



## Letter of Agreement (LOA)

Between

**People's Republic of China Division (VATPRC)**

and

**Hong Kong vACC,**

**Southeast Asia Division (VATSEA)**

**Revision 4**

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# Table of Contents

1. Purpose.....	4
2. Cancellation.....	4
3. Scope.....	4
4. Disclosure.....	5
5. Language.....	5
6. General Procedures.....	5
7. Sector Definitions.....	10
8. Routing Requirements.....	34
9. Handoff Altitudes at Transfer of Control Points (TCP) for IFR flights.....	41
10. Handoff Altitudes at Transfer of Control Points (TCP) for VFR flights.....	46
11. Coordination Procedures for Macau International Airport (VMMC).....	47
12. Special Agreement on FIR Boundary.....	53
13. Validity, Review, and Amendment.....	59
Appendix A: References.....	61
Appendix B: Quick Reference Table.....	62
Revisions.....	67

# 1. Purpose

This Letter of Agreement (LOA) establishes standard procedures and coordination responsibilities of air traffic control between Guangzhou FIR (ZGZU), Shanghai FIR (ZSHA), Sanya FIR (ZJSA) of the People's Republic of China Division (VATPRC) and Hong Kong FIR (VHHK) of Hong Kong vACC, Southeast Asia Division (VATSEA).

# 2. Cancellation

This document supersedes any agreements previously established in verbal or written form between VATSEA and VATPRC.

# 3. Scope

- 3.1 The information contained herein is supplementary to the rules established under VATSIM regulations, Aeronautical Information Publication (AIP) of the Hong Kong Special Administrative Region published by the Hong Kong Civil Aviation Department, AIP (Publicações de Informações Aeronáuticas) of Macau Special Administrative Region published by the Civil Aviation Administration of Macau S.A.R. (Autoridade de Aviação Civil da RAEM) and the AIP of the People's Republic of China published by the Civil Aviation Administration of China (CAAC).
- 3.2 While such regulations shall generally be strictly followed on the VATSIM network, in some circumstances exemptions or

modifications to the real-world regulations are necessary due to operational needs in an online environment. Such deviation shall be discussed in this document.

## 4. Disclosure

Both parties shall make this Letter of Agreement available for public access on their respective official websites. The information contained herein is for the exclusive use on the Virtual Air Traffic Simulation Network (VATSIM) only. Under no circumstances shall such information be used in the real world, including but not limited to, real-world air navigation or real-world air traffic control.

## 5. Language

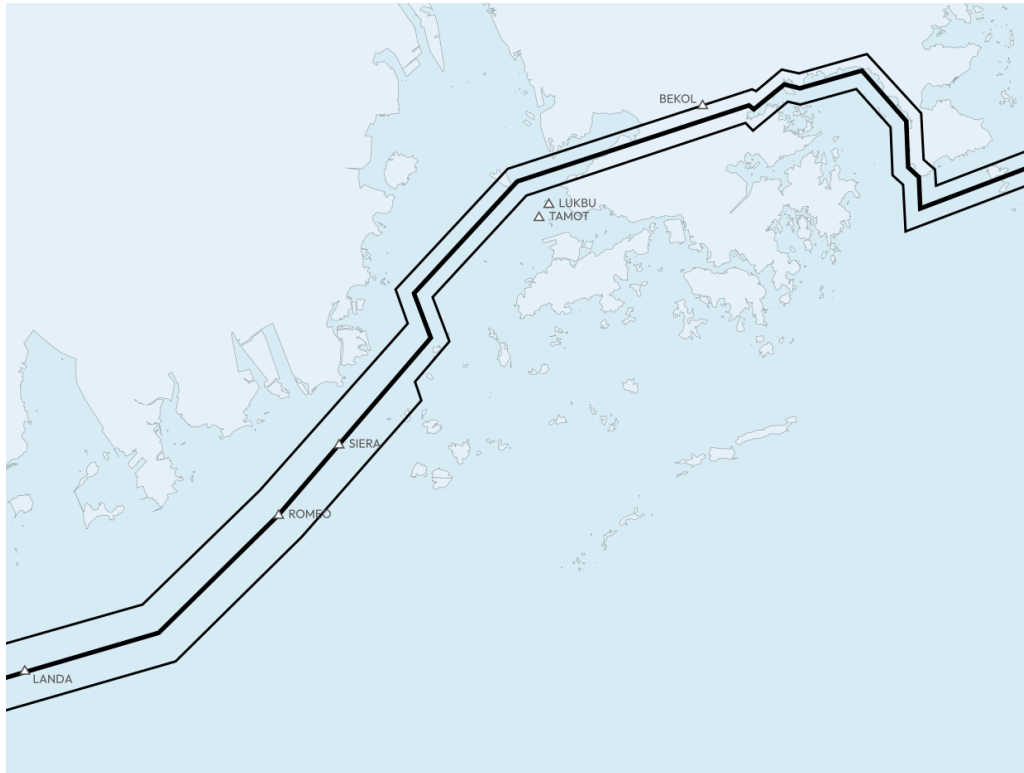
This Letter of Agreement is officially and originally prepared and documented in the English language. Both parties are encouraged to translate this LOA into Traditional Chinese and/or Simplified Chinese for reference purposes, but this is optional. The English version of this LOA shall always prevail, and future revisions to this LOA shall be based upon the English version.

## 6. General Procedures

6.1 Unless otherwise stated or coordinated:

- 6.1.1 Enroute controllers (CTR) of both parties shall keep traffic away from the 5 nautical miles (nm) margin of the boundary between Hong Kong FIR (VHHK), Guangzhou FIR (ZGZU), Shanghai FIR (ZSHA) and Sanya FIR (ZJSA) under all circumstances. The margins on both sides constitute a buffer zone of a width of 10nm. Except during a standard handover procedure, the controller in charge of the corresponding airspace or sector must coordinate and point out such aircraft to the controller of the other party when it becomes necessary for traffic to enter or cross such margin.
- 6.1.2 Due to the proximity of the approach path of runway 07L at VHHH and runway 33/34 at ZGSZ, Controllers shall keep traffic away from the Hong Kong - Zhuhai Airspace Boundary Non-Transgression Zone, except when following a published procedure. Controllers should immediately vector the aircraft away from the Hong Kong - Zhuhai Airspace Boundary Non-Transgression Zone if a pilot deviates from a published procedure.

*(Figure on Next Page)*



*Figure 6.1: Hong Kong - Zhuhai Non-Transgression Zone (NTZ)*

6.1.3 Controllers shall make every effort to follow the radar separation minima defined in ICAO Doc 4444. In addition, controllers shall also comply with the separation methods provided by the AIP of Hong Kong, the AIP of Macau, and the AIP of Mainland China.

6.1.3.1 As per ENR 2.2.2.3 Section 4.5 of AIP of Mainland China for IFR:

“For aircraft arriving at or departing from Macau at the same level and on the same route:

Arrival: **Minimum longitudinal** separation shall be **5 minutes (or 30 NM)** when the aircraft crosses the transfer of control point between Zhuhai Approach and Hong Kong.

Departure: **Minimum longitudinal** separation shall be **5 minutes** when aircraft crosses the transfer of control point between Macau and

Zhuhai Approach.”

6.1.3.2 As per ENR 1.2 Section 4 of AIP of Mainland China for VFR:

“The separation between aircraft operating on the same track and at same altitude shall not be less than:

2000m<sup>1</sup>: when aircraft cruising indicated airspeed is less than 250km/h<sup>2</sup>; or

5000m<sup>1</sup>: when aircraft cruising indicated airspeed is 250km/h<sup>2</sup> or above.”

**Remarks:**

<sup>1</sup> 2000m = 1NM; 5000m = 3NM

<sup>2</sup> 250km/h = 135kt

6.1.4 Controllers of each side shall generally initiate each handover **ten to thirty nautical miles (10-30 nm)** before crossing the Transfer of Control Point (TCP). In the absence of identifiable operational conflicts, controllers are encouraged to initiate early transfer. Handoff must be completed at least **ten nautical miles (10nm) for IFR or three nautical miles (3nm) for VFR** from the TCP.

6.1.5 Conversion of altitude measurement units shall be performed according to Section 8 and Section 9 of this document prior to handoff.

6.1.6 **No controller shall clear an aircraft directly to a waypoint outside of the FIR** at which the controller controls unless prior coordination is made, and proper permission of such clearance is obtained. This also applies when there is no en-route/ terminal ATC available at the adjacent FIR through which a flight will transit.



- 6.1.7 Proper liaison between FIRs shall be established for handover. **Controllers shall advise any cruising level changes (i.e., the altitude at which the aircraft will be flying during the handover) of a particular aircraft prior to entering neighboring FIR.** As per ICAO Doc 4444 Section 5.3.3.1, aircraft may not be cleared to change altitude during a handoff unless prior clearance has been obtained from the accepting controller. Controllers may request an altitude different from the ones specified in Section 7 of this LOA document from the receiving controller with prior coordination.
- 6.1.8 Controllers shall ensure that all aircraft are flying under real-time **speed (1x rate)** prior to the initiation of a handover and during a handover. **Crossing FIR boundary while under acceleration mode is strictly prohibited.**
- 6.1.9 Enroute or Terminal controllers should advise controllers of the other FIR when a sector is combined or separated and provide corresponding information.
- 6.1.10 If the route of the filed flight plan of a flight flying between FIRs does not include a valid TCP or does not include an airway that contains the valid TCP, a controller shall amend the route of such flight plan following standard procedures as per ICAO Doc 4444 so that the amended route will include a valid TCP. If the pilot is unable to amend their route, proper coordination shall be made to accommodate such situations.
- 6.1.11 Controllers should refer to the Sector Ownership Priority table in Appendix B to determine which position to handoff to. If

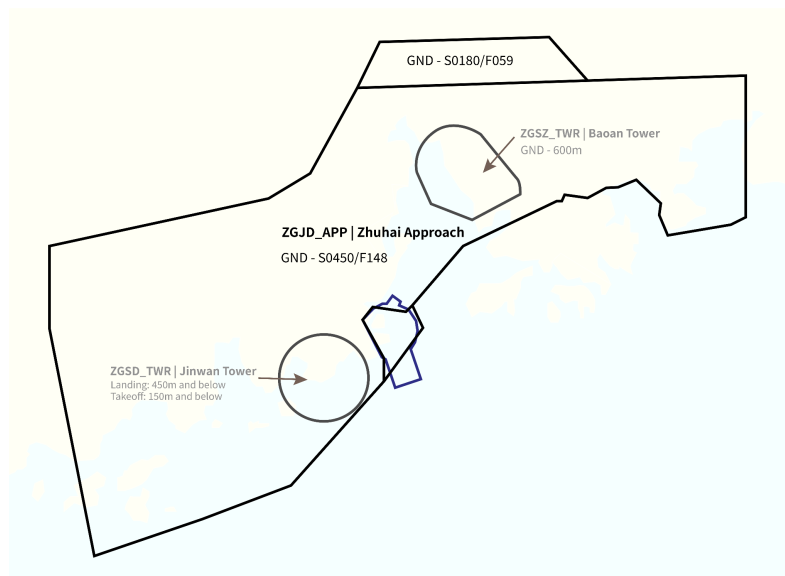
sectorization deviates from this standard (e.g., due to extra sectorization during events), controllers must explicitly coordinate this through ATC channels or otherwise.

## 7. Sector Definitions

### 7.1 Mainland China ATC

#### 7.1.1 Zhuhai TMA

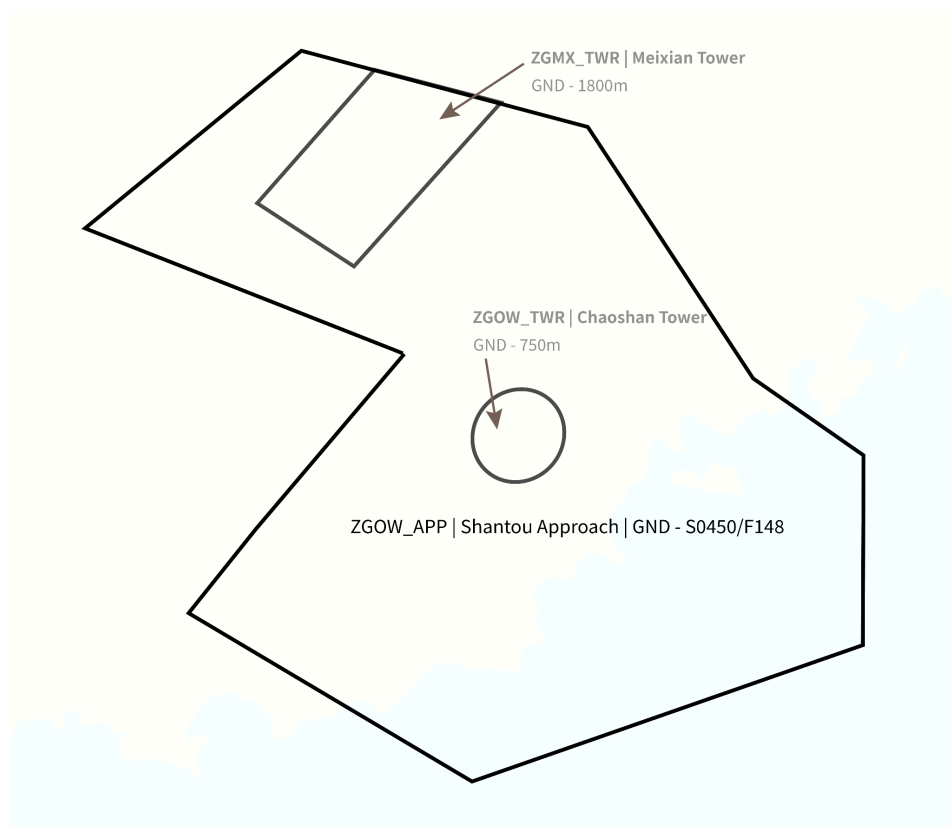
- Position: ZGJD\_APP; Callsign: Zhuhai Approach
- In the absence of ZGJD\_APP, the Guangzhou ACC controller shall be responsible for this sector.
- The horizontal boundary of Zhuhai TMA is shown in Figure 7.1
- The vertical boundary of Zhuhai TMA is GND - S0450 (F148)
- Handoffs to Zhuhai TMA shall be made in the following order:  
ZGJD\_APP -> ZGGG\_CTR -> ZGZU\_CTR



**Figure 7.1: Zhuhai TMA Sector**

### 7.1.2 Shantou TMA

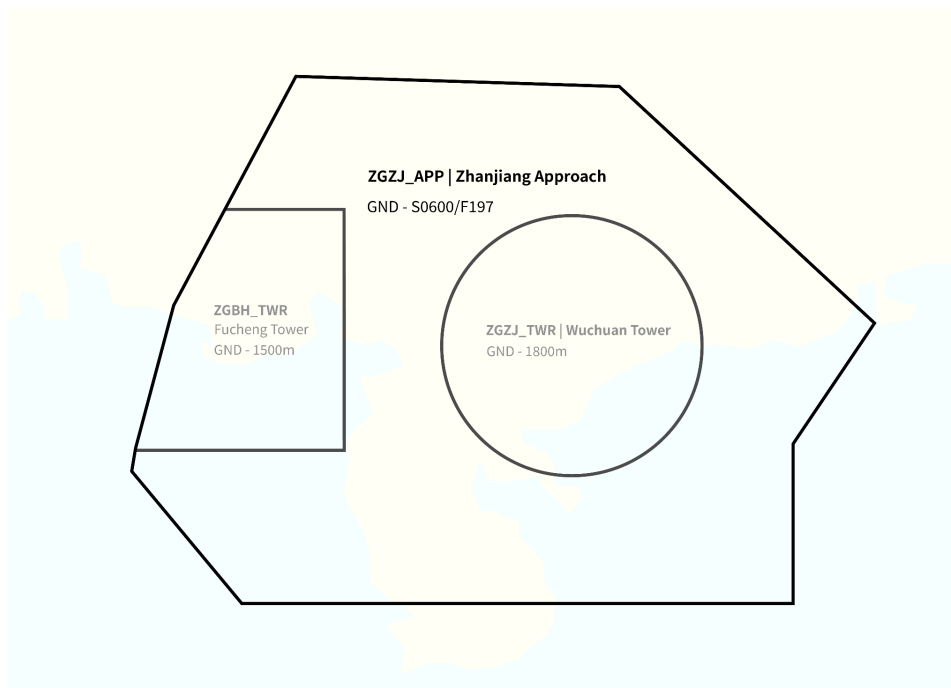
- Position: ZGOW\_APP; Callsign: Shantou Approach
- In the absence of ZGOW\_APP, the Guangzhou ACC controller shall be responsible for this sector.
- The Xiamen ACC controller shall be responsible for Shantou TMA when none of the Shantou TMA or Guangzhou ACC controllers are online.
- The horizontal boundary of Shantou TMA is shown in Figure 7.2
- The vertical boundary of Shantou TMA is GND - S0450 (F148)
- Handoffs to Shantou TMA shall be made in the following order:  
ZGOW\_APP -> ZGGG\_CTR -> ZGZU\_CTR -> ZSAM\_CTR ->  
ZSHA\_CTR



**Figure 7.2: Shantou TMA Sector**

### 7.1.3 Zhanjiang TMA

- Position: ZGZJ\_APP; Callsign Zhanjiang Approach
- In the absence of ZGZJ\_APP, the Nanning ACC controller will take responsibility.
- The horizontal boundary of Zhanjiang TMA is shown in Figure 7.3
- The vertical boundary of Zhanjiang TMA is GND - S0600 (F197)
- Handoffs to Zhanjiang TMA shall be made in the following order:  
ZGZJ\_APP -> ZGNN\_CTR -> ZGZU\_CTR



*Figure 7.3: Zhanjiang TMA Sector*

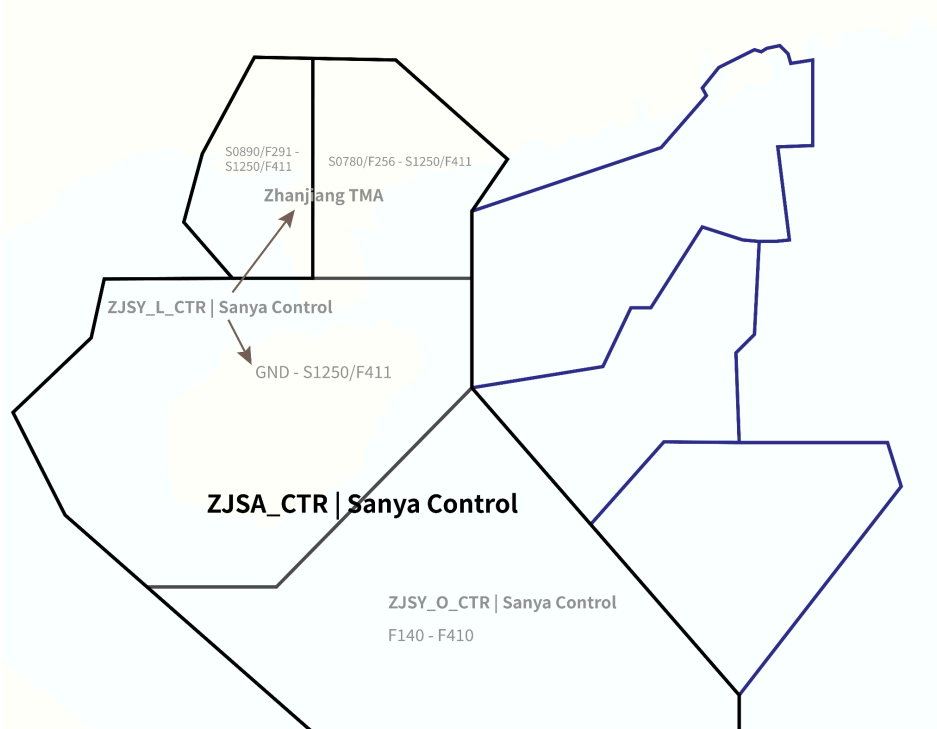
### 7.1.4 Guangzhou ACC

- Position: ZGGG\_CTR; Callsign: Guangzhou Control
- In the absence of ZGGG\_CTR, the Guangzhou FIR controller (ZGZU\_CTR) shall be responsible for this sector.
- PRC\_FSS (Callsign: Beijing Control) shall be responsible for



TMA. This sector uses fully metric operations.

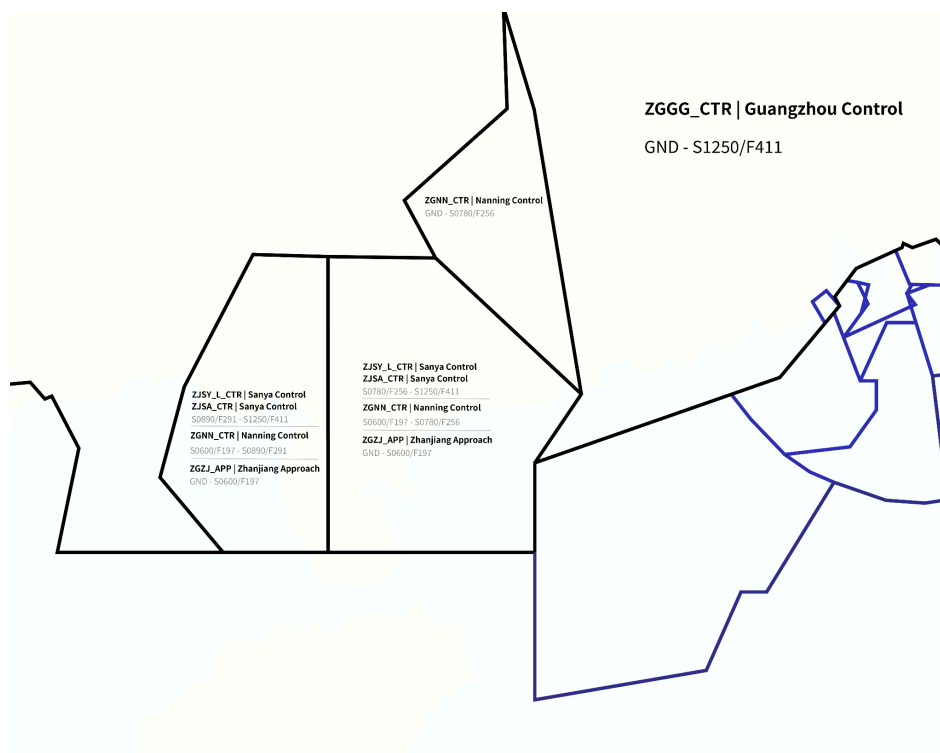
- The Sanya ACC Oceanic sector covers the oceanic area and uses fully imperial operations from F140 up to F410. The airspace below F140 is uncontrolled.
- PRC\_FSS (Callsign: Beijing Control) shall be responsible for Sanya ACC above S0780 (F256) (not incl.) when none of the Sanya ACC controllers are online.
- PRC\_FSS can accept the handover on coordination, but only if their cruising level is higher than S0780 (F256).
- The horizontal boundary of Sanya ACC is shown in Figure 7.5
- Handoffs to Sanya ACC shall be made in the following order:  
ZJSY\_L\_CTR/ZJSY\_O\_CTR -> ZJSA\_CTR -> PRC\_FSS (Above S0780/F256)



**Figure 7.5: Sanya ACC Sector**

### 7.1.6 Nanning ACC

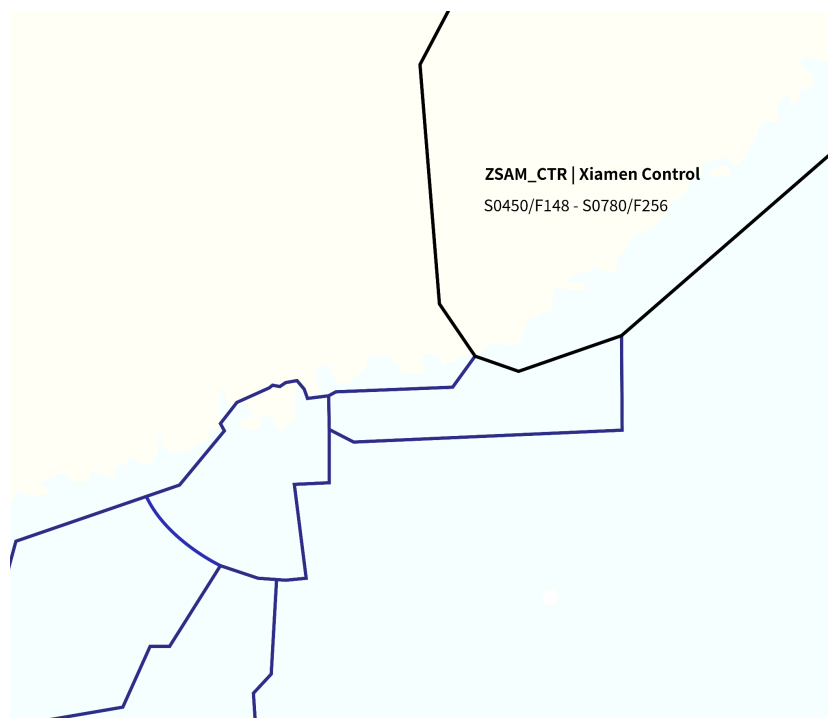
- Position: ZGNN\_CTR; Callsign: Nanning Control
- In the absence of ZGZJ\_APP, the Nanning ACC controller shall be responsible for this sector.
- In the absence of ZGNN\_CTR, the Guangzhou FIR controller (ZGZU\_CTR) shall be responsible for this sector.
- The vertical airspace constraints of Nanning ACC in the area of SIKOU and above Zhanjiang TMA are S0600 (F197) - S0780 (F256).
- Controllers shall use caution when transferring aircraft to Nanning ACC to avoid transferring aircraft to the wrong controller.
- The horizontal boundary of Nanning ACC is shown in Figure 7.6
- Handoffs to Nanning ACC shall be made in the following order:  
ZGNN\_CTR -> ZGZU\_CTR



**Figure 7.6: Nanning ACC Sector**

### 7.1.7 Xiamen ACC

- Position: ZSAM\_CTR; Callsign: Xiamen Control
- ZSAM\_CTR shall be responsible for Shantou TMA when none of the Shantou TMA or Guangzhou ACC controllers are online.
- In the absence of ZSAM\_CTR, the Shanghai FIR controller (ZSHA\_CTR) shall be responsible for this sector.
- The vertical airspace constraints of Xiamen ACC in the area of DOTMI/LELIM and above Shantou TMA are S0450 (F148) - S0780 (F256).
- Controllers shall use caution when transferring aircraft to Xiamen ACC to avoid transferring aircraft to the wrong controller.
- The horizontal boundary of Xiamen ACC is shown in Figure 7.7
- Handoffs to Xiamen ACC shall be made in the following order:  
ZSAM\_CTR -> ZSHA\_CTR

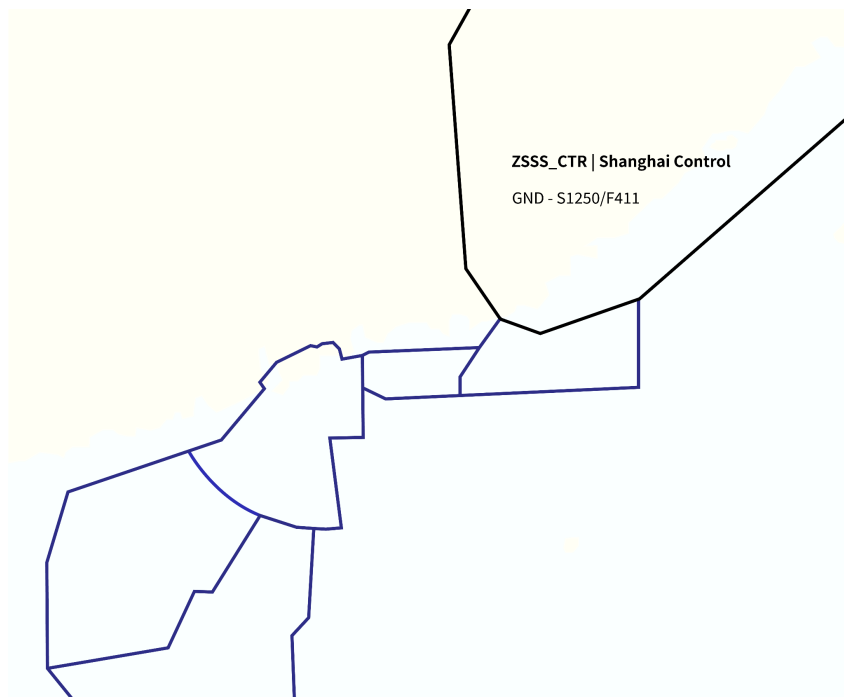


***Figure 7.7: Xiamen ACC Sector***



### 7.1.8 Shanghai ACC

- Position: ZSSS\_CTR; Callsign: Shanghai Control
- When Shanghai ACC South sector (ZSSS\_S\_CTR) is online, aircraft shall be handed off to this sector instead.
- In the absence of ZSSS\_CTR and ZSSS\_S\_CTR, the Shanghai FIR controller (ZSHA\_CTR) shall be responsible for this sector.
- PRC\_FSS (Callsign: Beijing Control) shall be responsible for Shanghai ACC above S0780 (F256) (not incl.) when none of the Shanghai ACC controllers are online.
- PRC\_FSS can accept the handover on coordination, but only if their cruising level is higher than S0780 (F256).
- The horizontal boundary of Shanghai ACC is shown in Figure 7.8
- Handoffs to Shanghai ACC shall be made in the following order:  
ZSSS\_S\_CTR -> ZSSS\_CTR -> ZSHA\_CTR -> PRC\_FSS (Above S0780/F256)



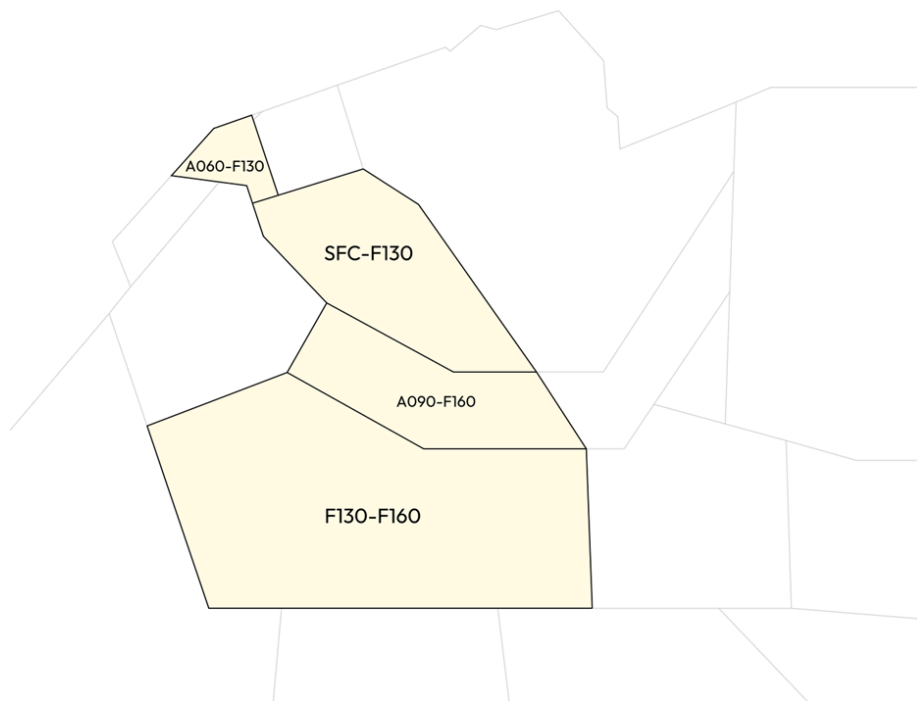
***Figure 7.8: Shanghai ACC Sector***

## 7.2 Hong Kong ATC

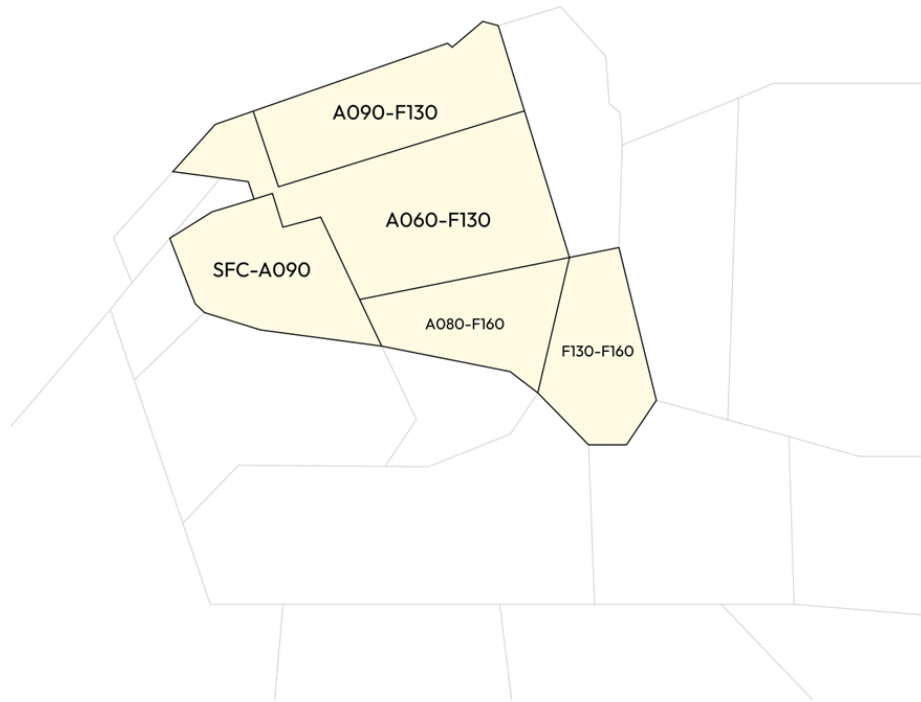
### 7.2.1 Hong Kong Departure South

- Position: VHHH\_S\_DEP; Callsign: Hong Kong Departure
- This sector covers ZGSZ/VMMC departures via LUKBU and VHHH RWY 07R / 25L departures.
- Hong Kong Departure South covers the airspace around LUKBU between SFC - FL130.
- Handoffs to Hong Kong Departure South shall be made in the following order:

VHHH\_S\_DEP -> VHHH\_N\_DEP -> VHHH\_APP -> HKG\_W\_CTR



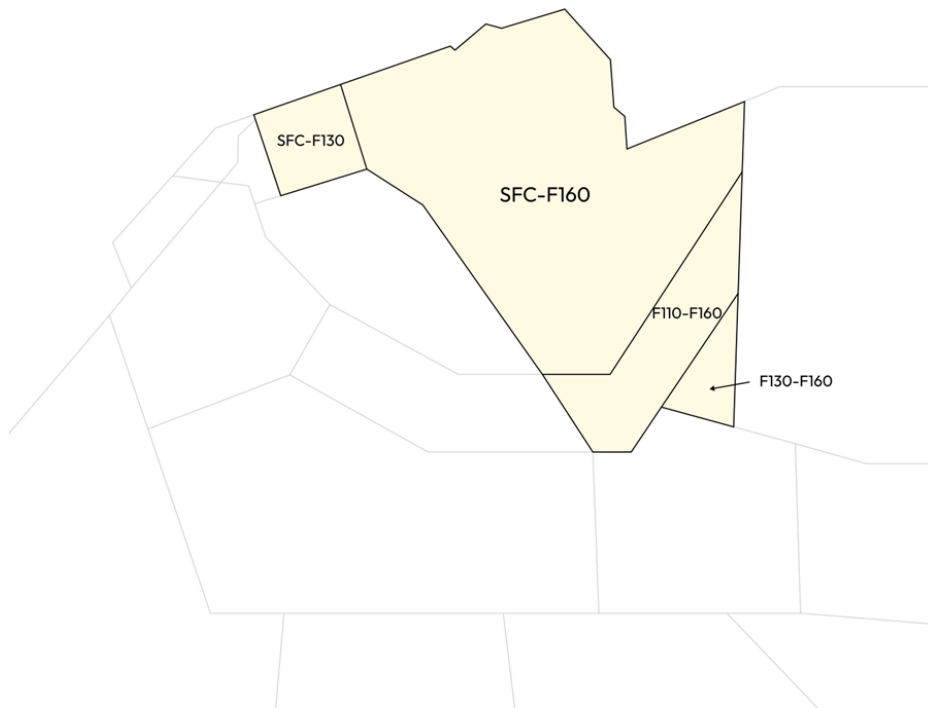
***Figure 7.9: Hong Kong Departure South Sector when runway 07s are in use***



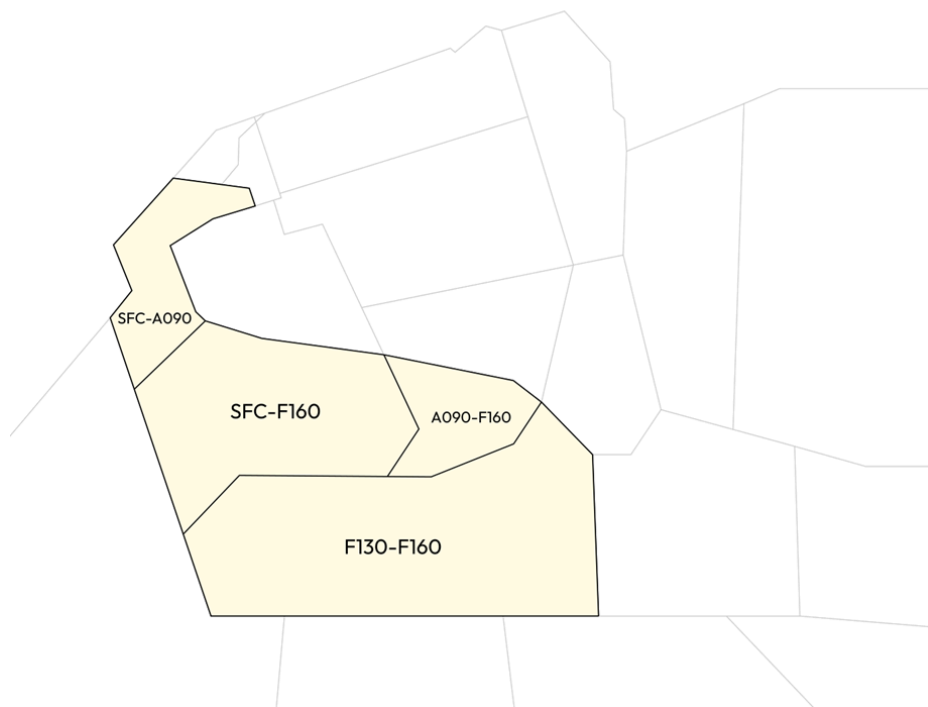
*Figure 7.10: Hong Kong Departure South Sector when runway 25s are in use*

### 7.2.2 Hong Kong Departure North

- Position: VHHH\_N\_DEP; Callsign: Hong Kong Departure
- This sector covers VHHH RWY 07L / 25R and RWY 07C / 25C departures. In the absence of VHHH\_H\_DEP, its responsibilities are assumed by this sector. The same applies to VHHH\_S\_DEP.
- Hong Kong Departure North covers the airspace around BEKOL between SFC - FL160.
- Handoffs to Hong Kong Departure North shall be made in the following order:  
VHHH\_N\_DEP -> VHHH\_APP -> HKG\_W\_CTR



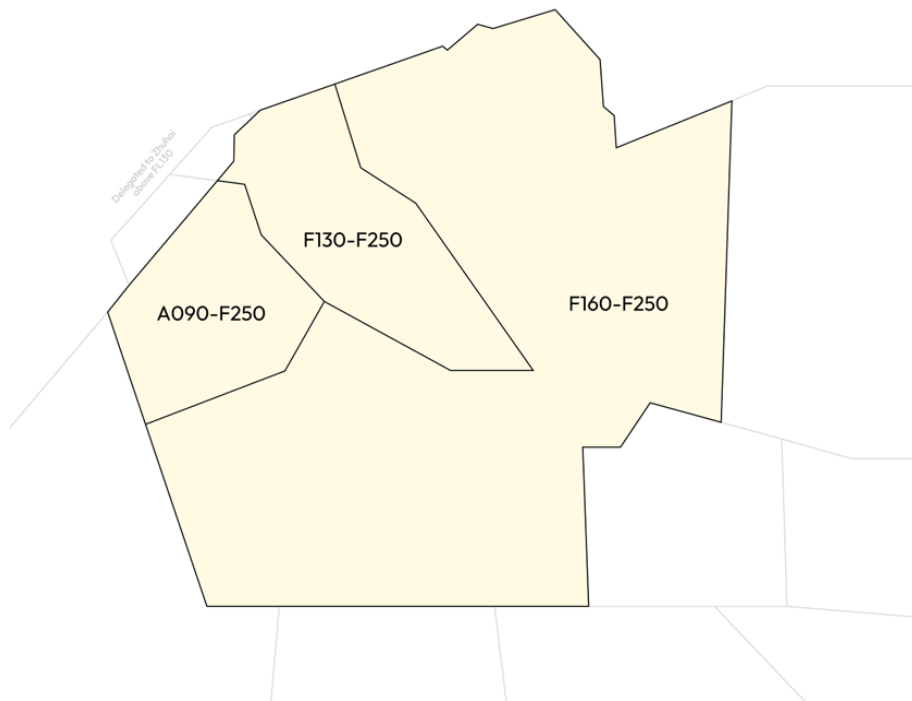
***Figure 7.11: Hong Kong Departure North Sector when runway 07s are in use***



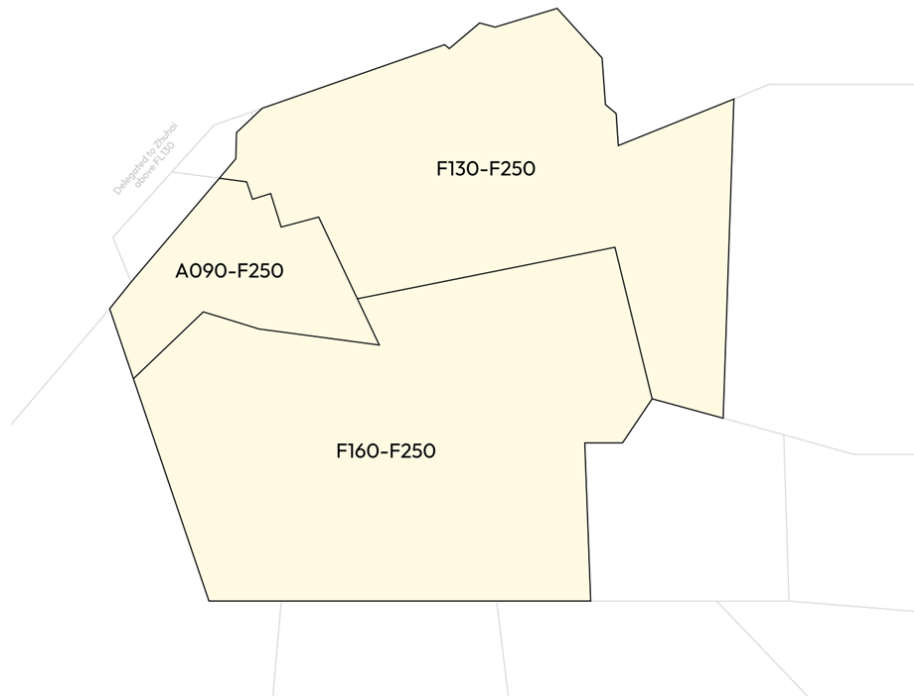
***Figure 7.12: Hong Kong Departure North Sector when runway 25s are in use***

### 7.2.3 Hong Kong Departure (High)

- Position: VHHH\_H\_DEP; Callsign: Hong Kong Departure
- This sector covers ZGGG arrivals via TAMOT and VHHH/VHHX departures via BEKOL.
- Hong Kong Departure (High) covers the airspace around TAMOT between FL130 - FL250, and the airspace around BEKOL between FL160 - FL250.
- Handoffs to Hong Kong Departure shall be made in the following order:  
VHHH\_H\_DEP -> VHHH\_DEP -> VHHH\_APP -> HKG\_W\_CTR



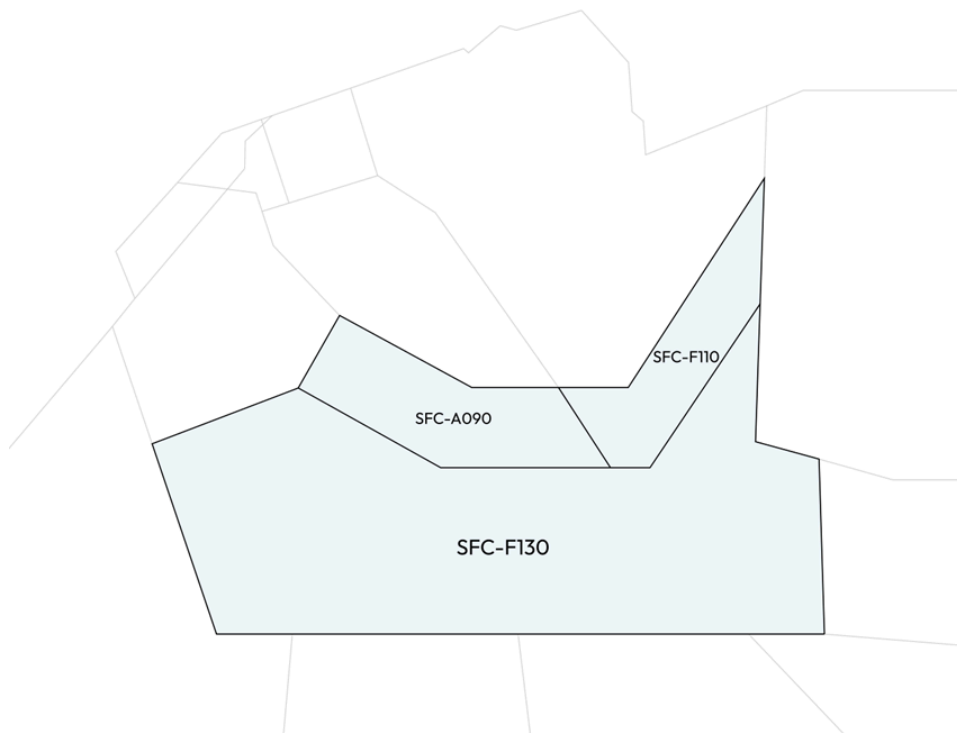
***Figure 7.13: Hong Kong Departure (High) Sector when runway 07s are in use***



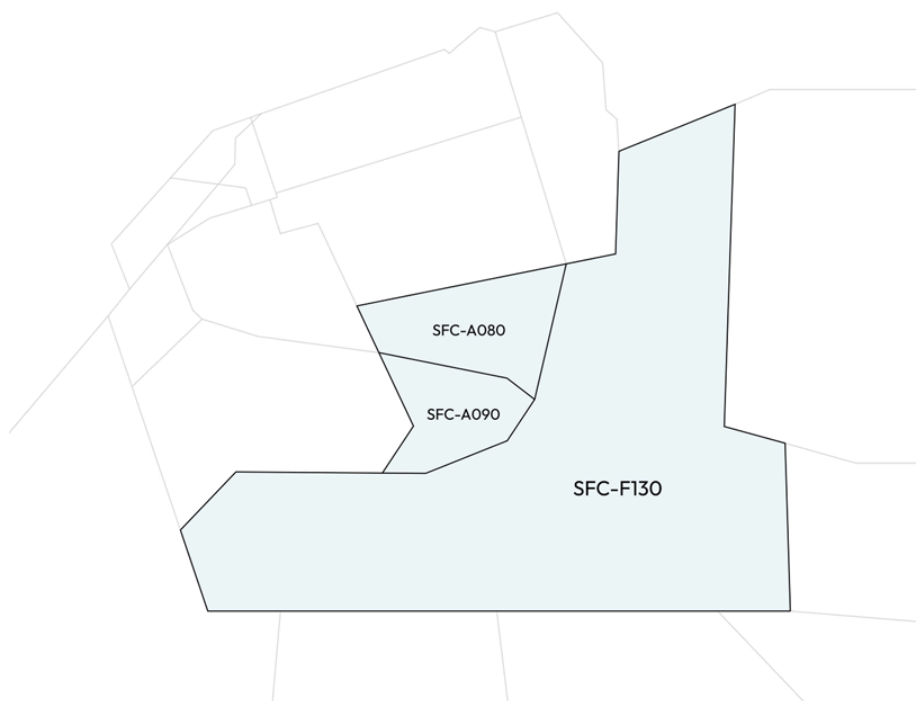
***Figure 7.14: Hong Kong Departure (High) Sector when runway 25s is in use***

#### 7.2.4 Hong Kong Approach

- Position: VHHH\_APP; Callsign: Hong Kong Approach
- This sector is the primary APP sector within Hong Kong vACC. While it does not cover any airspace at any boundary between VATPRC and HKvACC, it has been included here for completeness.



***Figure 7.15: Hong Kong Approach Sector when runway 07s are in use***

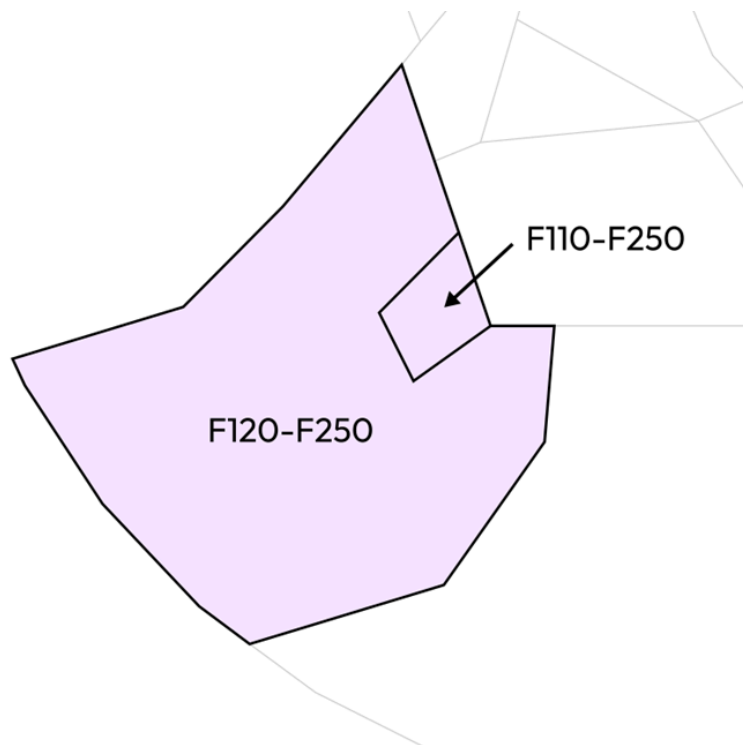


***Figure 7.16: Hong Kong Approach Sector when runway 25s are in use***

### 7.2.5 Hong Kong Terminal Radar West

- Position: VHHH\_W\_APP; Callsign: Hong Kong Radar
- This sector covers ZGSZ/ZGGG departures and VHHH arrivals via SIERA, as well as Hong Kong Terminal Radar Low and Macau Approach Radar sector in their absence.
- Hong Kong Terminal Radar West covers the airspace around SIERA between FL190- FL250.
- Handoffs to Hong Kong Terminal Radar West shall be made in the following order:

VHHH\_W\_APP -> HKG\_W\_CTR -> VHHH\_APP



*Figure 7.17: Hong Kong Terminal Radar West Sector*

### 7.2.6 Hong Kong Terminal Radar Low

- Position: VHHH\_L\_APP; Callsign: Hong Kong Radar
- This sector is responsible for SIERA arrivals that have been



handed off from Hong Kong Terminal Radar West and Macau Approach Radar sector in its absence. When this sector is open, FL190 is not available at SIERA.

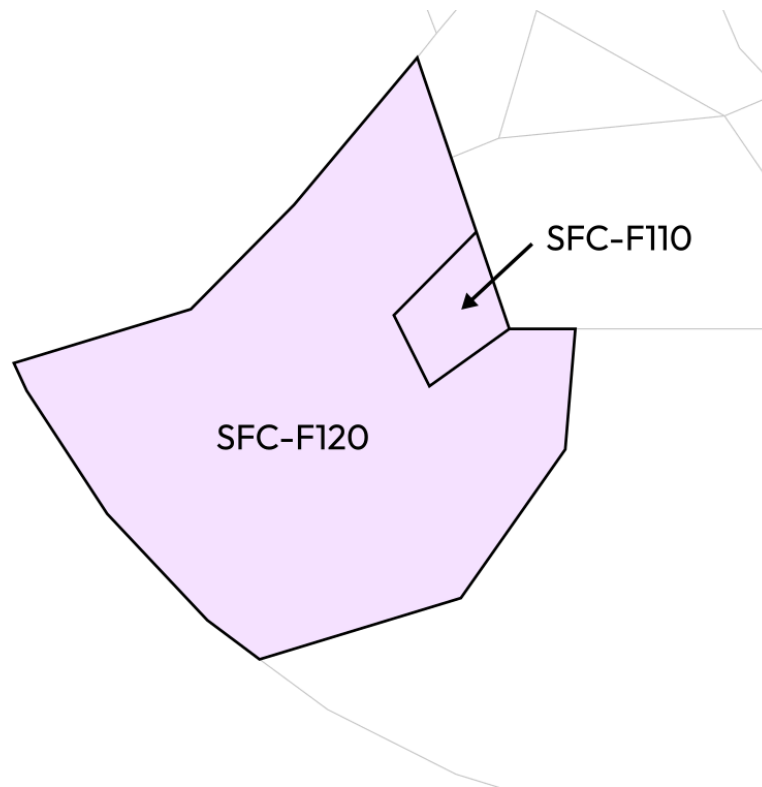
- Hong Kong Terminal Radar Low covers the airspace around SIERA between FL120 and FL190.
- Handoffs to Hong Kong Terminal Radar Low shall be made in the following order:

VHHH\_L\_APP -> VHHH\_W\_APP -> HKG\_W\_CTR -> VHHH\_APP

#### 7.2.7 Macau Approach Radar

- Position: VMMC\_APP; Callsign: Hong Kong Radar
- This sector covers ZGSZ arrivals via LANDA and ZGSZ departures via SIERA. When Runway 16 is in use, this sector also covers VMMC arrivals entering Zhuhai airspace via INDUS as well as VMMC arrivals via UJ and MCU and oil rig support helicopters via Track D.
- Macau Approach Radar covers the airspace around LANDA and SIERA between SFC - FL120.
- Handoffs to Macau Approach Radar shall be made in the following order:

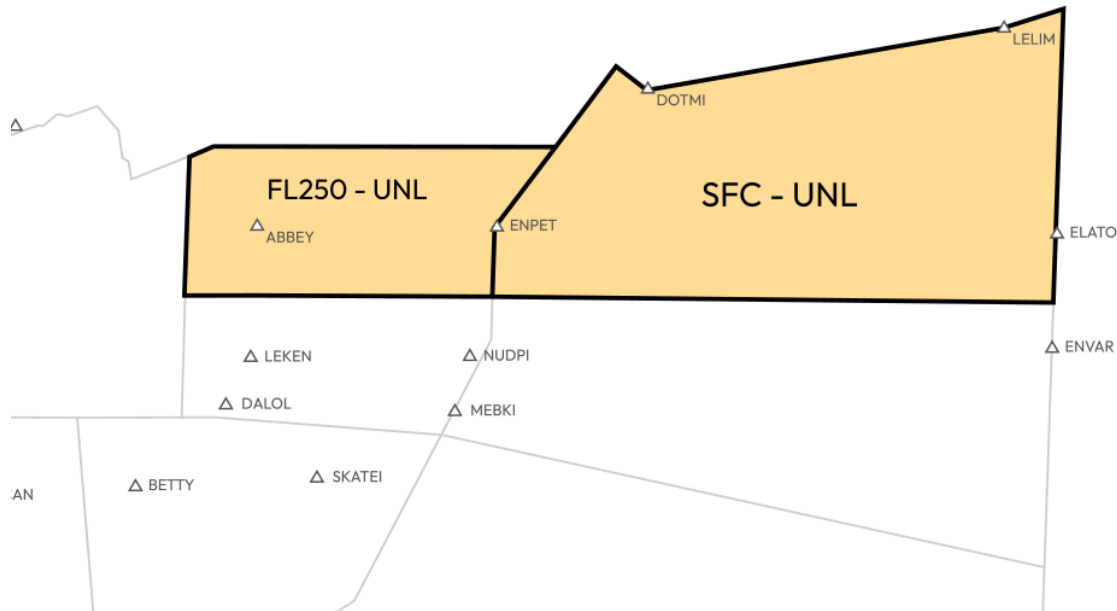
VMMC\_APP -> VHHH\_L\_APP -> VHHH\_W\_APP -> HKG\_W\_CTR -> VHHH\_APP



*Figure 7.18: Macau Approach Radar Sector*

#### 7.2.8 Hong Kong Area Radar East Arrivals

- Position: HKG\_K\_CTR; Callsign: Hong Kong Radar
- This sector covers traffic via DOTMI and LELIM.
- Hong Kong Area Radar East Arrivals covers the airspace around DOTMI and LELIM between SFC - UNL. (SFC - FL365 when Hong Kong Area Radar Upper is online)
- Handoffs to Hong Kong Area Radar East Arrivals shall be made in the following order:  
HKG\_K\_CTR -> HKG\_E\_CTR -> HKG\_S\_CTR -> HKG\_W\_CTR

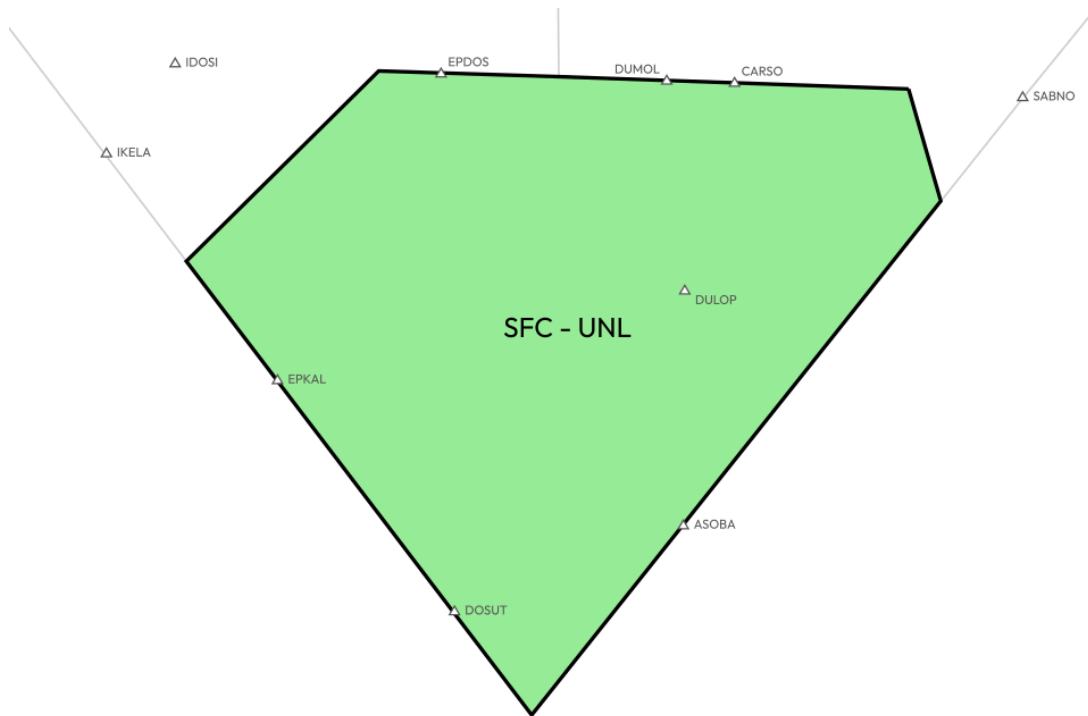


*Figure 7.19: Hong Kong Area Radar East Arrivals Sector*

#### 7.2.9 Hong Kong Area Radar West (TRD)

- Position: HKG\_D\_CTR; Callsign: Hong Kong Radar
- This sector covers traffic via EPKAL and DOSUT.
- Hong Kong Area Radar West (TRD) covers the airspace around EPKAL and DOSUT between SFC - UNL. (SFC - FL365 when Hong Kong Area Radar Upper is online)
- Handoffs to Hong Kong Area Radar West (TRD) shall be made in the following order:

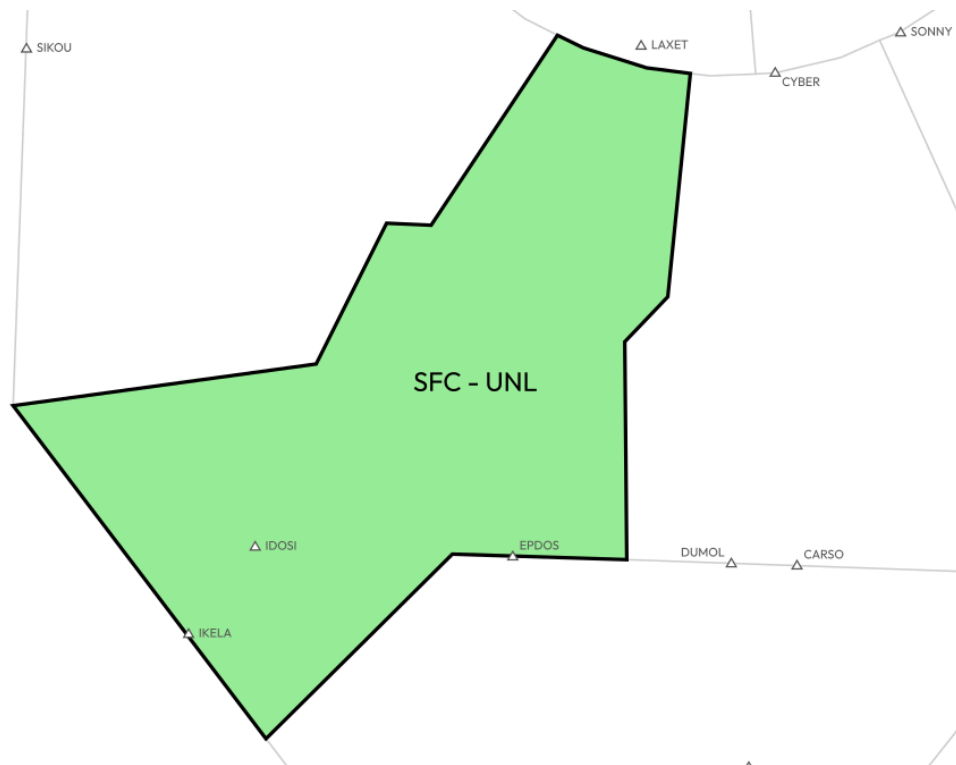
HKG\_D\_CTR -> HKG\_V\_CTR -> HKG\_W\_CTR



**Figure 7.20: Hong Kong Area Radar West (TRD) Sector**

#### 7.2.10 Hong Kong Area Radar West (TRV)

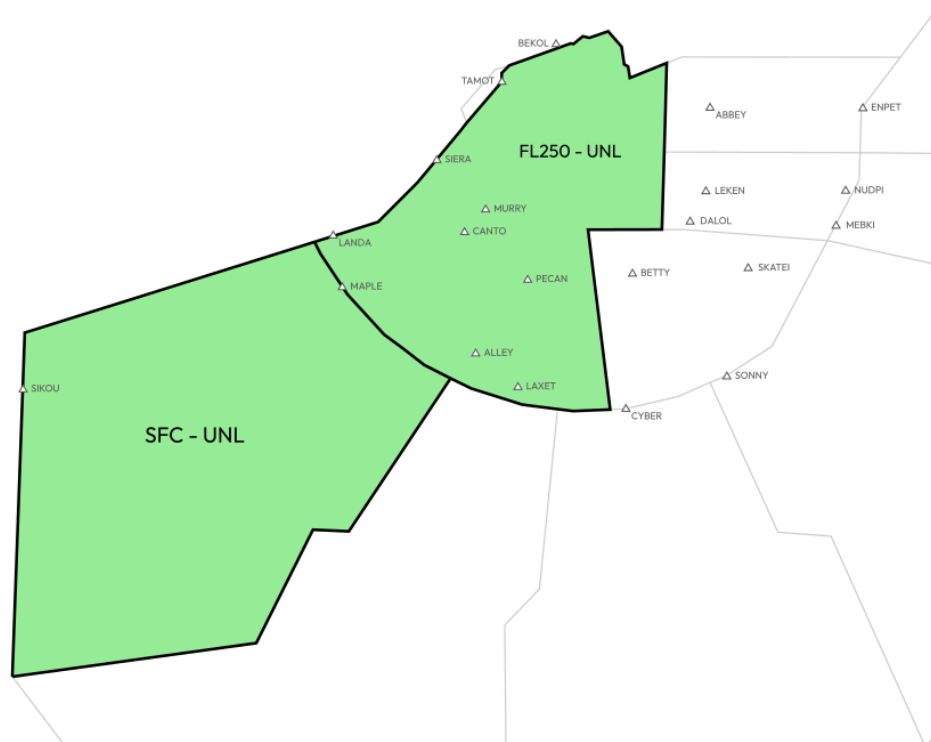
- Position: HKG\_V\_CTR; Callsign: Hong Kong Radar
- This sector covers traffic via IKELA.
- Hong Kong Area Radar West (TRV) covers the airspace around IKELA between SFC - UNL. (SFC - FL365 when Hong Kong Area Radar Upper is online)
- Handoffs to Hong Kong Area Radar West (TRV) shall be made in the following order:  
HKG\_V\_CTR -> HKG\_W\_CTR



**Figure 7.21: Hong Kong Area Radar West (TRV) Sector**

#### 7.2.11 Hong Kong Area Radar West

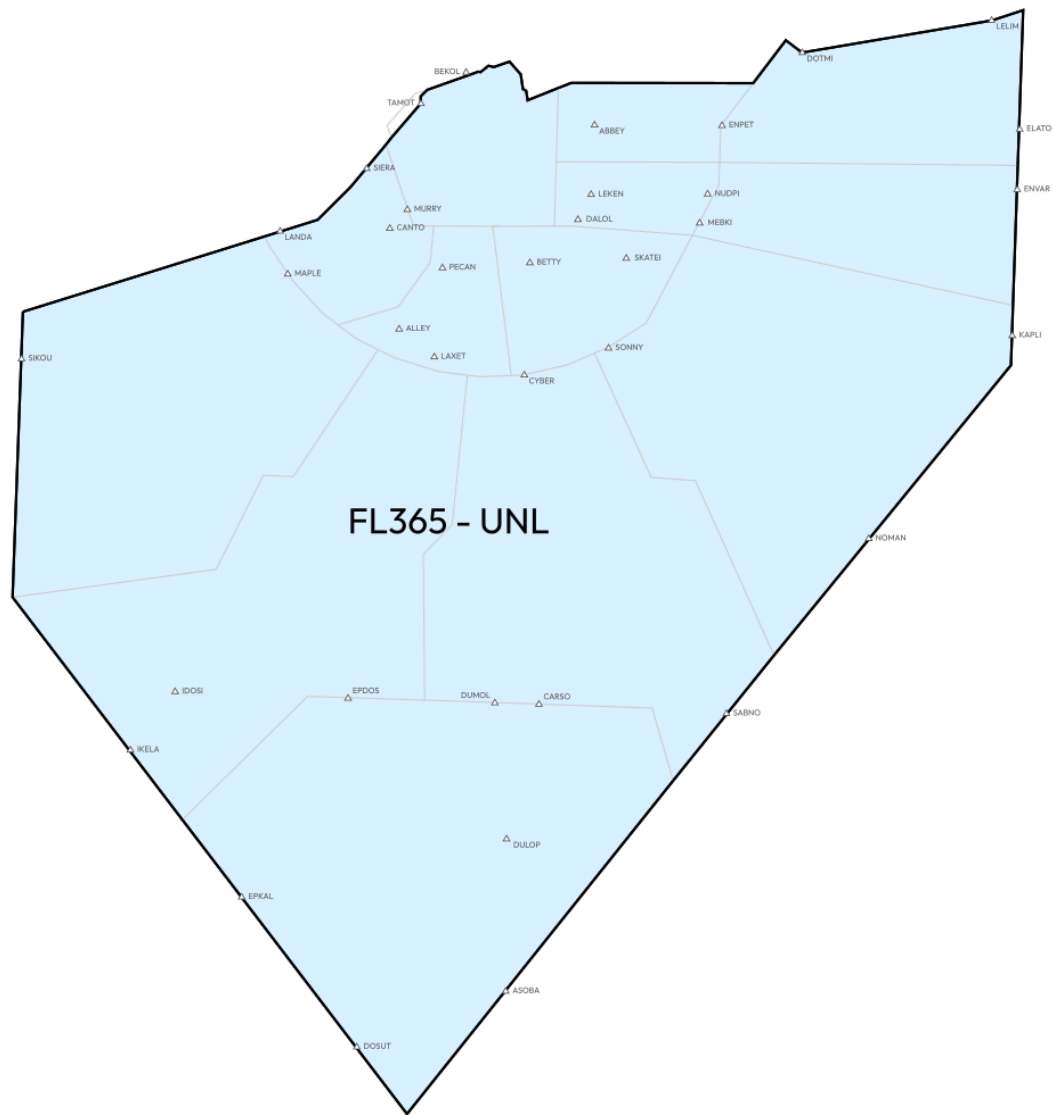
- Position: HKG\_W\_CTR; Callsign: Hong Kong Radar
- This is the primary Area Radar sector. When fully split, this sector covers traffic via SIKOU, high-level overflights and VHHX arrivals via TAMOT.
- Hong Kong Area Radar West covers the airspace around SIKOU and TAMOT between SFC - UNL. (SFC - FL365 when Hong Kong Area Radar Upper is online)



*Figure 7.22: Hong Kong Area Radar West Sector*

#### 7.2.12 Hong Kong Area Radar Upper

- Position: HKG\_U\_CTR; Callsign: Hong Kong Radar
- This sector covers high-level traffic within Hong Kong FIR.
- Hong Kong Area Radar Upper covers the airspace within Hong Kong FIR between FL365 - UNL.
- When Hong Kong Area Radar Upper is online, the upper limit for all other Area Radar sectors becomes FL365.



***Figure 7.23: Hong Kong Area Radar Upper Sector***

### 7.2.13 Hong Kong Air Movements Control (North)

- Position: VHHH\_N\_TWR; Callsign: Hong Kong Tower
- This sector covers the northern half of the Hong Kong ATZ. In the absence of VHHH\_S\_TWR and VHHH\_C\_TWR, it shall cover the entire Hong Kong ATZ.
- Hong Kong Air Movements Control (North) covers SFC - 2000ft AAL.

- Handoffs to Hong Kong Air Movements Control (North) shall be made in the following order:

VHHH\_N\_TWR -> VHHH\_C\_TWR -> VHHH\_S\_TWR ->  
VHHH\_APP -> HKG\_W\_CTR

#### 7.2.14 Hong Kong Air Movements Control (South)

- Position: VHHH\_S\_TWR; Callsign: Hong Kong Tower
- This sector covers the southern half of the Hong Kong ATZ. In the absence of VHHH\_N\_TWR and VHHH\_C\_TWR, it shall cover the entire Hong Kong ATZ.
- Hong Kong Air Movements Control (South) covers SFC - 2000ft AAL.
- Handoffs to Hong Kong Air Movements Control (South) shall be made in the following order:

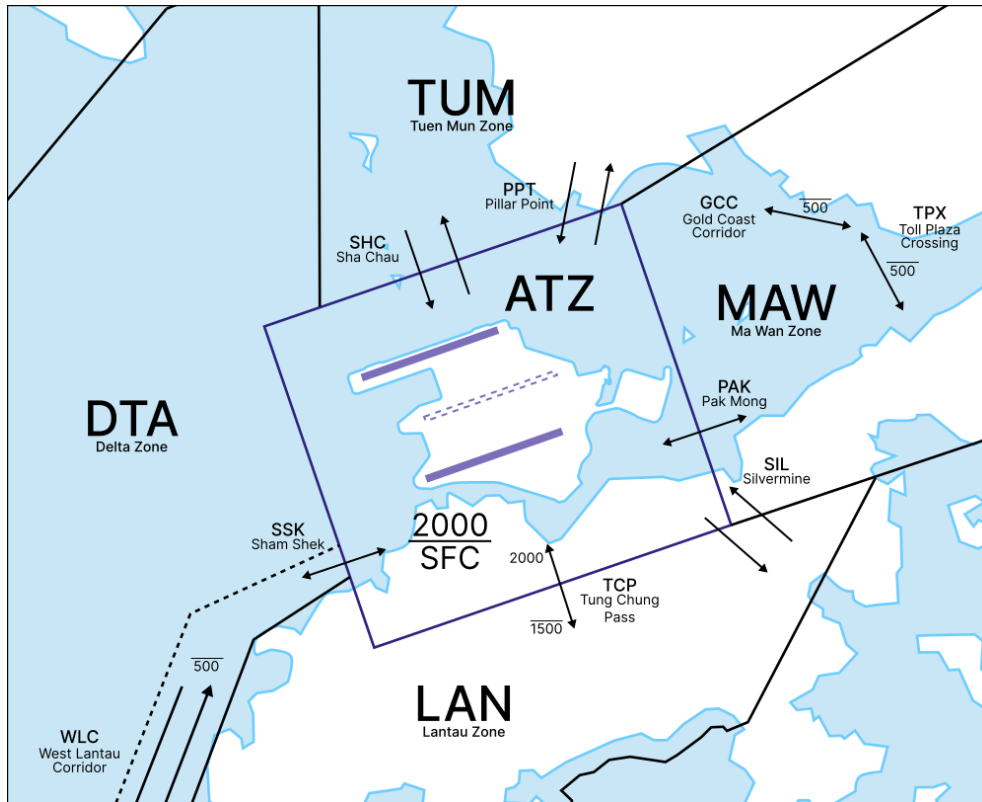
VHHH\_S\_TWR -> VHHH\_C\_TWR -> VHHH\_N\_TWR ->  
VHHH\_APP -> HKG\_W\_CTR

#### 7.2.15 Hong Kong Air Movements Control (Midfield)

- Position: VHHH\_C\_TWR; Callsign: Hong Kong Tower
- This sector covers the centre runway at VHHH. In the absence of VHHH\_N\_TWR and VHHH\_S\_TWR, it shall cover the entire Hong Kong ATZ.
- Handoffs to Hong Kong Air Movements Control (Midfield) shall be made in the following order:

VHHH\_C\_TWR -> VHHH\_S/N\_TWR (depending on RWY in use) ->  
VHHH\_APP -> HKG\_W\_CTR

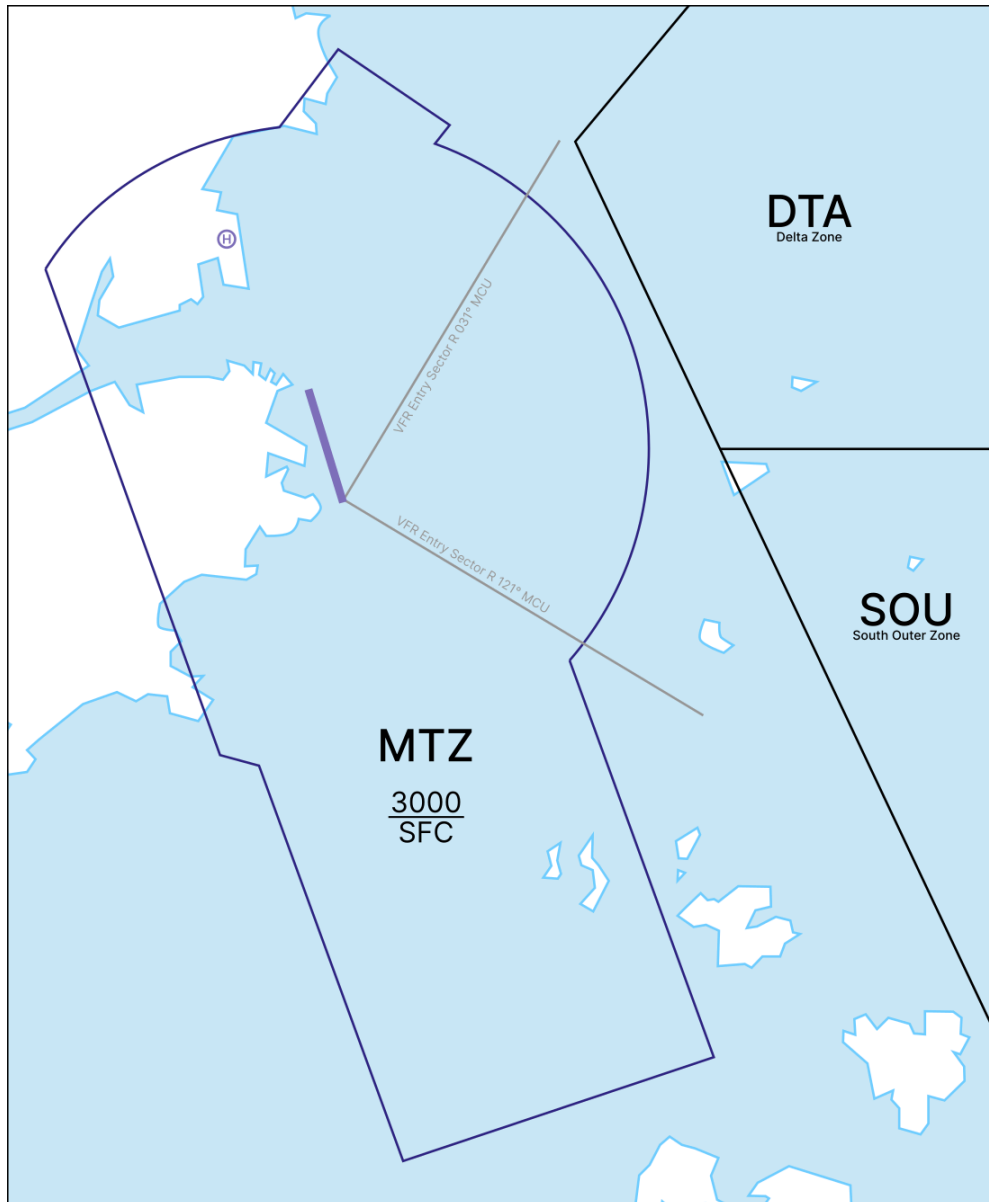




*Figure 7.24: Hong Kong Air Movements Control Sector*

#### 7.2.16 Macau Tower

- Position: VMMC\_TWR; Callsign: Macau Tower
- This sector covers the Macau ATZ.
- Macau Tower covers SFC - 3000ft AAL.
- Handoffs to Macau Tower shall be made in the following order:  
VMMC\_TWR -> VMMC\_APP -> VHHH\_L\_APP -> VHHH\_W\_APP ->  
HKG\_W\_CTR -> VHHH\_APP



*Figure 7.25: Control airspace of Macau Tower*

#### 7.2.17 Hong Kong Flight Information Service

- Position: VHHH\_F\_TWR; Callsign: Hong Kong Information
- This sector is responsible for providing Flight Information Service within Class G airspace in Hong Kong FIR.
- Handoffs to Hong Kong Flight Information Service shall be made

in the following order:

VHHH\_F\_TWR -> VHHH\_Z\_TWR -> VHHH\_S/C/N\_TWR (by coordination) -> VHHH\_APP -> HKG\_W\_CTR

#### 7.2.18 Hong Kong Zone Control

- Position: VHHH\_Z\_TWR; Callsign: Hong Kong Zone
- This sector is responsible for VFR traffic operating within the Hong Kong CTR at or below 2000ft. While this sector will not normally accept handoffs from Mainland China ATC positions, it is responsible for covering Hong Kong Flight Information Service in its absence, hence it has been included in this document.
- Handoffs to Hong Kong Zone Control shall be made in the following order:

VHHH\_Z\_TWR -> VHHH\_S/C/N\_TWR (by coordination) -> VHHH\_APP -> HKG\_W\_CTR

#### 7.2.19 Southeast Asia Control

- Position: ASEA\_FSS; Callsign: Southeast Asia Control
- This sector covers all CTR sectors within each VATSEA vACC in the absence of local ATC.
- Southeast Asia Control covers FL245 - UNL.

## 8. Routing Requirements

- 8.1 Both Mainland China and Hong Kong have strict flight planning requirements. On VATSIM, VATPRC and vACC Hong Kong have agreed to comply with requirements on some routes.

8.2 Hong Kong ATC is responsible for checking parts of routes and cruising altitude in the direction of Mainland China:

- BEKOL northbound traffic via W56 or eastbound via G471 shall use Metric Odd Levels.
- BEKOL westbound traffic via B330 shall use Metric Even Levels.
- BEKOL westbound traffic shall NOT route via A599, flights shall route via SIKOU R339 BSE, then join A599.
- BEKOL eastbound traffic shall NOT route via R200, flights shall route via DOTMI, then join A470.
- LELIM northbound traffic shall only be flown by aircraft with destinations ZSPD/ZSQD/ZSYT/ZYTL.
- Flights departing from VMMC:
  - NLG SIDs shall only be used for flights landing ZGSZ with cruising level S0150.
  - IDUMA SIDs shall be used for flights landing ZGGG with cruising level S0450.
  - Eastbound traffic via A470 shall route via DOTMI.
  - All other northbound and eastbound traffic shall route via MIPAG or IDUMA.
  - Westbound traffic shall route via BIGRO.
- Routes within Mainland China airspace shall not contain DCTs. Unless coordinated, all flight segments shall be connected via valid airways.

8.3 Mainland China ATC is responsible for checking parts of routes and cruising altitude in the direction of Hong Kong:

- Flights departing from ZGGG or ZGSZ and transiting Hong Kong airspace shall use one of the routes specified in AIP Hong Kong ENR 1.10-8.2 (Figure 8.1).

- Traffic routing via LUKBU may be subject to delay due to congestion in the vicinity of Hong Kong and Macao airports.

#### 8.4 Special Routes for Helicopter or General Aviation Aircraft

8.4.1 The following routes are generally for helicopter use ONLY. However, due to the nature of VATSIM, other non-helicopter aircraft - but limited to general aviation aircraft - can be used with the permission of ATC.

8.4.2 Unless otherwise stated or coordinated, the helicopter or general aviation aircraft shall use the following routes. Referring to ENR 3.4 Section 2.2 of AIP of Hong Kong and ENR 2.2.2.4 of AIP of Mainland China, the routes are:

8.4.2.1 VFR - Shenzhen ↔ Hong Kong:

- KEVAR – URBOR – LAXUS – LUKBU (TCP)
  - 300m/1000ft or below

8.4.2.2 VFR - Shenzhen ↔ Macau:

- KEVAR – URBOR – PEXEL – ZAO (TCP)
  - 300m/1000ft or below

8.4.2.3 VFR track H - Guangzhou FIR ↔ Hong Kong FIR:

- HG – PS – AT – SS (TCP) – H
  - 600m/2000ft or below

8.4.2.4 VFR track HT - Guangzhou FIR ↔ Hong Kong FIR:

- HG – PS – AT – HMS - QZ (TCP)

- 600m/2000ft or below

8.4.2.5 VFR track VH - Guangzhou FIR ↔ Hong Kong FIR:

- HG – PS – DP (TCP)
  - 600m/2000ft or below

8.4.2.6 VFR track VW - Guangzhou FIR ↔ Hong Kong FIR:

- ZAO (TCP) – U – VW
  - ZAO – U
    - 150m/500ft or below when VHHH RWY 07s in use
    - 250m/800ft or below when VHHH RWY 25s in use
  - U – VW
    - 300m/1000ft or below

8.4.2.7 IFR track H - Guangzhou FIR ↔ Hong Kong FIR:

- HG – PS – AT – SS (TCP) – H
  - To Hong Kong FIR
    - 1500m/5000ft
  - To Guangzhou FIR
    - 1200m/4000ft

8.4.2.8 IFR track HT - Guangzhou FIR ↔ Hong Kong FIR:

- HG – PS – AT – HMS - QZ (TCP)
  - To Hong Kong FIR
    - 1500m/5000ft
  - To Guangzhou FIR
    - 1200m/4000ft

8.4.2.9 IFR track D - Guangzhou FIR ↔ Hong Kong FIR:

- ZUH – R (TCP) – D
  - To Hong Kong FIR
    - 1200m/4000ft
  - To Guangzhou FIR
    - 1500m/5000ft

#### 8.4.3 VFR waypoint and coordinates

VFR waypoint	English Name	Chinese Name	Coordinates
ZAO	Jiu Zhou	九洲	N221442 E1133642
ZUH	Lian Sheng Wei	连胜围	N221318 E1132800
LUKBU	Lung Kwu Chau	龙鼓洲	N222244 E1135302
HENGA (HG)	Heng Gang	横岗	N223900 E1141200
PINGSHAN (PS)	Ping Shan	坪山	N224130 E1142100
AOTOU (AT)	Ao Tou	澳头	N224300 E1143155
DAPENG (DP)	Da Peng	大鹏	N222700 E1143000
SESAN (SS)	Xing Shan	星山	N223050 E1145025
HUANGMAOSHAN (HMS)	Huang Mao Shan	黄毛山	N222756 E1143718
QINGZHOU (QZ)	Qing Zhou	青州	N222424 E1143958
HOTEL (H)	HOTEL	/	N222300 E1145430
UNIFORM (U)	UNIFORM	/	N220900 E1134042
VICTOR WHISKEY (VW)	VICTOR WHISKEY	/	N215000 E1135500
DELTA (D)	DELTA	/	N213100 E1133000
ROMEO (R)	ROMEO	/	N215148 E1132654
KEVAR	KEVAR	/	N223730 E1134836
URBOR	URBOR	/	N223554 E1134312
LAXUS	LAXUS	/	N222412 E1134754
PEXEL	PEXEL	/	N222518 E1133912

#### 8.4.4 Track H shall be used as the primary IFR route.

- 8.4.5 Track H and Track VW shall be used as the primary VFR routes.
- 8.4.6 Track HT shall be used in the event of unavailability of Track H. Coordination required.
- 8.4.7 Handoff from/to Hong Kong Zone (VHHH\_Z\_TWR) or any online controllers who are responsible for this area may be established. Refer to Appendix B.
- 8.4.8 For VFR route Shenzhen ↔ VHHH, to avoid unnecessary change of frequencies, handoff from/to Hong Kong Air Movements Control North (VHHH\_N\_TWR) if online or Hong Kong Air Movements Control Midfield (VHHH\_C\_TWR) / Hong Kong Air Movements Control South (VHHH\_S\_TWR) if offline may be established.

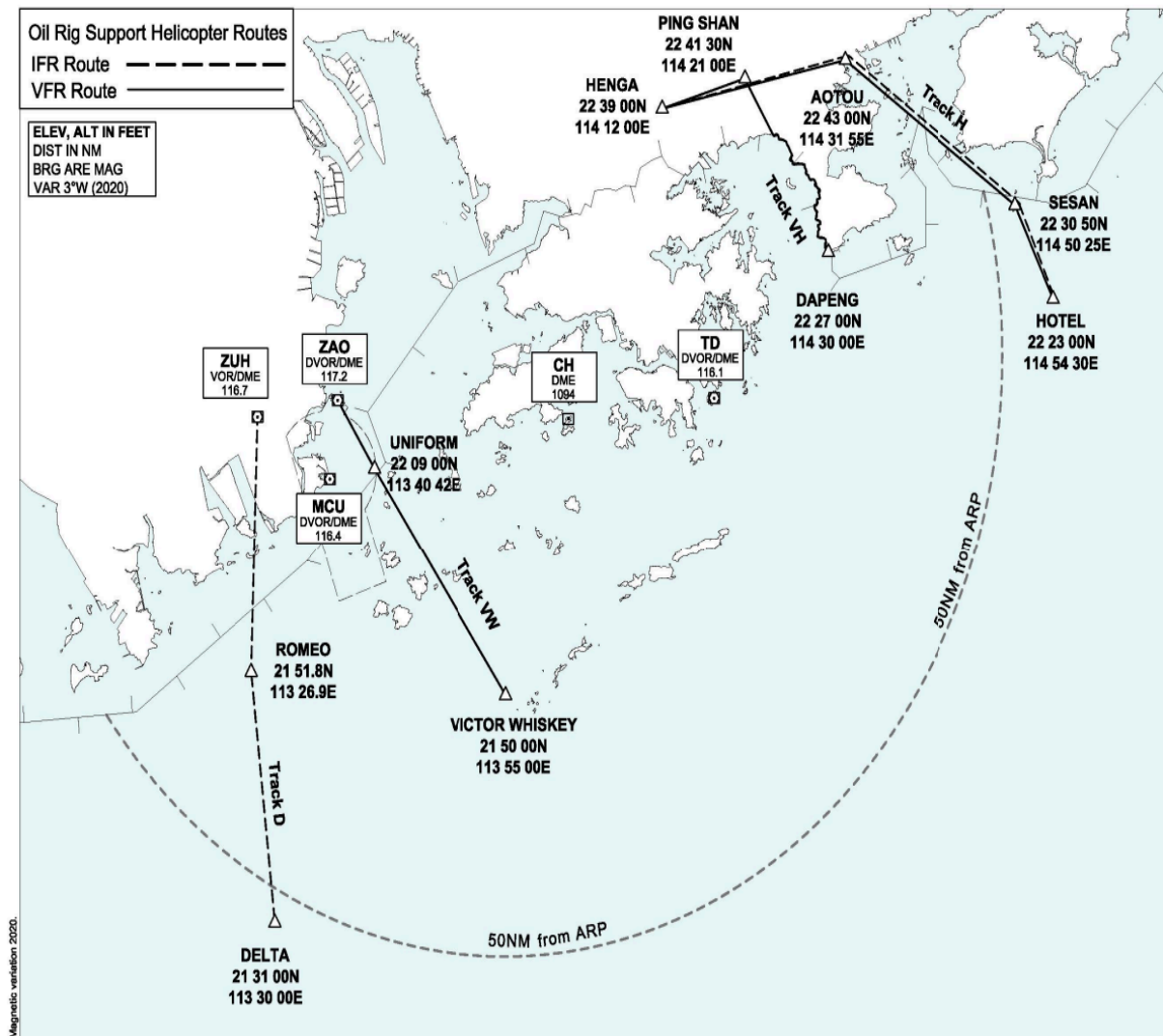


## 8.2 Departures from Guangzhou or Shenzhen Airports transiting Hong Kong FIR

	Depart from	Flight planned route within the Hong Kong FIR to be filled in Item 15 of the standard ICAO Flight Plan	Connecting Route
(1)	ZGGG	SIERA DCT MULET DCT SKATE DCT CONGA V621 ELATO <sup>1</sup>	A1/G581
(2)		SIERA DCT MULET DCT SKATE DCT CONGA V631 ENVAR <sup>2</sup>	M750
(3)		SIERA DCT MULET DCT SKATE V642 NOMAN	A461/M501
(4)		SIERA DCT MULET DCT SKATE V652 SABNO	A583
(5)		SIERA DCT MULET DCT ALLEY V32 EPDOS L642	L642
(6)		SIERA DCT MULET DCT ALLEY V31 IDOSI P901 IKELA <sup>3</sup> or SIERA DCT MULET DCT ALLEY V31 IDOSI A1 IKELA <sup>3</sup>	A1
(7)		SIERA DCT MULET DCT ALLEY V10 SIKOU	R339/A202
(8)	ZGSZ	LUKBU DCT SUDVA DCT DALOL V642 NOMAN <sup>4</sup>	A461/M501
(9)		LUKBU DCT SUDVA DCT DALOL V652 SABNO <sup>4</sup>	A583
(10)		LUKBU DCT SUDVA DCT SOSLU DCT PECAN V10 ALLEY V32 EPDOS L642 <sup>4</sup>	L642
(11)		LUKBU DCT SUDVA DCT SOSLU DCT PECAN V10 ALLEY V31 IDOSI P901 IKELA <sup>3 and 4</sup> or LUKBU DCT SUDVA DCT SOSLU DCT PECAN V10 ALLEY V31 IDOSI A1 IKELA <sup>3 and 4</sup>	A1
(12)		SIERA DCT ROCCA DCT SKATE DCT CONGA V621 ELATO <sup>1</sup>	A1/G581
(13)		SIERA DCT ROCCA DCT SKATE DCT CONGA V631 ENVAR <sup>2</sup>	M750
(14)		SIERA DCT ROCCA DCT SKATE V642 NOMAN	A461/M501
(15)		SIERA DCT ROCCA DCT SKATE V652 SABNO	A583
(16)		SIERA DCT ROCCA DCT ALLEY V32 EPDOS L642	L642
(17)		SIERA DCT ROCCA DCT ALLEY V31 IDOSI P901 IKELA <sup>3</sup> or SIERA DCT ROCCA DCT ALLEY V31 IDOSI A1 IKELA <sup>3</sup>	A1
(18)		SIERA DCT ROCCA DCT ALLEY V10 SIKOU	R339/A202

- 1 Normally for non-RNAV 5 compliant or non-RVSM approved aircraft.
- 2 To operate between FL290 and FL410 aircraft must be RNAV 5 compliant and RVSM approved.
- 3 Route via P901 at FL290 or above, or A1 at FL280 or below. To operate at FL290 or above aircraft must be RNP10 compliant.
- 4 Traffic routing via LUKBU may be subject to delay due to congestion in the vicinity of Hong Kong and Macao airports.

**Figure 8.1: Departures from Guangzhou or Shenzhen Airports transiting Hong Kong FIR**  
(Source: Hong Kong AIP ENR1.10-8.2)



**Figure 8.2: Oil Rig Support Helicopter Routes in Hong Kong FIR (Source: Hong Kong AIP ENR3.4-Heli-1)**

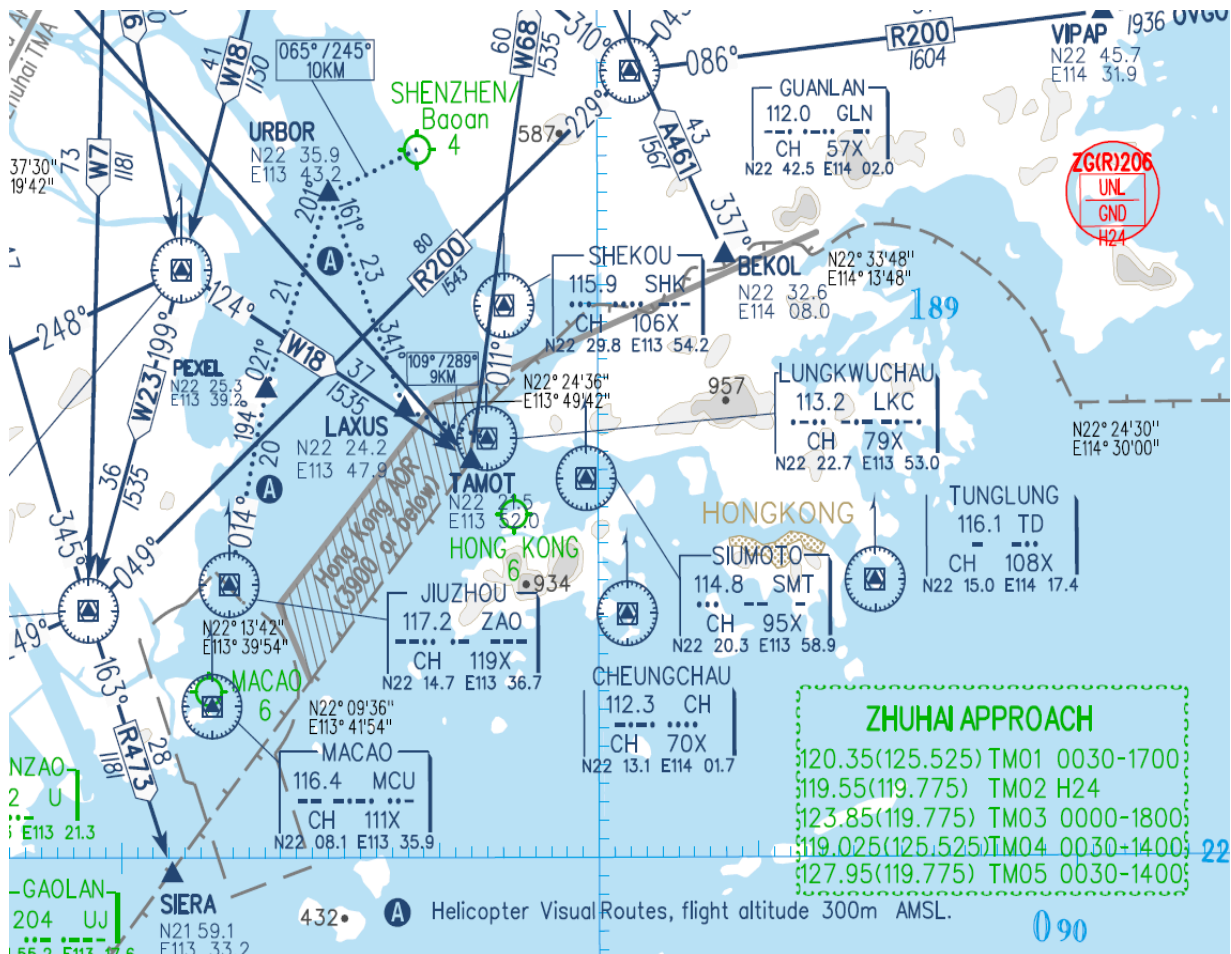


Figure 8.3: Area chart-Guangzhou and Zhuhai (Source: China AIP ENR2.2.2.4)

## 9. Handoff Altitudes at Transfer of Control Points (TCP) for IFR flights

### 9.1 Zhuhai TMA – Hong Kong TMA

TCP	Route	Direction	Altitudes (FLAS)
ROMEO <sup>1</sup>	Track D	To Hong Kong ACC	S0120 (4000ft)
		To Guangzhou ACC	S0150 (5000ft)

SESAN <sup>2</sup> (星山)	Track H	To Hong Kong ACC	S0150 (5000ft)
		To Guangzhou ACC	S0120 (4000ft)
QZ <sup>2</sup> (青州)	Track	To Hong Kong ACC	S0150 (5000ft)
	HT	To Guangzhou ACC	S0120 (4000ft)

**Remarks:**

<sup>1</sup> This TCP is for Helicopter or General Aviation aircraft ONLY. Hong Kong airspace at this altitude is Class G (uncontrolled), so aircraft may be handed directly to Advisory Frequency. Under coordination, the aircraft may be handed to Hong Kong Radar/Approach for traffic information purposes (see Appendix B).

<sup>2</sup> This TCP is for Helicopter or General Aviation aircraft ONLY.

TCP	Direction	Altitudes (FLAS)
BEKOL	Departing VHHH/VHHX Landing ZGSZ <sup>1</sup>	S0240 *S0210 on coordination
	Departing VHHH/VHHX Landing ZGGG	S0420 *S0450 on coordination
TAMOT	Landing ZGGG	S0450 *S0420 on coordination
LUKBU	Departing VMMC, ZGSZ <sup>2</sup>	9000ft* *Aircraft are released for climb to FL120
LANDA	Landing ZGSZ	F110 *9000ft alternate
SIERA	Departing ZGSZ	F120

**Remarks:**

<sup>1</sup> Traffic arriving at ZGSZ from other airports should route via LANDA.

<sup>2</sup> When Hong Kong airspace is congested, traffic should route via SIERA. See section 7.2.

## 9.2 Shantou TMA<sup>1</sup> – Hong Kong ACC (K)

TCP	Direction	Altitudes (FLAS)
DOTMI	Departing ZGOW	S0420
	Landing ZGOW	S0450

**Remarks:**

<sup>1</sup>Traffic departing ZGMX to VHHK should route via ZGZU and SIERA.

Traffic arriving at ZGMX from VHHK should route via ZGZU and BEKOL.

## 9.3 Zhanjiang TMA<sup>1</sup> – Hong Kong ACC (W)

TCP	Direction	Altitudes (FLAS)
SIKOU	Departing ZGZJ/ZGBH	S0570
	Landing ZGZJ	S0600

**Remarks:**

<sup>1</sup>Aircraft departing ZGBH to VHHK should route via ZGZU and SIERA.

## 9.4 Guangzhou ACC – Hong Kong ACC (W/U)/TMC\*

TCP	Direction	Altitudes (FLAS)
BEKOL <sup>1</sup>	Departing VHHH/VHHX	S0690 <sup>2</sup>
	To Guangzhou ACC Only	S0890 - S1190 *Metric Odd
SIERA	Landing VHHH	F190*/F210/F230
	Departing ZGGG	F230/F250
TAMOT	Landing VHHX	F280 <sup>3</sup>

	To Hong Kong ACC Only	S0840 - S1220 *Metric Even
--	-----------------------	-------------------------------

**Remarks:**

<sup>1</sup> This TCP shall NOT be used for aircraft landing ZGGG transit via VHHK FIR. Such aircraft need to be rerouted to TAMOT.

<sup>2</sup> Aircraft can be handed off when climbing but must be above 4800m (F157).

<sup>3</sup> Lower altitudes may be used with coordination to allow direct handoff with VHHH\_APP.

## 9.5 Sanya ACC – Hong Kong ACC (W/V/D/U)

TCP	Direction	Altitudes (FLAS)
SIKOU	Departing ZJSY	S0810/S0890
	Landing ZJSY	S0840
	To Sanya ACC beyond ASSAD	S1040, S1160, S1220
	To Hong Kong ACC from beyond ASSAD	S1010 - S1250 *Metric Odd
	To Sanya ACC beyond WUY	S0980 - S1220 *Metric Even
IKELA	To Sanya ACC	F280, F300, F340, F380, F400 and F430
	To Hong Kong ACC	F270, F290, F330, F370, F390, F410 and F450
EPKAL	To Sanya ACC Only	F280, F310, F320, F350, F360, F390 and F400
DOSUT	To Hong Kong ACC Only	F270, F310, F320, F350, F360, F390 and F400

## 9.6 Nanning ACC<sup>1</sup> – Hong Kong ACC (W)

TCP	Direction	Altitudes (FLAS)
SIKOU	Departing ZJHK/ZJQH	S0630
	Landing ZJHK/ZJQH	S0660/S0720
	Landing ZGNN/ZGBH	S0720/S0780

### Remarks:

<sup>1</sup>Aircraft departing ZGNN to VHHK should route via ZGZU and SIERA.

## 9.7 Xiamen ACC - Hong Kong ACC (K)

TCP	Direction	Altitudes (FLAS)
DOTMI	Departing Xiamen ACC	S0660/S0720/S0780
	Landing ZSAM/ZSQZ/ ZSFZ/ZSWY/ZSWZ	S0630/S0750

## 9.8 Shanghai ACC - Hong Kong ACC (K/U)

TCP	Direction	Altitudes (FLAS)
DOTMI	Landing VHHH/VMMC	F280/F300
	To Hong Kong ACC	F280/F300/F360/F380
	To Shanghai ACC	S0810/F330/F350/F390
LELIM	ZSPD/ZSQD/ZSYT/ZYTL ->VHHH	F300
	VHHH/VMMC -> ZSPD/ZSQD/ZSYT/ZYTL	F330/F350

## 10. Handoff Altitudes at Transfer of Control Points (TCP) for VFR flights

### 10.1 TCP: Jiuzhou VOR (ZAO)

#### 10.1.1 From Guangzhou FIR to Hong Kong FIR

- 150m/500ft or below when Hong Kong runway 07s in use
- 250m/800ft or below when Hong Kong runway 25s in use

#### 10.1.2 From Hong Kong FIR to Guangzhou FIR

- 300m/1000ft or below

### 10.2 TCP: LUKBU

#### 10.2.1 From Guangzhou FIR landing Hong Kong airport

- 300m/1000ft or below

#### 10.2.2 From Hong Kong airport to Guangzhou FIR

- 300m/1000ft or below

### 10.3 TCP: SESAN (Xing Shan/星山)

#### 10.3.1 From Guangzhou FIR to Hong Kong FIR

- 600m/2000ft or below

#### 10.3.2 From Hong Kong FIR to Guangzhou FIR

- 600m/2000ft or below



#### 10.4 TCP: DAPENG (Da Peng/大鹏)

##### 10.4.1 From Guangzhou FIR to Hong Kong FIR

- 600m/2000ft or below

##### 10.4.2 From Hong Kong FIR to Guangzhou FIR

- 600m/2000ft or below

#### 10.5 TCP: QZ (Qing Zhou/青州)

##### 10.5.1 From Guangzhou FIR to Hong Kong FIR

- 600m/2000ft or below

##### 10.5.2 From Hong Kong FIR to Guangzhou FIR

- 600m/2000ft or below

## 11. Coordination Procedures for Macau International Airport (VMMC)

11.1 This section defines the ATC coordination procedures for departing and arriving traffic at Macau International Airport (VMMC) on VATSIM.

### 11.2 General

11.2.1 Aerodrome control of Macau International Airport (Delivery (DEL), Ground (GND), and Tower (TWR)) shall be under the jurisdiction of Hong Kong vACC of the Southeast Asia Division

(VATSEA). The ATC service of such positions shall be provided by Hong Kong vACC controllers.

- 11.2.2 Responsibility for Terminal ATC service at Macau International Airport (VMMC) shall be shared between Hong Kong ATC and Mainland China ATC depending on the SID, STAR, and IAP of the specific flight.
- 11.2.3 Hong Kong ATC is responsible for ensuring all activities within ATZ Macau (SFC - 3000ft AMSL) do not deviate into Zhuhai TMA unless prior coordination with Mainland China ATC is performed.
- 11.2.4 Mainland China ATC shall be responsible for all segments of SID/STAR within Mainland China airspace.
- 11.2.5 Hong Kong ATC shall be responsible for all segments of SID/STAR within Hong Kong airspace.
- 11.2.6 All handoff procedures shall follow the AIP of Macau ENR1.5-2 (Figure 11.1) and the AIP of China ENR 2.2.2.3-3 (Figure 11.2).
- 11.2.7 Controllers shall assign the RNAV procedure for departure and arrival for flights from/to Mainland China airspace. Where a pilot is not able to accept a RNAV procedure, radar vectors shall be used.
- 11.2.8 As per AIP of Mainland China, ENR 2.2 Section 2.3.2, the altimeter setting procedure for aircraft departing and arriving at

VMMC in Zhuhai TMA shall be as follows:

- When the aircraft is at VMMC prior to departure, the altimeter setting shall be set to the QNH of VMMC.
- After departure, when the aircraft enters Zhuhai TMA, the altimeter shall be set to Zhuhai TMA QNH on instruction of Mainland China ATC.
- Altimeter shall be set to 1013.2 hPa upon passing the transition altitude of Zhuhai TMA (2700m on QNH).
- While operating as local flight within Zhuhai TMA, Zhuhai Approach may instruct the aircraft to set altimeter to either the Zhuhai Terminal QNH or VMMC QNH.

11.2.9 Controllers should refer to Appendix B for details on sectorization. Any non-standard sectorization must be coordinated through the ATC channel or via private messages.

11.2.10 Controllers covering Macau Airport should advise neighbouring controllers when a change of runway has occurred via the ATC channel or private message if necessary.

AMDT 12	Civil Aviation Authority – Macao, China	3. Transfer of Control Points	AIP MACAO 24 JUN 2004  ENR 1.5-2	Transfer of control			
				Transferring ATCU	Accepting ATCU	Point/Position	Altitude
				Zhuhai	Hong Kong	ROMEO	6000 ft
				Zhuhai	Hong Kong	'MCU' VOR	7000 ft
				Hong Kong	Macao	As soon as aircraft established on 'MCN' ILS	Appropriate profile altitude
				Macao	Zhuhai	Initial right turn after DEP/MAP	900 m or below
				Zhuhai	Hong Kong	'LKC' VOR	6 000 ft
				Hong Kong	Zhuhai	INDUS	2 700 m
				Zhuhai	Macao	As soon as aircraft established on 'MCS' LLZ	3 000 ft or below
				Macao	Hong Kong	As soon as practicable after departure and before enter Hong Kong FIR, climbing to assigned SID altitude	3 000 ft or below
				Hong Kong	Zhuhai	Common FIR boundary between Hong Kong and Zhuhai	1 800 m or below
				Macao	Hong Kong	Crossing 'MCU' VOR climbing to 4 000 ft	3 000 ft or below
				Zhuhai	Hong Kong	Crossing 'MCU' VOR climbing to 4 000 ft	4 000 ft or below
				Hong Kong	Zhuhai	INDUS	1 800 m
				For traffic from the direction of 'NLG' VOR			
				Reach 6 000 ft by 'LKC' VOR.			
				For traffic from Hong Kong FIR to Macao via Zhuhai airspace.			
				For all arrivals			
				For SIDs transiting HK FIR via PAPA, HK ATC shall not climb aircraft above 4000 ft until PAPA, unless otherwise co-ordinated and agreed with Zhuhai Approach.			
				Climbing to 1800 m for aircraft on SHL/ NLG SIDs, climbing to 1500 m for aircraft on BIGRO SID, unless otherwise co-ordinated and agreed with Zhuhai Approach.			
				For missed approach traffic under control of Zhuhai APP			

Figure 11.1: Transfer of Control Points for VMMC Airport (Source: Macau AIP ENR1.5-2)

### 3.1 澳门机场 34 号跑道进场

CON-6A、NLG-5A、NLG-7A、POU-6A、POU-8A: 珠海进近向香港管制交接点为澳门 VOR ;  
BIGRO-6A、BIGRO-7A: 珠海进近向香港管制交接点为 ROMEO 点;  
复飞: 澳门向珠海进近管制交接点为复飞后开始右转弯时; 珠海进近向香港管制交接点为 R040° ZAO/D12.5 MCU 或 MC420。

### 3.2 澳门机场 34 号跑道离场

澳门向珠海进近管制交接点为起飞后开始右转弯时;  
珠海进近向香港管制交接点参阅澳门 AIP 相关程序。

### 3.3 澳门机场 16 号跑道进场

SMT-4B/5B、CHALI-3B/4B: 香港向珠海进近管制交接点为 INDUS 点;  
珠海进近向澳门管制交接点为 LATOP 或 MC510 ;  
复飞: 在 INDUS 点前香港向珠海进近管制交接。

### 3.4 澳门机场 16 号跑道离场

在过飞行情报区边界时, 香港向珠海进近管制交接。

### 3.1 Arrival of Macao RWY34

CON-6A、NLG-5A、NLG-7A、POU-6A、POU-8A: Zhuhai Approach transfers to Hong Kong at Macao VOR;

BIGRO-6A、BIGRO-7A: Zhuhai Approach transfers to Hong Kong at point ROMEO;

Missed approach: Macao transfers to Zhuhai Approach when aircraft turning right; Zhuhai Approach transfers to Hong Kong at R040° ZAO/D12.5 MCU or MC420.

### 3.2 Departure of Macao RWY34

Macao transfers to Zhuhai Approach when aircraft turning right after take-off;

The point Zhuhai Approach transfers to HongKong refer related SID of Macao AIP.

### 3.3 Arrival of Macao RWY16

SMT-4B/5B、CHARLIE-3B/4B: Hong Kong transfers to Zhuhai Approach at point INDUS;

Zhuhai Approach transfers to Macao at LATOP or MC510;

Missed approach: Hong Kong transfers to Zhuhai Approach before point INDUS.

### 3.4 Departure of Macao RWY16

When crossing the boundary of FIRs, Hong Kong transfers to Zhuhai Approach.

Figure 11.2: Transfer of control points for VMMC Airport (Source: China AIP ENR2.2.2.3-3)

### 11.3 Special Procedures for Departing Flights from Macau International Airport (VMMC)

11.3.1 Per the AIP of Macau S.A.R., flights departing from runway 34 of Macau International Airport (VMMC) shall not overshoot Jiuzhou VOR (ZAO) due to noise abatement for Zhuhai.

11.3.2 If runway 34 is in use and the aircraft is non-RNAV, Hong Kong ATC shall notify Mainland China ATC and instruct the aircraft to fly a heading as coordinated with Mainland China ATC (usually 040) after departure. If the pilot insists on flying conventional procedures, coordination must take place.

11.3.3 When runway 34 is in use at Macau International Airport (VMMC), Macau Tower shall obtain a release from Zhuhai Approach(if online) for departing IFR aircraft prior to issuing takeoff clearance. Once this release has been obtained, only then is Macau Tower allowed to issue takeoff clearance to an aircraft.

### 11.4 Initial Altitude for Departing Flights from Macau International Airport (VMMC)

#### 11.4.1 Runway 34 departure

- All directions – S0120

#### 11.4.2 Runway 16 departure

- To Hong Kong direction – 4000ft
- To other Guangzhou directions - S0120

## 11.5 Procedure in the Absence of Mainland China ATC

11.5.1 This section defines the procedures when all Mainland China ATC are offline. This deviates from the AIP of Macau as the absence only takes place on an online network.

11.5.2 **RWY 34 Departure towards LUKBU and missed approach towards MC411** – After takeoff/missed approach, Macau Tower shall instruct aircraft with the following phraseology:

“<callsign>, leaving controlled airspace, monitor Advisory Frequency 122.8, report passing LUKBU/MC411 on <next controller frequency>.”

11.5.3 **RWY 16 arrival via INDUS** – Upon reaching INDUS, Hong Kong ATC shall instruct aircraft with the following phraseology:

“<callsign>, leaving controlled airspace, monitor Advisory Frequency 122.8, report established on the localiser runway 16 on <next controller frequency>.”

11.5.4 Hong Kong ATC is responsible for all VMMC departing and arriving traffic except runway 34 departures to Guangzhou FIR.

## 11.6 Procedure in the Absence of Hong Kong ATC

11.6.1 This section shall define the procedures when all Hong Kong ATC are offline. This deviates from the AIP of Macau as the absence only takes place on an online network.

11.6.2 **RWY 34 arrival** – Mainland China ATC shall instruct aircraft to monitor Advisory Frequency (122.800) upon reaching waypoint

ROMEO or MCU VOR.

- 11.6.3 **RWY 34 missed approach** – Macau Tower (if online) shall instruct traffic on the missed approach to tune to Mainland China ATC after the initial right turn. After passing LUKBU or MC411, Mainland China ATC shall instruct the aircraft to monitor Advisory Frequency (122.800).
- 11.6.4 **RWY 16 arrival via INDUS** – Traffic shall contact Mainland China ATC upon crossing INDUS. After establishing on MCS LOC (LOC/DME approach) or reaching MC510 (RNAV-GNSS) Mainland China ATC may instruct the aircraft to:
- Monitor Advisory Frequency (122.800) if Macau Tower is offline; or,
  - Contact Macau Tower if it is online.
- 11.6.5 **RWY 16 departure** – for SIDs entering Zhuhai TMA, Macau Tower shall directly hand traffic off to Mainland China ATC after departure.
- 11.6.6 **RWY 16 missed approach** – Traffic shall contact Mainland China ATC upon passing INDUS.

## 12. Special Agreement on FIR Boundary

- 12.1 There are differences between the depiction of the boundary line in the AIP of Hong Kong (shown in Figure 12.1) and that in the AIP of Mainland China (shown in Figure 12.2). To follow real-world

operations, and to avoid unnecessary handoffs, on VATSIM, Hong Kong vACC and VATPRC use actual controlling boundaries as the FIR boundary. (shown in Figure 12.3).

12.1.1 To comply with the real-world operation, Mainland China ATC will transfer aircraft as per Section 6.1.4,. while Hong Kong ATC will transfer aircraft prior to them reaching the line specified by the following coordinates:

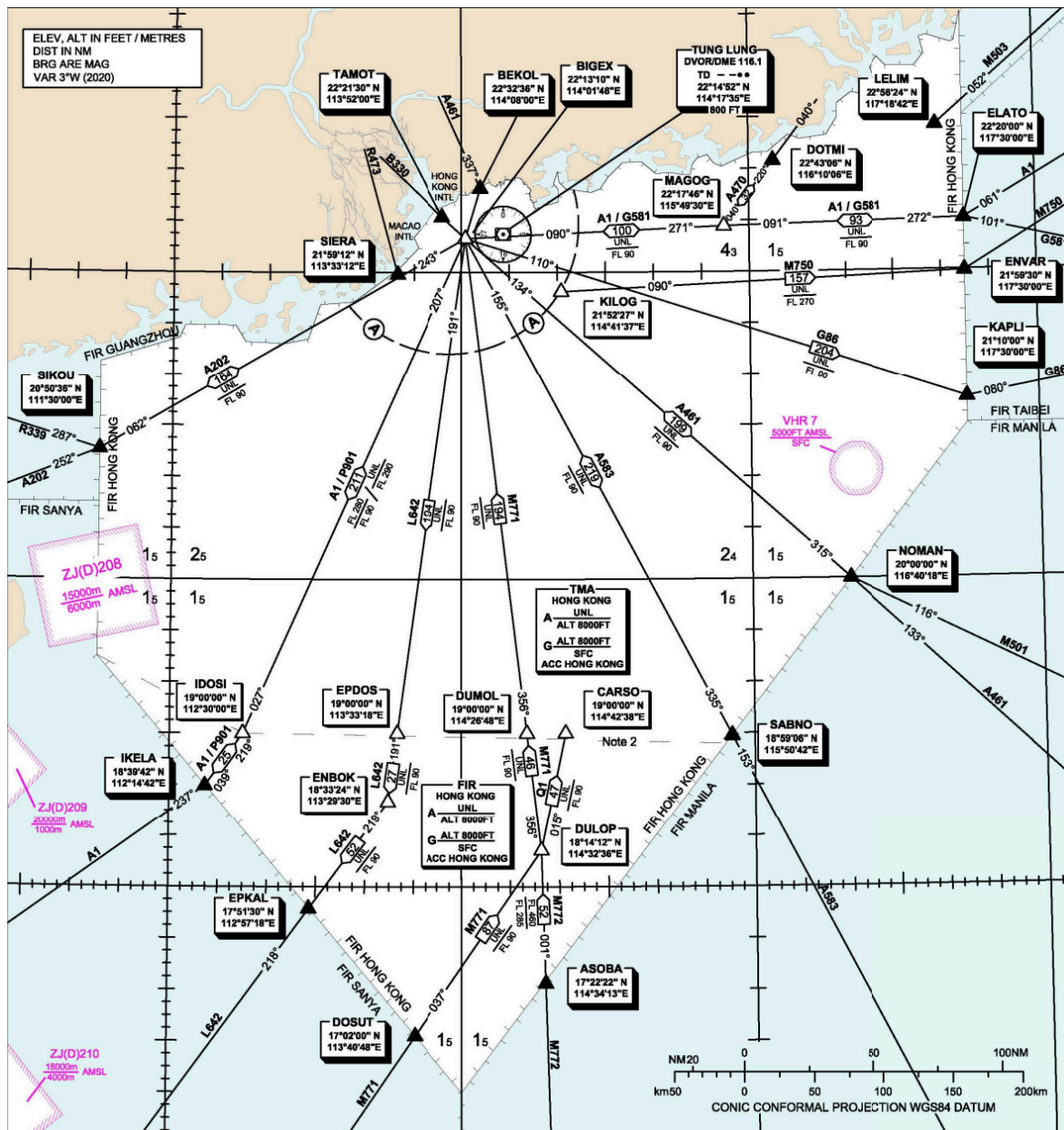
N022.47.09.363 E116.05.41.000

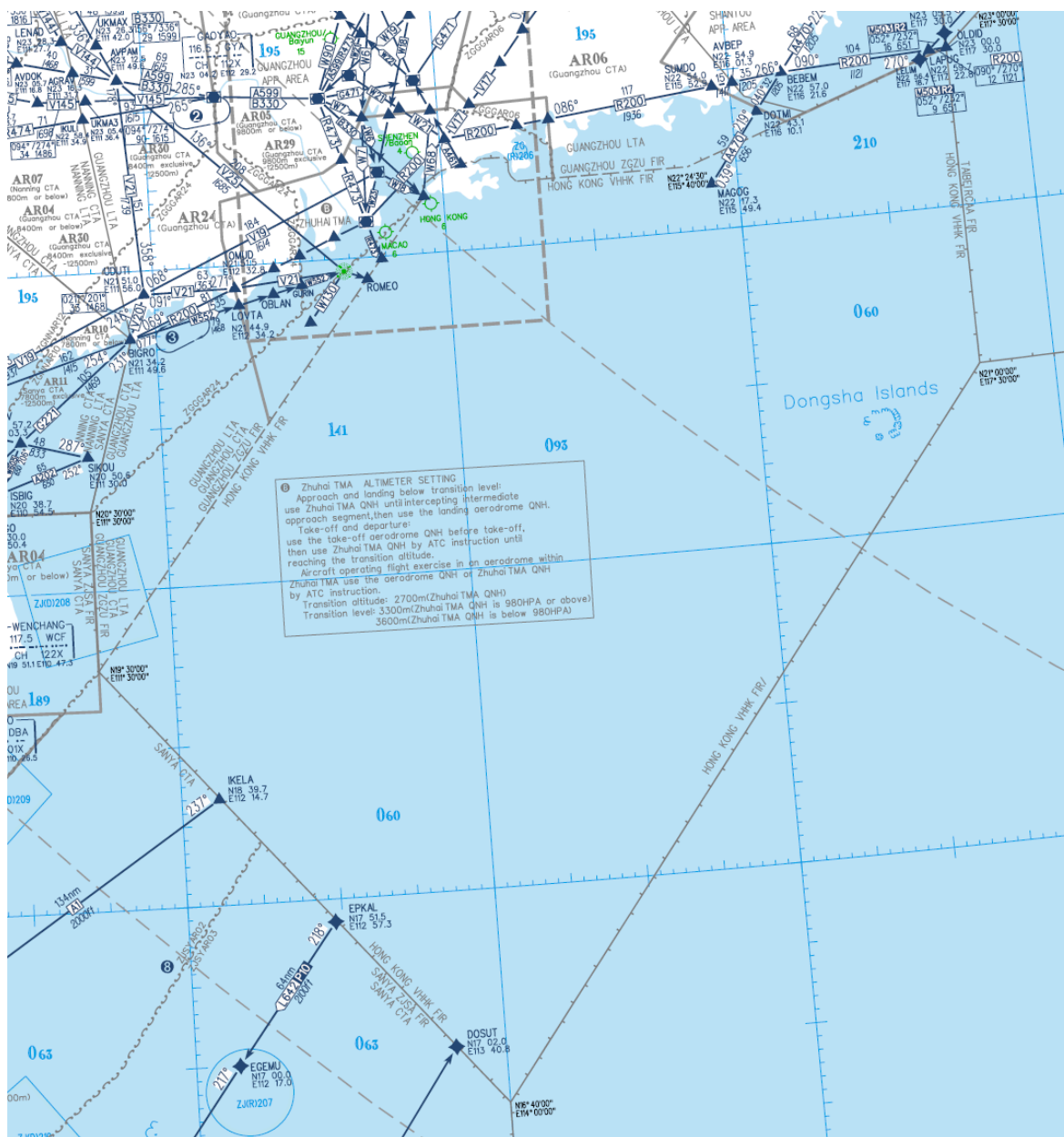
N022.43.05.999 E116.10.05.999

N022.56.21.001 E117.18.42.001

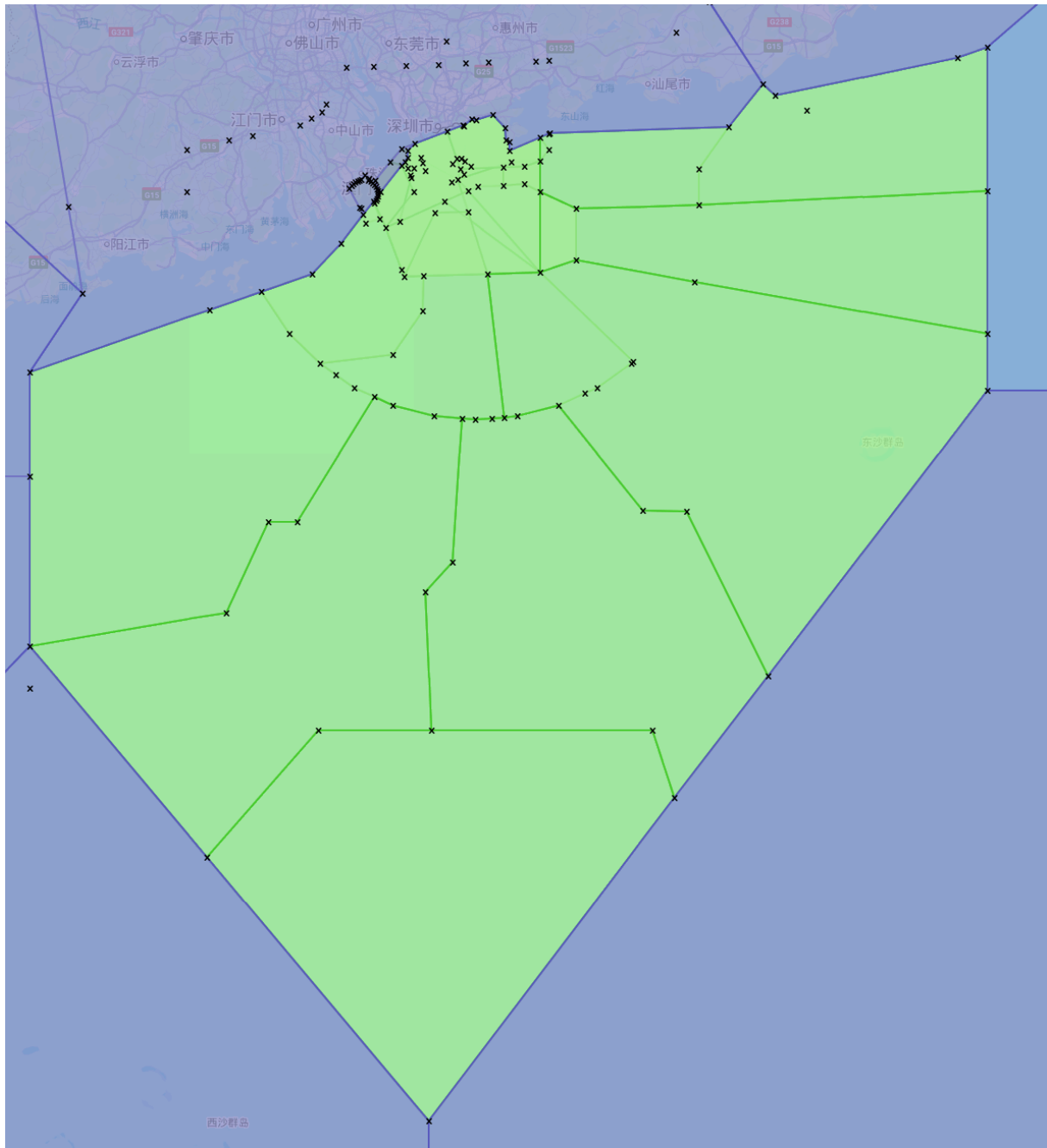
N023.00.00.000 E117.30.00.000





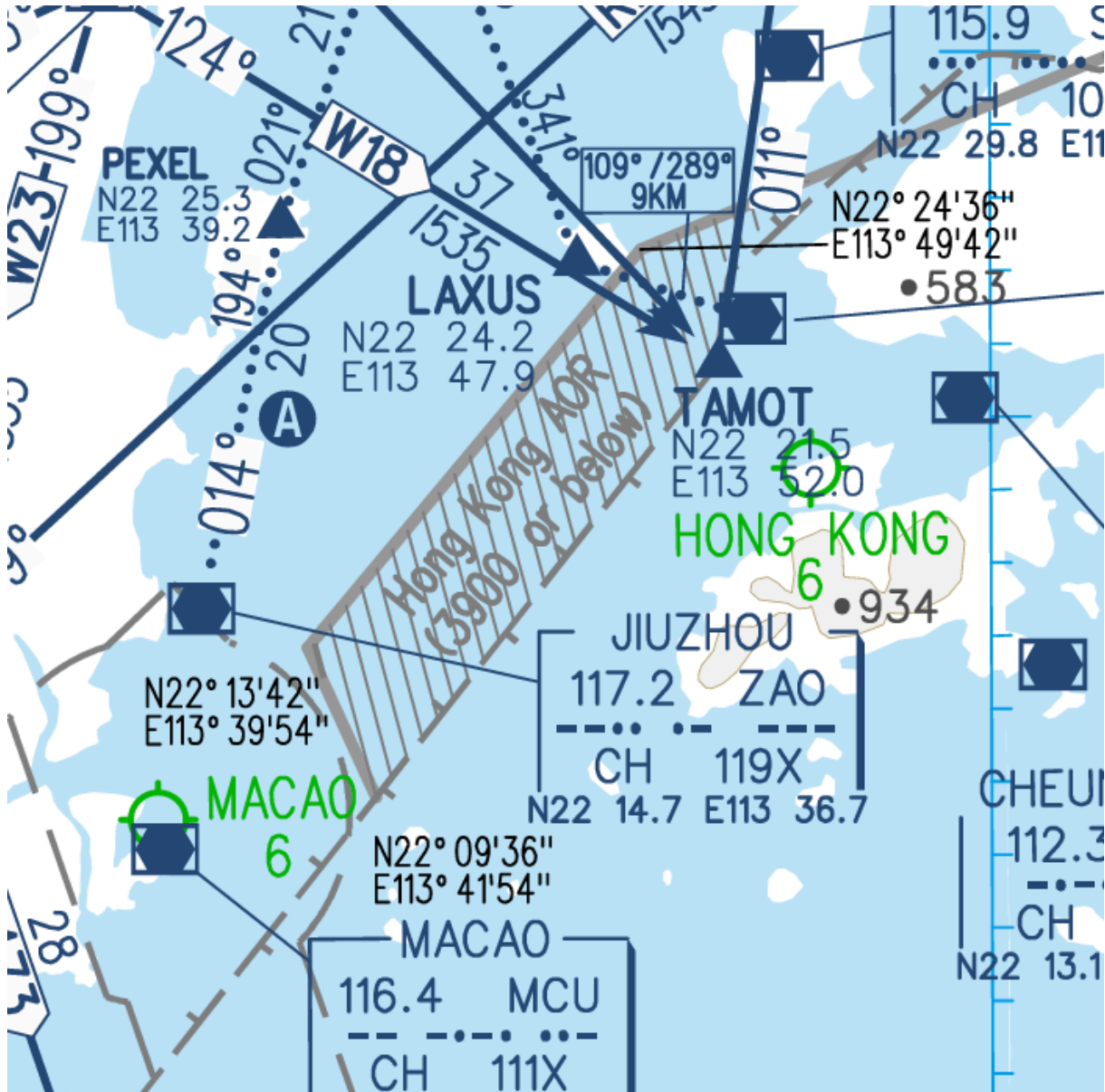


**Figure 12.2: Mainland China FIR boundaries as shown in Mainland China AIP ENR6 ERC (2024 No. 4).**



12.2 To follow the real-world operation, the Hong Kong Area of Responsibility (AoR)(shown in Figure 12.4) is established in Guangzhou FIR (ZGZU). GND-S0390 (FL130) and below are under the jurisdiction of Hong Kong ATC. Above S0390 (FL130) are under the

jurisdiction of Mainland China ATC.



*Figure 12.4: Hong Kong AoR, as shown in Mainland China AIP ENR6 ERC*

12.3 Since the coordinates of MAGOG published within the Mainland China AIP and Hong Kong AIP are different, both sides agree that the coordinates of MAGOG shall be based on the coordinates published within the Hong Kong AIP. The routing to be flown after the

handover point DOTMI shall be based on the content published within the Hong Kong AIP. The routing for the segment within the Mainland China FIRs shall end at DOTMI, e.g. A470 DOTMI.

## 13. Validity, Review, and Amendment

- 13.1 This Letter of Agreement becomes valid and takes immediate effect upon the approval of the Division Director (VATPRC1) of the People's Republic of China Division (VATPRC), the Division Director (VATSEA1) of the Southeast Asia Division (VATSEA), and the Director of Hong Kong Virtual Area Control Centre (HK vACC).
- 13.2 Should there be any changes to real-world procedures made by the local authorities, both parties shall decide whether an amendment to this LOA is necessary.
- 13.3 A content review of this LOA shall take at most six (6) months after this LOA takes effect. During the review, both parties shall convene to discuss the implementation of this LOA and make proper amendments to it if necessary. Subsequent content review shall take place at most every six (6) months henceforth.
- 13.4 Any parties wishing to amend this LOA (by adding, omitting or changing any clauses) shall contact the other party to call for an immediate review of the LOA. Both parties must reach a consensus on any amendments before they take effect. Subsequent content review shall take place at most every six (6) months henceforth.

**This Letter of Agreement is approved on 27 Nov, year 2025:**

VATPRC Division Director - **Hongye Rudi Zhang**

VATSEA Acting Division Director - **Hoo Jiong Sheng**

Hong Kong vACC Director - **Mark Hui**

## Appendix A: References

Aeronautical Information Publication of Hong Kong Special Administrative Region, published by the Hong Kong Civil Aviation Department.

Aeronautical Information Publication of the People's Republic of China, published by the Civil Aviation Administration of China.

Aeronautical Information Publication (Publicações de Informações Aeronáuticas) of Macau Special Administrative Region published by the Civil Aviation Administration of Macau S.A.R. (Autoridade de Aviação Civil da RAEM)

ICAO Doc 4444



## Appendix B: Quick Reference Table

Positions on the below take over positions on the above if they are offline.

TCP	Altitude	Transfer to	Remark
BEKOL	S0240 *S0210 on coordination	ZGJD_APP ZGGG_CTR ZGZU_CTR	Only for VHHH/VHHX->ZGSZ
	S0420 *S0450 on coordination	ZGJD_APP ZGGG_CTR ZGZU_CTR	Only for VHHH/VHHX->ZGGG
	S0690 *Above S0480 when handoff	ZGGG_CTR ZGZU_CTR	Departing VHHH/VHHX
	S0890 - S1190 *Metric Odd	ZGGG_CTR ZGZU_CTR PRC_FSS	To Guangzhou ACC *For En-Route
DAPENG (大鹏)	600m/2000ft or below	ZGJD_APP ZGGG_CTR ZGZU_CTR	To Guangzhou ACC *VFR Route Only for General Aviation
	600m/2000ft or below	VHHH_F_TWR VHHH_Z_TWR VHHH_S/C/N_TWR* VHHH_APP* HKG_W_CTR *Specific sector by coordination	To Hong Kong ACC *VFR Route Only for General Aviation
DOSUT	F270/F310/F320/F350/ F360/F390/F400	HKG_U_CTR (if F365+) HKG_D_CTR HKG_V_CTR HKG_W_CTR	To Hong Kong ACC *For En-Route
DOTMI	S0420	HKG_K_CTR HKG_E_CTR HKG_S_CTR HKG_W_CTR	Departing ZGOW
	S0450	ZGOW_APP ZGGG_CTR ZGZU_CTR ZSAM_CTR ZSHA_CTR	Landing ZGOW



	S0660 S0720 S0780	HKG_K_CTR HKG_E_CTR HKG_S_CTR HKG_W_CTR	Departing Xiamen ACC
	S0630 S0750	ZSAM_CTR ZSHA_CTR	Landing ZSAM/ZSQZ/ ZSFZ/ZSWY/ZSWZ
	F280 F300	HKG_K_CTR HKG_E_CTR HKG_S_CTR HKG_W_CTR	Landing VHHH/VMMC
	F280 F300 F360 F380	HKG_U_CTR (if F365+) HKG_K_CTR HKG_E_CTR HKG_S_CTR HKG_W_CTR	To Hong Kong ACC *For En-Route
	S0810 F330 F350 F390	ZSSS_S_CTR ZSSS_CTR ZSHA_CTR PRC_FSS	To Shanghai ACC *For En-Route
EPKAL	F280/F310/F320/F350/ F360/F390/F400	ZJSY_O_CTR ZJSA_CTR PRC_FSS	To Sanya ACC *For En-Route
QZ (青州)	600m/2000ft or below	VHHH_F_TWR VHHH_Z_TWR VHHH_S/C/N_TWR* VHHH_APP HKG_W_CTR *Specific sector by coordination	To Hong Kong ACC *VFR Route Only for General Aviation
	600m/2000ft or below	ZGJD_APP ZGGG_CTR ZGZU_CTR	To Guangzhou ACC *VFR Route Only for General Aviation
IKELA	F280/F300/F340/F380/F400/F4 30	ZJSY_O_CTR (if F140+) ZJSA_CTR (if F140+) PRC_FSS (if F256+)	To Sanya ACC *For En-Route
	F270/F290/F330/F370/F390/F4 10/F450	HKG_U_CTR (if F365+) HKG_V_CTR HKG_W_CTR	To Hong Kong ACC *For En-Route
INDUS	S0270	ZGJD_APP ZGGG_CTR ZGZU_CTR	Landing VMMC* *For runway 16

LANDA	F110 *9000ft alternate	ZGJD_APP ZGGG_CTR ZGZU_CTR	Landing ZGSZ
LELIM	F300	HKG_K_CTR HKG_E_CTR HKG_S_CTR HKG_W_CTR	Only for ZSPD/ZSQD/ ZSYT/ZYTL -> VHHH
	F330 F350	ZSSS_S_CTR ZSSS_CTR ZSHA_CTR PRC_FSS	Only for VHHH/VMMC -> ZSPD/ZSQD/ ZSYT/ZYTL
LUKBU	9000ft* *Aircraft are released for climb to FL120	VHHH_S_DEP VHHH_N_DEP VHHH_APP HKG_W_CTR	Departing ZGSZ*/VMMC * By coordination only Primary use SIERA
	300m/1000ft	VHHH_N_TWR VHHH_C_TWR VHHH_S_TWR VHHH_APP HKG_W_CTR	ZGSZ->VHHH *VFR Route Only for General Aviation
	300m/1000ft	ZGJD_APP ZGGG_CTR ZGZU_CTR	VHHH->ZGSZ *VFR Route Only for General Aviation
MCU	7000ft	VMMC_APP VHHH_L_APP VHHH_W_APP HKG_W_CTR VHHH_APP	Landing VMMC
ROMEO	6000ft	VMMC_APP VHHH_L_APP VHHH_W_APP HKG_W_CTR VHHH_APP	Landing VMMC
	S0120/4000ft *S0180/6000ft on coordination	VMMC_APP VHHH_L_APP VHHH_W_APP HKG_W_CTR VHHH_APP	To Hong Kong ACC *IFR Route Only for General Aviation

	S0150/5000ft	ZGJD_APP ZGGG_CTR ZGZU_CTR	To Guangzhou ACC *IFR Route Only for General Aviation
SESAN (星山)	600m/2000ft or below	VHHH_F_TWR VHHH_Z_TWR VHHH_S/C/N_TWR* VHHH_APP HKG_W_CTR *Specific sector by coordination	To Hong Kong ACC *VFR Route Only for General Aviation
	600m/2000ft or below	ZGJD_APP ZGGG_CTR ZGZU_CTR	To Guangzhou ACC *VFR Route Only for General Aviation
	S0120/4000ft	ZGJD_APP ZGGG_CTR ZGZU_CTR	To Guangzhou ACC *IFR Route Only for General Aviation
	S0150/5000ft	VHHH_F_TWR VHHH_Z_TWR VHHH_S/C/N_TWR* VHHH_APP HKG_W_CTR *Specific sector by coordination	To Hong Kong ACC *IFR Route Only for General Aviation
SIERA	F120	VMMC_APP VHHH_L_APP VHHH_W_APP HKG_W_CTR VHHH_APP	Departing ZGSZ
	F190 F210 F230	VHHH_W_APP HKG_W_CTR VHHH_APP	Landing VHHH
	F230 F250	VHHH_W_APP HKG_W_CTR VHHH_APP	Departing ZGGG
SIKOU	S0630	HKG_W_CTR	Departing ZJHK/ZJQH
	S0570	HKG_W_CTR	Departing ZGZJ/ZGBH
	S0600	ZGZJ_APP ZGNN_CTR ZGZU_CTR	Landing ZGZJ
	S0810 S0890	HKG_W_CTR	Departing ZJSY

	S0840	ZJSY_L_CTR ZJSA_CTR PRC_FSS	Landing ZJSY
	S0660 S0720	ZGNN_CTR ZGZU_CTR	Landing ZJHK/ZJQH
	S0720 S0780	ZGNN_CTR ZGZU_CTR	Landing ZGNN/ZGBH
	S1040/S1160/S1220	ZJSY_L_CTR ZJSA_CTR PRC_FSS	To Sanya ACC (beyond ASSAD) *For En-Route
	S0980 - S1220 *Metric Even	ZJSY_L_CTR ZJSA_CTR PRC_FSS	To Sanya ACC (beyond WUY) *For En-Route
	S1010 - S1250 *Metric Odd	HKG_U_CTR (if F365+) HKG_W_CTR	To Hong Kong ACC *For En-Route
TAMOT	S0450 *S0420 on coordination	ZGJD_APP ZGGG_CTR ZGZU_CTR	Landing ZGGG
	F280 *Lower altitudes on coordination	HKG_W_CTR	Landing VHHX
	S0840 - S1220 *Metric Even	HKG_U_CTR (if F365+) HKG_W_CTR	To Hong Kong ACC *For En-Route
ZAO (九洲)	300m/1000ft or below	VMMC_TWR VMMC_APP VHHH_L_APP VHHH_W_APP VHHH_APP HKG_W_CTR	ZGSZ->VMMC *VFR Route Only for General Aviation
	300m/1000ft or below	ZGJD_APP ZGGG_CTR ZGZU_CTR	VMMC->ZGSZ *VFR Route Only for General Aviation
	150/500ft or below *when VHHH RWY 07s in use 250m/800ft or below *when VHHH RWY 25s in use	VMMC_TWR VMMC_APP VHHH_L_APP VHHH_W_APP VHHH_APP HKG_W_CTR	To Hong Kong ACC *VFR Route Only for General Aviation
	300m/1000ft or below	ZGJD_APP ZGGG_CTR ZGZU_CTR	To Guangzhou ACC *VFR Route Only for General Aviation

FIR Border	S0180 or below	ZGJD_APP ZGGG_CTR ZGZU_CTR	Departing VMMC* *For runway 16
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## Revisions

Revision	Date	Content
R0	2023-05-01	Initial Release
R1	2024-05-24	<ul style="list-style-type: none"> <li>• Handoff levels changed at DOTMI/IKELA/SIKOU/BEKOL/TAM OT</li> <li>• FIR boundary changed</li> <li>• Routing requirements changed</li> <li>• VMMC procedures changed</li> <li>• New sector section</li> <li>• New appendix</li> <li>• Reword most of the sections</li> </ul>
R2	2024-11-14	<ul style="list-style-type: none"> <li>• Fixed TAMOT Altitude direction</li> <li>• Route requirements when departing ZGGG/ZGSZ changed</li> <li>• The margin of the boundary between the AoRs changed</li> <li>• Add Hong Kong Area Of Responsibility</li> <li>• Add VMMC departure limitations when runway 34 is in use</li> <li>• Hong Kong TMA airspace changed</li> </ul>
R3	2025-07-28	<ul style="list-style-type: none"> <li>• Determined the coordinates used by MAGOG</li> <li>• VMMC SHL SID changed to IDUMA</li> <li>• Add temporary GA track HT</li> <li>• Changed LUKBU altitude</li> <li>• Changed LANDA altitude</li> <li>• Changed SIERA handover position</li> </ul>

		<ul style="list-style-type: none"> <li>• Encourage early handover if no conflict</li> <li>• Changed VMMC initial altitude for NLG</li> </ul>
R4	2025-11-27	<ul style="list-style-type: none"> <li>• Changed VMMC departure handling procedures</li> <li>• Added new sectors</li> <li>• Handoff levels changed at SIKOU/IKELA/BEKOL</li> </ul>