

HAVANA FIR

Standard Operating Procedures (SOP)

AREA CONTROL
CENTER (CTR)

Version 1.0 Revision A

November 2017

This document contains essential information regarding our operations and policies. Therefore, it is required reading for all Havana FIR controllers.

*Virtual Havana FIR is governed by VATCAR,
The VATNA Caribbean Division*



Section 6 – Area Control Center

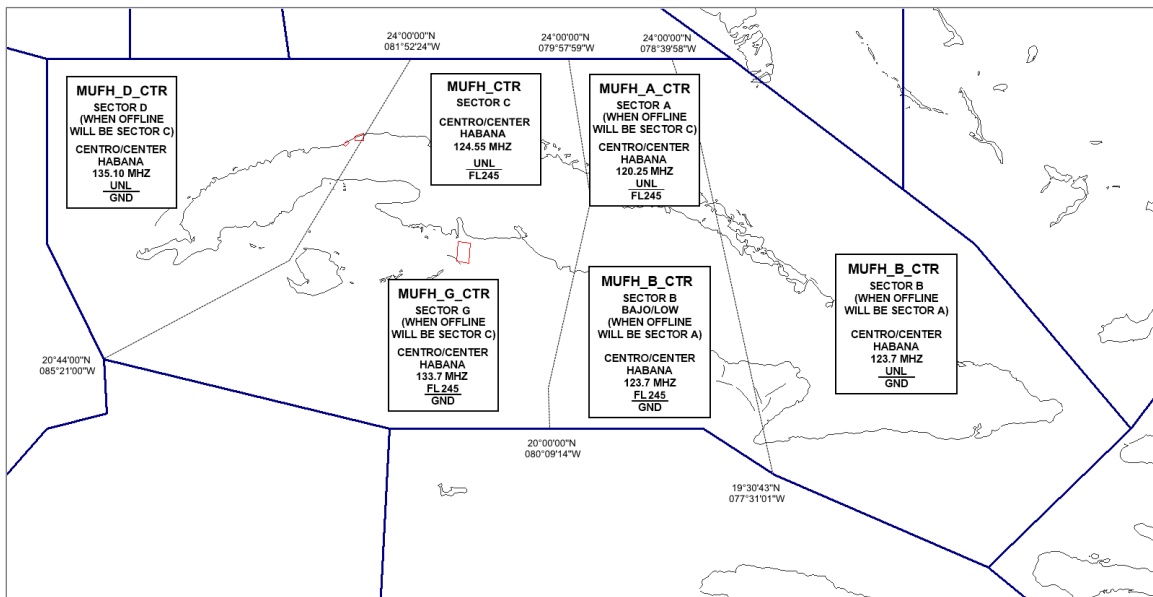
6.1 Generalities

6.1.1 In order to staff a Center position, a C1 rating or higher is required, as well as the corresponding certification issued by the FIR staff.

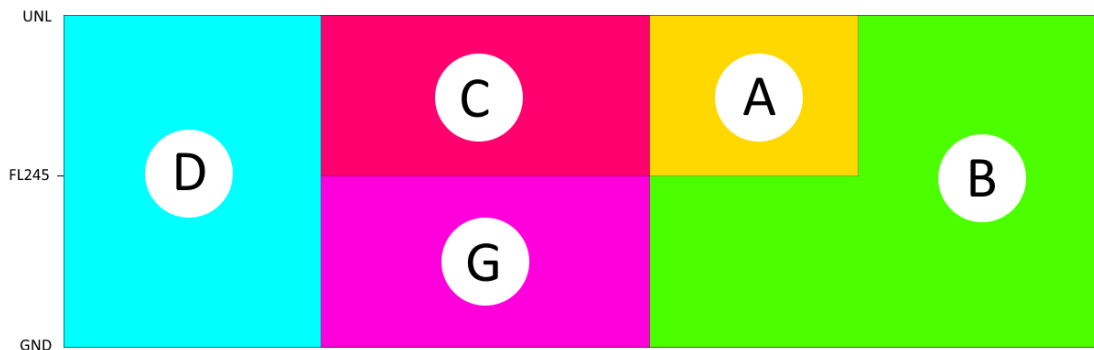
6.1.2 Havana FIR airspace is divided into 6 sectors as follow:

Name	VATSIM c/s	Callsign	Frequency	Vertical limits	Remarks
Sector A	MUFH_A_CTR	Centro Habana/ Havana Center	120.250 MHz	FL245/UNL	When offline will be sector C
Sector B	MUFH_B_CTR		123.700 MHz	GND/UNL	When offline will be sector A
Sector B Low				GND/FL245	
Sector C	MUFH_CTR		124.550 MHz	FL245/UNL	
Sector D	MUFH_D_CTR		135.100 MHz	GND/UNL	When offline will be sector C
Sector G	MUFH_G_CTR		133.700 MHz	GND/FL245	When offline will be sector C

Lateral limits



Vertical limits



6.1.3 The Center Controller (CENTER) will use the callsign and frequency as published in 6.1.2.

6.1.4 Unless otherwise authorized by the FIR ATM/DATM, the sectors must be staffed in the following order:

- 1) MUFH_CTR
- 2) MUFH_A_CTR or MUFH_G_CTR
- 3) MUFH_B_CTR (all preceding sectors online)
- 4) MUFH_D_CTR

6.1.5 CENTER will provide the following ATC services:

- a) En route services within the boundaries of the Havana FIR airspace as depicted in 6.1.2.
- b) Approach/departure services for all airports within the boundaries of the Havana FIR staffed sector(s) when those services are not being provided by an Approach Controller.
- c) Tower services for all airports within the Havana FIR staffed sector(s) when those services are not being provided by an Approach or Tower Controller.
- d) Ground Control and Clearance Delivery services for all airports within the Havana FIR staffed sector(s) when these are not being provided by an Approach, Tower or Ground controller.

6.2 Duties & Responsibilities

6.2.1 CENTER shall provide En route services within the Havana FIR in accordance with ICAO rules except as described in this document.

6.2.2 CENTER will track and claim radar ownership of all aircraft being provided with En route, Approach or Departure services.

6.2.3 CENTER shall coordinate arrival runways with the controller providing Tower service (when present). The Tower Controller shall have final authority of the choice of runways for arrival.

6.2.4 CENTER will vector or provide a route clearance to any IFR aircraft that will enter a Havana FIR Terminal Area as follows:

- a) To the intersection specified in the appropriate arrivals for airports within the Terminal Area.
- b) Descent to FL170 or other such altitude as coordinated with the controller providing Approach services.

6.2.5 CENTER will vector or provide route clearance to any IFR aircraft that will land at an airport receiving arrival services of an Approach Controller as published on any applicable Standard Arrival Route.

6.2.6 CENTER will coordinate with any controller providing Approach or Departure service to ensure a smooth flow of arriving and departing traffic, and to avoid any violation of separation minima.

6.2.7 CENTER will coordinate with any controller in an adjacent control facility (ARTCC or FIR) to ensure a smooth flow of traffic which will enter either airspace, and to avoid any violation of separation minima.

6.2.8 CENTER will transfer control as follows:

- a) To a Center Controller (when present) of an adjacent ARTCC or FIR such that the transfer of control is complete before an aircraft under the control of CENTER enters the airspace of the adjacent ARTCC or FIR.
- b) To a controller providing Approach services such that the transfer of control is complete before an aircraft under the control of CENTER enters the airspace of the Approach Controller.
- c) Such that no separation conflict exists or will exist between the aircraft being handed off and any aircraft within the airspace of the receiving controller.
- d) Such that any two aircraft that are established on the same Standard Arrival Route or airway, traveling in the same direction, and will be handed-off to a controller providing Approach service, are no less than 10 nautical miles in trail, unless the receiving controller agrees to a closer in-trail separation distance.
- e) Such that any two aircraft that are established on the same airway, traveling in the same direction and at the same altitude, and will be handed-off to a controller providing Enroute service, are no less than 20 nautical miles in trail, unless the receiving controller agrees to a closer in-trail separation distance.

6.2.9 CENTER will transfer communications as follows:

- a) To Tower (when present) of arriving IFR traffic as soon as practical after issuance of any approach clearance, and before the aircraft reaches the Final Approach Fix of the runway for landing.
- b) To the controller providing Approach service (when present) as soon as the radar transfer is complete.
- c) To the Center Controller (when present) of an adjacent ARTCC or FIR as soon as the radar transfer is complete.
- d) In the absence of any further ATC, to UNICOM (122.8) as the aircraft departs the FIR boundary.

6.2.10 CENTER will terminate radar service when no further ATC is available to any aircraft departing Havana FIR and inform the pilot of service termination.

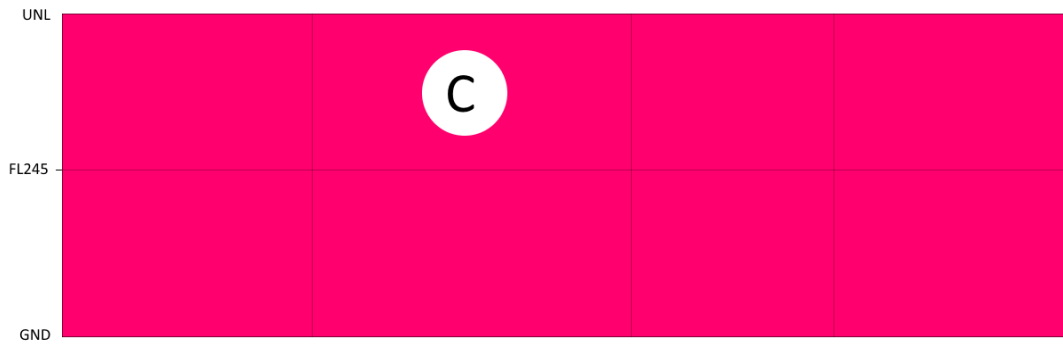
6.2.11 CENTER will drop track on any landing aircraft as soon as practical after a landing clearance has been issued.

6.3 Specific Provisions

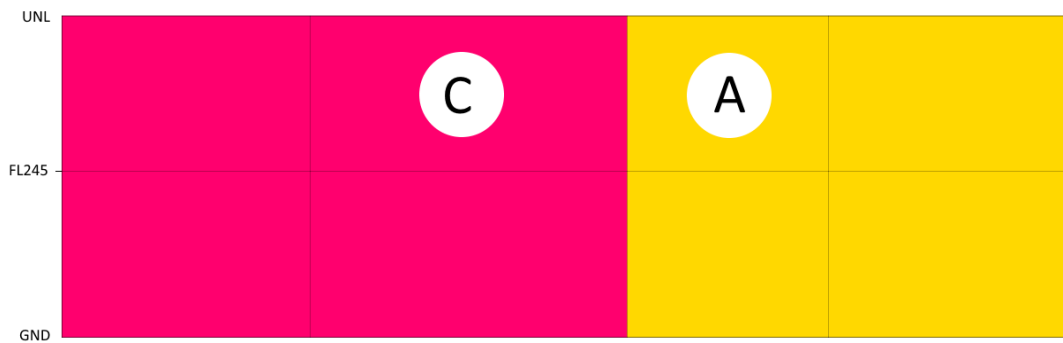
6.3.1 The Controller staffing sector G should also provide approach/departure services for Havana TMA and Santa Clara TMA if those facilities are offline.

6.4 ANNEX

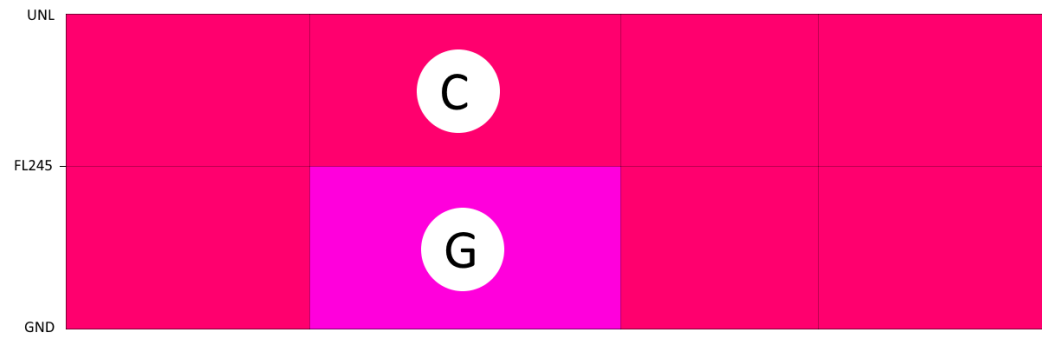
6.4.1 Vertical airspace coverage when only MUFH_CTR is online



6.4.2 Vertical airspace coverage when only MUFH_CTR and MUFH_A_CTR are online



6.4.3 Vertical airspace coverage when only MUFH_CTR and MUFH_G_CTR are online



6.4.4 Vertical airspace coverage when only MUFH_CTR, MUFH_A_CTR and MUFH_G_CTR are online

