

U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION Air Traffic Organization Policy

TRATION

June 19, 2014

Cancellation Date:

June 19, 2015

N JO 7110.677

SUBJ: Procedures for A380-800 and An225 Aircraft

- **1. Purpose of This Notice**. This notice delineates air traffic procedures that are applicable to Airbus A380-800 (A388) and Antonov An225 (An225) operations. The procedures contained 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: Air Traffic Services, Mission Support, and System Operations; and all associated air traffic control facilities.
- **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/ and on the air traffic publications Web site at http://www.faa.gov/air_traffic/publications.
- **4. Cancellation**. This notice cancels and replaces N JO 7110.626.

5. Procedures.

- **a.** Air traffic control facilities may apply visual separation, as specified in FAA Order JO 7110.65, Paragraph 7-2-1, Visual Separation, except that visual separation must not be applied when an A388 or An225 is the lead aircraft.
- **b.** Air traffic control facilities must use the following separation standards when applying the provisions of FAA Order JO 7110.65, Paragraph 5-5-4, Minima.

TERMINAL

(1) Separate aircraft operating directly behind or directly behind and less than 1,000 feet below, or following an A388/An225 on approach by:

NOTE -

- **1.** When applying wake turbulence separation criteria, directly behind means an aircraft is operating within 2,500 feet of the flight path of the leading aircraft over the surface of the earth.
- **2.** Consider parallel runways less than 2,500 feet apart as a single runway because of the possible effects of wake turbulence.
 - (a) A388/An225 behind A388/An225 minimum radar separation.
 - **(b)** A388/An225 behind Heavy or B757 minimum radar separation.
 - (c) Heavy behind A388/An225 6 miles.
 - (d) Large/B757 behind A388/An225 7 miles.
 - (e) Small behind A388/An225 8 miles.
- (2) When applying wake turbulence separation criteria that are defined in minutes, add 1 additional minute.

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EN ROUTE

- (3) Separate aircraft operating directly behind the A388 or An225 by the following minima:
 - (a) A388/An225 behind A388/An225 5 miles
 - **(b)** Heavy behind A388/An225 *5 miles*.
 - (c) Large behind A388/An225 5 miles.
 - (d) Small behind A388/An225 5 miles.
 - (e) When an A380/An225 is operating at or below 250 KIAS and below FL240 8 miles.
- (4) When applying wake turbulence separation criteria that are defined in minutes, add 1 additional minute.
- (5) Provide a minimum of 8 miles in-trail spacing behind an A388/An225 when transitioning from enroute to terminal airspace. This interval must exist when the leading aircraft crosses the terminal/en route boundary or transfer of control point.
- **c.** The word "SUPER" must be used immediately after the aircraft call sign as follows:
 - (1) TERMINAL. In all communications with or about A388 or An225 aircraft.
 - (2) EN ROUTE.
 - (a) In communications with a terminal facility about A388 or An225 operations.
- **(b)** In communications with or about A388 or An225 aircraft with regard to an airport where the en route center is providing approach control service.
 - (c) When issuing traffic advisories regarding an A388 or An225 aircraft.
- **6. Distribution**. This notice is distributed to the following ATO service units: Air Traffic Services, Mission Support, and System Operations; the ATO Office of Safety and Technical Training; the Air Traffic Safety Oversight Service; the William J. Hughes Technical Center; and the Mike Monroney Aeronautical Center.
- **7. Background**. In 2008, the FAA, European Organization for the Safety of Air Navigation (EuroControl), the Joint Aviation Authorities, and the aircraft manufacturer modified existing separation standards for the Airbus A380-800 (A388) aircraft. The separation standards apply to terminal and enroute facilities as specified above.

Although a "J" indicator for the A388 has been identified by ICAO in its October 9, 2006, guidance, the FAA has not rendered a final determination in support of such an indicator. Accordingly, existing flight data processing systems and records have not yet been modified to reflect a "J" indicator for the A388 on electronic flight lists or printed flight progress strips. Studies indicate that wake vortices generated by the A388 may be more substantial than those of aircraft in the "Heavy" Aircraft Weight Class, thus requiring the special designation, "Super" and additional wake turbulence separation during certain segments of flight. The A388 must identify itself as, "Super" in radio communications with air traffic control.

Recent analysis of the current U.S. weight-based wake turbulence categories and associated separation minima has indicated that the Antonov An225 is more appropriately aligned with the A388 than as a U.S. heavy aircraft.

8. Safety Management System. These procedures are based on guidance received from the International Civil Aviation Organization and the joint FAA/EuroControl Wake Turbulence Steering

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Group that studied the wake vortices of the A388 in July 2008. In addition, the use of the wake turbulence separation standards and procedures herein represent an increase in separation behind the An225. While the An225 to An225 separation minima contained herein technically represents a decrease in separation, the separation change is well bounded by the safety arguments for the A388 behind the A388. Also given that only one An225 was ever built, there exists no opportunity for two An225 to be in trail of each other. Accordingly, the separation standards and procedures contained in this notice are based on the approved study; therefore, no further safety risk analysis is necessary.

Heather Hemdal

Director, Air Traffic Standards and Procedures, AJV-8

Date Signed

6.18.2014