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The Special Counsel

December 3, 2024

The President
The White House
Washington, D.C. 20500

Re: OSC File No. DI-21-000698

Dear Mr. President:

I am forwarding a report transmitted to the U.S. Office of Special Counsel (OSC) by the U.S. Department of Transportation (DOT) in response to the Special Counsel's referral of a disclosure of wrongdoing at the Federal Aviation Administration (FAA), Detroit Metropolitan Airport (DTW), Detroit, Michigan. I have reviewed the disclosure, agency reports, and the whistleblower's comments, and in accordance with 5 U.S.C. § 1213(e), I have determined that the findings do not appear reasonable. DOT FAA's Office of Safety and Technical Training and the FAA Office of Audit and Evaluation (AAE) investigated the allegations. The whistleblower, [redacted] a retired Air Traffic Controller, consented to the release of his name. The following is a summary of the findings:

The Allegations

[redacted] alleged that DTW officials continue to direct the use of an unsafe air traffic procedure, a runway approach known as Instrument Landing System (ILS)-Y, which creates a danger for landing aircraft and the flying public, without additional safety review or mitigation to ensure public safety.[1]

[redacted] explained that the ILS-Y approach allows simultaneous landings on three parallel runways by using two ILS offset localizers installed on one runway. Additionally, [redacted] explained that an ILS offset localizer is an antenna system, typically positioned at the stop-end of the runway, that

[1]On August 14, 2018, former Special Counsel Henry J. Kerner referred similar allegations made by [redacted] *See* OSC File No. DI-18-4555. In that matter, [redacted] alleged that the FAA, in preparation for implementing the ILS-Y runway approach, installed two ILS offset localizers in locations where taxiing aircraft interfere with the ILS signal, creating a danger for landing aircraft; and that in August 2018, resumed the ILS-Y runway approach, which was discontinued in 2015 due to safety issues relating to aircraft interference with the ILS offset localizer signal. The agency did not substantiate [redacted] allegations. In a letter to the President dated August 5, 2020 former Special Counsel Kerner' determined that DOT's findings did not appear reasonable, and encouraged the agency to further review and take steps to resolve the safety issues associated with the ILS-Y approach.

provides course information to aircraft by transmitting a signal down the center of the runway. The signal helps align aircraft with a runway without visual contact. An offset localizer is not aligned with the runway centerline, rather, it intercepts the runway at a determined point. [redacted] further explained that the two offset localizers at DTW are in locations where taxiing aircraft interfere with the ILS signal by passing through ILS critical areas, thus creating a danger for landing aircraft. An ILS critical area is a specific ground area near a radiating localizer that must be protected from aircraft and vehicle parking and the unlimited movement of surface and air traffic to ensure continuous integrity of the signal received by landing aircraft.

The Agency Report

The FAA did not substantiate [redacted] allegation. The report briefly explains that the agency investigated and did not substantiate [redacted] previous disclosure on the safety of the ILS-Y approach.[2] The report further noted that, following supplemental reports and a meeting with the FAA Deputy Chief Operation Officer and FAA Vice President of Air Traffic Services in March 2020, OSC determined that the agency's findings on that previous disclosure regarding the safety of the ILS-Y approach did not appear reasonable.[3] DTW officials opted not to use the ILS-Y approach in 2020 due to reduced air traffic during the COVID-19 pandemic. However, the report noted that DTW officials resumed the ILS-Y approach on June 1, 2021.

The investigation centered around four distinct areas: (1) safety review and results conducted prior to resuming the use of the ILS-Y approach; (2) implementation of safety mitigations prior to resuming the use of the ILS-Y approach; (3) additional or related allegations of wrongdoing; and (4) reports of safety issues associated with resuming the use of the ILS-Y approach in June 2021.

Safety Review and Results Conducted Prior to Resuming the Use of ILS Y Approach

The report stated that prior to resuming the ILS-Y approach, the Cleveland Air Traffic Services Assistant General Manager and the Cleveland District Manager of Operations reviewed the FAA Math Modeling Study for the Runway (RWY) 04L Localizer at DTW (August 26, 2008); the Detroit Terminal Radar Approach Control Safety Evaluation and Determination Regarding the Use of the Precision Runway Monitor (PRM) ILS Runway 4L and PRM ILS Runway 22R Approaches (2017); the Detroit 04L Offset Approach on ALA ILS; and the Draft Post 2008 Math Modeling Study.

After this review, the Cleveland District Manager of Operations determined to continue a mitigation outlined in the 2015 Safety Risk Management Document (SRMD). In a May 5, 2021 memorandum, the Cleveland District Manager of Operations stated that heavy aircraft must not be in the ILS-Y offset localizer critical area while incoming airborne aircraft are cleared for ILS-Y approach to the same runway. The Cleveland District Manager of Operations also determined that the Detroit Terminal Radar Approach Control (TRACON) (D21) Letter of Agreement (LOA) needed to be updated to state that if a heavy aircraft is cleared for the ILS-Y approach, the succeeding aircraft will not be cleared for ILS-Y approach until the heavy aircraft has taxied clear of the critical area or the succeeding aircraft will be sent to a parallel runway. The memorandum stated that this mitigation always applies, not just when ILS critical area protections are in effect.

[2] *See* OSC File No. DI-18-004555.
[3] *See Id*.

Implementation of Safety Mitigations Prior to Resuming the Use of ILS-Y Approach

The investigation found that prior to resuming the ILS-Y approach, in addition to the May 5, 2021 memorandum, DTW officials implemented an education campaign for controllers and pilots. The Detroit TRACON (D21) workforce was briefed on PRM approaches and the LOA change mentioned above. Additionally, an ILS-Y User Flyer was developed and shared with air carriers and other operators. The flyer provided information on when and how the ILS-Y approach will be used, including situations in which the weather deteriorates.

Reports of Safety Issues Associated with Resuming the Use of the ILS Y in June 2021

Investigators reviewed Mandatory Occurrence Reports (MORs) and Service Integrity Risk Analysis Process (SIRAP) data and found no noted safety events associated with the ILS-Y approach since June 1, 2021. MORs are required electronic documents completed when certain events, such as a bird strike, two aircraft losing separation, a medical emergency, or an equipment failure occur within a facility's airspace. MORs are reviewed by Quality Assurance Office within the facility's region to validate the event and evaluate potential risk. SIRAP data concerns the reported loss of any advertised National Airspace System (NAS) Service used for the safe navigation of air traffic. The Quality Assurance Office investigates these losses of service to measure the risk to NAS users and reports its findings to appropriate leadership.

The Whistleblower's Comments

[redacted] disagreed with and questioned the findings in the agency report. [redacted] questioned why DTW officials relied on certain documents to determine the safety risks of the ILS-Y approach, the Y offset localizers, and the implementation of the heavy aircraft mitigation. He again asserted that DTW officials can use a combination of simultaneous or staggered approaches using the straight-in localizers, in lieu of using the Y offset localizers.

[redacted] also highlighted events he discovered via Freedom of Information Act (FOIA) requests,[4] including an MOR for a September 2021 event in which an aircraft flew through a Y offset localizer. [redacted] voiced concern that this September 2021 event was not found during the investigation and included in the agency report. [redacted] stated that this September 2021 event was reported in the MOR as "pilot deviation," despite documented concerns regarding the safety of the ILS-Y approach and agency officials remarking in e-mails that the aircraft flew through the Y offset localizer. [redacted] further asserted that reporting this event as "pilot deviation" brings forth questions and concerns regarding what events meet the threshold of being reported and investigated as safety events concerning the Y offset localizer and the ILS-Y approach.

The Supplemental Agency Report

OSC requested a supplemental report to address the September 2021 incident, as well as the agency's decision to eliminate the weather restriction for the ILS-Y approach, its reliance on a draft

[4]The Freedom of Information Act, 5 U.S.C. § 552, requires federal agencies to disclose agency records to requestors, subject to certain exceptions.

modeling study to determine safety risks associated with the ILS-Y approach, and any information concerning MORs, pilot and agency employee complaints, ASAP reports, and other reported anomalies involving the Y offset localizers since resumption of the ILS-Y approach in June 2021.

In its supplemental response, the agency acknowledged the September 2021 incident [redacted] discovered through his FOIA request and stated it was not included in the agency report because it was discovered after data for the report had already been complied. Nonetheless, the agency stated that the September 2021 incident would not have been included in the agency report regardless because it was not related to the availability or integrity of the RWY 04L ILS, including the offset localizer. Further, the agency stated that the incident was identified during a D21 TRACON internal audit of approaches. D21 TRACON determined that the aircraft involved in the September 2021 incident did not receive an approach clearance from a D21 air traffic controller. Additionally, the agency stated that the MOR for the September 2021 was also reviewed by Quality Assurance and Air Traffic Organization Safety and Technical Training, Litigation Support Group, which agreed that the incident was not related to the RWY 04L ILS or its offset localizer. The MOR was also provided to the local Flight Standards District Office to analyze the possible pilot deviation.

The agency also responded that it determined the weather restriction for the ILS-Y approach was not needed because, regardless of weather conditions, when a heavy aircraft is operating to RWY 04L, the succeeding arrival aircraft will not be cleared for the ILS-Y approach until the heavy aircraft has taxied clear of the ILS critical area, otherwise the arrival aircraft will be sent to a parallel runway.

The agency responded that it included the Draft Post 2008 Math Modeling Study in its review of the ILS-Y approach out of an abundance of caution, and that the final version of the 2008 Math Modeling Study was discussed and presented during the Safety Risk Management Panel (SRMP) on the ILS-Y approach procedure. The agency further stated that the previous 2015 SRMP was deemed sufficient to ensure the safety of the ILS-Y approach procedure and was incorporated into the Safety Risk Management Document (SRMD). The agency stated that the 2018 SRMP validated the findings and mitigations of the 2015 SRMD. The agency also noted that the final 2008 Math Modeling Study was an engineering study produced in accordance with an FAA order, which determined that the localizer location criteria was met or within tolerance. Finally, the agency stated it found no MORs, pilot or agency employee complaints, ASAP reports, or any other reported anomalies involving the ILS Y approach or the operation of the offset localizers since 2021.

The Whistleblower's Comments on the Supplemental Report

[redacted] disagreed with the supplemental report findings and questioned the validity of the report in light of a December 2020 Senate Committee report noting significant lapses in aviation safety oversight and leadership with the FAA,[5] and a January 5, 2023 DOT Office of the Inspector General report finding major deficiencies within FAA AAE.[6] Additionally, [redacted] outlined numerous inconsistencies

[5] U.S. Senate Committee on Commerce, Science, and Transportation, Committee Investigation Report, *Aviation Safety Oversight*, December 2020, *available at* https://www.commerce.senate.gov/services/files/FFDA35FA-0442-465D-AC63-5634D9D3CEF6.

[6] U.S. Department of Transportation, Office of the Inspector General, FAA's Office of Audit and Evaluation Adheres to Investigative Practice Standards but Lacks Comprehensive Standard Operating Procedures, Report No.

within the supplemental report and stated that the agency's view of safety is dangerous. Further, [redacted] stated that the agency's insistence on using the ILS-Y approach, with the offset localizers in their current positions, and without regard to weather, wind, and forecast, needlessly puts the flying public at risk and in harm's way.

The Special Counsel's Findings

I thank [redacted] for bringing forth this allegation, as well has his previous disclosures to OSC. I have reviewed [redacted] disclosure in this matter, the agency reports, and his comments. The usage of ILS-Y approach procedure at DTW, in conjunction with the location of the ILS offset localizers, has been the subject of his disclosures for several years. Although the agency has not substantiated [redacted] allegations, all the agency reports regarding this matter confirm that the FAA has continued the use of the ILS-Y approach procedure at DTW, with the full knowledge the offset localizers are located in areas where aircraft taxi through the ILS critical area and could cause interference with the ILS signal.[7]

Further, I am concerned that the agency has discontinued the weather restriction, one of the two mitigations that the agency previously deemed necessary for the safe operation of the ILS-Y approach.[8] Thus, one of the mitigations that was deemed essential for safe operation of the ILS-Y approach procedure is no longer in place.[9]

Additionally, as stated earlier, the offset localizers remain in the same location; an area in which DTW officials have previously acknowledged that taxiing aircraft could interfere with the localizer signal. While DTW officials have a mitigation in place regarding high tail aircraft in the critical area, the reports are silent on other, smaller aircraft interfering with the localizer signal while taxiing through the localizer critical area even though the agency has previously acknowledged such aircraft could pose a safety risk.

Based on the foregoing, it appears that previous safety concerns surrounding the ILS-Y approach at DTW remain. Therefore, I have determined that the agency's findings do not appear reasonable. Again, I urge the FAA to further review the safety issues associated with the ILS-Y approach and the location of offset localizers at DTW and take steps necessary to resolve them.

PT20230313 (Jan. 25, 2023), *available at* *https://www.oig.dot.gov/sites/default/files/FAA%20AAE%20Final%20Report-1.25.2023.pdf*.

[7] Federal Aviation Administration, Safety Risk Management Document, Safety Analysis No. SMTS2018051505134 (dated May 15, 2018) ("After lengthy discussion, all stakeholders agreed that even though *interference could occur*, there were too many controls … that would prevent a hazard from occurring."). *See* OSC File No. DI-18-4555, Agency Report Redacted 30, *available at* *https://www.osc.gov/Documents/Public%20Files/FY20/DI-18-4555/DI-18-4555%20-%20Agency%20Report_Redacted.pdf*.

[8] The 2018 SRMP determined that the ILS-Y approach is "'low-risk hazard' that 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]." *See* OSC File No. DI-18-004555.

[9] Memorandum from Detroit Terminal Radar Approach Control (D21) Traffic Management Unit (TMU) to All Personnel (December 29, 2018) ([e]ffective immediately, TRACON personnel are authorized to conduct ILS Yankee approaches down to published minimums. The facility requirement to come off the Yankee Localizer when the ceiling or visibility drops below 800' or 2 miles has been lifted. The restrictions in place for heavies and B757/300's remains in effective."). *See* OSC File No. DI-18-4555, Supplemental Report Redacted 207, *available at* https://www.osc.gov/Documents/Public%20Files/FY20/DI-18-4555/Supplemental%20Report.pdf.

As required by 5 U.S.C. § 1213(e)(3), I have sent copies of this letter, the agency reports, and [redacted] comments to the Chairs 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 copies of these documents and a redacted copy of the referral letter in our public file, which is available online at www.osc.gov. This matter is now closed.

Respectfully,

Hampton Dellinger

Hampton Dellinger
Special Counsel

Enclosures