#### 2-1-19 Wake Turbulence

a. Apply wake turbulence procedures to aircraft operating behind heavy jets/B757's and, where indicated, to small aircraft behind large aircraft.

#### NOTE -

Paragraph 5-5-3, *Minima*, specifies increased radar separation for small type aircraft landing behind large, heavy, or B757 aircraft because of the possible effects of wake turbulence.

b. The separation minima shall continue to touchdown for all IFR aircraft not making a visual approach or maintaining visual separation.

### **REFERENCE -**

FAAO 7110.65, Approach Separation Responsibility, paragraph 5-9-5.

## 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 heavy jet or B757 to:

### **REFERENCE -**

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

- 1. TERMINAL. VFR aircraft not being radar vectored but are behind heavy jets or B757's.
  - 2. IFR aircraft that accept a visual approach or visual separation.

#### **REFERENCE -**

FAAO 7110.65, Visual Approach, paragraph 7-4-1.

- 3. TERMINAL. VFR arriving aircraft that have previously been radar vectored and the vectoring has been discontinued.
- 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 heavy aircraft, include the word *heavy* in

the description.

#### NOTE -

Wake turbulence may be encountered by aircraft in flight as well as when operating on the airport movement area. Because wake turbulence is unpredictable, the controller is not responsible for anticipating its existence or effect. Although not mandatory during ground operations, controllers may use the words jet blast, propwash, or rotorwash, in lieu of wake turbulence, when issuing a caution advisory.

### **REFERENCE** -

AC 90-23 Aircraft Wake Turbulence.

P/CG TERM - Aircraft Classes.

P/CG TERM - Wake Turbulence.

## PHRASEOLOGY -

CAUTION WAKE TURBULENCE (traffic information).

#### **REFERENCE -**

FAAO 7110.65, Visual Separation, paragraph 7-2-1.

#### 2-1-21 Traffic Advisories

Unless an aircraft is operating within Class A airspace or omission is requested by the pilot, issue traffic advisories to all aircraft (IFR or VFR) on your frequency when in your judgment their proximity may diminish to less than the applicable separation minima. Where no separation minima applies, such as for VFR aircraft outside of Class B/Class C airspace, or a TRSA, issue traffic advisories to those aircraft on your frequency when in your judgment their proximity warrants it. Provide this service as follows:

#### a. To radar identified aircraft:

- 1. Azimuth from aircraft in terms of the 12-hour clock, or
- 2. When rapidly maneuvering aircraft prevent accurate issuance of traffic as in 1 above, specify the direction from an aircraft's position in terms of the eight cardinal compass points (N, NE, E, SE, S, SW, W, and NW). This method shall be terminated at the pilot's request.
  - 3. Distance from aircraft in miles.

4. Direction in which traffic is proceeding and/or relative movement of traffic.

#### NOTE -

Relative movement includes closing, converging, parallel same direction, opposite direction, diverging, overtaking, crossing left to right, crossing right to left.

5. If known, type of aircraft and altitude.

#### **REFERENCE -**

FAAO 7110.65, Description of Aircraft Types, paragraph 2-4-21.

## PHRASEOLOGY -

TRAFFIC, (number) O'CLOCK,

or when appropriate,

(direction) (number) MILES, (direction)-BOUND and/or (relative movement),

and if known,

(type of aircraft and altitude).

or when appropriate,

(type of aircraft and relative position), (number of feet) FEET ABOVE/BELOW YOU.

If altitude is unknown,

ALTITUDE UNKNOWN.

#### **EXAMPLE** -

"Traffic, eleven o'clock, one zero miles, southbound, converging, Boeing 727, one seven thousand."

"Traffic, twelve o'clock, one five miles, opposite direction, altitude unknown."

"Traffic, ten o'clock, one two miles, southeast bound, one thousand feet below you."

- 6. When requested by the pilot, issue radar vectors to assist in avoiding the traffic, provided the aircraft to be vectored is within your area of jurisdiction or coordination has been effected with the sector/facility in whose area the aircraft is operating.
  - 7. If unable to provide vector service, inform the pilot.

#### **REFERENCE -**

FAAO 7110.65, Operational Requests, paragraph 2-1-18.

- 8. Inform the pilot of the following when traffic you have issued is not reported in sight:
  - (a) The traffic is no factor.
  - (b) The traffic is no longer depicted on radar.

#### PHRASEOLOGY -

TRAFFIC NO FACTOR / NO LONGER OBSERVED,

or

(number) O'CLOCK TRAFFIC NO FACTOR / NO LONGER OBSERVED,

or

(direction) TRAFFIC NO FACTOR / NO LONGER OBSERVED.

- b. To aircraft that are not radar identified:
  - 1. Distance and direction from fix.
  - 2. Direction in which traffic is proceeding.
  - 3. If known, type of aircraft and altitude.
  - 4. ETA over the fix the aircraft is approaching, if appropriate.

## PHRASEOLOGY -

TRAFFIC, (number) MILES/MINUTES (direction) OF (airport or fix), (direction)-BOUND,

and if known,

(type of aircraft and altitude), ESTIMATED (fix) (time),

or

TRAFFIC, NUMEROUS AIRCRAFT VICINITY (location).

If altitude is unknown,

ALTITUDE UNKNOWN.

#### **EXAMPLE** -

- "Traffic, one zero miles east of Forsythe V-O-R, southbound, M-D Eighty, descending to one six thousand."
- "Traffic, reported one zero miles west of Downey V-O-R, northbound, Apache, altitude unknown, estimated Joliet V-O-R one three one five."
- "Traffic, eight minutes west of Chicago Heights V-O-R, westbound, Mooney, eight thousand, estimated Joliet V-O-R two zero three five."
- "Traffic, numerous aircraft, vicinity of Delia Airport."
- c. For aircraft displaying Mode C, not radar identified, issue indicated altitude.

#### **EXAMPLE** -

"Traffic, one o'clock, six miles, eastbound, altitude indicates six thousand five hundred."

#### **REFERENCE -**

FAAO 7110.65, Traffic Information, paragraph 3-1-6.

FAAO 7110.65, Visual Separation, paragraph 7-2-1.

FAAO 7110.65, VFR Departure Information, paragraph 7-6-10.

# **AEROSPATIALE** (France)

(Also MORANE-SAULNIER, PZL-OKECIE, SOCATA, SUD, SUD-EST, TBM)

Model	Type	Description	Performance Informatio	
	Designator	Number &	Climb Rate	Descent
		Type Engines /	(fpm)	Rate (fpm)
		Weight Class		
Rallye, Rallye Club, Super Rallye,	RALL	1P/S	750	750
Rallye Commodore, Minerva				
(MS-880 to 894)				
Caravelle SE 210	S210	2J/L	2,300	2,000
Corvette SN601	S601	2J/S+	2,500	2,000
Tampico TB-9	TAMP	1P/S	600	700
TBM TB-700	TBM7	1T/S	1,700	1,500
Tabago TB10C/200	TOBA	1P/S	700	700
Trinidad TB-20/21	TRIN	1P/S	850	700

# **BOEING VERTOL COMPANY (USA)**

(Also BOEING HELICOPTERS, KAWASAKI, MERIDIONALI, VERTOL)

Model	Туре	Description	Performance Informatio	
	Designator	Number & Type Engines / Weight Class	Climb Rate (fpm)	Descent Rate (fpm)
Chinook, Model 234	H47	2T/L	1,500	1,500
Sea Knight 107, CH-113, Labrador	H46	2T/S+	2,130	2,130