Section 8. Caribbean ICAO Region

8-8-1. APPLICATION

Provide air traffic control services in the Caribbean ICAO Region with the procedures and minima contained in this section except when noted otherwise.

8-8-2. VERTICAL SEPARATION

Provide vertical separation in accordance with Chapter 4, IFR, Section 5, Altitude Assignment and Verification.

8-8-3. LONGITUDINAL SEPARATION

Provide longitudinal separation between aircraft as follows:

a. Supersonic flight:

1. Provided the Mach number technique is applied in accordance with para 8-3-3, Mach Number Technique;

(a) *10 minutes;* or

(b) *10 minutes* when one or both aircraft has been cleared to commence the deceleration/descent phase of supersonic flight and the preceding aircraft is maintaining a Mach number which is the same as or greater than that of the following aircraft.

2. *15 minutes* between all other aircraft.

b. Operations in the West Atlantic Route System *(WATRS) (subsonic flight):*

1. Between all aircraft within the San Juan CTA/FIR *15 minutes;* or

2. Aircraft operating at or above FL 280 within the WATRS area or west of 60° West when in transit to or from WATRS;

(a) *10 minutes,* provided the Mach number technique is applied in accordance with para 8-3-3, Mach Number Technique; and

(1) Where tracks diverge from the common point:

(2) At least *10 minutes,* longitudinal separation exists at the point where the tracks diverge; and

(3) At least *5 minutes,* longitudinal separation will exist where the minimum lateral separation is achieved; and

(4) At least the minimum lateral separation will be achieved at or before the next significant point; or, if not, within *90 minutes* of the time the second aircraft passes the common point or is within 600 NM of the common point, whichever is estimated to occur first;

NOTE-
The WATRS area is defined as beginning at a point 27°00'N/77°00'W direct to 20°00'N/67°00'W direct to 18°00'N/62°00'W direct to 18°00'N/60°00'W direct to 38°30'N/60°00'W direct to 38°30'N/69°15'W, thence counterclockwise along the New York Oceanic CTA/FIR boundary to the Miami Oceanic CTA/FIR boundary, thence southbound along the Miami Oceanic CTA/FIR boundary to the point of beginning.

(b) If the aircraft have not reported over a common point, it is possible to ensure, by radar or other approved means, that the appropriate time interval will exist at the common point from which they either follow the same track or continuously diverging tracks;

3. *Between 9 and 5 minutes,* provided the Mach number technique is applied in accordance with para 8-3-3, Mach Number Technique; and

(1) It is possible to ensure by radar or other approved means, that the required time interval exists and will exist at the common point from which they either follow the same track or continuously diverging tracks; and

(2) The preceding aircraft is maintaining a greater Mach number than the following aircraft in accordance with the following:

[a] *9 minutes,* if the preceding aircraft is Mach 0.02 faster than the following aircraft;

[b] *8 minutes,* if the preceding aircraft is Mach 0.03 faster than the following aircraft;

[c] *7 minutes,* if the preceding aircraft is Mach 0.04 faster than the following aircraft;

[d] *6 minutes,* if the preceding aircraft is Mach 0.05 faster than the following aircraft;

[e] *5 minutes,* if the preceding aircraft is Mach 0.06 faster than the following aircraft.

NOTE-
When the preceding aircraft is maintaining a greater Mach number than the following aircraft, in accordance with the table above, and the aircraft will follow continuously diverging tracks so that the minimum lateral separation will be achieved by the next significant point, the requirement stated above, to have at least 5 minutes longitudinal separation where the minimum lateral separation is achieved, may be disregarded.

c. Between turbojet aircraft meeting the MNPS and operating in the New York oceanic CTA/FIR wholly or partly in MNPS airspace *(subsonic flight)*:

1. *10 minutes,* provided the Mach number technique is applied in accordance with para 8-3-3, Mach Number Technique; and

(a) Where tracks diverge from the common point:

(1) At least *10 minutes,* longitudinal separation exists at the point where the tracks diverge; and

(2) At least *5 minutes,* longitudinal separation will exist where 60 NM lateral separation is achieved; and

NOTE-
When the preceding aircraft is maintaining a greater Mach number than the following aircraft in accordance with this subparagraph, and the aircraft will follow continuously diverging tracks so that 60 NM lateral separation will be achieved by the next significant point, the requirement to have at least 5 minutes longitudinal separation where 60 NM lateral separation is achieved, may be disregarded.

(3) At least 60 NM lateral separation will be achieved at or before the next significant point (normally within ten degrees of longitude along track(s)) or, if not, within *90 minutes* of the time the second aircraft passes the common point or is within 600 NM of the common point, whichever is estimated to occur first.

2. Between *9 and 5 minutes,* provided the Mach number technique is applied in accordance with para 8-3-3, Mach Number Technique; and

(a) It is possible to ensure, by radar or other approved means, that the required time interval exists and will exist at the common point from which they either follow the same track or continuously diverging tracks; and

(b) The preceding aircraft is maintaining a greater Mach number than the following aircraft in accordance with the following:

(1) *9 minutes,* if the preceding aircraft is Mach 0.02 faster than the following aircraft;

(2) *8 minutes,* if the preceding aircraft is Mach 0.03 faster than the following aircraft;

(3) *7 minutes,* if the preceding aircraft is Mach 0.04 faster than the following aircraft;

(4) *6 minutes,* if the preceding aircraft is Mach 0.05 faster than the following aircraft;

(5) *5 minutes,* if the preceding aircraft is Mach 0.06 faster than the following aircraft.

3. *15 minutes,* between turbojet aircraft not covered in subparas c1 and 2.

d. Operations between aircraft not covered in subparas b or c *(subsonic flight)*:

1. Operations at or above FL 200.

(a) *10 minutes,* between turbojet aircraft, provided the Mach number technique is applied, in accordance with para 8-3-3, Mach Number Technique.

(b) Between turbojet aircraft, provided the Mach number technique is applied in accordance with para 8-3-3, Mach Number Technique, and *only* when it is possible to ensure by radar or other approved means that the required time interval exists and will exist at the common point, and the preceding aircraft is maintaining a greater Mach number than the following aircraft in accordance with the following:

(1) 9 minutes, if the preceding aircraft is Mach 0.02 faster than the following aircraft;

(2) 8 minutes, if the preceding aircraft is Mach 0.03 faster than the following aircraft;

(3) 7 minutes, if the preceding aircraft is Mach 0.04 faster than the following aircraft;

(4) 6 minutes, if the preceding aircraft is Mach 0.05 faster than the following aircraft;

(5) 5 minutes, if the preceding aircraft is Mach 0.06 faster than the following aircraft.

(c) Between all other turbojet aircraft:

15 minutes.

2. *20 minutes:*

(a) Between aircraft operating below FL 200 west of 55° West;

(b) Between aircraft operating at all levels east of 55° West;

(c) Within the New York CTA/FIR;

(1) Between turbojet aircraft not covered by subparas d1(a) and (b) above;

(2) Between other than turbojet aircraft operating along routes extending between the U.S., Canada, or Bermuda and the Caribbean ICAO Region.

8-8-4. LATERAL SEPARATION

Provide lateral separation by assigning different flight paths whose widths or protected airspace do not overlap. Apply the following:

a. 60 NM:

1. Supersonic aircraft operating above FL 275 within the New York oceanic CTA/FIR.

2. Supersonic aircraft operating at or above FL 450 not covered in subpara 1 above.

NOTE-
This reduced lateral separation shall not be used if track keeping capability of the aircraft has been reduced for any reason.

3. Aircraft which meet the MNPS and while operating in the New York oceanic CTA/FIR which are in transit to or from NAT MNPS airspace.

b. *90 NM* between aircraft operating:

1. Within *WATRS;*

2. West of 55° West between the U.S., Canada, or Bermuda and points in the Caribbean ICAO Region.

c. *100 NM* between aircraft operating west of 55° West not covered by subparas a or b above.

d. *120 NM* between aircraft operating east of 55° West.

8-8-5. VFR CLIMB AND DESCENT

a. In the Houston, Miami, and San Juan CTA's, IFR flights may be cleared to climb and descend in VFR conditions only:

1. When requested by the pilot; and

2. Between sunrise and sunset.

b. Apply the following when the flight is cleared:

1. If there is a possibility that VFR conditions may become impractical, issue alternative instructions.

2. Issue traffic information to aircraft that are not separated in accordance with the minima in this section.