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of Transportation

**Federal Aviation
Administration**

InFO

Information for Operators

InFO 13006
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Flight Standards Service
Washington, DC

http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/info

An InFO contains valuable information for operators that should help them meet certain administrative, regulatory, or operational requirements with relatively low urgency or impact on safety.

Subject: Operational Demonstration of Wake Turbulence Mitigation for Departures (WTMD)

Purpose: This InFO advises pilots of changes to the current Federal Aviation Administration (FAA) wake turbulence separation minima between parallel runway operations under certain crosswind conditions.

Background: Pilots and controllers are aware of the wake turbulence mitigation effects of crosswinds. Since 2006, the FAA has worked to develop a safe wake mitigation procedure that enables reduced wake turbulence separations during operations from Closely Spaced Parallel Runways (CSPR). The FAA recently approved the WTMD system and procedures. WTMD is the crosswind-enabled elimination of wake turbulence separation minima when Heavy/B757 aircraft depart the downwind runway and any aircraft follows departing the upwind runway. This system will be fielded at San Francisco International Airport (SFO), followed by George Bush Intercontinental/Houston Airport (IAH), and Memphis International Airport (MEM) to demonstrate operational benefit and support operational experience for potential expansion of airports for WTMD operation. Each demonstration is for one year with the option to extend with the starting effective dates:

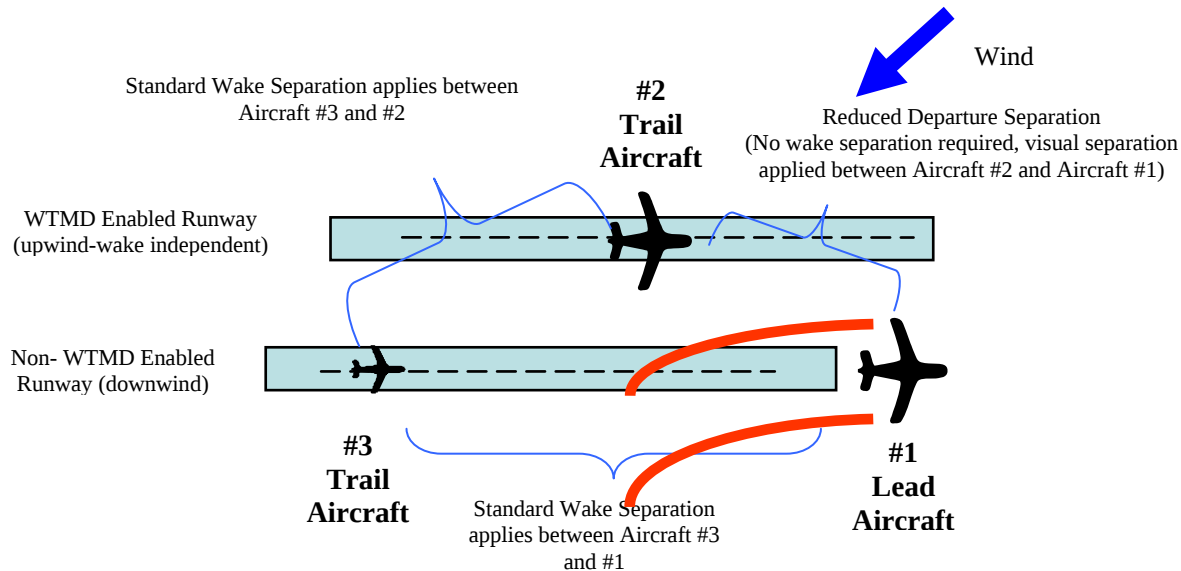
- **SFO:** Wednesday, May 15, 2013, 0600 PDT (1300Z)
- **IAH:** Monday, May 20, 2013, 0600 CDT (1100Z) [NOTE: RWY 15R construction may delay start]
- **MEM:** Monday, August 5, 2013, 0600 CDT (1100Z)

Discussion: The WTMD system notifies Air Traffic Control (ATC) Supervisors when one of the CSPRs (upwind runway) can be used as wake independent from Heavy/B757 aircraft departing from the parallel (downwind) runway and allows them to enable the WTMD procedure. WTMD requires favorable wind conditions for a specific airport's runway configuration and a minimum ceiling and visibility of 1000 feet AGL and 3SM. The WTMD system uses wind information at the surface and incrementally up to about 1200 feet AGL to ensure actual crosswinds and a conservative forecast of future crosswinds are sufficiently strong to allow the reduced separation operations. The WTMD system has been validated through a comprehensive analysis of departure wake turbulence data. When the ATC Supervisor enables WTMD, a display notifies the Local Controller which runway has been identified as wake independent from Heavy/B757 aircraft departure operations from the other parallel runway. The system also has an automatic alert to cease WTMD operations when monitored winds or forecasted winds are falling out of the conservative crosswind criteria required for reduced separation operations. In addition, the pilot always has the option to request 2-minute separation (CSPRs separated by less than 2,500 feet with runway thresholds offset by less than 500 feet) or 3-minute separation (CSPRs separated by less than 2,500 feet with runway thresholds offset by 500 feet or more) instead of controller applied reduced distance separation when WTMD is enabled. WTMD operations will be

included in the Automated Terminal Information Service (ATIS) message and communicated to the pilots via pilot/controller radiotelephony during transition to WTMD operations. Figure 1 presents a graphic of reduced separation operations when WTMD is enabled.

NOTE: Airbus A380 series is not permitted to be a lead aircraft in the reduced separation operations.

Figure 1 Reduced Separation Operations When WTMD Is Enabled



Recommended Action: All pilots operating at these operational demonstration airports should become familiar with this InFO and be reminded of existing pilot responsibilities that support WTMD operations, specifically:

- The pilot will notify ATC of the preference for 2-minute (or 3-minute) separation over the WTMD reduced separation prior to entering the departure runway.
- Pilots observing winds not in agreement with reported winds shall report their observation to the Local Controller. In particular, pilots observing winds blowing toward runways reported to be wake independent from wake dependent runways shall report their observation to the Local Controller. (Required under Title 14 of the Code of Federal regulations (14 CFR) part 91 § 91.183 (b) and (c)).

For additional information on WTMD, operators can view the following document, "FAA Order JO 7110.316" at http://www.faa.gov/regulations_policies/orders_notices/index.cfm/go/document.information/documentID/1020684.

Contact: Questions or comments specific to Wake Turbulence Mitigation for Departures:

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