CHANGE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Air Traffic Organization Policy

JO 7110.308
CHG 2

Effective Date:
September 1, 2010

SUBJ: 1.5-Nautical Mile Dependent Approaches to Parallel Runways Spaced Less Than 2,500 Feet Apart

1. Purpose of This Change. This order specifies specific runway pairs and approach geometries authorized and defines the necessary procedures. Paragraph 6d of this order defines the navigation aids necessary for authorized use of the procedure. Appendix A provides an updated list of authorized runway pairings for use of this procedure to include Newark Liberty International (EWR), Memphis International (MEM), and an additional runway pair at Seattle-Tacoma International (SEA) Airports.

2. Audience. This order applies to the Terminal Services organization and all associated air traffic control facilities.

3. Where Can I Find This Change? This change 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. Explanation of Policy Change. This change to closely spaced parallel runway (CSPR) procedures will eliminate the requirement for the lead aircraft to be established and/or cleared for the instrument approach before the trailing aircraft is established and/or cleared for the instrument approach.

5. Distribution. This order is distributed to the following Air Traffic Organization service units: En Route and Oceanic, Terminal, Safety, NextGen and Operations Planning, and System Operations Services; the Air Traffic Safety Oversight Service; the William J. Hughes Technical Center; and the Mike Monroney Aeronautical Center.

6. Background. FAA Order JO 7110.308, dated November 5, 2008, authorizes the use of 1.5-nautical mile dependent staggered approaches to be conducted at the General Edward Lawrence Logan International (BOS), Cleveland-Hopkins International (CLE), Philadelphia International (PHL), Seattle-Tacoma International (SEA), and Lambert-St. Louis International (STL) Airports.

7. Disposition of Transmittal. Retain this transmittal until superseded by a new basic order.

8. Page Control Chart. See the page control chart attachment.

for Nancy B. Kalinowski
Vice President, System Operations Services
Air Traffic Organization

August 18, 2010
Date Signed

Distribution: ZAT-721; ZAT-464

Initiated By: AJT-2
Terminal Safety and Operations Support

PAGE CONTROL CHART

JO 7110.308

09/01/10

REMOVE PAGES	DATED	INSERT PAGES	DATED
4	11/05/08	4	09/01/10
A-1	11/05/08	A-1	09/01/10

(h) Reduced separation is not permitted if either of the aircraft in a reduced separation pair is conducting a non-precision approach.

(i) If the lead aircraft executes a missed approach and is larger than the trailing aircraft in the pair, the trailing aircraft will be instructed to execute a missed approach.

d. Navigational Aids. The 1.5-NM diagonal dependent approaches authorized by this order may be conducted using ILS Category I (CAT I). Localizer and glide slope must be in service to both approaches.

e. Radar Surveillance. Terminal approach radar services apply.

f. Weather Minimums. The 1.5-NM diagonal dependent approaches authorized by this be order may be conducted down to and including CAT I weather conditions.

g. Charting. Charting for ILS approaches with modified glide slope angles will be published after flight checking and before the implementation of ILS procedures authorized by this order.

7. Distribution. This order is distributed to the following ATO service units: Terminal, En Route and Oceanic, System Operations Services, and NextGen and Operations Planning; 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.

8. Background. Increased airport capacity and reduced arrival delays, under instrument meteorological conditions down to and including CAT I, can be achieved by using 1.5-NM diagonal separation within successive pairs of arrivals to CSPRs. This type of dependent instrument approach can be conducted for airports with specific centerline separations and threshold staggers. The lead aircraft of the dependent pair is restricted to being small or large aircraft weight type and is cleared to the lower approach. The geometry of the approach, with small or large aircraft leading on the lower approach, as well as the lateral separation between the two approaches, provide wake turbulence avoidance necessary for this reduced separation dependent approach operation.

Lateral separation between the two approaches contributes to wake avoidance. In addition, a small glide path height difference may be necessary, especially at distances of 7 or more nautical miles from touchdown, to ensure the trailing aircraft is at or above the height of the leading aircraft in the reduced separation pair. The required glide path height can be achieved through displaced landing thresholds or through small glide path angle differences that are permitted within the constraints of precision approaches.

9. Definitions. For the purpose of this order, the following definitions are provided.

a. Lead Aircraft – The lead aircraft in the pair of reduced separation aircraft, authorized by this order. The lead aircraft is restricted to be a small or large aircraft weight type as defined in FAAO 7110.65, Appendix A, Aircraft Information Fixed-Wing Aircraft.

b. Lead Approach – The approach assigned to the lead aircraft in a reduced separation pair. For each CSPR pair identified in appendix A of this order, the lead approach is listed first and is typically the lower approach.

c. Higher Approach – The higher approach is the approach to the runway with the staggered landing threshold. (See FIG 1.)

d. Lower Approach – The lower approach is the approach to the runway with the nonstaggered landing threshold. (See FIG 1.)

Appendix A. Authorized Runway Pairing

TBL-A-1

Specific Airports/Runway Geometries Approved for 1.5-NM Diagonal Dependent Approaches

Airport	CSPR Pair (Lead/Trail)	Centerline Separation (in feet)	Glide Path Height Difference (7NM from lead a/c threshold)	Runway (Lead/Trail)	Navigation Type	Glide Slope Angle (degrees)
BOS	4R/4L	1500	128 ft	4R (lead)	ILS	3.0
				4L (trail)	ILS	3.1
CLE	6L/6R	1241	193 ft	6L (lead)	ILS	3.0
				6R (trail)	ILS	3.1
	24L/24R	1241	63 ft	24L (lead)	ILS	3.0
				24R (trail)	ILS	3.0
EWR	4L/4R	950	74 ft	4L (lead)	ILS	3.0
				4R (trail)	ILS	3.1
	22R/22L	950	74ft	22R (lead)	ILS	3.0
				22L (trail)	ILS	3.1
MEM	18C/18L	927	185 ft	18C (lead)	ILS	3.0
				18L (trail)	ILS	3.1
	36R/36C	927	74 ft	36R (lead)	ILS	3.0
				36C (trail)	ILS	3.1
PHL	9R/9L	1400	316 ft	9R (lead)	ILS	3.0
				9L (trail)	ILS	3.0
	27R/27L	1400	263 ft	27R (lead)	ILS	3.0
				27L (trail)	ILS	3.0
SEA	34C/34L	1700	49 ft	34C (lead)	ILS	3.0
				34L (trail)	ILS	3.0
	16C/16R	1700	0 ft	16C (lead)	ILS	3.0
				16R (trail)	ILS	3.0
	16L/16C	800	0 ft	16L (lead)	ILS	3.0
				16C (trail)	ILS	3.0
	34R/34C	800	130 ft	34R (lead)	ILS	2.75*
				34C (trail)	ILS	3.0
STL	30R/30L	1300	89 ft	30R (lead)	ILS	3.0
				30L (lead)	ILS	3.0
	12R/12L	1300	159 ft	12R (lead)	ILS	3.0
				12L (trail)	ILS	3.0

NOTE-
For those runway pairs which require a 3.1 degree glide slope to the trailing approach, this procedure is not to be conducted until the 3.1 degree approach is established.

** SEA 34R currently has a 2.75 degree glide slope. The risk analysis was conducted using a 3.0 degree glide slope, and the procedure is authorized on SEA 34R at 2.75 and up to a 3.0 degree glide slope.*