

# NOTICE

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION  
Air Traffic Organization Policy

N JO 7110.542

**Effective Date:**  
November 1, 2010

**Cancellation Date:**  
October 31, 2011

**SUBJ:** Interim Procedures for Boeing 747-800 and Boeing 787 Flights

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- 1. Purpose of This Notice.** This notice provides interim air traffic procedures applicable to the Boeing 747-800 (B748) and three variants of the Boeing 787 (B783, B788, and B789) operations. The procedures specified in this notice supplement existing guidance contained in Federal Aviation Administration (FAA) Order JO 7110.65, Air Traffic Control.
- 2. Audience.** This notice applies to the following Air Traffic Organization (ATO) service units: En Route and Oceanic, Terminal, and System Operations Services.
- 3. Where Can I Find This Notice?** This notice is available on the MyFAA employee Web site at [https://employees.faa.gov/tools\\_resources/orders\\_notices/](https://employees.faa.gov/tools_resources/orders_notices/) and on the air traffic publications Web site at [http://www.faa.gov/air\\_traffic/publications/](http://www.faa.gov/air_traffic/publications/).
- 4. Explanation of Policy Change.** The procedures in this notice establish interim wake turbulence separation criteria for the Boeing 748, B783, B788, and B789 aircraft.
- 5. Procedures.** Standard air traffic control procedures contained in FAA Order JO 7110.65 and facility letters of agreement must be applied in support of the Boeing 748, B783, B788, and B789 with the following additions/changes:

**a. TERMINAL.**

1. Separate aircraft operating directly behind or directly behind and less than 1,000 feet below by:

**NOTE-**

*Consider parallel runways less than 2,500 feet apart as a single runway because of the possible effects of wake turbulence.*

- (a) Heavy behind B748 or B783, B788, B789 – 10 miles.
  - (b) Large behind B748 or B783, B788, B789 – 10 miles.
  - (c) Small behind B748 or B783, B788, B789 – 10 miles.
  - (d) When applying wake turbulence separation criteria for terminal operations that are defined in minutes, add 1 additional minute.
2. Visual separation rules specified in FAA Order JO 7110.65, Chapter 7, Section 2, Visual Separation, must not be applied with respect to B748, B783, B788, or B789 aircraft.

**b. EN ROUTE.**

1. Small/large/heavy behind a B748, B783, B788, B789 – 5 miles.
2. When transitioning to terminal airspace - provide a minimum of 10 miles spacing.

3. Visual separation rules specified in FAA Order JO 7110.65, chapter 7, section 2, Visual Separation, must not be applied with respect to B748, B783, B788, and B789 aircraft.

**6. Distribution.** This notice is distributed to the following ATO service units: Terminal, En Route and Oceanic, and System Operations Services; the ATO Office of Safety; Office of the Service Center; the Air Traffic Safety Oversight Service; the William J. Hughes Technical Center; and the Mike Monroney Aeronautical Center.

**7. Background.** Studies indicate that wake vortices generated by the B748 and possibly by the B787 (all variants) may be more substantial than those of aircraft in the "Heavy" wake turbulence category. The FAA Flight Standards Service has not yet issued final standards for either aircraft. Pending the issuance of such standards, the ATO will continue to issue interim guidance to support the operation of the B748, B783, B788, and B789 aircraft in U.S. controlled airspace.

**8. Safety Management System.** These procedures are based in part on guidance received from the International Civil Aviation Organization and the joint FAA/Euro-Control Wake Turbulence Steering Group that studied the wake vortices of the Airbus 380-800 (A388) in 2006. The B748 is 7 percent heavier than the B747-400 (B744) version and 27 percent lighter than the Airbus A388.

The B787 (all variants) maximum certificated takeoff weight is approximately one-third that of the Boeing 748. The analyses of computational models suggest that the B748 wake vortices are similar to those generated by the B744. The separation standards and procedures contained in this notice are conservative. Final guidance will become available once the flight test data have been evaluated.

  
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Vice President, System Operations Services  
Air Traffic Organization

9-27-2010

Date Signed