



THE SECRETARY OF TRANSPORTATION

WASHINGTON, D.C. 20590

June 10, 2009

William E. Reukauf
Acting Special Counsel
U.S. Office of Special Counsel
1730 M Street, NW, Suite 218
Washington, DC 20036

Re: OSC File Nos. DI-08-0591 and DI-08-1696

Dear Mr. Reukauf:

Thank you for your correspondence of March 12, 2008, and May 20, 2008, concerning whistleblower allegations of management improprieties at the Federal Aviation Administration's (FAA) Detroit Metropolitan Airport (DTW) Air Traffic Control Tower (ATCT). The complainant, Vincent Sugent, a senior controller at DTW, raised a number of concerns, including that DTW management operated an air traffic approach and departure configuration known as the "Southwest Flow" in an unsafe manner and in violation of FAA policy. Among his other concerns, Mr. Sugent asserted that management guidance to controllers for directing traffic on "Taxiway Quebec" was contradictory, thus creating confusion. In addition, Mr. Sugent expressed concern that FAA managers provided misleading information to Senator Carl Levin in response to the Senator's inquiry about the safety of the Southwest Flow.

The former Secretary of the U.S. Department of Transportation, Mary Peters, delegated responsibility for investigating Mr. Sugent's concerns to the Department's Inspector General, who has concluded his investigation and provided me the enclosed memorandum report containing his findings and recommendations.

In short, the Office of Inspector General (OIG) substantiated several of Mr. Sugent's allegations, including that from May 2007 to October 2007, a critical segment of DTW's Southwest Flow operation was often non-compliant with an applicable FAA safety directive prescribing aircraft separation standards for intersecting runways. This allowed a potentially unsafe condition to persist. The OIG further found that DTW management failed to provide controllers with proper instruction on the safe operation of the Southwest Flow, and management guidelines for certain Taxiway Quebec operations were contradictory and confusing.

The OIG also concluded that DTW's Manager and then-Staff Manager provided wording for FAA's September 17, 2007, response to Senator Levin that was, at a minimum, disingenuous. In particular, FAA advised Senator Levin that a recent FAA audit had not found the Southwest Flow to be unsafe. In fact, the FAA audit found non-compliance with an FAA safety Order, violations of which necessarily pose safety implications. The FAA sent a clarifying letter to Senator Levin in April 2008, but only after your office referred Mr. Sugent's concerns to the Department for investigation.

On April 3, 2009, OIG issued a report to FAA's Acting Administrator containing its findings and recommendations in this matter. By the enclosed memorandum dated May 6, 2009, the Acting Administrator responded to OIG, concurring with each of its recommendations. The FAA's corrective actions include discontinuing the Southwest Flow, completing an audit of DTW's controller training program by June 30, 2009, and counseling the DTW Manager and Operations Manager for failing to ensure the Southwest Flow complied with FAA policy.

The Acting Administrator also reported that the DTW Manager and then-Staff Manager have been counseled about the wording they provided for FAA's September 17, 2007, letter to Senator Levin concerning the safety of the Southwest Flow configuration. Although the Acting Administrator concluded that these managers misunderstood information verbally briefed to them by FAA's audit group, and thus did not intend to mislead Senator Levin, OIG found they nonetheless waited nearly 7 months after receiving the audit report to provide Senator Levin with corrected correspondence.

The Inspector General and I have reviewed the Acting Administrator's response and believe FAA's corrective actions address OIG's findings and recommendations. However, I have reservations about the adequacy of the administrative action for the managers who failed to prepare a timely clarification of FAA's September 17, 2007, letter to Senator Levin, which they principally authored. The FAA, through these managers, was obligated to promptly provide Senator Levin with a straightforward correction; this did not occur for almost 7 months. Accordingly, I will ask the new Administrator to examine these circumstances to determine whether formal disciplinary action is warranted and to apprise you of the disposition.

Transportation safety is the Department's top strategic goal. Transparency and accountability are also imperative, particularly with respect to the Department's communications with Congress, stakeholders, and especially our Nation's travelers.

I appreciate Mr. Sugent's diligence in raising his concerns.

Sincerely yours,

Ray LaHood



Enclosures: 2



Federal Aviation Administration

Memorandum

Date: May 6, 2009

To: Rick Beitel, Assistant Inspector General
for Washington Investigative Operations

From: *Lynne*
Lynne Osmus, Acting Administrator

Subject: Detroit Metropolitan Airport (DTW) Airport Traffic Control Tower Operations

We have reviewed the above identified OIG Report and submit the following responses to the recommendations contained in the report:

1. (a) Recommendation: Before DTW considers reinstating operation of the Southwest Flow, it must consult with ATO's Office of Terminal Safety and Operations and the Air Traffic Safety Oversight Service (AOV) to develop detailed procedures for the safe operation of this configuration.

Response: Concur. DTW in conjunction with ATO-Terminal will review the Southwest Flow operations to include current procedures and compliance. Modifications or changes and the approval processes will be accomplished through the Safety Management System (SMS) processes and completed by October 31, 2009. The SMS process will include a review by the Air Traffic Safety Oversight Service (AOV). In addition, AOV may elect to audit any procedures developed by the ATO whenever they deem necessary.

(b) Recommendation: ATO conduct an audit into DTW's air traffic controller training program to ensure that controllers are provided with thorough, consistent, and uniform training regarding proper air traffic procedures pertaining to intersecting runways.

Response: Concur. ATO's Office of Safety and Office of Terminal Safety and Operations Support will jointly conduct an audit of DTW's air traffic controller training program to ensure that controllers are provided with thorough, consistent, and uniform training regarding proper air traffic procedures pertaining to intersecting runways. The audit report will be completed by June 30, 2009.

(c) Recommendation: Consider appropriate administrative action for DTW Manager Joseph Figliuolo and DTW Operations Manager Kevin Grammes based on their failure to ensure that the Southwest Flow complied with FAA Order 7110.65 (regarding the safe operation of runways with intersecting flight paths), and their failure to ensure that controllers received adequate

training and guidance. Mr. Figliuolo and Mr. Grammes were counseled. We believe the counseling was effective and produced the required change in procedures and understanding.

Response: Concur. Administrative action has been effective in ensuring compliance with procedures pertaining to Southwest Flow operations. The Director of Operations for Central Service Area counseled the DTW Manager. Closer supervision was provided by monthly reports through November 2008, followed by quarterly reports to the Director. The Director will meet with the DTW Manager on April 23, 2009 to reinforce expectations. Additionally, the Director will require that the DTW Manager provide further follow-up to the facility staff.

2. (a) Recommendation: Consider appropriate administrative action for DTW Manager Joseph Figliuolo and former DTW Staff Manager Marcia Boliard for providing information for FAA's initial response to Senator Levin that was, at a minimum, disingenuous.

Response: Concur. The FAA investigated and determined that Mr. Figliuolo and Ms. Boliard misunderstood the AOV verbal outbrief reference the Southwest Flow operations. When they received the written response from AOV, it was recognized that it differed from their understanding of the initial verbal briefing. Mr. Figliuolo and Ms. Boliard were counseled. We believe the counseling was effective and produced the required change in procedures and understanding. Reference the FAA's response to Senator Levin, there was no intent to mislead. The information provided to the Senator was based on DTW management's understanding of the AOV verbal briefing. The Director of Central Service Area counseled the managers on providing information based on verbal briefings.

(b) Recommendation: The Acting Administrator apprises Senator Levin of the disposition of actions at DTW pursuant to Mr. Sugent's concerns and our findings and recommendations.

Response: Concur. I will forward Senator Levin a copy of the response to the OIG.

3. (a) Recommendation: Promptly determine the correct location for all "hold-short" lines on Taxiway Quebec and ensure that painted lines and lighted signs are situated correctly. (b) modify ASDE-X in accordance with the foregoing determinations. (c) properly train controllers on "hold-short" requirements. (d) DTW, with the review and concurrence of ATO-Terminal's Office of Terminal Safety and Operations Support, revise Subchapter 5-7.b (II) of the ground control chapter of its Operating Manual by changing wording from "should" to "shall."

Response: 3 (a) Concur. ATO's Office of Runway Safety will assist in providing an assessment for all "hold-short" lines and lighted signs on Taxiway Quebec. We will request that Airports and the Airport Authority bring identified deficiencies into compliance and advise of the expected completion date. The Office of Runway Safety will initiate these actions by May 30, 2009.

Response: 3 (b) Concur. The FAA will ensure ASDE-X and hold short requirements are integrated pending completion of actions in 3 (a).

Response: 3 (c) Concur. DTW will review the training on hold short requirements for Taxiway Quebec operations based upon any changes that result from actions addressed in 3a and 3b. Any

changes to training found to be appropriate following the review will be completed by June 30, 2009.

Response: 3 (d) Concur. DTW, with the review and concurrence of AJT, will revise as necessary the subchapter 5-7 b.(11) of the ground control chapter of its Operating Manual by changing the word "Should" to Shall". This will be completed by June 30, 2009.

4. Recommendation: Require that AOV conduct a follow-up audit to ensure that DTW's corrective measures regarding segregation of outbound jet and propeller aircraft are still being properly trained and implemented, and are sufficient to remedy the safety concerns previously identified by AOV.

Response: Once the above actions are completed, the ATO will request that AOV conduct an audit of actions taken in response to the OIG report.



Memorandum

**U.S. Department of
Transportation**

Office of the Secretary
of Transportation

Office of Inspector General

Subject: ACTION: OIG Investigation #08IHB33H001,
Re: Detroit Air Traffic Control Tower

Date: May 18, 2009

From: Calvin L. Scovel III
Inspector General

Reply to
Attn of:

To: The Secretary

In accordance with the statutory requirements of the U.S. Office of Special Counsel (OSC), this presents our investigative findings and recommendations stemming from whistleblower safety concerns disclosed by Vincent Sugent, a senior Air Traffic Controller at FAA's Detroit Metropolitan Airport (DTW) Air Traffic Control Tower (ATCT). We conducted our investigation with technical assistance from FAA's Air Traffic Safety Oversight Service (AOV)¹, which is independent of the Air Traffic Organization (ATO), to which DTW reports.

Mr. Sugent raised multiple concerns regarding the safety of air traffic operations at DTW to OSC. OSC, in turn, referred Mr. Sugent's concerns to then-Secretary Peters by letters dated March 12, 2008 (OSC File No. DI-08-0591), and May 20, 2008 (OSC File No. DI-08-1696). Specifically, Mr. Sugent alleged the following:

¹ AOV was established on March 14, 2005, by the FAA Administrator in response to recommendations, made by the National Civil Aviation Review Commission and the International Civil Aviation Organization, that air traffic service providers be subject to safety oversight by an FAA entity outside the Air Traffic Organization (ATO). AOV's mission includes having authority to develop or adopt safety standards, and to ensure that the ATO complies with those standards. AOV is part of FAA's Aviation Safety Organization, and provides independent oversight of the ATO in a manner structurally similar to FAA's oversight of air carriers.

1. DTW management officials operated an air traffic approach and departure configuration known as the “Southwest Flow”² in a manner that was unsafe because it violated an applicable FAA safety Order, and management guidance to DTW controllers regarding this configuration was confusing and inadequate.
2. FAA officials provided misleading information to Senator Carl Levin in response to the Senator’s inquiry about the safety of the Southwest Flow.
3. The “hold-short” lines on Taxiway Quebec and as depicted on controller monitor screens via ASDE-X,³ are insufficient for controllers to comply with DTW guidance for directing traffic on this Taxiway. In addition, language and guidance contained in a DTW Notice and DTW’s local Operating Manual for directing traffic on Taxiway Quebec is contradictory, creating unnecessary confusion for controllers.
4. Management has not implemented necessary changes to written guidance provided to controllers for segregating jet and propeller aircraft departures.
5. DTW controllers were unable to use an electronic communication system when transmitting Standard Instrument Departure (SID) routes to aircraft traveling to several airports in Ohio.

Secretary Peters delegated investigation of these allegations to our office. If you accept the results of our investigation, we recommend you transmit this report to the Special Counsel, along with FAA’s statement of corrective action in response to our findings and recommendations.

Results in Brief

In short, our investigation substantiated several of Mr. Sugent’s concerns. Foremost, we found that between approximately May 2007 and October 2007, a critical segment of DTW’s “Southwest Flow” operation was often non-compliant with an applicable FAA safety Order, which prescribes aircraft separation standards for intersecting runways. This allowed a potentially unsafe condition to persist, as evidenced by our

² The Southwest Flow refers to an air traffic operation in which aircraft depart or arrive from the north and head to the south, while other aircraft on an intersecting runway depart or arrive from the east and head to the west. This operation is not unique to DTW.

³ Airport Surface Detection Equipment, Model X (ASDE-X), is a runway-safety tool that enables air traffic controllers to detect potential runway conflicts by displaying, on controller monitor screens, the details of aircraft and vehicle movement on runways and taxiways.

finding of at least one controller operational error directly attributable to DTW's non-compliant operation of the Southwest Flow.⁴

We concluded that DTW's non-compliance resulted from both factors inherent to the configuration, and DTW management's failure to provide controllers with proper instruction on its safe operation. We further determined that, for two months during this period, DTW Operations Manager Kevin Grammes knowingly allowed the non-compliant operation to occur. Due to the adverse safety implications, DTW applied interim corrective measures in October 2007, but ultimately discontinued the Southwest Flow in March 2008 because the corrective measures could not assure compliance with FAA Order 7110.65.⁵

Additionally, we concluded that DTW Manager Joseph Figliuolo and then-Staff Manager Marcia Boliard provided wording for FAA's September 2007 response to Senator Levin that was, at a minimum, disingenuous. FAA sent a clarifying letter to Senator Levin in April 2008—seven months later, and only after OSC referred Mr. Sugent's concerns for investigation. The US Attorney's Office, Eastern District of Michigan, declined to consider prosecution of this matter.

We have presented our findings and recommendations in this matter to FAA's Acting Administrator. Our recommendations are detailed later in this report.

Allegation 1: DTW management operated an air traffic configuration known as the "Southwest Flow" in a manner that was unsafe because it violated an applicable FAA safety Order, and guidance provided to DTW controllers regarding this configuration was confusing and inadequate.

Findings: DTW temporarily discontinued a critical segment of the Southwest Flow operation in October 2007, after AOV and ATO's Office of Safety Services (ATO-

⁴ An "operational error" occurs when less than 90% of the minimum separation standard between two or more aircraft, or between an aircraft and terrain/obstacles, is met. We determined that at least one operational error, which occurred on October 17, 2007, was directly attributable to DTW's non-compliant operation of the Southwest Flow. However, we were unable to determine whether additional such operational errors occurred between May-October 2007 due to the unavailability of radar data. Our investigation was initiated after DTW ceased operating the Southwest Flow, and all relevant data had been destroyed in accordance with FAA's 45-day radar data retention policy.

⁵ In a subsequent OSC disclosure referral (OSC File No. DI-08-3157 and DI-08-2777), assigned to our office in January 2009, Mr. Sugent, along with another complainant, reported that DTW management had, in effect, reinstated operation of the Southwest Flow on at least one day in summer 2008, during which multiple operational errors occurred. We are separately investigating this issue.

Safety) conducted multiple audits and determined that the segment (known as the “dependent operation”) was non-compliant with FAA Order 7110.65, Paragraph 3-9-8, which prescribes procedures for the safe operation of runways with intersecting flight paths. In particular, DTW’s non-compliance with this Order stemmed from lack of adequate spacing between aircraft, as evidenced by at least one controller operational error, occurring on October 17, 2007, directly attributable to DTW’s non-compliant operation of the Southwest Flow. DTW ultimately discontinued the Southwest Flow in March 2008 because the corrective measures could not assure compliance with FAA Order 7110.65.

DTW management was first notified of its non-compliance with FAA Order 7110.65, Paragraph 3-9-8, in August 2007, after the non-compliance was identified during an AOV audit. A subsequent audit conducted by ATO-Safety in October 2007 also identified non-compliance with the Order. We determined that while the non-compliance occurred from approximately May 2007 to October 2007, DTW Operations Manager Kevin Grammes knowingly allowed the non-compliant operation of the Southwest Flow to occur from August 2007 to October 2007.

Mr. Grammes, after being informed of DTW’s non-compliance in August 2007 by AOV, failed to instruct Front Line Managers (FLMs) and controllers to properly execute the Southwest Flow configuration in a manner which ensured compliance with the Order. In fact, we determined that DTW management, on several occasions from May 2007 to January 2008, presented controllers with inconsistent instructions and inadequate guidance for properly executing the Southwest Flow. Although we did not find evidence to suggest DTW Air Traffic Manager Joseph Figliuolo was aware of DTW’s continued non-compliance, as the facility Manager, Mr. Figliuolo bears ultimate responsibility for ensuring the facility conducts air traffic operations in compliance with FAA Order 7110.65.

In addition to ultimately discontinuing the Southwest Flow in March 2008, because the corrective measures could not assure compliance with FAA Order 7110.65, DTW has taken steps to improve management-controller communication by implementing a new training program, and standardizing controller briefings. However, the effectiveness of these program enhancements has not been evaluated by FAA following implementation in mid-2008.

Recommendations: (a) Before DTW considers reinstating operation of the Southwest Flow, it must consult with ATO’s Office of Terminal Safety and Operations and AOV to develop detailed procedures for the safe operation of this configuration; (b) ATO conduct an audit into DTW’s newly-implemented air traffic controller training program to ensure that controllers are provided with thorough, consistent, and uniform training; and (c) consider appropriate administrative action for DTW

Manager Joseph Figliuolo and DTW Operations Manager Kevin Grammes based on their failure to ensure that the Southwest Flow complied with FAA Order 7110.65, and their failure to ensure that controllers received adequate training and guidance.

Allegation 2: FAA officials provided misleading information to Senator Carl Levin in response to the Senator's inquiry into the safety of the Southwest Flow.

Findings: By letter dated September 17, 2007, Barry Cooper, FAA's Great Lakes Regional Administrator, informed Senator Levin that AOV visited DTW in August 2007 to perform an audit of the Southwest Flow operation, and that "AOV did not find this operation to be unsafe." After OSC referred Mr. Sugent's whistleblower allegations to the Secretary in March 2008, Mr. Cooper sent Senator Levin a second letter, dated April 25, 2008, clarifying his previous correspondence.

In his April 25, 2008, letter, Mr. Cooper advised Senator Levin that his previous letter "was based on incomplete information," and did not reflect information contained in an audit report issued by AOV in September 2007. He further stated, "[a]s documented by AOV, the Air Traffic Control facility at Detroit was, in fact, not consistently compliant with a specific safety procedure when utilizing the [Southwest Flow]."

During AOV's August 2007 audit (which occurred prior to Mr. Cooper's initial letter to Senator Levin), AOV audit staff briefed DTW management that they had observed instances of non-compliance with sections of FAA Order 7110.65 governing the operation of air traffic on runways with intersecting flight paths. In our view, Mr. Cooper's initial characterization of AOV's findings to Senator Levin was, at a minimum, disingenuous. AOV's audit found non-compliance with this FAA safety Order, violations of which necessarily pose safety implications. Moreover, despite having attended the AOV briefing in which they were informed that the facility was non-compliant with this safety Order, Mr. Figliuolo and then-DTW Staff Manager Marcia Boliard provided the information for Mr. Cooper's response to Senator Levin, omitting any reference to AOV's finding of non-compliance with the Order.

We requested that the US Attorney's Office (USAO), Eastern District of Michigan, consider criminal prosecution of anyone who provided the information contained in Mr. Cooper's letter to Senator Levin, on the basis that the information in the letter was false, and thus a violation of 18 USC § 1001. However, on May 6, 2009, they declined prosecution, indicating that the case did not have sufficient evidence to conclude that the statements provided to Senator Levin were literally and deliberately false.

Recommendations: (a) Consider appropriate administrative action for DTW Manager Joseph Figluolo and former DTW Staff Manager Marcia Boliard for providing information for FAA's initial response to Senator Levin that was, at a minimum, disingenuous; and (b) the Acting Administrator apprise Senator Levin of the disposition of actions at DTW pursuant to Mr. Sugent's concerns and our findings and recommendations.

Allegation 3: The "hold-short" lines on Taxiway Quebec, and as depicted on controller monitor screens via ASDE-X, are insufficient for controllers to comply with DTW guidance for directing traffic on this taxiway. In addition, language and guidance contained in a DTW Notice and DTW's Operating Manual for directing traffic on Taxiway Quebec is contradictory, creating unnecessary confusion for controllers.

Findings: The "hold-short" markings and signage on Taxiway Quebec are currently at 750 feet on either side of the Runway 4R extended centerline. The DTW Operating Manual, however, directs controllers to hold traffic short on Taxiway Quebec at 200 feet on either side of the extended centerline. Moreover, neither the DTW controllers and managers we interviewed, nor the Airports Division personnel we contacted, were able to definitively say whether one, the other, or both "hold-short" lines are currently required.

We determined that differences in language contained in the "local control" chapter of the Manual, but not included in the "ground control" chapter, are appropriate in light of the different responsibilities of the two air traffic control tower positions. However, a conforming change in language from "should" to "shall" is needed in the ground control chapter to comport with the word "required" in that same chapter.

Recommendations: (a) Promptly determine the correct location for all "hold-short" lines on Taxiway Quebec and ensure that painted lines and lighted signs are situated correctly; (b) modify ASDE-X in accordance with the foregoing determinations; (c) properly train controllers on "hold-short" requirements; and (d) DTW, with the review and concurrence of ATO-Terminal's Office of Terminal Safety and Operations Support, revise Subchapter 5-7.b(11) of the ground control chapter of its Operating Manual by changing language from "should" to "shall."

Allegation 4: DTW management has not implemented necessary changes to written guidance provided to controllers for segregating jet and propeller aircraft departures.

Findings: Exceptions to segregation guidance between jet and propeller aircraft created confusion and constituted a potential safety issue until May 2008. We determined that DTW resolved its procedural deficiencies by simplifying segregation

procedures and eliminating the numerous exceptions that controllers had previously found confusing. In August 2008, the new procedures were incorporated into a Letter of Agreement (LOA) between DTW's ATCT and Terminal Radar Approach Control (TRACON) facility.

Recommendation: AOV conduct a follow-up audit to ensure DTW has taken sufficient action to correct the identified deficiencies.

Allegation 5: DTW controllers were unable to use an electronic communication system when transmitting SID routes to aircraft traveling to several airports in Ohio.

Findings: We determined that if the electronic communication system fails, the back-up procedure is for the clearance delivery controller to verbally provide the routing information to any departing aircraft, just as DTW now does for aircraft headed to the affected Ohio airports.

Additionally, DTW recently developed a procedure to ensure all departing aircraft, including those traveling to the airports in Ohio at issue, receive SIDs utilizing the electronic communication system. The proposed procedure is currently under review with DTW management. (Mr. Sugent has reviewed and expressed satisfaction with the proposed procedure.)

Methodology

To address Mr. Sugent's concerns, our investigation included a comprehensive examination of DTW's operation of the Southwest Flow. The OIG-led investigative team included an OIG attorney-investigator and air traffic controllers and other technical experts from AOV. Investigators from OIG and AOV conducted interviews and reviewed records at DTW. We conducted 23 interviews in Detroit and Washington, DC, including the following:

- Vincent Sugent, Complainant;
- DTW Manager (and District Manager) Joseph Figliuolo III;
- DTW Operations Manager Kevin Grammes;
- Former DTW Staff Manager Marcia Boliard;
- DTW Support Manager for Training and Quality Assurance Earl Grand;
- DTW's five Front Line Managers (FLMs);
- Eleven DTW air traffic controllers; and
- Two AOV Air Traffic Safety Inspectors who audited DTW's operation of the Southwest Flow in August 2007.

We also reviewed numerous documents, including training records, memoranda, letters, emails, manuals, and applicable FAA regulations and Orders. Additionally, we reviewed findings and reports issued in prior FAA investigations and audits into safety concerns arising from the Southwest Flow.

Findings in Detail

Finding 1: From approximately May 2007 to October 2007, DTW management operated a critical segment of the “Southwest Flow” configuration in non-compliance with FAA safety Order 7110.65, thereby allowing a potentially unsafe condition to persist. Moreover, from August 2007 to October 2007, the DTW Operations Manager knowingly allowed the non-compliance to occur. Further, DTW managers failed to provide FAA controllers with adequate instruction and training on the correct operation of this configuration.

We determined that while DTW had conducted the Southwest Flow on a routine basis from approximately May 2007 until March 2008, it temporarily discontinued operation of a critical segment of the Southwest Flow on October 17, 2007. Further, DTW ceased the entire Southwest Flow configuration on March 25, 2008, in response to multiple AOV and ATO-Safety audits in which inspectors voiced concern regarding the potential safety risks posed by aircraft proximity (lack of adequate spacing) and possible wake turbulence in the event of unplanned go-arounds. Prior audits conducted by AOV and ATO-Safety in August 2007 and October 2007, respectively, had identified a “safety compliance issue”; more specifically, that DTW was non-compliant with FAA Order 7110.65, Paragraph 3-9-8, which establishes procedures for the safe operation of runways with intersecting flight paths.

During AOV’s August 2007 audit and contemporaneous verbal briefing, DTW management was informed that they were non-compliant with the FAA Order, and were offered ways in which the facility could come into compliance, to include increasing the spacing of arrivals. In response, to AOV’s briefing, we found that DTW Operations Manager Kevin Grammes promptly conducted briefings with several of the FLMs; however, he failed to provide instructions that ensured compliance with FAA Order 7110.65, Paragraph 3-9-8. In fact, the evidence demonstrates that Mr. Grammes failed to provide instructions differing from the manner in which DTW had operated the Southwest Flow since May 2007, i.e., which AOV found non-compliant. In response to our questions, Mr. Grammes told us it would be inefficient for DTW to increase spacing between aircraft, stating that if DTW increased the gap between aircraft arrivals from 4 to 6 miles to strictly comply with Paragraph 3-9-8, “it’s not even advantageous for us to run this [configuration].”

Mr. Figliuolo told us he was aware of AOV's August 2007 non-compliance findings, but was unaware that some controllers continued to operate the Southwest Flow in a non-compliant manner subsequent to AOV's August 2007 briefing. He told us if controllers were briefed to perform in any manner less than strict adherence to the Order, "[they were] briefed incorrectly."

On October 15-17, 2007, ATO-Safety performed an internal audit of DTW, finding that "[a] portion of [DTW's] operational personnel, including the FLM's [sic], do not have an accurate understanding of the appropriate application of FAA Order 7110.65 paragraph 3-9-8." Therefore, DTW was still non-compliant with the Order two months after AOV's initial finding of non-compliance in August 2007. Significantly, this was evidenced by at least one controller operational error, occurring on October 17, 2007, as observed by ATO-Safety during its audit, directly attributable to DTW's non-compliant operation of the Southwest Flow. When Mr. Figliuolo became aware of the ATO-Safety audit findings, he directed Mr. Grammes to temporarily suspend operation of the Southwest Flow, effective October 18, 2007. Although Mr. Grammes, in a November 7, 2007, memorandum, clarified that the "independent operation" segment of the Southwest Flow could continue, the "dependent operation" segment, which AOV and ATO-Safety found non-compliant, remained suspended.

We determined that on those occasions when managers offered controllers some guidance, the managers generally briefed the controllers verbally, and provided insufficient written instructions. As reflected in a follow-up AOV audit in March 2008, as well as information related to us during numerous interviews, considerable controller confusion resulted due to incomplete or inaccurate briefings provided by DTW managers. Controllers overwhelmingly told us that they were frustrated and confused regarding the proper execution of the Southwest Flow.

In November 2007, in an effort to address the concerns of controllers and the findings of AOV and ATO-Safety, DTW management drafted proposed guidance for conducting both segments of the Southwest Flow (i.e., the independent and dependent operations). The guidance, however, was never issued due to concerns that it would not remedy the problem of non-compliance with FAA Order 7110.65.

As a result, DTW management did not take adequate corrective measures until January 2008, when it clarified the proper operation of the Southwest Flow in Notice 7110.152 by incorporating a copy of Paragraph 3-9-8 in the Notice. AOV found the Notice compliant with FAA Order 7110.65; however, during its follow-up audit in March 2008, AOV found that FLMs and controllers remained confused. In particular, AOV found that controllers were presented four different sets of instructions on how to conduct the Southwest Flow by several FLMs, resulting in varying understandings of this configuration. Consequently, in March 2008, Mr. Figliuolo issued Notice

7110.156, which superseded Notice 7110.152, directing the ATCT to cease operating Southwest Flow in its entirety.

Further, to prevent misunderstandings, in May 2008, Mr. Figliuolo issued a formal directive to subordinate managers to conduct face-to-face briefings with controllers whenever guidance in writing is issued. In addition, new standardized classroom training for operational personnel has been implemented.

Because DTW management was notified of their non-compliance with FAA Order 7110.65 in August 2007, we found that, from August 2007 until October 2007, Mr. Grammes knowingly allowed the non-compliant operation of the Southwest Flow and failed to provide direction that ensured compliance with the Order. Additionally, as the DTW Air Traffic Manager, Mr. Figliuolo is ultimately responsible for ensuring the safe operation of the Southwest Flow in compliance with FAA Order 7110.65.

Given the safety concerns, we are perplexed that it took DTW management approximately five months from AOV's August 2007 audit to issue adequate guidance to controllers incorporating sufficient clarifying instructions for conducting the Southwest Flow, and ten months to ensure controller understanding of operational procedures and materials during face-to-face briefings.

Finding 2: DTW's Manager and then-Staff Manager provided information for FAA's response to Senator Levin that was, at a minimum, disingenuous.

We reviewed Mr. Sugent's concern that FAA provided misleading information to Senator Carl Levin in a letter dated September 17, 2007. We found that in June 2007, Mr. Sugent contacted Senator Carl Levin to express concern about the safety of the Southwest Flow. In response, Senator Levin initiated an inquiry with FAA. Barry Cooper, FAA Great Lakes Regional Administrator, responded to Senator Levin by letter dated September 17, 2007. In the letter, Mr. Cooper stated that AOV visited DTW in August 2007 to perform an audit of the Southwest Flow, and that "AOV did not find this operation to be unsafe." The letter made no mention of AOV's finding of non-compliance with an FAA safety Order, posing safety implications.

After OSC referred Mr. Sugent's whistleblower allegations to the Secretary in March 2008, Mr. Cooper sent Senator Levin a clarifying letter, dated April 25, 2008. In the clarifying letter, Mr. Cooper stated that his previous letter contained "incomplete information" and did not reflect information contained in an internal safety report issued by AOV.

Mr. Figliuolo told us that he and then-Staff Manager Marcia Boliard provided the wording for Mr. Cooper's September 17, 2007, letter to Senator Levin, stating AOV

did not find DTW's operation of the Southwest Flow unsafe. Mr. Figliuolo told us that Ms. Boliard was responsible for including the assertion that AOV had not found the Southwest Flow to be unsafe; he confirmed, however, that he approved the inclusion of this statement. When interviewed, Ms. Boliard did not recall whether she provided the wording in question, but she acknowledged that it may have originated in correspondence she and Mr. Figliuolo sent to senior officials within FAA's Central Service Area for inclusion in the response to Senator Levin.

Mr. Figliuolo disagreed that the wording in Mr. Cooper's September 17, 2007, letter was misleading, maintaining that the Southwest Flow had not been "unsafe." He stated that at the time he provided Mr. Cooper with the wording for this letter, he had not yet received a copy of AOV's August 2007 audit report. According to Mr. Figliuolo, the AOV audit report was the first time DTW's operation of the Southwest Flow was deemed a "safety compliance issue." Mr. Figliuolo asserted that DTW management believed the statement in question to be accurate, based on the information available to them at the time.

Kenneth Hartenstine, the AOV auditor who conducted the August 2007 audit and subsequent briefing with DTW managers, including Mr. Figliuolo and Ms. Boliard, considered Mr. Cooper's September 17, 2007, letter to misrepresent AOV's findings. Mr. Hartenstine told us that while he did not expressly characterize the Southwest Flow as "unsafe" when he briefed the DTW managers in August 2007, he clearly informed them that he had directly observed instances of non-compliance with FAA Order 7110.65, Paragraph 3-9-8, which governs the safe operation of this type of air traffic configuration, and, thus for which non-compliance poses safety implications.

We requested that an Assistant U.S. Attorney (AUSA) from the USAO, Eastern District of Michigan consider criminal prosecution of Mr. Cooper, or anyone who provided the information that was contained in Mr. Cooper's letter, on the basis that the information in the letter was false, and thus a violation of 18 USC § 1001. On May 6, 2009, the AUSA declined to pursue prosecution of the case given that there was insufficient evidence to conclude that the statements provided to Senator Levin were literally and deliberately false.

In our view, FAA's initial response to Senator Levin was, at a minimum, disingenuous as FAA was obligated to provide Senator Levin a full and accurate representation of AOV's findings. Significantly, Mr. Figliuolo and Ms. Boliard were verbally informed of DTW's non-compliance with the FAA safety Order prior to preparing FAA's response to Senator Levin; therefore, they should have referenced this key AOV finding in the September 17, 2007, response to Senator Levin.

Finding 3: DTW's procedural guidance for conducting traffic on Taxiway Quebec is conflicting and confusing in certain areas.

In addition to his concerns regarding DTW's operation of the Southwest Flow, Mr. Sugent raised several concerns regarding DTW's guidance for conducting air traffic on Taxiway Quebec. Specifically, Mr. Sugent identified four principal issues pertaining to guidance concerning Taxiway Quebec in the "local control" and "ground control" chapters of the DTW Operating Manual: (a) "hold-short" lines on Taxiway Quebec and the ASDE-X are insufficient, thereby preventing controllers from properly directing traffic Taxiway Quebec; (b) DTW's use of the word "should" versus "shall" in Subchapter 5-7.b(11) of the "ground control" chapter of the Manual is inconsistent with wording found elsewhere in the chapter; (c) guidance set forth in DTW Notice 7110.134 concerning Taxiway Quebec was fully incorporated into the "local control" chapter but only partially incorporated into the "ground control" chapter of the DTW Operating Manual; and (d) the Manual fails to properly delegate control responsibility for aircraft on Taxiway Quebec.

To address Mr. Sugent's concerns, we examined sections of DTW's air traffic control Operating Manual that pertain to directing traffic on Taxiway Quebec. His concerns and our findings follow:

(a) Unclear "hold-short" requirements for aircraft on Taxiway Quebec

Mr. Sugent reported that even though the DTW Operating Manual requires controllers to hold traffic on Taxiway Quebec short at 200 feet from either side of the Runway 4R extended centerline, the "hold-short" signs and painted lines are instead located 750 feet from either side of the extended centerline. Mr. Sugent further reported that both the 200 and 750-foot marks appear on the ASDE-X display on controller monitor screens in the Tower. Mr. Sugent contended that the lack of signage at the 200-foot mark on Taxiway Quebec itself, as well as both the 200 and 750-foot marks appearing on the ASDE-X, prevent controllers from complying with the Operating Manual's requirements concerning Taxiway Quebec.

We found that Taxiway Quebec has painted lines and adjacent signs demarcating a "hold-short" area 750 feet from either side of the extended centerline of Runway 4R. There are, however, no corresponding lines or signs for the 200-foot mark.

We determined that DTW management implemented DTW Notice 7110.134, effective February 1, 2007, which prescribed new procedures for the operation of Taxiway Quebec, requiring controllers to keep Taxiway Quebec clear of aircraft (or "held short") at 200 feet on either side of Runway 4R's extended centerline. The requirements provided in the Notice have been incorporated in Subchapter 5-7.b(11)

of the “ground control” chapter of DTW’s Operating Manual. This 200-foot “hold-short” requirement is separate from the 750-foot “hold-short” mark, established pursuant to a 1999 airspace study, which prohibits aircraft with a tail-height over 65 feet from taxiing through the runway approach area while aircraft depart from and arrive on Runway 4R.

In issuing DTW Notice 7110.134, and incorporating its language into the facility’s Operating Manual, DTW established the 200-foot wide “hold-short” area to ensure that aircraft using Taxiway Quebec do not obstruct the ability of inbound aircraft to observe landing lights on Runway 4R when they approach from the south. However, DTW cannot add corresponding signage or “hold-short” lines without the approval of the Airports Division, which is responsible for ensuring signage and markings on an airport surface meet national standards.

Despite our numerous conversations with ATCT and Airports Division Office personnel, it is unclear whether either, or both, the 200-foot or 750-foot “hold-short” requirements are in effect at DTW. We found that controller confusion has been heightened by the fact that both “hold-short” marks are displayed on controller monitor screens via ASDE-X.

(b) Use of the word “should” versus “shall” in the ground control chapter

We agree with Mr. Sugent’s recommendation that in the “ground control” chapter of DTW’s Operating Manual, the word “should” be replaced with “shall”, to be consistent with the word “required” in the first sentence of Subchapter 5-7.b(11) of the ground control chapter.

(c) Differences between the “ground control” and “local control” chapters

Mr. Sugent raised concern that some language from DTW Notice 7110.134, which contains restrictions for using Taxiway Quebec, was more comprehensively incorporated into the “ground control” chapter of the DTW Operating Manual than it was in the “local control” chapter of the Manual.

We determined that the disparity between wording contained in the “local control” chapter of the manual and that included in the “ground control” chapter is appropriate in light of the different responsibilities of the two positions.

(d) Area of control responsibility

According to Subchapter 5.7b(11) of the DTW Operating Manual, under certain visibility conditions, an aircraft that must “hold-short” on Taxiway Quebec while

another aircraft overflies the taxiway to arrive on Runway 4R, is the responsibility of ground control. Mr. Sugent contended, however, that the aircraft on Taxiway Quebec should either be the responsibility of local control, or that ground control should seek permission from local control before moving the aircraft through the Taxiway's hold-short area.

We found that aircraft on taxiways are typically the responsibility of ground control, and we did not identify any enhancement in safety or operational efficiency that would result from requiring DTW to assign local control the responsibility of controlling aircraft on Taxiway Quebec. Further, we found that DTW's Operating Manual is sufficiently clear that aircraft on Taxiway Quebec are the responsibility of ground control. Therefore, we did not substantiate this concern.

Finding 4: Exceptions to segregation guidance for jet and propeller aircraft created confusion and constituted a potential safety issue until May 2008.

Two FLMs and all ten controllers we interviewed concurred with Mr. Sugent's contention that the confusion created by numerous exceptions to segregation guidance constituted a potential safety issue. Mr. Sugent stated that, between approximately November 2007 and May 2008, controllers committed at least eight operational deviations,⁶ which he believed could be attributed, at least in part, to the confusing nature of the separation guidance. Given the number of operational deviations that occurred, we concluded that prior to correction, this matter constituted a potential safety issue.

We found that some of these ten controllers had raised concerns about the confusing segregation guidance to DTW management several years earlier, before Mr. Figliuolo and Mr. Grammes assumed their current positions; however, management did not take action to address the segregation issue until January 2008. In January 2008, DTW management implemented a policy to change the color of the ink used on the flight strip⁷ assigned to each flight within the ATCT. According to Mr. Sugent and other controllers, however, this measure did not fully resolve the problem, leading management to search for an alternate solution.

⁶ An "operational deviation" occurs when an aircraft in airspace controlled by one air traffic controller encroaches upon, or flies into, airspace assigned to another controller without proper coordination.

⁷ The flight progress strip is a strip of paper, approximately 1" x 8" in size, on which relevant air traffic information is printed, such as an aircraft's call sign, type, altitude, and heading.

To clarify the matter and eliminate confusion, DTW management implemented trial corrective measures in May 2008 that simplified the segregation procedures and eliminated the numerous exceptions that controllers had previously found to be confusing. The measures were incorporated into a LOA between DTW's ATCT and TRACON on August 15, 2008. We reviewed these measures, concluding they are sufficient to resolve the concerns.

Finding 5: In the absence of an electronic communication system, DTW controllers have adequate means to provide routing information to aircraft headed to Ohio airports.

During interviews, Mr. Sugent expressed concern about the inability of controllers at DTW to use an electronic communication system when providing routing information to aircraft traveling to several airports in Ohio, subsequent to a regional airspace reconfiguration in June 2006. Pursuant to the reconfiguration, DTW was no longer able to electronically provide SID routes to aircraft traveling to certain airports in Ohio.

Specifically, the controller handling clearance delivery within the DTW ATCT typically sends the SID (which contains information such as vector, altitude, and departure frequency) via an electronic system that displays the SID on a screen in the outbound aircraft's cockpit.⁸ Since the reconfiguration, however, SIDs have not been programmed for certain airports in Ohio. Consequently, the clearance delivery controller at DTW must instead verbally provide the information to the pilot, who then repeats the information back to the controller.

According to Mr. Sugent and several other controllers, this constitutes a safety issue because incorrect information could be provided by the controller or recorded by the pilot. Mr. Figliuolo, Mr. Grammes, and the FLMs disagreed, however, contending this is a workload issue rather than a safety issue.

We did not find evidence that this condition poses a safety issue, as we determined that if the electronic communication system fails, the standard, FAA-approved (system-wide) back-up procedure is for the clearance delivery controller to verbally provide the routing information to any departing aircraft, just as DTW now does for aircraft heading to the affected Ohio airports.

⁸ The specific SID provided to an aircraft depends on the runway from which it departs and its next destination. Among other things, the SID provides the aircraft with a safe route for departing the airport, as well as the waypoints to the air corridor in which it will travel.

Moreover, DTW staff recently developed a procedure to ensure all departing aircraft, including those traveling to the airports in Ohio at issue, receive SIDs utilizing the electronic communication system. This proposed procedure is currently under review with DTW management. (Mr. Sugent has reviewed and expressed his satisfaction with the proposed procedure.)

Recommendations

The results of our investigation into Mr. Sugent's concerns show the need for FAA to take a number of corrective actions to assure that the safety of air traffic control operations at DTW is maintained. Such corrective actions include the need to improve management-controller communication, ensure future compliance with FAA safety Orders and other directives, and minimize the potential for safety risks at DTW. Accordingly, as formalized in an April 3, 2009, memorandum to FAA's Acting Administrator, we recommended the following to FAA:

1. (a) Before DTW considers reinstating operation of the Southwest Flow, it must consult with ATO's Office of Terminal Safety and Operations and AOV to develop detailed procedures for the safe operation of this configuration; (b) ATO conduct an audit into DTW's air traffic controller training program to ensure that controllers are provided with thorough, consistent, and uniform training regarding proper air traffic procedures pertaining to intersecting runways; and (c) consider appropriate administrative action for DTW Manager Joseph Figliuolo and DTW Operations Manager Kevin Grammes based on their failure to ensure that the Southwest Flow complied with FAA Order 7110.65 (regarding the safe operation of runways with intersecting flight paths), and their failure to ensure that controllers received adequate training and guidance.
2. (a) Consider appropriate administrative action for DTW Manager Joseph Figliuolo and former DTW Staff Manager Marcia Boliard for providing information for FAA's initial response to Senator Levin that was, at a minimum, disingenuous; and (b) the Acting Administrator apprise Senator Levin of the disposition of actions at DTW pursuant to Mr. Sugent's concerns and our findings and recommendations.
3. (a) Promptly determine the correct location for all "hold-short" lines on Taxiway Quebec and ensure that painted lines and lighted signs are situated correctly; (b) modify ASDE-X in accordance with the foregoing determinations; (c) properly train controllers on "hold-short" requirements; and (d) DTW, with the review and concurrence of ATO-Terminal's Office of Terminal Safety and Operations Support, revise Subchapter 5-7.b(11) of the ground control chapter of its Operating Manual by changing wording from "should" to "shall."

4. Require that AOV conduct a follow-up audit to ensure that DTW's corrective measures regarding segregation of outbound jet and propeller aircraft are still being properly trained and implemented, and are sufficient to remedy the safety concerns previously identified by AOV.

If I can answer any questions or be of further assistance, please contact me at (202) 366-1959, or David Dobbs, Deputy Inspector General, at (202) 366-6767.

Attachments

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