

NOTICE

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

N JO 7110.608

Effective Date:
November 1, 2012

Cancellation Date:
October 31, 2013

SUBJ: Guidance for the Implementation of Wake Turbulence Recategorization Separation Standards at Memphis International Airport

- 1. Purpose of This Notice.** This notice provides guidance for the use of Wake Turbulence Recategorization (Wake RECAT) wake turbulence standards for the separation of aircraft at Memphis TRACON (M03) and Memphis International Airport Traffic Control Tower (MEM). Testing at M03 and MEM is the first step in national implementation.
- 2. Audience.** This notice applies to the Air Traffic Organization (ATO) Terminal Service Unit at Memphis TRACON (M03) and Memphis International Airport Traffic Control Tower (MEM).
- 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. Procedures.** Procedures contained in FAA Order JO 7110.65, FAA Notice JO 7110.582, and facility directives must be applied in support of the Wake RECAT program at M03 and MEM only, with the following additions/changes:
 - a. Amend the following paragraphs in FAA Order JO 7110.65, to read as follows:

2-1-19. WAKE TURBULENCE

- a. Apply wake turbulence procedures to aircraft operating behind Category A, B, and C aircraft, and, where indicated, to Category F aircraft behind Category D and E aircraft.

NOTE-

Para 5-5-4, Minima, specifies increased radar separation for Category F aircraft landing behind Category A, B, C, D, and E aircraft because of the possible effects of wake turbulence.

No further changes to paragraph

2-1-20. WAKE TURBULENCE CAUTIONARY ADVISORIES

- a. Issue wake turbulence cautionary advisories and the position, altitude if known, and direction of flight of the Category A, B, C, and D aircraft to:

REFERENCE-

AC 90-23, Aircraft Wake Turbulence, Pilot Responsibility, Para 12.

1. **TERMINAL.** VFR aircraft not being radar vectored but are behind Category A, B, C, or D aircraft.

a2 through a3, no change

b. Issue cautionary information to any aircraft if in your opinion, wake turbulence may have an adverse effect on it. When traffic is known to be a Category A aircraft, include the word *Super* in the description. When traffic is known to be a Category B or C aircraft, include the word *Heavy* in the description.

No further changes to paragraph

2-2-6. IFR FLIGHT PROGRESS DATA

Title through a1, no change

2. Number of aircraft if more than one, Wake Category indicator, type of aircraft, and aircraft equipment suffix.

No further changes to paragraph

2-3-4. TERMINAL DATA ENTRIES

Title through Table 2-3-3, block 2a, no change

Table 2-3-3, block 3 - Number of aircraft if more than one, Wake Category indicator, type of aircraft, and aircraft equipment suffix.

Table 2-3-3, block 4 through table 2-3-4, block 2a, no change

Table 2-3-4, block 3 - Number of aircraft if more than one, Wake Category indicator, type of aircraft, and aircraft equipment suffix.

Table 2-3-4, block 4 through table 2-3-5, block 2a, no change

Table 2-3-5, block 3 – Number of aircraft if more than one, Wake Category indicator, type of aircraft, and aircraft equipment suffix.

No further changes to paragraph

2-4-14. WORDS AND PHRASES

Title thru a, no change

b. The word *Super* must be used as part of the identification of Category A aircraft.

c. The word *Heavy* must be used as part of the identification of Category B or C aircraft.

No further changes to paragraph

2-4-21. DESCRIPTION OF AIRCRAFT TYPES

Except for Wake Category A, B, or C aircraft, describe aircraft as follows when issuing traffic information.

a through c2 example, no change

d. When issuing traffic information to aircraft following a Wake Category A aircraft, specify the word *Super* before the manufacturer's name and model.

e. When issuing traffic information to aircraft following a Wake Category B, or C aircraft, specify the word *Heavy* before the manufacturer's name and model.

EXAMPLE-

“Super A-Three-Eighty-Eight”

“Heavy Seven-Seventy-Seven.”

“Heavy C-Five.”

“Heavy Boeing Seven Forty-Seven.”

No further changes to paragraph

3-3-5. BRAKING ACTION ADVISORIES

Title through b, no change

1. Issue the latest braking action report for the runway in use to each arriving and departing aircraft early enough to be of benefit to the pilot. When possible, include reports from Wake Category A, B, or C aircraft when the arriving or departing aircraft is a Wake Category A, B, or C aircraft.

No further changes to paragraph.

3-7-3. GROUND OPERATIONS

Title to a, no change

a. Category A, B, or C aircraft to use greater than normal taxiing power.

b. Category F aircraft or helicopters to taxi in close proximity to taxiing or hover-taxi helicopters.

No further changes to paragraph.

3-9-6. SAME RUNWAY SEPARATION

Title through WAKE TURBULENCE APPLICATION, no change

c. Do not issue clearances which imply or indicate approval of rolling takeoffs by Category A, B, or C aircraft except as provided in para 3-1-14, Ground Operations When Volcanic Ash is Present.

d. Do not issue clearances to Category F aircraft to line up and wait on the same runway behind a departing Category A, B, or C aircraft to apply the necessary intervals.

d Reference, no change

e. The minima in para 5-5-4, Minima, TBL 5-5-1, may be applied in lieu of the time interval requirement in subpara f. When para 5-5-4, TBL 5-5-1, is applied, ensure that the appropriate radar separation exists at or prior to the time an aircraft becomes airborne when taking off behind a Category A, B, C, or D aircraft.

NOTE –

The pilot may request additional separation, but should make this request before taxiing on the runway.

f. Separate IFR/VFR aircraft taking off when departing the same runway or a parallel runway separated by less than 2,500 feet:

NOTE –

Takeoff clearance to the following aircraft should not be issued until the time intervals have passed after the preceding aircraft begins takeoff roll.

f1, FIG 3-9-4, f2, delete

1. Behind a Category A aircraft:

(a) Category B, C, D, and E – *3 minutes.*

(b) Category F – *4 minutes.*

2. Behind a Category B aircraft:

(a) Category B, C, D, and E – *2 minutes.*

(b) Category F – *3½ minutes.*

3. Behind a Category C aircraft.

(a) Category B, C, D, and E – *2 minutes.*

(b) Category F – *3 minutes.*

4. Category F behind Category D – *2 minutes.*

g. Separate aircraft when operating on a runway with a displaced landing threshold if projected flight paths will cross when either a departure follows an arrival or an arrival follows a departure:

g1, g2, delete

1. Behind a Category A aircraft:

(a) Category B, C, D, and E – *3 minutes.*

(b) Category F – 4 *minutes*.

2. Behind a Category B aircraft:

(a) Category B, C, D, and E – 2 *minutes*.

(b) Category F – 3½ *minutes*.

3. Behind a Category C aircraft:

(a) Category B, C, D, and E – 2 *minutes*.

(b) Category F – 3 *minutes*.

4. Category F aircraft behind Category D – 2 *minutes*.

h. Do not approve pilot requests to deviate from the required wake turbulence time interval if the preceding aircraft is a Category A, B, or C aircraft, or a Category F is departing behind a Category D aircraft.

i. Separate a Category F aircraft behind a Category E aircraft that has departed or made a low/missed approach when utilizing opposite direction takeoffs on the same runway by 3 *minutes* unless a pilot has initiated a request to deviate from the 3 minute interval. In the latter case, issue a wake turbulence advisory before clearing the aircraft for takeoff. Controllers must not initiate or suggest a waiver of the 3 minute rule.

NOTE –

A request for takeoff does not initiate a waiver request from the required time interval. The request must be accompanied by the explicit time interval requesting to be waived.

i Reference, no change

j. Separate aircraft behind a another aircraft that has departed or made a low/missed approach when utilizing opposite direction takeoffs or landings on the same or parallel runways separated by less than 2,500 feet by the following minima:

1. Behind a Category A aircraft:

(a) Category B, C, D, and E – 4 *minutes*.

(b) Category F – 5 *minutes*.

2. Behind a Category B aircraft:

(a) Category B, C, D, and E – 3 *minutes*.

(b) Category F – 4½ *minutes*.

3. Behind a Category C aircraft:

(a) Category B, C, D, and E – *3 minutes*

(b) Category F – *4 minutes*

4. Category F behind Category D – *3 minutes*.

k. Inform an aircraft when it is necessary to hold in order to provide the required time interval.

No further changes to paragraph.

3-9-7. WAKE TURBULENCE SEPARATION FOR INTERSECTION DEPARTURES

Title thru a, no change

1. Separate a Category F aircraft taking off from an intersection on the same runway (same or opposite direction takeoff) behind a preceding departing Category E aircraft by ensuring that the Category F aircraft does not start takeoff roll until at least *3 minutes* after the Category E aircraft has taken off.

2. Separate aircraft departing from an intersection on the same runway (same or opposite direction takeoff), parallel runways separated by less than 2,500 feet, and parallel runways separated by less than 2,500 feet with the runway thresholds offset by 500 feet or more, by ensuring that the aircraft does not start take-off roll until the following interval exists:

(a). Behind a Category A aircraft:

(1) Category B, C, D, and E – *4 minutes*.

(2) Category F – *5 minutes*.

(b). Behind a Category B aircraft:

(1) Category B, C, D, and E – *3 minutes*.

(2) Category F – *4½ minutes*.

(c). Behind a Category C aircraft:

(1) Category B, C, D, and E – *3 minutes*.

(2) Category F – *4 minutes*.

(d) Category F aircraft behind a Category D – *3 minutes*.

Note, delete

3. Separate a Category F aircraft weighing 12,500 lbs. or less taking off from an intersection on the same runway (same or opposite direction takeoff) behind a preceding Category F aircraft weighing more

than 12,500 lbs. by ensuring the following Category F aircraft does not start takeoff roll until at least 3 *minutes* after the preceding aircraft has taken off.

4. Inform an aircraft when it is necessary to hold in order to provide the required time interval.
Phraseology through Reference, no change.

b. The time interval is not required when:

1. A pilot has initiated a request to deviate from that interval unless the preceding departing aircraft is a Category A, B, or C, or a Category F is departing behind a Category D aircraft.

Note through b2, no change

3. Successive touch-and-go and stop-and-go operations are conducted with a Category F aircraft following another Category F aircraft weighing more than 12,500 lbs. or a Category D or E aircraft in the pattern or a Category F aircraft weighing more than 12,500 lbs. or a Category D or E aircraft departing the same runway, provided the pilot of the Category F aircraft is maintaining visual separation/spacing behind the preceding Category D or E aircraft. Issue a wake turbulence cautionary advisory and the position of the Category D or E aircraft.

Example, no change.

4. Successive touch-and-go or stop-and-go operations are conducted with any aircraft following a Category B or C aircraft in the pattern, or a Category B or C aircraft departing the same runway, provided the pilot of the aircraft is maintaining visual separation/spacing behind the preceding Category B or C aircraft. Issue a wake turbulence cautionary advisory and the position of the Category B or C aircraft.

NOTE –

Not authorized with a Category A aircraft as the lead aircraft.

Example, no change

b5, delete

c thru c2, no change.

3. Issue a clearance to permit the trailing aircraft to deviate from course enough to avoid the flight path of the preceding Category E aircraft when applying subpara b1 or b2.

No further changes to paragraph.

3-9-8. INTERSECTING RUNWAY SEPARATION

a through WAKE TURBULENCE APPLICATION, no change

3. Separate IFR/VFR aircraft taking off behind a landing or departing aircraft on a crossing runway if flight paths will cross (see FIG 3-9-9 and 3-9-10), or an aircraft departing a parallel runway separated by 2,500 feet or more if projected flight paths will cross (See FIG 3-9-11):

b3 Note through b4, delete.

(a) Behind a Category A aircraft:

(1) Category B, C, D, and E – 3 minutes.

(2) Category F – 4 minutes.

(b) Behind a Category B aircraft:

(1) Category B, C, D, and E – 2 minutes.

(2) Category F - 3½ minutes.

(c) Behind a Category C aircraft:

(1) Category B, C, D, and E – 2 minutes.

(2) Category F – 3 minutes.

(d) Category F aircraft behind a Category D – 2 minutes.

FIG 3-9-9

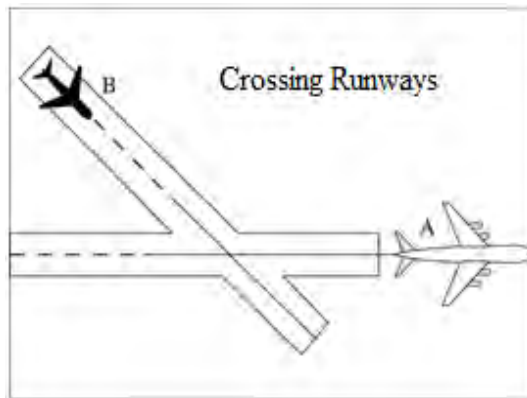


FIG 3-9-10

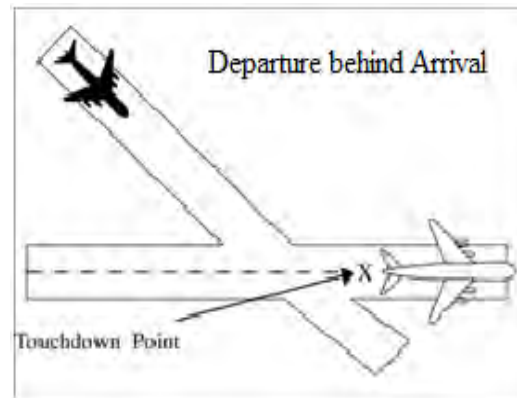
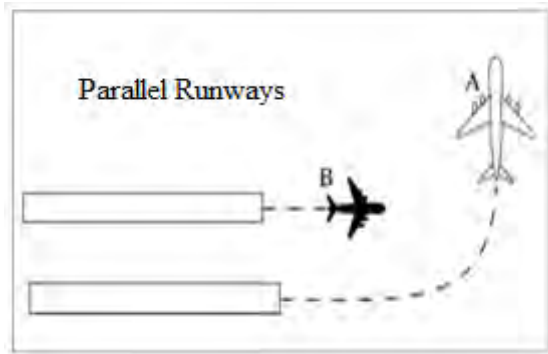


FIG 3-9-11**Note –**

Takeoff clearance to the following aircraft should not be issued until the appropriate time interval has passed from when the Category A, B, or C aircraft began takeoff roll.

4. Pilot requests to deviate from the required wake turbulence time intervals must not be approved when the preceding aircraft is a Category A, B, or C aircraft, or a Category F is departing behind a Category D aircraft.

No further changes to paragraph.

3-10-3 SAME RUNWAY SEPARATION

Title through b, no change.

1. The Category A, B, or C aircraft to all aircraft landing behind a departing/arriving Category A, B, or C aircraft on the same or parallel runways separated by less than 2,500 feet.

2. The Category D aircraft to a Category E or F aircraft landing behind a departing or arriving Category D aircraft on the same or parallel runways separated by less than 2,500 feet.

No further changes to paragraph.

3-10-4. INTERSECTING RUNWAY SEPARATION

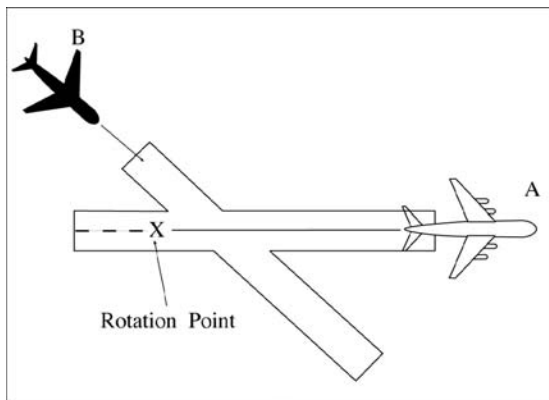
Title through WAKE TURBULENCE APPLICATION, no change.

c. Separate IFR/VFR aircraft landing behind a departing aircraft on a crossing runway if the arrival will fly through the airborne path of the departure by the appropriate radar separation or the following interval: (See FIG 3-10-10):

1. Behind a Category A aircraft:

(a) Category B, C, D, and E – 3 minutes.

- (b) Category F – 4 minutes.
2. Behind a Category B aircraft:
 - (a) Category B, C, D, and E – 2 minutes.
 - (b) Category F - 3½ minutes.
 3. Behind a Category C aircraft:
 - (a) Category B, C, D, and E – 2 minutes.
 - (b) Category F – 3 minutes.
 4. Category F aircraft behind a Category D – 2 minutes.

FIG 3-10-10

d. Issue wake turbulence cautionary advisories, the position, altitude if known, and direction of flight of the Category A, B, C, and D aircraft to:

1. IFR/VFR aircraft landing on crossing runways behind a departing Category A, B, C, or D aircraft; if the arrival flight path will cross the takeoff path behind the Category A, B, C, or D aircraft and behind the Category A, B, C, or D aircraft rotation point. (See FIG 3-10-11)

FIG 3-10-11 thru Example, no change.

2. VFR aircraft landing on a crossing runway behind an arriving Category A, B, C, or D aircraft if the arrival flight path will cross. (See FIG 3-10-12.)

No further changes to paragraph.

3-10-10. ALTITUDE RESTRICTED LOW APPROACH

Title to Note, no change

NOTE –

1. *The 500 feet restriction is a minimum. Higher altitudes should be used when warranted. For example, 1,000 feet is more appropriate for Category A, B, or C aircraft operating over unprotected personnel or Category F aircraft on or near the runway*

No further changes to paragraph.

3-11-1. TAXI AND GROUND MOVEMENT OPERATION

Title through Wake Turbulence Application, no change.

d. Avoid clearances which require Category F aircraft or helicopters to taxi in close proximity to taxiing or hover-taxi helicopters.

No further changes to paragraph.

4-8-11. PRACTICE APPROACHES

Title thru a.1.(b), no change

2. Where procedures require application of IFR separation to VFR aircraft practicing instrument approaches, standard IFR separation in accordance with Chapter 3, Chapter 4, Chapter 5, Chapter 6, and Chapter 7 must be provided. Controller responsibility for separation begins at the point where the approach clearance becomes effective. Except for Wake Category A, B, C, or D aircraft, 500 feet vertical separation may be applied between VFR aircraft and between a VFR and an IFR aircraft.

No further changes to paragraph.

5-5-4. MINIMA

Title thru a.3, no change

NOTE-

Wake turbulence procedures specify increased separation minima for certain categories of aircraft because of the possible effects of wake turbulence.

b. thru d. Note 3, no change.

WAKE TURBULENCE APPLICATION

e. Separate aircraft operating directly behind and/or less than 1,000 feet below in accordance with the minima specified in Table 5-5-1.

Note 1 and 2, no change.

TBL 5-5-1
Wake Turbulence Separation for Directly Behind

		Follower					
		A	B	C	D	E	F
Leader	A		5 NM	6 NM	7 NM	7 NM	8 NM
	B		3 NM	4 NM	5 NM	5 NM	5 NM
	C				3.5 NM	3.5 NM	5 NM
	D						5 NM
	E						
	F						

WAKE TURBULENCE APPLICATION

f. *ON APPROACH.* In addition to subpara e, separate an aircraft on approach behind another aircraft to the same runway, or one making a touch-and-go, stop-and-go, or low approach, by ensuring the wake separation minima in *table 5-5-2* will exist at the time the trailing aircraft is within 5 NM of the FAF.

Note, no change

TBL 5-5-2
Wake Turbulence Separation for Approach

		Follower					
		A	B	C	D	E	F
Leader	A		5 NM	6 NM	7 NM	7 NM	8 NM
	B		3 NM	4 NM	5 NM	5 NM	7 NM
	C				3.5 NM	3.5 NM	6 NM
	D						5 NM
	E						4 NM
	F						

g. through g1, no change

g.2, delete, renumber g3 thru 5 to g2 thru g4.

No further changes to paragraph.

5-5-7. PASSING OR DIVERGING

Title thru a.2. reference, no change

NOTE –

Although all other approved separation may be discontinued, the requirements of para 5-5-4 minima, subparas e and f must apply where indicated.

No further changes to paragraph.

5-8-3. SUCCESSIVE OR SIMULTANEOUS DEPARTURES

Title through FIG 5-8-3, no change.

NOTE –

This procedure does not apply when a Category F aircraft is taking off from an intersection on the same runway behind a Category D aircraft or when an aircraft is departing behind a Category A, B, or C aircraft.

a. reference thru FIG 5-8-4, no change

2. Intersecting runways and/or helicopter takeoff courses which diverge by 15 degrees or more. Authorize takeoff of a succeeding aircraft when the preceding aircraft has passed the point of runway and/or takeoff course intersection. When applicable, apply the procedures in para 3-9-6, Same Runway Separation. (See [FIG 5-8-5](#) and [FIG 5-8-6](#).)

Figure 5-8-5, no change

Note, delete

No further changes to paragraph.

5-8-5. DEPARTURES AND ARRIVALS ON PARALLEL OR NONINTERSECTING DIVERGING RUNWAYS

Title thru FIG 5-8-12, no change.

NOTE –

In the event of a missed approach by a Category A, B, C, or D aircraft, apply the procedures in para 3-9-6, Same Runway Separation, or para 3-9-8, Intersecting Runway separation, as appropriate, to ensure that the Category A, B, C, or D aircraft does not overtake or cross in front of an aircraft departing from the adjacent parallel runway.

No further changes to paragraph.

6-1-4. ADJACENT AIRPORT OPERATION

Title through WAKE TURBULENCE APPLICATION, no change.

The ATC facility providing service to and having control jurisdiction at adjacent airports must separate arriving or departing IFR aircraft on a course that will cross the flight path:

a. Behind Category A aircraft:

1. Category B, C, D, and E – 3 minutes.

2. Category F – 4 minutes.

b. Behind Category B aircraft:

1. Category B, C, D, and E – 2 minutes.

2. Category F – $3\frac{1}{2}$ minutes.

c. Behind Category C aircraft:

1. Category B, C, D, and E – 2 minutes.

2. Category F – 3 minutes.

d. Category F aircraft behind a Category D – 2 minutes.

FIG 6-1-1 and FIG 6-1-2, delete.

6-1-5. ARRIVAL MINIMA

WAKE TURBULENCE APPLICATION

Separate IFR aircraft landing behind other arriving aircraft to the same runway, a parallel runway separated by less than 2,500 feet, or a crossing runway if projected flight paths will cross, by the following:

a. Behind Category A aircraft:

1. Category B, C, D, and E – 3 minutes.

2. Category F – 4 minutes.

b. Behind Category B aircraft:

1. Category B, C, D, and E – 2 minutes.

2. Category F – $3\frac{1}{2}$ minutes.

c. Behind Category C aircraft:

1. Category B, C, D, and E – 2 minutes.

2. Category F – 3 minutes.

d. Category F aircraft behind a Category D – 2 minutes.

FIG 6-1-3, delete.

6-7-5. INTERVAL MINIMA

Use the following time or radar interval as the minimum interval between successive approaches and increase the intervals as follows:

a. Minutes in trail:

1. Behind a Category A aircraft:

(a) Category B, C, D, and E – 3 *minutes*.

(b) Category F – 4 *minutes*

2. Behind a Category B aircraft:

(a) Category B, C, D, and E – 2 *minutes*.

(b) Category F - 3½ *minutes*.

3. Behind a Category C aircraft:

(a) Category B, C, D, and E – 2 *minutes*.

(b) Category F - 3 *minutes*.

4. Category F aircraft behind a Category D – 2 *minutes*.

b. Miles in Trail:

1. Behind a Category A aircraft:

(a) Category B – 5 *miles*.

(b) Category C – 6 *miles*.

(c) Category D and E – 7 *miles*.

(d) Category F – 8 *miles*.

2. Behind a Category B aircraft:

(a) Category B – 3 *miles*.

(b) Category C – 4 *miles*.

(c) Category D and E – 5 *miles*.

(d) Category F – 7 *miles*.

3. Behind a Category C aircraft:

(a) Category D and E – 3.5 *miles*.

(b) Category F – 6 *miles*.

4. Category F aircraft behind a:

(a) Category D – 5 miles.

(b) Category E – 4 miles.

c. Further increase of the interval may be necessary, considering the following:

1. Relative speeds of the aircraft concerned.
2. Existing weather conditions.
3. Distance between the approach fix and the airport
4. Type of approach being made.

NOTE –

Increased separation is required for smaller aircraft behind larger/heavier aircraft due to the possible effects of wake turbulence.

7-4-3. CLEARANCE FOR VISUAL APPROACH

Title through c.3.

d. All aircraft following a Wake Category A, B, C, or D aircraft must be informed of the airplane manufacturer and/or model.

EXAMPLE-

“Cessna Three Four Juliet, following a heavy Boeing 747, 12 o'clock, seven miles.”

or

“Cessna Three Four Juliet, following a heavy Seven forty seven, 12 o'clock, seven miles.”

No further changes to paragraph.

7-4-4. APPROACHES TO MULTIPLE RUNWAYS

Title through c., no change

1. Parallel runways separated by less than 2,500 feet. Unless standard separation is provided by ATC, an aircraft must report sighting a preceding aircraft making an approach (instrument or visual) to the adjacent parallel runway. When an aircraft reports another aircraft in sight on the adjacent final approach course and visual separation is applied, controllers must advise the succeeding aircraft to maintain visual separation. However, do not permit a Category A, B, or C aircraft to overtake another aircraft. Do not permit a Category D or E aircraft to overtake a Category F aircraft.

No further changes to paragraph.

7-6-7. SEQUENCING

Title through c.1., no change.

2. When parallel runways are less than 2,500 feet apart, do not permit a Category A, B, or C aircraft to overtake any aircraft, nor a Category D or E aircraft to overtake a Category F aircraft established on final within the facility's area of responsibility.

b. Amend the following definitions in the Pilot/Controller Glossary to read as follows:

AIRCRAFT CLASSES, Delete

AIRCRAFT WAKE CATEGORIES. For the purposes of Wake Turbulence Separation Minima, aircraft are categorized as Category A through Category F. Each aircraft is assigned a category based on wingspan and maximum takeoff weight (MTOW).

a. Category A - Aircraft capable of MTOW of 300,000 pounds or more and a wingspan greater than 245 feet.

b. Category B - Aircraft capable of MTOW of 300,000 pounds or more and a wingspan greater than 175 feet and less than or equal to 245 feet.

c. Category C – Aircraft capable of a MTOW of 300,000 pounds or more and a wingspan greater than 125 feet and less than or equal to 175 feet.

d. Category D – Aircraft capable of a MTOW of less than 300,000 pounds and a wingspan greater than 125 feet and less than or equal to 175 feet; or aircraft with a wingspan greater than 90 feet and less than or equal to 125 feet.

e. Category E – Aircraft capable of a MTOW greater than 41,000 pounds with a wingspan greater than 65 feet and less than or equal to 90 feet.

f. Category F – Aircraft capable of a MTOW of less than 41,000 pounds and a wingspan less than or equal to 125 feet, or aircraft capable of a MTOW less than 15,500 pounds regardless of wingspan, or a powered sailplane.

EQUIPMENT REQUIREMENTS. M03 and MEM must be equipped with EFSTS or an equivalent electronic flight progress strip system in order to participate in Wake RECAT.

AUTOMATION REQUIREMENTS. M03 automation must be configured as follows:

a. Allow for the appropriate aircraft category to be displayed in the Full Data Block (FDB) of each aircraft.

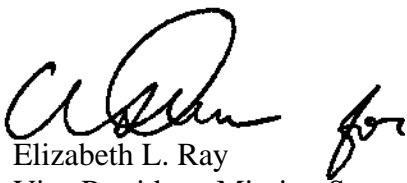
b. The Electronic Flight Strip Transfer System (EFSTS) must display the aircraft category of each aircraft on the flight strip.

5. Distribution. This notice is distributed to the following ATO service units: Terminal; En Route and Oceanic; Systems Operations; the ATO Office of Safety; the Office of the Service Center; the Air Traffic Safety Oversight Service; and the William J. Hughes Technical Center.

6. Background. The Federal Aviation Administration (FAA) is transforming the current National Airspace System (NAS) utilizing a Next Generation (NextGen) influenced Air Traffic Control (ATC) system. This system incorporates new technologies, software applications and methodology designed specifically to enhance the safety and efficiency of the NAS. The Wake Turbulence Re-Categorization Project applies these attributes to the transport and decay of aircraft generated wake turbulence in order to design wake separation standards that maintain safety while allowing more efficient use of airport runways and the NAS.

This research and development project focused on satisfying the capacity demands of future aviation growth. The last full review of separation standards used by air traffic control occurred nearly 20 years ago in the early 1990s and was focused primarily on weight of aircraft standards to determine separation criteria. Since then, air carrier operations and fleet mix have changed dramatically. Airport runway complexes have changed and many new aircraft designs (A-380, very light jets, unmanned aircraft systems) have been introduced into the NAS. The 20 year old weight separation standards no longer provide the most capacity efficient spacing and sequencing of aircraft in approach, departure and en-route operations. This loss of efficient spacing is adding to the gap between demand and the capacity which the NAS provides. The proposed 6 category system and associated separation minima, divided by wake output and decay is the result of a joint EUROCONTROL and FAA effort. It has been determined that the required aircraft separation standards, used for wake mitigation separation in both the USA's and Europe's air traffic control processes, can be modified to safely increase the operational capacity of airports and the NAS. Airports, as well as users, are currently experiencing a heavy operational demand which will only continue to increase during the NextGen era.

7. Forms and Reports. The provisions of this notice are based on the Wake Re-Categorization Safety Risk Management Document: Sub-System Hazard/System Hazard Analysis for MEM TRACON Wake Re-Categorization and Wake Turbulence Separation Standards. That SRMD supports the procedural guidance contained in this notice, and has been accepted and approved as required by FAA Order 1100.161, Air Traffic Safety Oversight, and the ATO Safety Management System Manual.


Elizabeth L. Ray
Vice President, Mission Support Services
Air Traffic Organization

10 - 31 - 2012
Date Signed