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The Special Counsel

August 5, 2020

The President The White House Washington, D.C. 20050

Re: OSC File No. DI-18-4555

Dear Mr. President:

I am forwarding reports from the Department of Transportation in response to disclosures of wrongdoing at the Federal Aviation Administration (FAA), Detroit Metropolitan Airport (DTW), Detroit, Michigan. **The second problem** who consented to the release of his name, disclosed that as part of a plan to maximize flight capacity at DTW, FAA resumed an air traffic procedure that was discontinued in 2015 due to safety concerns, without adequately addressing the safety risks. FAA did not substantiate the allegations. In accordance with 5 U.S.C. § 1213(e), I am providing a summary of the agency reports, the whistleblower's comments, and my findings.¹ As discussed below, I have determined that the findings do not appear reasonable.

The Whistleblower's Allegations

Mr. **Mathematical and a controller, alleged that in preparation for implementing an approach procedure for simultaneous landings on three parallel runways, FAA: (1) installed two Instrument Landing System (ILS) offset localizers in a location where taxiing aircraft interfere with the ILS signal, creating a danger for landing aircraft;² and (2) in August 2018, resumed the "ILS Y approach" procedure, which was discontinued in 2015 because of safety issues relating to aircraft interference with the offset localizer signal.**

According to Mr. **Determined** because of the location of the offset localizers, most aircraft landing and exiting the involved runways must taxi through the ILS critical areas,³ interfering with the localizers' signal that transmits information to approaching aircraft. He stated that when FAA began using the ILS Y approach procedure in 2015, there were numerous pilot reports of disruptions and fluctuations in the offset localizer signal, causing some aircraft to overshoot the

¹Mr. allegations were referred to Secretary of Transportation, Elaine L. Chao, on August 14, 2018, pursuant to 5 U.S.C. § 1213(c) and (d). FAA's Office of Audit and Evaluation (AAE) conducted the investigation. Secretary Chao reviewed and signed the agency report.

²An ILS localizer is an antenna system, typically positioned at the stop-end of the runway, that provides course information to aircraft by transmitting a signal down the center of the runway. An "offset" localizer is not aligned with the runway centerline but rather intercepts it at a determined point.

³An ILS critical area is a specific ground area near a radiating localizer, which must be protected from aircraft and vehicle parking and the unlimited movement of surface and air traffic to ensure the continuous integrity of the signal received by aircraft.

The President August 5, 2020 Page 2 of 5

runway and resulting in aborted landings, or "go-arounds." In 2015, FAA discontinued the procedure because of the signal interference problems.

In August 2018, FAA resumed using the ILS Y approach procedure. In its announcement, FAA acknowledged that having aircraft in the ILS critical areas when ILS approaches are in use is "undesirable, as it has an effect on the ILS." Nevertheless, FAA stated that "this effect has been deemed an acceptable risk." The mitigations outlined in the briefings included weather and <u>high-tail</u> aircraft restrictions and improved pilot education and control tower procedures. Mr.

contended that, without relocating the offset localizers, the mitigations do not resolve the safety risks posed by aircraft interfering with the localizer signal.

The Agency's Investigation

The FAA did not substantiate Mr. **Constitution** allegations. The agency report concluded that, although the offset localizers are located where aircraft may infrequently interfere, the configuration does not create a specific or imminent danger. The agency's report stated that the ILS Y approach procedure was discontinued in 2015 out of an "abundance of caution" due to anomalies reported by pilots. The report further stated that the Terminal Radar Approach Control Air Traffic Manager never believed the offset localizer was unsafe, but felt it was prudent to further evaluate the location and mitigations in place. According to the report, the Technical Operations, Flight Standards, and Engineering Services subsequently met several times, but none of the parties were comfortable determining that the disruptions to the localizer represented minimal or no risk.

The report further stated that following a March 2017 request for a safety evaluation and determination, a "formal" Safety Risk Management Panel (SRMP) was convened in May 2018 to reevaluate the ILS Y approach procedure. The SRMP determined that the procedure was a "very low-risk hazard," and could be conducted safely with two mitigations: 1) When weather is forecast with less than an 800-foot ceiling and less than a 2-nautical mile visibility, DTW will discontinue the use of the triple simultaneous approach; and 2) High tail aircraft will not land on runway 4L/22R as they may cause greater interference [with the offset localizer]. Several senior officials and technical experts agreed that after years of analyses and testing, "comprehensive safeguards are in place to address all safety concerns." The report stated that during the three months following reinstatement of the procedure, there were no reported anomalies or go-arounds associated with localizer signal disruption.

FAA submitted a supplemental report providing the documents reviewed by the 2018 SRMP. According to those documents, the SRMP determined that "no new hazards exist" and that, therefore, the panel did not have to complete a risk/hazard mitigation safety risk management decision. Rather, they relied on the previous SRMP document from 2015. The 2018 SRMP summary stated that the panel was convened to address whether there were enough controls in place to reduce the risk of localizer interference; whether the localizer was in the correct location; how the interference affected pilots; and whether the ILS Y procedure is safe. The rationale for not requiring further analysis is based on the fact that the SRMP agreed that, The President August 5, 2020 Page 3 of 5

although interference could occur, there were "too many controls" that would prevent a hazard. However, the 2018 SRMP document did not identify the controls or mitigations.

The supplemental documents also reflect that, in 2015, a Heavy aircraft restriction was in place as a mitigation. However, even after "a robust awareness effort" to educate pilots about the procedure, the reported anomalies continued, raising concerns about the impact of smaller aircraft transitioning through the critical area. The documents state that no flight checks were performed with aircraft in the ILS critical area. However, "Tech Ops, Engineering, and Flight Standards agreed that there would always be a disruption to the localizer anytime ANY aircraft transitioned through the critical area." None of these experts were "comfortable providing an opinion that the disruptions to the localizer (caused by other than Heavy aircraft) were within a safe tolerance."

Significantly, the supplemental report includes a December 29, 2018 memorandum rescinding the weather restriction that the SRMP determined was a necessary mitigation for safe operation of the ILS Y approach procedure. Thus, one of the two additional mitigations highlighted in the agency report has been eliminated. The supplemental report also includes several incident reports relating to offset localizer interference since the reinstatement of the procedure.

The agency's second supplemental report indicated that, from July 2018 to March 2020, only three reported incidents of unexpected or unintended aircraft operation were related to the offset localizer. Further, the agency asserted that the recent drop in air traffic volume due to the COVID-19 pandemic precipitated reduced use of the ILS Y approach.

The Whistleblower's Comments

Mr. **Confirmed** that the weather restriction for the ILS Y approach procedure was cancelled. He also commented on the 2018 SRMP's determination that the procedure is a very low-risk hazard with "too many controls" that would prevent a hazard, noting that the same controls were in place in 2015. He stated that records from 2015 show there were aircraft in the ILS critical area when pilots complained about disruption. He also identified several reported incidents involving go-arounds and/or pilot complaints related to ILS Y localizer interference since the reinstatement of the procedure in August 2018.

Mr. **Constitution** asserted that the FAA's current findings are inconsistent with its previous findings in 2015 regarding the safety concerns associated with the ILS Y Approach procedure. He stated that in a December 2015 response to a complaint about the decision to discontinue the procedure, FAA stated there was information and evidence demonstrating that safety was a legitimate concern, and aircraft were losing and/or not receiving the offset localizer signal when aircraft with lower tail heights than originally thought were in the critical area. Thus, the procedure was discontinued until FAA could safely resolve the issue.

The President August 5, 2020 Page 4 of 5

Mr. also asserted that the analyses and math modeling outlined in the supplemental documents present "alarming" statements and "red flags" about the potential hazards relating to localizer interference, and they do not support the conclusion that the ILS Y approach procedure is safe with the reported mitigations. He contended that the 2018 SRMP did not address the concerns for which it was convened, nor did it identify the mitigations. He also discussed the multiple, confusing briefings and guidance issued to DTW staff about the procedure. He asserted that FAA has prioritized airport efficiency and capacity over the safety of the flying public and has placed controllers and pilots in compromising positions. Mr. further stated that the report includes statements attributed to him, purporting to downplay the risks of the procedure, that are portrayed inaccurately and lack important context. Mr. for the discontinued until it can be moved or a waiver can be issued to permit simultaneous straight-in approaches.⁴

In his second supplemental comments, Mr. pointed out numerous inaccuracies and inconsistencies in the second supplemental report, including misstatements regarding the reason and timing of the DTW's initial use of the Y offset localizer and triple simultaneous approach and incorrect labeling of the ILS critical areas in diagrams. Mr. also provided additional information and context for the incident reports the agency referenced, noting factual discrepancies and the failure to include relevant information. Mr. again highlighted the conflicting and confusing directions given to controllers on when and how to handle traffic also questioned the agency's assertion that the triple taxiing through the critical area. Mr. approach was not discontinued but that decreased air traffic due to the COVID-19 pandemic was the reason for its current disuse. Mr. offered that DTW controllers were instructed not to use the triple approach, and that this decision predated any decrease in traffic.

The Special Counsel's Analysis and Findings

I have reviewed the original disclosure, agency reports, and whistleblower comments. The reports confirm that DTW's ILS offset localizers are in a location where aircraft taxi through the ILS critical area, causing interference with the ILS signal. The reports also confirm that FAA resumed the ILS Y approach procedure, which was discontinued in 2015 due to safety concerns about aircraft interference with the localizer signal. FAA claims it did not substantiate the allegations because it determined that the configuration does not create a specific or imminent danger. FAA found that the procedure was reinstated after experts determined it posed a very low-risk hazard, and that safety reviews concluded that FAA has developed effective mitigation measures. The reports state that FAA did not conduct any new safety risk analysis, but instead

⁴Mr. **Solution** also highlighted a section of the report stating he did not "have time" to review FAA's informal response, which implies that OSC's referral of the allegations pursuant to 5 U.S.C. § 1213 was not based on a thorough review of the informal response. The agency later revised its report to correctly state that Mr. **Solution** did not have "an opportunity" to review the agency's informal response. Per its policy, OSC did not provide FAA's informal response to Mr. **Solution** for review. However, OSC thoroughly reviewed FAA's response and discussed the information with Mr. **Solution** who confirmed that it did not offer any new information that would resolve his allegations.

The President August 5, 2020 Page 5 of 5

relied on the previous analyses and testing. Yet, significantly, none of the experts who previously conducted or reviewed those analyses were willing to conclude that the procedure was safe.

Further, in December 2018, FAA eliminated the weather restriction, one of two mitigations that FAA determined was necessary for safe operation of the procedure. And, the previous analyses suggest that the second mitigation, restricting high tail aircraft, does not resolve the risk posed by smaller aircraft interfering with the localizer signal. The evidence presented does not support FAA's conclusion that "comprehensive safeguards are in place to address all safety concerns," and even with greater pilot awareness, recent incident reports suggest the safety issues are unresolved. For these reasons, I have determined that the agency's findings do not appear reasonable. I urge FAA to further review the safety issues associated with the ILS Y approach procedure and take the steps necessary to resolve them.

As required by 5 U.S.C. § 1213(e)(3), I have sent copies of this letter, the agency reports, and the whistleblower's comments to the Chairmen and Ranking Members of the Senate Committee on Commerce, Science, and Transportation and the House Committee on Transportation and Infrastructure. I have also filed redacted versions of these documents and the § 1213(c) referral letter in our public file, which is available at <u>https://osc.gov/PublicFiles</u>. This matter is now closed.

Respectfully,

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Henry J. Kerner Special Counsel

Enclosures