

## THE SECRETARY OF TRANSPORTATION WASHINGTON, DC 20590

October 4, 2018

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-17-5857

Dear Mr. Kerner:

By letter dated June 12, 2018, you referred for investigation a disclosure from a Federal Aviation Administration (FAA) Certified Professional Controller at the Jacksonville Air Route Traffic Control Center (ARTCC), Hilliard, Florida alleging: (1) Controllers do not comply with the coordination rules required by FAA Joint Order 7110.65W during the transfer of aircraft from one airspace sector to another; and (2) ARTCC managers have implemented a change in standard operating procedures (SOPs) that creates hazardous air traffic conditions, rather than addressing noncompliance with FAA rules.

The investigation of these allegations was delegated to the FAA Office of Audit and Evaluation (AAE). Enclosed is the Report of Investigation which substantiated both allegations. Specifically, the investigation found multiple occasions in which controllers did not comply with coordination rules required during the transfer of aircraft from one sector to another and that management failed to appropriately document such failures or take action to address controller performance and actions.

Additionally, rather than addressing controller performance and conduct related to the continued failure to coordinate issue, we found that the ARTCC managers implemented a change to SOPs in February 2018. This change requires less frequent coordination, but creates potentially hazardous air traffic conditions by moving points of aircraft conflict very close to sector borders, giving controllers very little time and space to react should a conflict occur. The investigation also found that facility management failed to conduct a safety risk management (SRM) review prior to implementing this change as required by FAA Orders.

Based on these findings, AAE made the following two recommendations for corrective action to the Air Traffic Organization (ATO): (1) immediately conduct a SRM review of the SOP implemented in February 2018; and (2) initiate a change in ARTCC management for failure to hold controllers accountable for their performance and actions. The ATO concurred with the

recommendations and will conduct a SRM review of the current operation within the next thirty days. The ATO also replaced the acting Air Traffic Manager with a new, permanent manager. Finally, ATO initiated an audit of management oversight and accountability, to include identification of deficiencies and development of corrective actions to address oversight and accountability issues. The audit is ongoing at this time.

I appreciate the opportunity to review this important matter.

Z. Chao

Sincerely,

Elaine L. Chao

Enclosure

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

## In response to:

**U.S. Office of Special Counsel (OSC)** 

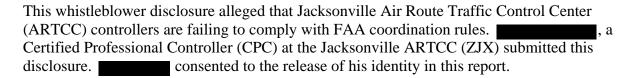
File DI-17-5857

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

**September 10, 2018** 

#### **Executive Summary**

Secretary of Transportation, Elaine Chao, directed the Federal Aviation Administration (FAA), Office of Audit and Evaluation (AAE) to investigate a U.S. Office of Special Counsel (OSC) whistleblower disclosure (OSC File No. DI-17-5857) referred on June 12, 2018. AAE is an independent FAA organization with statutory authority to conduct impartial investigations of aviation safety-related whistleblower disclosures.



The whistleblower specifically alleged that: (1) Controllers do not comply with the coordination rules required by FAA Joint Order 7110.65W during the transfer of aircraft from one airspace sector to another; and (2) ARTCC managers have implemented a change in standard operating procedures (SOP) that creates hazardous air traffic conditions rather than address noncompliance with FAA rules.

The investigation substantiated the whistleblower's allegations. Specifically, we found multiple occasions in which controllers did not comply with coordination rules requiring during the transfer of aircraft from one sector to another, and that management failed to appropriately document such failures or take action with regard to performance management. Further, we found the whistleblower previously filed a 2017 FAA hotline complaint alleging that controllers were failing to coordinate. The allegation was substantiated in February 2018. As a result, ZJX implemented corrective action. However, it appears the corrective action was ineffective and inconsequential, as repeated failures to coordinate have continued to occur.

Additionally, rather than addressing controller performance and conduct related to the continued failure to coordinate issue, we found that ZJX managers implemented a change to standard operating procedures in February 2018. This change requires less frequent coordination, but creates potentially hazardous air traffic conditions by moving points of aircraft conflict very close to sector borders, giving controllers very little time and space to react should a conflict occur. Several supervisors told us the new procedure was "hazardous" or "introduced risk," and they believed the change was implemented to stop the whistleblower from continuing to file complaints. All of the supervisors of the impacted sectors stated they had no knowledge or involvement in the change, and only learned of it when told of it after-the-fact.

We found the facility management failed to appropriately consider potential increased risk, by not complying with the required safety risk management decision process as required by FAA Orders.

Because of these findings, we recommend that the Air Traffic Organization (1) immediately conduct a Safety Risk Management review of the current operation implemented as of February 2018; and (2) initiate a change in ZJX management for failure to hold controllers accountable for

their performance and actions.

### **Detailed Findings**

<u>Allegation 1</u>: Controllers do not comply with the coordination rules required by FAA Joint Order 7110.65W during the transfer of aircraft from one airspace sector to another.

#### **Finding:** Substantiated

A review of data from February 2016 to June 2018 provided by ZJX, documents at least 43 instances where coordination required was not performed for aircraft transiting the Lake City/Lawtey sectors. Specifically, the required coordination did not occur in situations where an aircraft is assigned an Inappropriate Altitude for Direction of Flight (IAFDOF). Controllers from the Perry/Micanopy and Mayo sectors are not calling via landline to initiate an Approval Request (APREQ) from controllers working other sectors. Additionally, based on information including flight strips and Falcon radar and audio replays provided by the whistleblower, we identified 20 events from February to July 2018, and 10 events between June and July 2018, in which required coordination did not occur.

The whistleblower stated he reported each of the events to management personnel; however, only one event could be located following a review of Mandatory Occurrence Reports (MORs) associated with the 20 flight progress strips, despite an FAA requirement to record such events. Events between February and May 2018, aside from the one event that was entered as an MOR, could not be validated because radar and audio data were no longer available.

A review of Falcon radar and audio replays of 10 events submitted by the whistleblower between June 2018 and July 2018 was conducted by the investigative team. The expected method for completing required coordination for the events reviewed would have been via recorded landline; however, the required coordination did not occur.

The whistleblower has also filed multiple Air Traffic Safety Action Plan (ATSAP) reports regarding the issue. However, the whistleblower told us that unknown personnel in the ATSAP program advised him to stop filing ATSAP reports for noncompliance with coordination. According to the whistleblower, they deemed the matter to be an internal issue with compliance related to performance management versus safety. However, the whistleblower could not provide documentation (emails or other correspondence) from ATSAP stating the aforementioned; nor could he recall the person he spoke to, or the date of the conversation with the ATSAP program.

The whistleblower stated that noncompliance is not the norm, but it is frequent enough to be of concern. He stated it is limited to several Air Traffic Controllers (ATCS) in the Central Area.

<sup>1</sup> FAA JO 7110.632, *Air Traffic Organization Occurrence Reporting*, Chapter 2-5 a. and b. How to Report, employees are required to report known events to management or a Controller-in-Charge (CIC) and management/CIC is required to enter all observed or known events into the Comprehensive Electronic Data and Reporting (CEDAR) system as an MOR.

The whistleblower stated that in situations where traffic permitted him to do so safely, he was directed by facility management to accept a handoff on aircraft even when required coordination had not been performed, and to report it to the Operations Supervisor (OS).

All personnel interviewed stated that there has been a culture of noncompliance with certain elements of required coordination, specifically IAFDOF and point outs. OS personnel from the Gulf Area told us that when they are made aware of an event where required coordination has not been performed, they would advise the Central Area OS and enter an MOR into the Comprehensive Electronic Data and Reporting system (CEDAR).

Both Central Area OSs interviewed stated that they have engaged in performance discussions with employees who have been noncompliant with coordination requirements. However, when we reviewed personnel files, we found a total of three Performance Records Of Conversation (PROCs) associated with discussions regarding performing required coordination conducted between April 2017 and July 2018, the most recent of which was in August 2017.

The OSs interviewed stated that most performance discussions related to performance of required coordination are conducted as "on-the-spot corrections" which are not documented as PROCs. The OSs and the OM stated that they are aware of several controllers who will adjust their compliance regarding required coordination based upon whether the whistleblower is working. It was noted during several interviews that controllers would not perform required coordination if controllers other than the whistleblower were present, but if the whistleblower is working a control position, most controllers will perform required coordination.

The whistleblower also filed a hotline report in September 2017 regarding controllers' failure to coordinate.<sup>2</sup> In response, by a February 16, 2018 memo signed by FAA's Air Traffic Chief of Staff, the allegation was reported as substantiated. As one of the corrective actions, a mandatory briefing was issued requiring all controllers to follow the FAA Order 7110.65 and SOP, specifically stating that aircraft transitioning from the Central Area to the Gulf area and vice versa must be at the right altitude for direction of flight unless there is traffic that prohibits it and proper coordinate takes place.

The Operations Manager (OM) and Operations Supervisor (OS) personnel interviewed stated that they are aware of the issues with required coordination noncompliance, that it is a "people issue, not a procedure issue" and that there is conflict between some controllers in two different areas, which creates a "lack of professionalism" and "inability to work as a team." Despite this knowledge, the managers were unable to identify corrective, administrative or disciplinary actions beyond "on the spot" verbal corrections that have been taken to resolve these conflicts.

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<sup>&</sup>lt;sup>2</sup> FAA Hotline file A20170928011.

<u>Allegation 2</u>: ARTCC managers have implemented a change in standard operating procedures (SOP) that creates hazardous air traffic conditions rather than address noncompliance with FAA rules.

#### **Findings: Substantiated**

Prior to February 2018, the facility SOP required aircraft transitioning between the Gulf and Central areas to be at even altitudes northbound and odd altitudes southbound<sup>3</sup>. The whistleblower told us he filed numerous reports for noncompliance with required coordination for aircraft that were IAFDOF per the SOP. Most of the reported IAFDOF noncompliance issues dealt with aircraft that were northeast bound. The majority of these northeast bound aircraft were en route from Mexico and Central America, transiting from over the waypoints CIGAR or KNOST directly to Taylor (TAY) VORTAC<sup>4</sup>.

The whistleblower told us that at on April 22, 2017 he was involved in an event that resulted in disciplinary action in which he received a Letter of Reprimand (LOR). During that event, he stated he had an aircraft, TN63EE, that was southbound at FL390 and that the Perry/Micanopy sector initiated a handoff on an aircraft, (West Jet) WJA2802, northeast bound at FL390 that was IAFDOF per the SOP. He observed that the two aircraft would be in confliction and stated he did not take action to resolve the conflict because he was waiting for the Perry/Micanopy controller to call and APREQ the IAFDOF. The whistleblower reported that Conflict Alert activated between the two aircraft and he issued a radar vector to TN63EE and WJA2802 was descended to FL380 by the other controller.

The whistleblower stated that the LOR was later rescinded (in December 2017), as the facility manager (now retired) determined that the event was performance related. However, he believes facility management changed the SOP in February 2018 in response to the April 22, 2017 event.

The whistleblower stated that the change to the SOP creates a safety hazard because it changes the confliction point from well within the Lake City/Lawtey sectors to within one to two minutes from the boundary between the Lake City/Lawtey sectors and the Perry/Micanopy sectors. The whistleblower stated that the new SOP gives controllers less time to formulate a plan and resolve conflicts. Additionally, the whistleblower reported that the change to the SOP has created confusion about altitude assignment when aircraft transition a common boundary point between the Perry/Micanopy, Lake City/Lawtey, and Mayo sectors; the SOP requires that aircraft transitioning to and from the Mayo sector be at odd altitudes southbound and even altitudes

5

<sup>&</sup>lt;sup>3</sup> Per FAA JO 7110.65X, *Air Traffic Control*, Chapter 4-5-2 Flight Direction, north and eastbound aircraft should be assigned odd cardinal altitudes and south and westbound aircraft should be assigned even cardinal altitudes; commonly referred to as "NE-odd SW-even rule." Personnel interviewed explained that due to the way traffic flows through ZJX airspace, slight variances in headings would require numerous altitude changes to comply with NE-odd SW-even rule. As a result, the facility SOP designated required altitudes that may not follow the NE-odd SW-even rule for aircraft transitioning between sectors in accordance with FAA JO 7110.65X, *Air Traffic Control*, Chapter 4-5-3 Exceptions a. 1.

<sup>&</sup>lt;sup>4</sup> A navigational aid for aircraft pilots

#### northbound.

Both CPCs and all five OSs interviewed reported that the change to the SOP resulted in changes to confliction points for aircraft transitioning between the Perry/Micanopy and Lake City/Lawtey. Those interviewees described the change as "hazardous" or as "introducing risk," especially in situations where aircraft were deviating for weather.

Additionally, those interviewees stated that the SOP change created confusion because it did not address northeast or southwest bound aircraft that transition through the Mayo/Zephyr sectors prior to entering either the Perry/Micanopy or Lake City/Lawtey sectors; those aircraft are required to be at even altitudes northbound and odd altitudes southbound. A Falcon screenshot and review of available Falcon data for two events occurring during the investigation illustrated the issues described with the new confliction points. All of the supervisors of the impacted sectors stated they had no knowledge or involvement in the SOP change, and only learned of it when told of it after-the-fact.

We found that the February 2018 changes made to the SOP stemmed from a Pre-Arbitration (PAR) Resolution associated with a grievance filed by the whistleblower related to the April 22, 2017 event for which the whistleblower received an LOR. Section 2 of the PAR, dated December xx, 2017, stated that "within 30 days of the signing of this agreement, the Jacksonville ARTCC Air Traffic Manager and NATCA Facility Representative will meet to address FAA Order ZJX AT 7110.49P (facility SOP), Section 2 (Sector 17 Perry), Item 17. The Parties are tasked with reaching a solution that will safely reduce the internal problems related to this procedure and in compliance with the applicable Safety Management System (SMS) processes." The section of the SOP referenced in the PAR agreement stated that aircraft transitioning between the Gulf and Central Area sectors must be at even altitudes northbound and odd altitudes southbound. The ATM reported that he, the NATCA Facility Representative, an Airspace and Procedures Support Specialist, and the Gulf and Central Area OM met within the timeframe required by the agreement. During that meeting, the group reviewed a PDARS<sup>5</sup> replay from Wednesday, January 24, 2018 and discussed possible solutions.

The PDARS replay covered a period of approximately 15 hours and was focused primarily on aircraft transitioning the Perry/Micanopy and Lake City/Lawtey sectors to and from Mexico and Central America. There were 46 aircraft captured during the replay; 31 of the aircraft were northeast bound and 15 were southwest bound. Of the 31 aircraft, only two aircraft entered the Lake City/Lawtey sectors at even altitudes. The ATM stated that since the majority of aircraft were already at odd altitudes and would eventually be assigned an odd altitude prior to leaving the Lake City/Lawtey sectors, he and the NATCA Facility Representative agreed to change the SOP to conform to FAA JO 7110.65X, *Air Traffic Control*, Chapter 4-5-2 Flight Direction.

The ATM stated he was directed by the ESA Director of Operations (DO) office to make a change to the SOP that corrected the issues related to the numerous MORs associated with airspace violations. While the ATM could not recall whom in the DO's office provided the direction to make the SOP change, he stated that he believed the change met requirements of

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<sup>&</sup>lt;sup>5</sup> The Performance Data and Recording System (PDARS) is a network of computers that use specialized software to collect detailed air traffic data, such as flight trajectory synthesis, and a comprehensive view of the National Airspace System (NAS), including weather, traffic flow, navigational objects, etc.

FAA JO 7110.65X, *Air Traffic Control*, was more efficient as it required fewer changes in altitude, and met the direction received from the ESA DO's office and the PAR. However, as discussed in Allegation 1, corrective action identified on February 16, 2018 memo signed by FAA's Air Traffic Chief of Staff makes no mention of an intended change to the SOP.

The whistleblower alleged that ZJX management implemented this procedure, which was previously determined to be unsafe. The whistleblower refers to testing conducted in 2011 and 2015 for aircraft transitioning between the Gulf and Central areas at any odd or even cardinal altitude regardless of direction of flight. Based on interviews and review of data provided, the decision not to implement was not associated specifically with the safety concerns raised by the whistleblower. Rather, the decision was based on concerns of running out of available altitudes to resolve a conflict when aircraft are "stacked" – or separated by the vertical minimum separation requirement. As a result, the allegation by the whistleblower that ZJX implemented a procedure previously determined to be unsafe could not be substantiated.

The investigative team requested all Safety Risk Management (SRM) documentation related to the February 2018 SOP change. The facility was unable to provide SRM documentation and, based upon interviews with ZJX management personnel, it was determined that the facility did not conduct or document SRM as required per FAA JO 1000.37A. Since SRM was not conducted, an analysis of potential hazards and implementation of appropriate mitigations was not incorporated into the February 2018 SOP change.

Based upon interview statements and review of available data, the allegation that ARTCC managers have implemented a change in SOPs that creates hazardous air traffic conditions, rather than address noncompliance with FAA rules is substantiated.

Because of the findings contained in this report, we made the following recommendations for corrective action to the Air Traffic Organization (ATO):

- 1. The ATO immediately conduct a SRM as was required by FAA Order FAA JO 1000.37A to determine potential hazards and implementation of appropriate mitigations on the new SOP implemented in February 2018.
- 2. The ATO initiate a change in ZJX management for failure to hold controllers accountable for their performance and actions.

The ATO concurred with both recommendations. The February 2018 change to facility Standard Operating Procedures (SOPs) initiated by management did not comply with the required SRM process. Noncompliance will be addressed within the next 30 days as part of a Management Corrective Action Plan (CAP) that will be developed. Part of the CAP will include a review of the February 2018 SOP change and conducting an SRM in accordance with FAA Order JO

services.

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<sup>&</sup>lt;sup>6</sup> FAA JO 1000.37A, *Air Traffic Organization Safety Management System*, Chapter 2-2 c. Service Unit SRM Responsibilities, requires facilities to conduct SRM assessments of changes to ATO-provided air traffic services and infrastructure and to record SRM efforts in a safety management tracking system. The SRM process includes identification of hazards/risks, categorization of those risks/hazards, and mitigations to the identified hazards/risks. Changes implemented in the February 2018 change to the SOP constituted a change in ATO-provided air traffic

1000.37A to identify hazards and implement appropriate mitigations.

In addition, the acting Air Traffic Manager was removed and reassigned to another facility effective August 21, 2018. A new permanent Air Traffic Manager reported to ZJX on August 20, 2018.

Finally, Headquarters Air Traffic Services (AJT) initiated a review of management oversight and accountability related to information detailed in this report on August 20, 2018. The review included sending a team of personnel from AJT to ZJX ARTCC to conduct an audit of management oversight, identify deficiencies, and develop corrective actions to address oversight and accountability issues.

#### **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:**

- Erika Vincent, Senior Technical Advisor, Office of Audit and Evaluation
- Steve Pinkerton, Event Investigation Manager, Air Traffic Safety Investigations
- Jeff Hall, Quality Assurance Manager South, Eastern Service Area, Air Traffic Safety

The investigative team analyzed records and documents obtained from the whistleblower, other interviewees, and the facility including current and prior editions of the facility standard operating practices (SOPs), Mandatory Occurrence Reports (MORs), Performance Records of Conference (PROCs), and flight progress strips. The team also reviewed Falcon radar replays and a Performance Data Analysis and Reporting System (PDARS) replay.

Interviews were conducted with the following individuals:

- Certified Professional Controller (CPC), Gulf Area Whistleblower
- CPC, Gulf Area
- CPC, Central Area
- Operations Supervisor (OS), Central Area
- OS, Gulf Area
- Operations Manager, Gulf and Central Areas
- OS, North Area Whistleblower's former supervisor of record
- OS, Gulf Area
- Quality Assurance Support Manager
- OS, Central Area
- CPC, National Air Traffic Controllers Association (NATCA) Facility Representative
- CPC, Airspace and Procedures Support Specialist
- Airspace and Procedures Support Manager
- Acting Air Traffic Manager, ZJX

#### Index of Names

The Whistleblower:
FAA's Air Traffic Chief of Staff:
The Central Area OS(s):
The Gulf Area OS(s):
The Operations Manager:
The ATM:
The NATCA Facility Representative:
The Airspace and Procedures Support Specialist:
The Gulf and Central Area OM: