# **ERRATA SHEET**

SUBJECT: Change 2 to FAA Order 7110.65V, Air Traffic Control, effective 1/8/15.

Pages 3–9–7 through 3–9–12 were inadvertently omitted in the printed page inserts for Change 2. This errata sheet transmits the missing pages to the subject order.

REMOVE PAGE	DATED	INSERT PAGE	DATED
3–9–7 through 3–9–10	4/13/14	3–9–7 through 3–9–12	1/8/15

Attachment

**b.** The 3-minute interval is not required when:

**1.** A pilot has initiated a request to deviate from that interval unless the preceding departing aircraft is a heavy aircraft/B757.

#### NOTE-

A request for takeoff does not initiate a waiver request; the request for takeoff must be accomplished by a request to deviate from the 3-minute interval.

**2.** USA NOT APPLICABLE. The intersection is 500 feet or less from the departure point of the preceding aircraft and both aircraft are taking off in the same direction.

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

#### EXAMPLE-

"Caution wake turbulence, DC-9 on base leg."

**4.** Successive touch-and-go and stop-and-go operations are conducted with any aircraft following a heavy aircraft/B757 in the pattern, or heavy aircraft/B757 departing the same runway, provided the pilot of the aircraft is maintaining visual separation/spacing behind the preceding heavy aircraft/B757. Issue a wake turbulence cautionary advisory and the position of the heavy aircraft/B757.

#### EXAMPLE-

"Caution wake turbulence, heavy Lockheed C5A departing runway two three."

**5.** If action is initiated to reduce the separation between successive touch-and-go or stop-and-go operations, apply 3 minutes separation.

c. When applying the provision of subpara b:

**1.** Issue a wake turbulence advisory before clearing the aircraft for takeoff.

**2.** Do not clear the intersection departure for an immediate takeoff.

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

**4.** Separation requirements in accordance with para 3–9–6, Same Runway Separation, must also apply.

**REFERENCE**-FAAO JO 7110.65, Para 3–9–6 Same Runway Separation.

### 3–9–8. INTERSECTING RUNWAY OPERA-TIONS

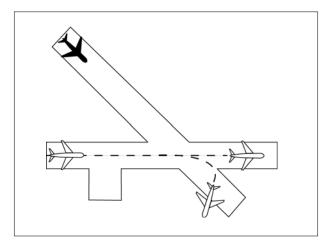
**a.** Issue traffic information to each aircraft operating on intersecting runways.

**b.** Separate departing aircraft from another aircraft using an intersecting runway by ensuring that the departure does not begin takeoff roll until one of the following exists:

**REFERENCE**-FAAO JO 7110.65, Para 2–1–21 Traffic Advisories.

**1.** The preceding aircraft has departed and passed the intersection or is turning to avert any conflict. (See FIG 3-9-5).

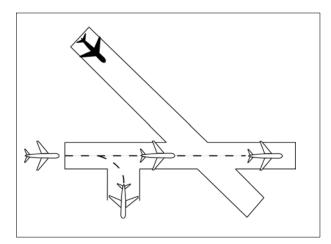
FIG 3-9-5 Intersecting Runway Separation



**2.** A preceding arriving aircraft is clear of the landing runway, completed the landing roll and will hold short of the intersection, or has passed the intersection. (See FIG 3-9-6).

**REFERENCE**-P/CG Term- Clear of the Runway.

FIG 3-9-6 Intersecting Runway Separation



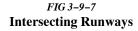
# WAKE TURBULENCE APPLICATION

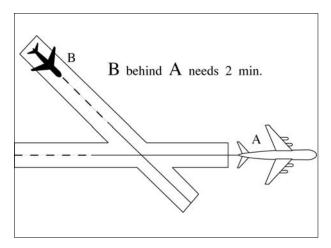
**3.** Separate IFR/VFR aircraft taking off behind a heavy jet/B757 departure by 2 minutes when departing:

#### NOTE-

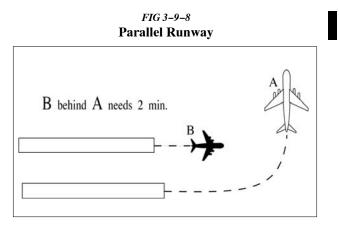
Takeoff clearance to the following aircraft should not be issued until 2 minutes after the heavy jet/B757 begins takeoff roll.

(a) Intersecting runways if projected flight paths will cross. (See FIG 3–9–7).



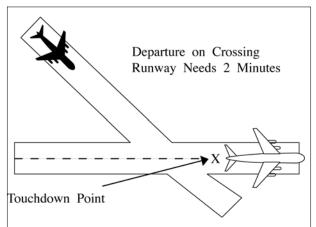


(b) A parallel runway separated by 2,500 feet or more if projected flight paths will cross.(See FIG 3–9–8.)



**4.** Separate IFR/VFR aircraft departing behind a landing heavy jet/B757 on an intersecting g runway if the departure will fly through the airborne path of the arrival– *2 minutes*. (See FIG 3–9–9.)

FIG 3-9-9 Departure on Intersecting Runway



**5.** Air traffic controllers must not approve pilot requests to deviate from the required wake turbulence time interval if the preceding aircraft is a heavy jet/B757.

#### REFERENCE-

FAAO JO 7110.65, Para 5–8–3 Successive or Simultaneous Departures. FAAO JO 7110.65, Para 5–8–5 Departures and Arrivals on Parallel

```
or Nonintersecting Diverging Runways.
```

# 3–9–9. NONINTERSECTING CONVERGING RUNWAY OPERATIONS

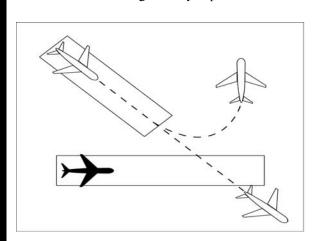
**a.** Separate departing aircraft from an aircraft using a nonintersecting runway when the flight paths intersect by ensuring that the departure does not begin takeoff roll until one of the following exists:

#### REFERENCE-

FAAO JO 7110.65, Para 2-1-21, Traffic Advisories.

1. The preceding aircraft has departed and crossed the departure runway, or is turning to avert any conflict. (See FIG 3-9-10).

*FIG 3–9–10* Intersecting Runway Separation



2. A preceding arriving aircraft has completed the landing roll and will hold short of the projected intersection, passed the projected intersection, or has crossed over the departure runway (See FIG 3-9-11 and FIG 3-9-12).

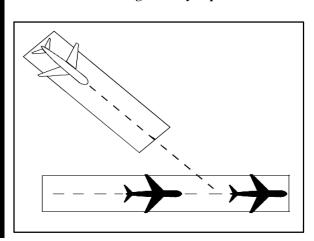
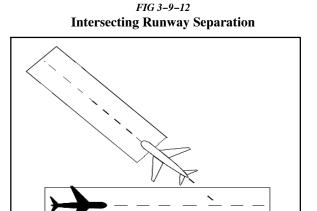


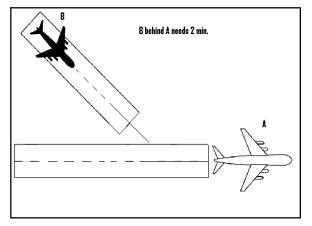
FIG 3-9-11 Intersecting Runway Separation



# WAKE TURBULENCE APPLICATION

**b.** Separate IFR/VFR aircraft taking off behind a heavy jet/B757 departure by 2 minutes when departing a crossing runway if projected flight paths will cross. (See FIG 3–9–13).

FIG 3-9-13 Intersecting Runway Separation



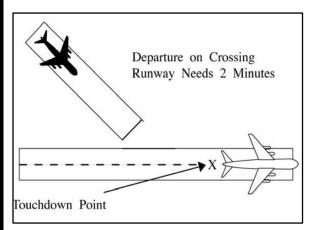
#### NOTE-

Takeoff clearance to the following aircraft should not be issued until 2 minutes after the heavy jet/B757 begins takeoff roll.

**c.** Separate IFR/VFR aircraft departing behind a landing heavy jet/B757 on a crossing runway if the

departure will fly through the airborne path of the arrival- 2 minutes. (See FIG 3–9–14).

FIG 3-9-14 Intersecting Runway Separation



**d.** Air traffic controllers must not approve pilot requests to deviate from the required wake turbulence time interval if the preceding aircraft is a heavy jet/B757.

#### REFERENCE-

FAAO JO 7110.65, Para 5-8-3, Successive or Simultaneous Departures.

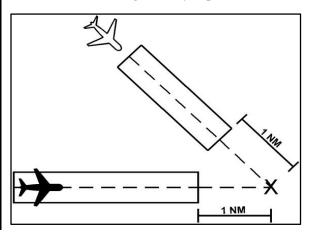
FAAO JO 7110.65, Para 5-8-5, Departures and Arrivals on Parallel or Nonintersecting Diverging Runways.

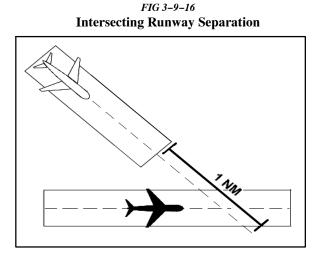
**e.** If the extended centerline of a runway crosses a converging runway or the extended centerline of a converging runway within 1 NM of either departure end, apply the provisions of Paragraph 3-9-8, Intersecting Runway Separation. (See FIG 3-9-15).

#### REFERENCE-

FAAO JO 7210.3, Para 10-3-14, Go-Around/Missed Approach

FIG 3-9-15 Intersecting Runway Separation





# 3-9-10. TAKEOFF CLEARANCE

**a.** When issuing a clearance for takeoff, first state the runway number followed by the takeoff clearance.

#### PHRASEOLOGY-

RUNWAY (number), CLEARED FOR TAKEOFF.

#### EXAMPLE-

"RUNWAY TWO SEVEN, CLEARED FOR TAKEOFF."

#### NOTE-

Turbine-powered aircraft may be considered ready for takeoff when they reach the runway unless they advise otherwise.

#### REFERENCE-

FAAO JO 7110.65, Para 4-3-1 Departure Terminology.

**b.** When clearing an aircraft for takeoff from an intersection, state the runway intersection.

#### PHRASEOLOGY-

RUNWAY (number) AT (taxiway designator) CLEARED FOR TAKEOFF.

**c.** When two or more aircraft call the tower ready for departure, one or more at the full length of a runway and one or more at an intersection, state the location of the aircraft at the full length of the runway when clearing that aircraft for takeoff.

### PHRASEOLOGY-

RUNWAY (number), FULL LENGTH, CLEARED FOR TAKEOFF.

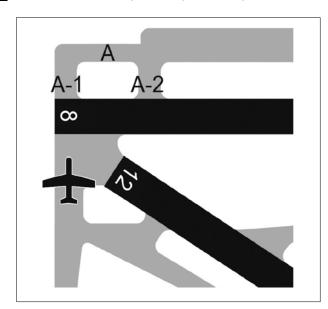
#### EXAMPLE-

"American Four Eighty Two, Runway Three Zero full length, cleared for takeoff."

**d.** The controller must ensure that all runways along the taxi route that lead to the departure runway are crossed before the takeoff clearance is issued, except as stated in para 3-9-9e.

3 - 9 - 10

FIG 3-9-17 Runway/Taxiway Proximity



e. At those airports where the airport configuration does not allow for an aircraft to completely cross one runway and hold short of the departure runway and/or where airports do not have runway hold markings between runways, state the runway to be crossed with the takeoff clearance if the aircraft is not able to complete a runway crossing before reaching its departure runway.

#### PHRASEOLOGY-

CROSS RUNWAY (number), RUNWAY (number) CLEARED FOR TAKEOFF.

#### EXAMPLE-

"CROSS RUNWAY TWO FOUR LEFT, RUNWAY TWO FOUR RIGHT, CLEARED FOR TAKEOFF."

Runway/Taxiway Proximity

FIG 3-9-18

**REFERENCE**-FAAO JO 7210.3, Para 10–3–9, Takeoff Clearance. P/CG Term– Clear of the Runway.

**f.** Do not use the term "full length" when the runway length available for departure has been temporarily shortened. On permanently shortened runways, do not use the term "full length" until the Airport/Facility Directory is updated to include the change(s).

#### NOTE-

The use of the term "full length" could be interpreted by the pilot(s) as the available runway length prior to the runway being shortened.

**g.** Whenever a runway length has been temporarily or permanently shortened, state the word "shortened" immediately following the runway number as part of the takeoff clearance. This information must be issued in conjunction with the takeoff clearance.

**1.** The addition of "shortened" must be included in the takeoff clearance for the duration of the construction project when the runway is temporarily shortened.

**2.** The addition of "shortened" must be included in the takeoff clearance until the Airport/Facility Directory is updated to include the change(s) when the runway is permanently shortened.

#### PHRASEOLOGY-

RUNWAY (number) SHORTENED, CLEARED FOR TAKEOFF.

#### EXAMPLE-

"Runway Two-Seven shortened, cleared for takeoff."

#### PHRASEOLOGY-

RUNWAY (number) AT (taxiway designator) INTERSECTION DEPARTURE SHORTENED, CLEARED FOR TAKEOFF.

#### EXAMPLE-

"Runway Two-Seven at Juliet, intersection departure shortened, cleared for takeoff."

#### REFERENCE-

FAAO JO 7210.3, Para 10-3-11, Airport Construction FAAO JO 7210.3, Para 10-3-12, Change in Runway Length Due to Construction

**h.** USAF. When an aircraft is cleared for takeoff, inform it of the closest traffic within 6 miles on final approach to the same runway. If the approaching aircraft is on a different frequency, inform it of the departing aircraft.

**i.** USA/USN/USAF. Issue surface wind and takeoff clearance to aircraft.

#### PHRASEOLOGY-

RUNWAY (number), WIND (surface wind in direction and velocity). CLEARED FOR TAKEOFF.

# 3-9-11. CANCELLATION OF TAKEOFF CLEARANCE

Cancel a previously issued clearance for takeoff and inform the pilot of the reason if circumstances require. Once an aircraft has started takeoff roll, cancel the takeoff clearance only for the purpose of safety.

#### NOTE-

In no case should a takeoff clearance be canceled after an aircraft has started its takeoff roll solely for the purpose of meeting traffic management requirements/EDCT.

#### PHRASEOLOGY-

CANCEL TAKEOFF CLEARANCE (reason).