

DOCUMENT CHANGE PROPOSAL/BRIEFING SHEET

FINAL DISPOSITION (INITIAL Not Required)

ORDER/PUBLICATION: 7110.65T

CHANGE: 1

EFFECTIVE DATE: August 26, 2010

TRACKING #: 51- App-A-

SPECIALIST/ROUTING: Robert Law AJR-53 (202) 267-9326

1. PARAGRAPH NUMBER AND TITLE:

Appendix A. AIRCRAFT WEIGHT CLASSES

2. BACKGROUND: Existing procedures governing the application of wake turbulence separation in instrument flight rules (IFR) operations are dependent on the weight classes of the two in-trail aircraft and whether or not the lead or in trail aircraft is a Boeing 757 (B757). Current weight class definitions categorize B757s as either "Large" (with special separation applied behind the B757) or "Heavy," depending on the particular model. Three variants of the aircraft were built, each characterized by a different value for maximum certificated gross takeoff weight. As a result, different wake turbulence separation may be applied to different B757 models, despite the fact that they differ relatively little in weight.

The FAA recently conducted a review of the performance characteristics, separation standards, and weight classes for B757 aircraft in accordance with the Safety Risk Management (SRM) process to determine if changes were warranted. The physics-based and data driven analysis concluded that the wake behavior of the lightest B757 bounded that for all three variants. As such, the analysis concluded that all B757s could be treated the same. The SRMD was approved by the Office of Safety on January 9, 2009 and the separation change was accepted by Air Traffic Safety Oversight Service on July 22, 2009. As a result of these approvals, the additional 1 NM of separation required for the B757-300 (B753) and B757-200H (B752H) models is unnecessary. Therefore, all B757 models will be in the "Large" weight category but with the same special separation procedures applied regardless of model type. The separation procedures are noted in FAA Order JO 7110.65, Paragraph 5-5-4, Minima.

3. EXPLANATION OF CHANGE: This change implements a reclassification by the Flight Standards Service for wake turbulence purposes for certain B752 and B753 aircraft capable of takeoff weights of more than 255,000 pounds. These aircraft will be in the "Large" weight category and subject to the separation criteria specified in FAA Order JO 7110.65, Para 5-5-4, Minima. A new sub-paragraph under Aircraft Weight Classes is added to apply to Boeing 757 aircraft. Those B757 aircraft that had previously been considered "Heavy" as the lead aircraft under paragraph 5-5-4 will now be considered "B757s." In addition, all Boeing 757 models will be considered "Large" aircraft when following another aircraft. This change cancels and incorporates N JO 7110.520, Aircraft Weight Classes, effective April 8, 2010.

4. CHANGE:

OLD

AIRCRAFT WEIGHT CLASSES

a. Heavy. Aircraft capable of takeoff weights of more than 255,000 pounds whether or not they are operating at this weight during a particular phase of flight.

Add

NEW

AIRCRAFT WEIGHT CLASSES

No change

NOTE-

For the purposes of applying separation standards prescribed in this order, all B752 and B753 aircraft, regardless of weight certification, are to be considered a large aircraft when following another aircraft and a B757 when the lead aircraft.

OLD

BOEING COMPANY (USA)

(Also GRUMMAN, IAI, LOCKHEED-BOEING, Mc DONNELL DOUGLAS, NORTHROP-GRUMMAN, ROHR)

Model	Type Designator	Description	Performance Information			
		Number & Type Engines / Weight Class	Climb Rate (fpm)	Descent Rate (fpm)	SRS Cat.	LAHSO Group
Title thru 747SP						
757-200 (C32)	B752	2J/L	3,500	2,500	III	7
757-300	B753	2J/H	3,500	2,500	III	8

NEW

BOEING COMPANY (USA)

(Also GRUMMAN, IAI, LOCKHEED-BOEING, Mc DONNELL DOUGLAS, NORTHROP-GRUMMAN, ROHR)

Model	Type Designator	Description	Performance Information			
		Number & Type Engines/ Weight Class	Climb Rate (fpm)	Descent Rate (fpm)	SRS Cat.	LAHSO Group
No change						
757-200 (C32)	B752	2J/L	3,500	2,500	III	7
757-300	B753	2J/L	3,500	2,500	III	8

No further changes to paragraph.

5. **INDEX CHANGES:** None
6. **GRAPHICS:** None
7. **GENOT/NOTICE:** N JO 7110.520, Aircraft Weight Classes, effective April 8, 2010
8. **FORMATTING & PLAIN LANGUAGE REVIEW:** ☒ HM 11/05/2009
9. **SAFETY RISK MANAGEMENT:** (Check appropriate box).
☒ **SRMD.** Proposed change meets full SMS requirements for safety risk assessment.
☐ **SRMDM.** Proposed change is not safety related.

Comments:



Chuck Chamberlain
Acting Manager, Terminal Operations Group

11/30/09

Date: