the current airworthiness certificates were in the

[7] FAA Order 8900.1, Volume 3, Chapter 18.

experimental category, they actually did have standard airworthiness certificates issued to them. Those discrepancies were administrative in nature and did not create a substantial and specific safety danger to the public. Although the investigation did not find a substantial and specific danger to public safety, the potential risk of safety concerns still exists, because such data is relied upon to ensure safety compliance, and unless all of the data is validated for accuracy, regulatory non-compliance could actually exist. Therefore, one of the recommended corrective actions in this report is that FAA validate that all of the aircraft identified in this report are appropriate for commercial use.

Recommendations and Corrective Actions:

Based upon the findings related to existing guidance regarding the issuance of airworthiness certificates and the certification process, the following recommendations are issued to the Office of Aviation Safety (AVS) and the Flight Standards Service (AFX).

Recommendation 1: Ensure that the records for the identified aircraft in Allegation 1 are evaluated and corrected.

Recommendation 2: Review and revise FAA Order 8900.1, Volume 3, Chapter 18, Section 6, for authorizing aircraft to be added to a certificate holders' OpSpecs paragraph D0085. The guidance should instruct the inspector to ensure that the aircraft is registered and has a current standard airworthiness certificate.

Recommendation 3: Review and revise guidance for documenting and submitting accurate airworthiness certification activities to the FAA Aircraft Registry. Guidance should direct the submitter to provide concise documentation that clearly identifies the final airworthiness certificate category assigned by that documentation.

Recommendation 4: Alert inspectors and airworthiness designees of the findings in this report and the importance of making sure that document packages submitted to the FAA Aircraft Registry are concise and clearly depict the sequence of events and final airworthiness status.

Recommendation 5: Develop and implement an automated audit function that will periodically compare FAA Aircraft Registry and OpSpecs paragraph D085 information.

Recommendation 6: Conduct a formal risk assessment to determine the actual risk the identified OpSpecs discrepancies pose to safety.

Recommendation 7: Evaluate guidance related to OpSpecs management and oversight and update national policy to specify an inspector's responsibility to proactively and periodically review OpSpecs for currency and accuracy and to correct any discrepancies.

Recommendation 8: Develop and implement an automation solution that supports Flight Standards business rules, workflows and regulatory requirements related to the overall issuance, acceptance, management and oversight of OpSpecs and to address the discrepancies above to include operator and inspector notifications.

Investigation Methodology

The investigation was conducted under the authority of the FAA Office of Audit and Evaluation (AAE), pursuant to Title 49 U.S.C. §106(t) and FAA Order 1100.167B.

Investigative Team:

- [redacted], Senior Investigator, Office of Audit and Evaluation – Detailee
- [redacted], Investigator, DOT Office of the Inspector General

AAE analyzed records, documents, and interviews obtained from the DOT Office of Inspector General, as well as memorandums, emails, FAA guidance, policy, regulations, orders, notices, and records obtained from the FAA Aircraft Registry, WebOpps and Vital Information Systems (VIS). In addition, interviews and technical discussions with ten AFX executives, managers and policy/technical specialists, discussions of policy, and email correspondence were conducted.