STANDARD OPERATING PROCEDURE (SOP)
DOCUMENT NUMBER: HKVACC-SOP001-R13
DATE ISSUED: 16 OCT 2025
REVISION: 13

SUBJECT: Hong Kong International Airport (VHHH) Standard Operating Procedures

EFFECTIVE DATE: 30 OCT 2025

SCOPE: Outlines standard techniques for controllers staffing aerodrome positions at Hong Kong International Airport (VHHH) on VATSIM.

TABLE OF CONTENTS

1. PURPOSE

1.1. This Standard Operating Procedure (SOP) sets forth the procedures for all controllers providing air traffic control service at Hong Kong International Airport (VHHH) to improve communication, techniques, and to distinguish procedures that are specific to the online environment.

2. ROLES AND RESPONSIBILITIES

2.1. The Office of Primary Responsibility (OPR) for this SOP is the team under the supervision of the Facilities Director. This SOP shall be maintained, revised, updated or cancelled by the Facilities Director. Any suggestions for modification / amendment to this SOP should be sent to the Facilities Director for review.

3. DISTRIBUTION

3.1. This SOP is intended for controllers staffing ADC positions at Hong Kong International Airport (VHHH), as well as other controllers who interface with those controllers.

4. BACKGROUND

4.1. Over time, it has been observed that a written standard procedure is helpful to ADC controllers due to the vast knowledge required to control within this complex airspace. Due to operational differences between this online environment on VATSIM and that in the real world, it is also necessary to define procedures that are specific to the online environment.

5. GENERAL PROCEDURES

5.1. Aerodrome control service shall be provided by the Aerodrome Control Unit (ADC).

5.2. ADC shall provide:

- Aerodrome control service;
- Flight information service;
- Alerting service.

5.3. ADC shall issue information and instructions to aircraft under its control to achieve a safe, orderly and expeditious flow of traffic and to assist pilots in preventing collision between:

- Aircraft flying in the ATZ;
- Aircraft flying in the CTR Zones;
- Aircraft landing or taking off;
- Aircraft operating on the manoeuvring area;
- Aircraft operating on the manoeuvring area and other objects or obstructions;
- Aircraft taxiing on the apron.

5.4. ADC shall set-up voice Automatic Terminal Information Service (ATIS) using the vATIS profile provided by Hong Kong vACC. Controllers shall open both frequencies simultaneously.

POSITION	TEXT CALL SIGN	FREQUENCY	ES IDENTIFIER
Hong Kong Departure Information	VHHH_D_ATIS	127.050	DTIS
Hong Kong Arrival Information	VHHH_A_ATIS	128.200	ATIS

5.5. Controllers shall always refer to SOP011 and other applicable VATSIM regulations when broadcasting ATIS.

5.6. Selection of Runway Direction

5.6.1. A preferential runway system is used at HKIA. During normal operations, controllers shall always refer to the Hong Kong Civil Aviation Department (CAD) Automatic Terminal Information Service (ATIS) website (https://atis.cad.gov.hk/) for real world information to determine the runway direction.

5.6.2. If real world information is unavailable, RWY 07s will be nominated as the runway direction whenever the tailwind component is 5 KTS or less. AMC shall also select an appropriate runway operating mode as detailed in the next section.

5.6.3. In specific situations it may be necessary to select the runway direction that is opposite to that of the real world (e.g. selecting RWYs 07 when RWYs 25 in use in the real world). Such a decision shall be made by AMC.

5.7. Runway Operating Modes

5.7.1. There are three runways at HKIA: the north runway (RWY 07L / 25R), the centre runway (RWY 07C / 25C) and the south runway (RWY 07R / 25L). As such, there are 3 different modes of operation available for use. The details of each mode are detailed below.

5.7.2. Arrivals Only, Departures Only, Mixed (ADM) Mode

5.7.2.1. Under this operating mode all three runways are available for use. Aircraft shall be assigned the appropriate runway using the compass departure strategy as specified below:

<u>RWY 07s</u>

- Runway 07L: Arrivals Only
- Runway 07C: Departures Only (via BEKOL, LEKEN – V601 / V611 or DALOL V621 / V631)
- Runway 07R: Mixed Arrivals and Departures (Departures via DALOL – V642 / V652 or PECAN – V10 / V11 / V12, Arrivals for BAC / Cargo apron and limited passenger aircraft)

<u>RWY 25s</u>

- Runway 25R: Arrivals Only
- Runway 25C: Departures Only (via DALOL or PECAN)
- Runway 25L: Mixed Arrivals and Departures (Departures via BEKOL or LEKEN, Arrivals for BAC / Cargo apron and limited passenger aircraft)

5.7.2.2. Aircraft with SID assignment not following the compass departure strategy are known as “off-mode” departures.

5.7.2.3. APP may assign cargo / BAC arrivals to the south runway without prior coordination with AMC, up to a maximum of 6 aircraft per hour. Passenger aircraft arrivals may also be assigned to the south runway provided that the limit has not yet been reached.

5.7.2.4. Aircraft will operate via dependent parallel approaches to RWYs 07L / 07R or RWYs 25L / 25R.

5.7.2.5. Independent parallel departures will normally be conducted on RWYs 07C / 07R or RWYs 25L / 25C. This information shall be broadcast on the Departure ATIS.

5.7.2.6. Arrivals that are not able to accept the north runway shall be assigned to the south runway.

5.7.3. Segregated Mode

5.7.3.1. Under this operating mode, one runway is used for arrivals and another is used for departures. The northernmost available runway (either north or centre) is the arrival runway with the southernmost available runway (either centre or south) used for departures.

5.7.3.2. Where necessary, TRAM for arrivals may be activated (this shall be avoided when the South Runway is not in use).

5.7.3.3. Control of aircraft on the closed runway is the responsibility of GMC.

5.7.3.4. Between 2300 – 2359 UTC daily, Centre-South (Departure/Mixed (D/M) Mode) dual runway operations may be adopted at the discretion of AMC when the North Runway is not in use. During this time departures shall be assigned the appropriate runway using the compass departure strategy for Arrivals Only, Departures Only, Mixed (ADM) mode. All arrivals shall be directed to the South Runway. Owing to the reduced arrival rate allowed for this operating mode (6 aircraft per hour), AMC should only adopt this operating mode if doing so will not cause undue delay to arriving aircraft.

5.7.4. Single Runway Operations (SRO) Mode

5.7.4.1. Under this operating mode, a single runway is used for arrivals and departures.

5.7.5. During normal operations, AMC shall determine the runway operating mode to be adopted using the CAD ATIS website (see Section 5.6.1). Under specific circumstances (e.g. heavy outbound traffic), it is permissible for a different runway operating mode to be adopted at the discretion of AMC.

5.8. When AMC is not open, CDC/GMC shall be responsible for selecting the appropriate runway direction and operating mode, however pilots will have the final say as to which runways to use.

5.9. Runway Change Procedure (Change of Operating Mode)

5.9.1. When a change of operating mode is considered necessary by AMC, they shall first seek approval from APP/FAD. Once this approval has been given, AMC shall coordinate with APP/FAD regarding the last arrival and departure under the old operating mode and the first arrival and departure under the new operating mode.

5.9.2. AMC shall advise CDC and GMC of the change so that they may begin issuing revised ATC and taxi clearances.

5.10. Runway Change Procedure (Change of Runway Direction)

5.10.1. When a change of runway direction is considered necessary by AMC, they shall first seek approval from APP/FAD. Once this approval has been given, APP will advise AMC of the callsign of the last arrival for the old runway(s), along with an expiry time for departing aircraft after which all aircraft shall depart via the new runway(s)

5.10.2. AMC shall communicate the change of runway direction to CDC and GMC.

5.10.3. AMC shall pass the expiry time issued by APP to GMC. GMC shall inform AMC of the number of departures planned for the old runway(s) and the callsign of the last departure. Any aircraft that are not able to depart before the expiry time shall be issued with a revised clearance for the new runway(s). The controller responsible for the ATIS shall prepare a new ATIS with the updated runways-in-use.

5.10.4. CDC shall make a general broadcast of the runway change on their frequency in addition to amending individual ATC clearances.

5.10.5. AMC should note that, depending on the traffic situation, it may be necessary to transfer aircraft departing the old runway(s) to APP as opposed to DEP. Close coordination shall be effected with AMC/APP regarding this.

5.10.6. AMC shall request approval for release from APP the first departure from the new runway(s).

6. CLEARANCE DELIVERY (CDC)

6.1. Callsigns & Frequencies

POSITION	TEXT CALL SIGN	VOICE CALL SIGN	FREQUENCY	CODE	CJS
Clearance Delivery	VHHH_DEL	"Hong Kong Delivery"	122.150	CDC	CD

6.2. Responsibilities

6.2.1. CDC is responsible for obtaining and passing an ATC clearance to every IFR departure.

6.2.2. CDC duties shall be delegated to GMC when CDC is closed.

6.2.3. CDC shall coordinate with the relevant positions for departures on non-departure runways, local IFR flights and flights requiring non-standard departures.

6.2.4. CDC shall inform AMC of any after departure instructions for non-standard departures as coordinated with DEP.

6.2.5. CDC shall **not** be responsible for VFR departures. All VFR departures shall contact GMC/AMC directly for taxi.

6.3. General Procedures

6.3.1. CDC shall ensure all departing traffic have the current Departure ATIS prior to contacting GMC.

6.3.2. CDC shall issue ATC clearances to departing traffic in accordance with the Letters of Agreements (LOA). Controllers may refer to SOP001 Annex I for details on prerequisites for issuing ATC clearance.

6.3.3. All SID procedures include a 5000ft initial climb restriction – CDC shall not issue a clearance to a different altitude or flight level unless instructed by DEP.

6.3.4. When an aircraft requests departure on a non-departure runway for operational reasons (e.g. requesting RWY 07L due to being unable to achieve the RWY 07R minimum 4.8% climb gradient), CDC shall coordinate with AMC and DEP before issuing ATC clearance.

6.3.5. When an aircraft is unable to accept the assigned SID and/or requests a non-standard departure (including non-RF SIDs and non-RNP 1 contingency departures, e.g. RAMEN2A), CDC shall coordinate with DEP and TMC before issuing ATC clearance. Under normal circumstances, the non-RNP1 contingency departures shall be preferentially assigned. CDC shall note the following restrictions for assigning non-RNP1 contingency SIDs:

- Contingency SIDs from RWY 07R shall only be assigned when HKIA is operating in ADM mode, North / South segregated mode or RWY 07R SRO mode;
- Contingency SIDs from RWY 07C shall only be assigned when HKIA is operating in North / Centre segregated mode or RWY 07C SRO mode;
- Contingency SIDs from RWY 25L shall only be assigned when HKIA is operating in ADM mode, North / South segregated mode or RWY 25L SRO mode;
- Contingency SIDs from RWY 25C shall only be assigned when HKIA is operating in North / Centre segregated mode or RWY 25C SRO mode;
- Contingency SIDs from the north runway shall only be assigned when HKIA is operating in north runway SRO mode.

Any after departure instructions for aircraft departing via radar vectors shall also be passed to AMC.

6.3.6. There are two methods of passing an ATC clearance:

- By Pre-Departure Clearance (PDC) system to pilots connected to the Hoppie network
- By R/T to all other pilots

6.3.7. Aircraft not utilising the PDC system shall be passed their ATC clearance via R/T. In this case, CDC shall pass the clearance and verify their readback. The standard clearance format shall include callsign, clearance limit, routing, SID, initial climb clearance and squawk (e.g. “cleared to Taipei, flight planned route, climb via DALOL1X departure to 5000ft, squawk 3501”).

6.3.8. Aircraft issued a non-standard departure shall be told to expect radar vectors to the first waypoint on their route, e.g. “expect radar vectors to ENVAR” as part of the ATC clearance.

6.3.9. CDC shall instruct aircraft to contact the appropriate GMC frequency when ready to start.

6.3.10. During periods of heavy outbound traffic, a clearance may include an expiry time (e.g. TOBT/CTOT). GMC shall inform CDC if an aircraft is unable to comply with the expiry time restriction, and CDC shall issue a revised clearance as appropriate.

6.3.11. To assist crews in their departure planning, whenever there is a change of departure runway, CDC shall, in addition to amending individual SID clearances, also make a general broadcast of the runway change on the CDC frequency.

6.4. Pre-Departure Clearance (PDC) Procedures

6.4.1. CDC may opt to issue clearances via the PDC system. Controllers may refer to SOP007 for details on operating the PDC system.

6.4.2. PDC clearances are not available to aircraft requiring a non-standard departure.

6.4.3. CDC shall pass any subsequent amendments to the ATC clearance or re-clearance via R/T.

7. GROUND MOVEMENTS CONTROL (GMC)

7.1. Callsigns & Frequencies

POSITION	TEXT CALL SIGN	VOICE CALL SIGN	FREQUENCY	CODE	CJS
Ground Movements Control (Area 1)	VHHH_1_GND	"Hong Kong Ground"	121.600	GMC1	G1
Ground Movements Control (Area 2)	VHHH_2_GND	"Hong Kong Ground"	122.550	GMC2	G2
Ground Movements Control (Area 3)	VHHH_3_GND	"Hong Kong Ground"	121.875	GMC3	G3
Ground Movements Control (Area 4)	VHHH_4_GND	"Hong Kong Ground"	122.600	GMC4	G4
Ground Movements Control (Area 5)	VHHH_5_GND	"Hong Kong Ground"	122.125	GMC5	G5

7.2. Responsibilities

7.2.1. GMC shall be responsible for the control of aircraft operating on the manoeuvring area except for those on the runway and any taxiways delegated to AMC.

7.2.2. GMC shall be responsible for preventing collision between:

- Aircraft operating on the manoeuvring area and other objects or obstructions, except on the runway and any taxiways delegated to AMC;
- Aircraft taxiing on an apron.

7.2.3. GMC shall assume the responsibilities of CDC when CDC is not open.

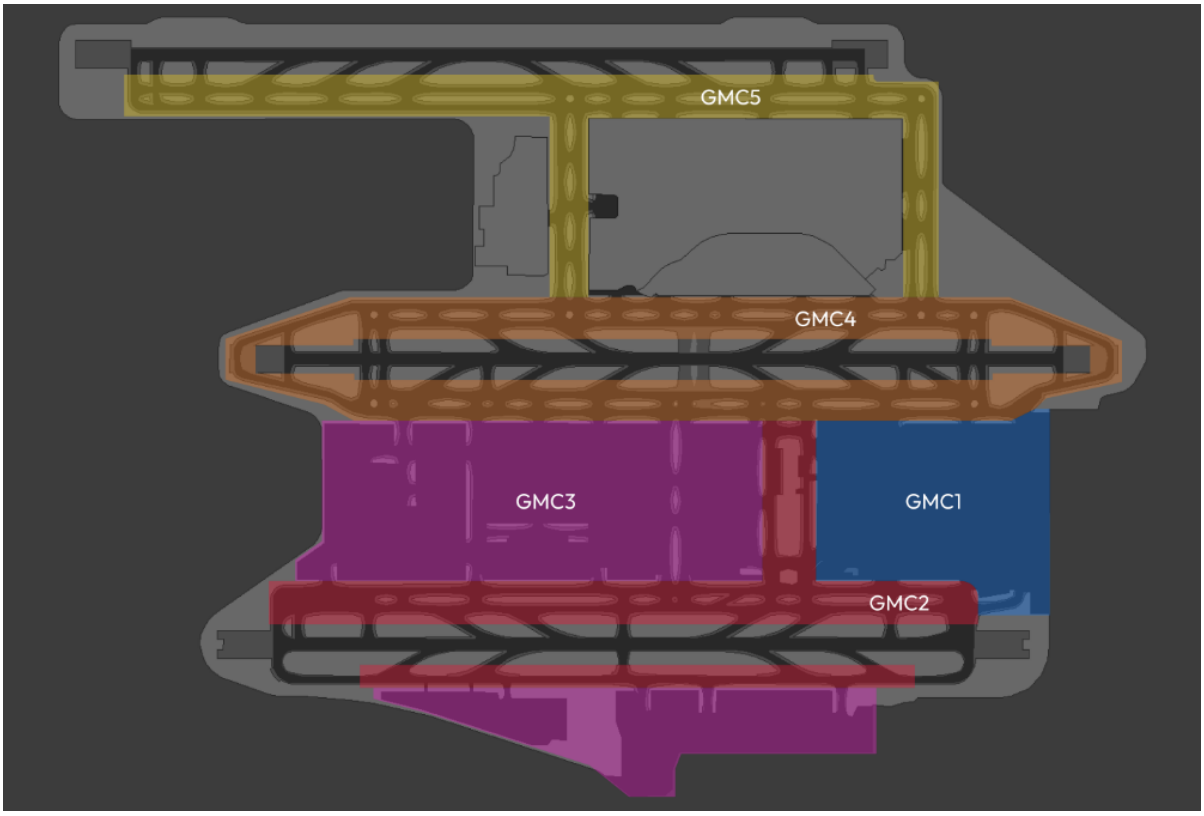
7.3. Logon Order

7.3.1. The order in which GMC positions shall log on has been tabulated below. Sectors other than GMC1 may only be opened after CDC has been opened.

<table>
<tr><th colspan="4">Positions on the left take over positions on the right if offline</th><th>AoR</th></tr>
<tr><td rowspan="5">VHHH_1_GND</td><td rowspan="2">VHHH_1_GND</td><td colspan="2">VHHH_1_GND</td><td>GMC1</td></tr>
<tr><td colspan="2">VHHH_3_GND</td><td>GMC3</td></tr>
<tr><td rowspan="3">VHHH_2_GND</td><td colspan="2">VHHH_2_GND</td><td>GMC2</td></tr>
<tr><td rowspan="2">VHHH_4_GND</td><td>VHHH_4_GND</td><td>GMC4</td></tr>
<tr><td>VHHH_5_GND</td><td>GMC5</td></tr>
</table>

7.4. GMC Area of Responsibility

7.4.1. In addition to the diagram below, GMC4 shall also be responsible for the centre runway when the centre runway is closed, and GMC2 shall also be responsible for the south runway when the south runway is closed.



7.5. Coordination

7.5.1. AMC/GMC Coordination

7.5.1.1. GMC shall not instruct aircraft to taxi on a routing such that the aircraft may block the rapid exit taxiways of the designated arrival runway(s) without prior coordination with AMC.

7.5.1.2. GMC may delegate portions of parallel TWYs C, D, A, F, K and J to AMC to prevent blockage from traffic vacating runways.

7.5.1.3. To ensure that arrivals from RWY 07R do not occupy TWY J8 when contacting GMC, GMC2 may delegate the southernmost portion of TWY W to AMS such that aircraft may be instructed to taxi onto TWY W directly. GMC2 shall ensure this aircraft has priority over other traffic on TWY H and J.

7.5.1.4. GMC shall notify AMC of any intersection departures.

7.5.1.5. GMC shall coordinate with AMC if any rapid exit TWYs are not available due to other ground traffic movements.

7.5.2. GMC Inter-Sector Coordination

7.5.2.1. During a runway change, GMC sectors shall coordinate amongst themselves regarding any changes in the flow of traffic on taxiways connecting each GMC sector.

7.5.2.2. When GMC is sectorised, GMC shall coordinate taxi routings between each GMC sector ahead of time as opposed to individual coordination.

7.5.2.3. When RWY 07s are in use, GMC3 may delegate TWY N to GMC2 to facilitate the taxiing of RWY 07C departures.

7.5.2.4. When RWY 25s are in use, GMC3 may delegate TWY N to GMC4 to facilitate the taxiing of RWY 25R arrivals.

7.6. Control of Traffic

7.6.1. Control of traffic crossing active runways

7.6.1.1. Aircraft requiring to cross active runways shall contact the appropriate AMC sector for authorization.

7.6.1.2. GMC shall instruct aircraft to taxi to the runway holding point and contact AMC for the runway crossing. Prior to handing the aircraft off to AMC, GMC shall advise AMC of the crossing traffic. AMC shall acknowledge.

7.6.1.3. AMC shall notify GMC when crossing clearance has been given. GMC shall acknowledge.

7.6.2. Control of traffic crossing inactive runways

7.6.2.1. GMC may instruct aircraft to cross inactive runways without prior approval from any AMC sector.

7.6.3. Taxi Restrictions / Procedures

7.6.3.1. Due to aircraft dimensions there are restrictions on the taxiing and parking of **Airbus A380** aircraft. While all TWYs at HKIA are approved for Code F aircraft (except Q1, Q2, Q3, L7, N1, W1, W2, the section of TWY M between B and the HAECO hangars), TWYs N2, H2, K1-7 (except K4), L2 and L3 are not approved for A380 operations.

7.6.3.2. Landing traffic shall be given priority on the parallel taxiways next to the landing runway over departing traffic to minimise dwell-time near rapid exit taxiways.

7.6.3.3. When RWY 07s are in use, aircraft departing via RWY 07C shall be routed via TWY A westbound. Arrivals shall be routed via TWY B eastbound.

7.6.3.4. When RWY 25s are in use, aircraft departing via RWY 25C shall be routed via TWY A eastbound. Arrivals shall be routed via TWY B westbound.

7.6.3.5. The following standard taxi routings shall be issued to arriving aircraft:

RWY 07s
T1 North Apron arrivals from RWY 07L shall be routed via the RWY 25 side of the Centre Runway. Other arrivals shall be routed via the RWY 07 side of the Centre Runway.

RWY 25s
T1 Main Apron arrivals from RWY 25R shall be routed via the RWY 25 side of the Centre Runway. Other arrivals shall be routed via the RWY 07 side of the Centre Runway.

7.6.3.6. GMC is not responsible for the provision of Air Traffic Services within the GFS dispersal. However, traffic information on other arrivals and departures in the area should be passed to the pilots concerned.

7.6.3.7. There are two access taxiways from TWY K to GFS, TWY Q1 and Q2. GFS helicopters and fixed wing aircraft may use either taxiway.

7.6.3.8. GMC is not responsible for the provision of Air Traffic Services within the BAC apron. However, traffic information on other arrivals and departures in the area should be passed to the pilots concerned.

7.6.3.9. There is one access taxiway to the BAC apron, TWY Q3.

7.6.3.10. To mitigate against incorrect SID selection when parallel independent departure operations from RWY 07C and RWY 07R are in progress, GMC shall instruct aircraft departing RWY 07C to report their assigned SID when handing aircraft off to AMC using the phraseology: "report your SID to Tower on xxx".

7.6.3.11. TWYs B1 and B12 are Wrap-Around Taxiways (WAT) established to allow aircraft to bypass the centre runway when taxiing. These two WATs are under the jurisdiction of GMC4. Coordination with AMC is **not** necessary when using the WATs, however aircraft shall not be taxied on the WAT closest to the departure end of the centre runway when the centre runway is in use for departures. (e.g. when RWY 07C is in use, WAT B12 shall not be used). Additionally, when the centre runway is in use for arrivals, both WATs shall not be used and aircraft requiring runway crossing shall utilise other holding points.

7.6.3.12. Taxi clearances for helicopter VFR departures are issued by AMC. Where necessary, AMC shall coordinate with GMC regarding the use of taxiways for helicopters. GMC may provide taxi clearances for helicopters **if AMC is not open.**

7.6.3.13. GMC shall issue a VFR squawk code to fixed wing VFR departures. When AMC is not open, helicopter VFR departures shall also be issued with a VFR squawk code.

7.6.3.14. Helicopters may depart from three different locations around HKIA. GFS helicopters may depart directly from the helipads on the GFS dispersal. All helicopters may depart from the section of TWY K between TWY Q2 and Q3 or the intersection between TWY H and TWY H2.

7.6.4. Aircraft Parking

7.6.4.1. GMC shall allocate a parking stand for every aircraft parking on the North, South or West passenger aprons or cargo apron and a parking area for every General Aviation aircraft (BAC apron or Maintenance apron). The parking

stand shall be marked using GRP as appropriate.

7.6.4.2. Where possible, GMC shall endeavour to accommodate requests for a specific parking stand from arriving aircraft.

7.6.4.3. Parking stand numbers are prefixed with a letter to indicate the apron or terminal area – N (North Apron), S (South Apron), W (West Apron), X (Cargo Apron), M (Maintenance Apron), D (Midfield Apron), L (Long-Term Parking Apron), R (T1 North Satellite Apron).

7.6.4.4. The majority of parking stands can accommodate aircraft up to B744 and a few can accommodate up to A380. Some parking stands can only accommodate narrow-body aircraft. When passenger apron parking stands that can accommodate wide-body aircraft are used by a narrow-body aircraft an off-set parking is used and the stand number is suffixed with an L or R to indicate the off-set nature. When some cargo apron parking stands are used by MD11 aircraft or smaller an off-set parking stand is used and the stand number is suffixed by an L or R to indicate the off-set nature.

7.6.4.5. Parking stand W126 is a self-manoeuvring stand and does not require a push-back. (i.e. taxi in via W and taxi out via W1) This stand can only accommodate aircraft up to Code C size (e.g. A320, B737).

7.6.4.6. Parking stand W123 may only be entered from TWY W2 due to the excessive angle of turn if accessed from TWY W1.

7.6.5. Start-Up Procedures

7.6.5.1. Due to the high fuel consumption of turbine-engine aircraft on the ground, start-up approval should only be given when it is anticipated that there will be minimum delay at the holding point for departure. Due allowance should be made for the location of the parking stand and the distance required to taxi to the holding point.

7.6.6. Push-back Procedures

7.6.6.1. Standard push-back procedures are to be used whenever possible. In the event that a non-standard manoeuvre is required the instructions should be clear and precise.

7.6.6.2. If for expediency a conditional pushback clearance has to be issued, GMC should ensure the relevant traffic is in the vicinity of the pushback stand so that the pilot will be able to clearly identify the subject aircraft.

7.6.6.3. As mentioned in Section 7.6.4.5, parking stand W126 is self-manoeuvring and aircraft can taxi in and out without requiring pushback.

7.6.6.4. Standard push-back procedures are established for all parking stands in the passenger, cargo and maintenance apron. The majority of parking stands have two procedures, PUSH-BACK BLUE and PUSH-BACK RED, but several parking stands around the perimeter of the apron only have one push-back direction. Controllers shall stipulate the colour code of the standard push-back procedure when issuing push-back instruction. This is applicable even to aircraft pushing back from parking stands with only one standard push-back procedure.

7.6.6.5. Controllers should note that the majority of push-back procedures have **no marked stop point**, the charts are indicative only and actual stop points may vary. Only certain push-back procedures which may cause jet-blast related concerns, on the perimeters of the apron or in some cases close to taxilane junctions are positioned to **fixed tug-stop points**. Therefore, if pushback positioning is critical for clearance from other aircraft, specific instructions need to be included in the pushback clearance to provide the required spacing.

7.6.6.6. Notwithstanding the above, the following standard push-back phraseology shall be used: “start-up approved, pushback colour RED/BLUE”.

7.6.6.7. To provide a degree of flexibility, a push-back and tow forward procedure, TOW FORWARD GREEN, is established at certain parking stands. Controllers should note that some pilots will not be able to execute this procedure due to simulator limitations, so this procedure shall only be used after determining the pilot is able to carry out the procedure.

7.6.6.8. To avoid misunderstandings when a non-standard push-back is necessary, the required push-back direction should be passed in relation to the direction of the tail of the aircraft and the nearest taxiway. (e.g. “Pushback on TWY B7 with the tail towards TWY B” or “Pushback on H8 with the tail towards TWY H”). References to the terminal building, runway or compass direction should not be used.

7.6.6.9. Non-standard push-back tow forward procedures are established for Cargo apron stands. This procedure may be used in conjunction with either BLUE or RED pushback directions. The tow-forward manoeuvre should provide at least one stand-width behind the aircraft to permit another aircraft to taxi or push-back. To avoid misunderstanding the following type of standard phraseology should be used: "non-standard pushback RED/BLUE tow forward to .... approved".

7.6.7. Push-back Restrictions

7.6.7.1. Some parking stands, especially those at the perimeters of the parking apron, (PUSH-BACK BLUE S49, S105, and N9; PUSH-BACK RED S45, N8, N9, N66, N68 and N70), will restrict aircraft movement on the adjacent external taxiway. When a push-back manoeuvre is being carried out from those parking stands, aircraft on the adjacent external taxiways shall be instructed to hold short of an appropriate taxiway. The following procedures shall be used when aircraft push-back from these stands:

- PUSH-BACK BLUE S105 and PUSH-BACK RED S45 will **block TWY H**. PUSH-BACK BLUE N144 and PUSH-BACK RED N9, N68 and N70 will **block TWY B**, therefore pilots should be reminded that they will be required to commence taxiing immediately after the push-back manoeuvre is complete;

- PUSH-BACK BLUE S49 will **infringe TWY H** and PUSH-BACK RED N66 will **infringe TWY B** during the push-back manoeuvres. Due to the restricted field of view at these taxiway junctions, aircraft on TWYs H and B should be instructed to hold prior to the junction with taxilanes H7 and B7 respectively until the push-back manoeuvres are complete.

- PUSH-BACK RED N8 and PUSH-BACK BLUE N9 will **infringe TWY B** during the push-back manoeuvre, and are therefore subject to traffic on TWY B.

8. AIR MOVEMENTS CONTROL (AMC)

8.1. Callsigns & Frequencies

POSITION	TEXT CALL SIGN	VOICE CALL SIGN	FREQUENCY	CODE	CJS
Air Movements Control North	VHHH_N_TWR	"Hong Kong Tower"	118.700	AMN	TN
Air Movements Control Midfield	VHHH_C_TWR	"Hong Kong Tower"	118.200	AMM	TM
Air Movements Control South	VHHH_S_TWR	"Hong Kong Tower"	118.400	AMS	TS

8.2. Responsibilities

8.2.1. AMC shall be responsible for the control of aircraft flying in the ATZ, aircraft landing and taking-off.

8.2.2. Notwithstanding the mode of operation during parallel runway operations, AMC shall exercise vigilance in monitoring and resolving any track deviation of aircraft operating within their respective sectors.

8.2.3. AMC shall integrate VFR/SVFR traffic with IFR arrivals and departures.

8.2.4. AMC shall be responsible for all aircraft on the runway and for aircraft on sections of taxiway delegated to their control.

8.2.5. Each AMC sector shall coordinate with the other AMC sectors in respect of:

- Aircraft on final approach that deviates from the final approach track;
- Helicopter traffic crossing the airport;
- Sidestep procedures;
- Release of departures from the non-departure runway(s);
- Releasing a contingency SID departure with RWY 25s in use when HKIA is operating in ADM mode;
- Any other significant information.

8.2.6. AMC shall coordinate with APP/DEP in respect of:

- Runway changes;
- Aircraft making a missed approach;
- Essential aerodrome information relevant to arriving/departing aircraft;
- Weather conditions that may affect arriving/departing aircraft;
- Speed control.

8.2.7. AMC shall coordinate with GMC in respect of:

- Runway changes;
- Aircraft crossing the south/centre runway;
- Helicopters requesting a TWY K departure;
- Helicopters requesting to lift from any other taxiway or apron;

8.2.8. AMC shall coordinate with ZNC in respect of:

- Non-IFR flights leaving the ATZ;
- Off-mode departures when RWY 07 is in use

8.3. Logon Order

8.3.1. AMC controllers shall open an appropriate AMC sector based on the mode of operation at HKIA and the number of AMC controllers available. Refer to the table below. GMC1 must first be opened before a second AMC may be opened.

NO. OF AMC(S)	ADM	N/S SEGREGATED	C/S SEGREGATED	N/C SEGREGATED	SRO
1	AMS	AMS	AMS	AMM	Runway Dependent
2	AMS + AMN	AMS + AMN	AMS + AMM	AMM + AMN	Not Authorised
3	AMS + AMM + AMN	Not Authorised	Not Authorised	Not Authorised	Not Authorised

Note: During SRO mode, "Runway Dependent" refers to the most appropriate AMC sector for the runway in use (e.g. AMN shall be opened during RWY 07L / 25R SRO).

8.3.2. When only AMS and AMN are online and ADM mode is in use, AMN shall also assume the responsibilities of AMM.

8.4. General Procedures

8.4.1. AMC shall be responsible for the provision of separation between VFR/SVFR traffic and IFR traffic within the ATZ.

8.4.2. Aircraft in formation may be exempted from the separation minima with respect to other aircraft in the same formation.

8.4.3. Clearance to enter the traffic circuit is issued when an aircraft is still some distance from the aerodrome in order that the pilot may conform with the traffic circuit, pending clearance to land. Information concerning the runway-in-use and any other necessary instructions are given at the same time so that pilots may intelligently position themselves in the traffic pattern.

8.5. Control of Arriving Aircraft

8.5.1. Approach control may instruct IFR aircraft to contact AMC when it is number one on approach, and for following aircraft when they are established on final approach and have been provided with the required separation. AMC shall not issue any instruction that would reduce the established separation without prior coordination with FAD.

8.5.2. In the event of a missed approach, AMC shall activate the missed approach alarm and, if applicable, coordinate separation between the missed approach traffic and the preceding departure prior to transferring one or both aircraft to the next sector.

8.5.3. If an uncontained catch-up situation occurs between consecutive arrivals on the ILS/LOC, the following traffic should be instructed to carry out the standard missed approach procedure **before** the breakdown of prescribed radar separation (3 NM same runway or 2.5 NM on adjacent runways, if the latter separation standard is applicable), unless an alternative form of separation is provided. In this circumstance, separation is considered assured even though a residual catch-up may result in momentary loss of separation during the missed approach.

8.6. Control of Departing Aircraft

8.6.1. Line-Up Clearance

8.6.1.1. A conditional clearance for an aircraft to enter the runway, e.g. “behind the landing traffic line up and wait behind”, shall only be issued when the landing aircraft is no more than 2 NM from touchdown and can be observed by the pilot.

8.6.1.2. The time taken for an aircraft to line up on the runway and take-off is a critical factor in achieving high runway utilisation. When given the instruction “cleared for immediate take-off” it is expected that the aircraft shall:

a) If holding clear of the runway, immediately taxi onto the runway and commence take-off without stopping;
b) If already lined up on the runway, commence take-off without delay.

Note: It is good practice to confirm that the pilot can accept an immediate departure prior to issuing the instruction.

8.6.2. Intersection Departure

8.6.2.1. To expedite traffic flow, a pilot may be offered to line up on the runway from a taxiway other than the main holding point for the runway, but allowance shall be given to the required wake turbulence separation minima for an intersection departure.

8.6.2.2. The TORA for intersection departures are:

RWY 07L – TWY C3 – 3317 m
RWY 07C – TWY A4 – 3014 m
RWY 07R – TWY J3 – 3130 m
RWY 07R – TWY K2 – 2720 m
RWY 25L – TWY J9 – 3200 m
RWY 25L – TWY K6 – 2880 m
RWY 25C – TWY A9 – 3249 m
RWY 25R – TWY C10 – 3228 m

8.6.3. Departure Spacing

8.6.3.1. Subject to wake turbulence separation minima and relative aircraft performance, the minimum interval between two IFR departures should normally be approximately 90 seconds in order to achieve subsequent radar separation. Two jet aircraft of similar performance departing in this manner will provide at least 4 NM between aircraft when the second aircraft is airborne. However the following points should be taken into account when calculating departure intervals:

- Differences in performance between various types of aircraft as well as the different operating procedures of pilots operating similar types of aircraft;
- Timing of the wake turbulence separation shall be based on the commencement of take-off roll using the time interval specified in the section below;
- To avoid excessive workload for DEP, TMC and TR sectors, AMC should release a maximum of two successive departures on the same RNAV SID with 90 second spacing. Further traffic on the same SID should be released with a minimum of 120 seconds spacing;
- A minimum separation of 3 minutes (180 seconds) should be provided between departures on RNAV SIDs from different runways **when independent parallel departures are not in use; or when releasing off-mode departures;**

- When releasing an **on-mode** contingency SID departure with RWY 07s in use, normal spacing shall be applied between it and the preceding aircraft (i.e. 90 seconds subject to wake turbulence separation), with a minimum separation of 3 minutes (180 seconds) required for the trailing aircraft. **Off-mode** contingency SID departures with RWY 07s in use shall be treated as any other off-mode departure;
- The appropriate AMC shall coordinate with the other AMC(s) to suspend independent parallel departures when releasing a contingency SID departure when HKIA is operating in ADM mode with RWY 25s in use;
- When RWY 25s are in use, the use of normal spacing (90 seconds subject to wake turbulence separation) is authorised for the following departure pairs:
  - Contingency SID trailing RWY 25L RNAV SID;
  - RWY 25C RNAV SID trailing RWY 25L/C contingency SID;
  - RWY 25R RNAV SID trailing RWY 25L/C/R contingency SID.

  Pairs not listed above shall require a minimum separation of 3 minutes (180 seconds).
- Separation of at least 3 minutes should be provided between a propeller-type aircraft departure, e.g. Diamond DA42, and a subsequent jet aircraft departure, unless otherwise coordinated with DEP.

8.6.3.2. The initial track of RWY 07L (and RWY 07C non-T) SIDs conflicts with the missed approach track for RWY 07R. As such, during parallel runway operations when IFR traffic has to depart from RWY 07L/C for operational reasons, AMN shall coordinate with AMS prior to issuing a line-up clearance to the RWY 07L/C departure. If the aircraft is to be released immediately prior to a RWY 07R IFR arrival, it shall not commence take-off once the south runway arriving traffic is within 5 NM from touchdown.

8.6.3.3. Due to the limited airspace available to DEP, in the event of an unforeseen catch-up situation between departing traffic or departing traffic and missed approach traffic, in the vicinity of the aerodrome, AMC should promptly intervene to establish alternative (vertical) separation, or if unable, immediately alert DEP to facilitate early remedial action.

8.6.3.4. CDC and GMC should jointly plan and apply tactical measures (e.g. timing of start-up or alternative taxi routings) to achieve the minimum delay at the holding point and the most expeditious and effective traffic flow.

8.6.4. Wake Turbulence Separation Minima

8.6.4.1. All aircraft generate vortices at the wing tips as a consequence of producing aerodynamic lift. Wake vortices begin to be generated by fixed-wing aircraft when the nose wheel lifts off the runway on take-off and continues until the nose-wheel touches down on landing. The heavier the aircraft and the slower it is flying, the stronger the vortex. Vortices are liable to be persistent in calm or light wind conditions.

8.6.4.2. Controllers shall utilise the ICAO wake turbulence categorisation system when determining the wake turbulence category of an aircraft. However, the following shall also be noted:

- Due to the vortex generating characteristics of the **Boeing B757**, it is categorised as a HEAVY type when it is the leading aircraft and a MEDIUM type when it is the following aircraft.

8.6.4.3. AMC shall apply the following wake turbulence separation minima for successive departing aircraft. Timing shall be based upon the commencement of the take-off roll using the following time intervals:

LEADING AIRCRAFT	FOLLOWING AIRCRAFT		MINIMUM SEPARATION
Super	Heavy		2 Minutes
	Medium or Light	Departing from the same position	3 Minutes
		Departing from an intersection position	4 Minutes
Heavy	Medium or Light	Departing from the same position	2 Minutes
		Departing from an intersection position	3 Minutes
Medium	Light	Departing from the same position	2 Minutes
		Departing from the intersection position	3 Minutes

8.6.4.4. AMC shall apply wake turbulence separation minima of 2 minutes between a MEDIUM or LIGHT aircraft following a HEAVY aircraft, and 3 minutes between a MEDIUM or LIGHT aircraft following a SUPER aircraft, when taking-off or landing on the same runway in the opposite direction to the previous movement.

8.6.5. Communication

8.6.5.1. When ADM mode and RWY 07 is in use, GMC shall instruct RWY 07C departures to report their SID to AMC on first contact. Should the aircraft not report their assigned SID on first contact, AMC shall instruct the aircraft to report the assigned SID to verify that the aircraft will fly the correct SID after departure (i.e. left turn instead of right turn).

8.6.5.2. AMC shall retain departing traffic on the AMC frequency until:

- It is airborne;
- It is clear of other ATZ traffic.

8.6.5.3. AMC should then specifically instruct the departing traffic to contact the appropriate DEP sector. South runway departures shall be transferred to DES while centre and north runway departures shall be transferred to DEN.

8.6.6. Mixed Mode Operations on a single runway

8.6.6.1. A landing aircraft will not normally be permitted to cross the beginning of the runway on its final approach until the preceding departing aircraft has crossed the end of the runway-in-use, or has started a turn, or until the preceding landing aircraft is clear of the runway.

8.6.6.2. Under normal circumstances, a departure must commence its take-off run before an arrival reaches 3 NM from touchdown. If a departure is not positively rolling when an arrival reaches 3 NM from the landing threshold, the take-off clearance shall be cancelled and recovery action initiated. The 3 NM distance is a minimum and must be increased when necessary, e.g. because of high approach speeds, tailwind conditions, reported turbulence or reported wind shear on final approach.

8.6.6.3. AMC should aim to provide adequate spacing such that the arrival is at short final (approximately 1 NM), when the departure is crossing the upwind end of the runway.

8.6.6.4. The prescribed spacing for arriving traffic during mixed mode operations is 8 NM when the leading aircraft crosses the landing threshold. However, AMC should monitor the relative speeds of the arriving aircraft and be aware of any reduction in the spacing due to "catch-up" situations caused by a disparity in approach speeds or variable upper winds.

8.6.6.5. When releasing consecutive departures ahead of an arrival, careful assessment is required when 120 sec wake turbulence separation is applicable. Given the real-time variation in pilot responses and interpretation of wake turbulence application, controllers should be cautious not to commit a second departure to line up until the first actually commences rolling and remaining time can be more accurately assessed. As a rule of thumb (based on approach **groundspeed 180kt**) when 90 sec departure spacing is applicable the first departure must be rolling when the arrival is at least 7.5 NM from touchdown. If 120 sec wake turbulence separation is required, the landing aircraft range has to be extended to 9 NM or more, in order to satisfy the 3-NM rolling/cut-off criteria.

8.6.7. Reduced Runway Separation Minima (RRSM)

8.6.7.1. RRSM may be applied on the same runway:

- Between a departing aircraft and a succeeding landing aircraft;
- Between two successive landing aircraft.

8.6.7.2. RRSM shall be subject to all of the following conditions:

- Wake turbulence minima shall be applied at all times;
- RRSM shall only be applied during the period from 30 minutes after sunrise to 30 minutes before sunset;
- Visibility shall be at least 5km and cloud ceiling shall not be lower than 3000ft in the departure / missed approach area;
- The prevailing operating conditions exist for AMC to provide accurate traffic information to the succeeding aircraft and to assist the pilot concerned in sighting the traffic;
- The nominal tailwind component should be 0 kt. However, AMC may use discretion to allow not more than 5 kt tailwind under marginal circumstances;
- No actual reports of severe turbulence or wind shear exceeding 15 kt;
- Runway surface is dry and braking action is not adversely affected by runway contaminants.

8.6.7.3. RRSM standards and the corresponding visual reference points are:

RUNWAY	SEPARATION STANDARD	VISUAL REFERENCE
07L	2400 m	RET C8
25R	2400 m	RET C5
07C	2400 m	RET A8/F6
25C	2400 m	RET F3
07R	2900 m	RET K6
25L	2900 m	RET K2

8.6.7.4. Separation exists between a succeeding landing aircraft crossing the threshold and the preceding aircraft when:

- The preceding departure is, or will be, airborne and has passed a point 2400 m (north / centre runway) or 2900 m (south runway) from the landing threshold; or
- The preceding arrival has landed and has either commenced a turn on to or passed abeam the relevant RET, and the aircraft is in motion and will vacate the runway without backtracking.

8.6.7.5. When RRSM is applied, the succeeding landing aircraft may be given clearance to land before the first aircraft has physically cleared the runway after landing or crossed the runway end on departure.

8.6.7.6. AMC shall provide traffic information to the succeeding aircraft when issuing the landing clearance. See the following example phraseology:

"preceding B737 landing about to vacate the runway, surface wind 090 degrees 11 kt, cleared to land."

"departing A320 ahead about to rotate, surface wind 230 degrees 6 kt, cleared to land."

8.6.8. Kai Tak IGS RWY 13 Arrivals

8.6.8.1. When RWY 13 is in use at Kai Tak (VHHX), APP shall pass the GOLF estimate of any IGS RWY 13 arrivals at least 5 minutes prior to that estimate to AMC. During the period between that estimate and the time when the arrival passes the ATZ boundary, AMC shall:

- RWY 07: AMC **shall not** release any departures until the IGS arrival has crossed the ATZ boundary;
- RWY 25: Continue to release departures, however, restrict the initial climb of those departures to 3000 ft. Departures with the standard initial climb altitude may be resumed once the IGS arrival has crossed the ATZ boundary.

8.7. Runway Crossings

8.7.1. Aircraft requiring to cross active runways shall contact AMC for authorization. GMC will notify AMC of any required crossings prior to handing the aircraft off to AMC. AMC shall acknowledge.

8.7.2. Once the crossing clearance has been given, AMC shall notify GMC of such. GMC shall acknowledge.

8.7.3. When runway crossing clearance is given conditionally, such clearance shall be given in a timely manner and without any ambiguity. In cases where runway crossing clearances are given conditionally against a departing aircraft, the departing aircraft must have started their takeoff roll before runway crossing clearance may be given.

8.7.4. Runway crossings whilst an aircraft is already lined up on the runway should generally be avoided. If it is necessary to conduct a runway crossing with an aircraft lined up, traffic information must be passed to the aircraft lined up using the following phraseology: “traffic crossing ahead, line up and hold/hold position”.

8.8. Division of Airspace

8.8.1. The ATZ is divided into two sectors – ATZ North and ATZ South sectors. The dividing line is along the centreline of the centre runway.

8.8.2. When only a single AMC is online, both ATZ North and ATZ South sectors shall be assigned to the single AMC.

8.8.3. When only AMN and AMS are online, ATZ North and ATZ South sectors shall be assigned to AMN and AMS respectively.

8.8.4. When only AMN and AMM are online, ATZ North and ATZ South sectors shall be assigned to AMN and AMM respectively.

8.8.5. When only AMM and AMS are online, ATZ North and ATZ South sectors shall be assigned to AMM and AMS respectively.

8.8.6. When all three AMC sectors are online, ATZ North and ATZ South sectors shall be assigned to AMN and AMS respectively, with AMM only responsible for operations on the centre runway.

8.9. Arrivals on the Non-Arrival Runway

8.9.1. Under normal circumstances, landings on non-arrival runway(s) require individual coordination with AMC. APP shall coordinate with AMC regarding any aircraft requiring a different runway at the earliest opportunity.

8.9.2. At peak periods (between 0000 – 1500Z) with more than one runway in use and when arrival demand significantly exceeds arrival capacity a limited number of arrivals may be directed to the departure runway(s) without individual coordination to increase overall efficiency. This procedure is known as Tactical Runway Allocation Mode (TRAM). Controllers should refer to SOP004 for more details regarding TRAM.

8.10. Operational Missed Approaches

8.10.1. In the event of a go around for an operational reason by an IFR arrival to any runway, the appropriate AMC sector shall activate the missed approach alarm immediately to alert the APP/DEP sectors and the other AMC(s). The missed approach traffic shall be monitored closely by AMC to ensure that there is no deviation from the missed approach instructions.

8.10.2. AMC should resolve any conflict before transferring the missed approach aircraft and departing traffic to the next sector. However, if aircraft is already with the next sector, AMC shall pass the relevant instructions to the other aircraft before transferring it to the next sector and advise the next sector of the actions taken.

8.10.3. Pursuant to the section above, aircraft on missed approach from RWY 07L / 07C shall be transferred to DEN, aircraft from RWY 07R / 25L to DES and aircraft from RWY 25C / 25R to FAD.

8.10.4. Controllers should be aware that during the initial stages of a missed approach the cockpit workload is very high. Unless there is an urgent need to pass specific ATC instructions or information relating to flight safety (e.g. essential traffic information), AMC should not initiate routine instructions or requests, including the reason for the missed approach, until the aircraft is well established in the missed approach procedure.

8.10.5. Effective coordination amongst all parties concerned is essential to ensure separation between the relevant traffic in a go around situation.

8.10.6. Under normal circumstances, north runway (RWY 07L / 25R) and centre runway (RWY 07C / 25C) standard missed approach procedures are deemed separated from south runway (RWY 07R / 25L) SID and standard missed approach procedures provided both aircraft follow the published tracks. However, relevant traffic information shall be passed to enhance situational awareness.

8.10.7. Should either aircraft deviate from published procedures in a manner that reduces track separation the concerned AMC sectors shall take coordinated action to recover the situation and, if necessary establish vertical separation prior to handoff to the next sector.

8.10.8. AMC shall note that a release is required from the appropriate DEP sector prior to releasing the first departure after a non-standard go around.

8.11. Additional Considerations for RWY 25C / 25R Missed Approaches

8.11.1. In the case of **multiple** simultaneous missed approaches, AMM / AMN shall promptly coordinate with APP / FAD regarding recovery actions to ensure separation between all aircraft, especially with regard to the altitude steps built into the RWY 25C / 25R MAP. Prompt liaison with AMS is also essential – stopping of departures should be considered part of the plan to allow maximum flexibility in resolving the situation.

8.11.2. RWY 25C / 25R missed approach procedures also pass over the Castle Peak Range area, VHD5. The range is normally active up to a maximum height of 1000 ft AGL and the missed approach procedure climb gradient ensures adequate clearance for aircraft passing over the area.

8.12. Non-Standard Operational Missed Approaches

8.12.1. In the event of an aircraft not being able to carry out a standard missed approach the concerned AMC sector shall immediately coordinate an alternative clearance with the next sector to provide as much assistance as possible to the pilot and coordinate with

other AMC sectors with respect to separation from departing traffic.

8.12.2. As a guideline, a surveillance-based alternative clearance may be issued by the next sector to an aircraft whose climb performance is not impaired, e.g. "climb to xxxx ft, remain on the extended runway centreline, track xxx ° and expect radar vectors".

8.13. Planned Missed Approaches

8.13.1. Planned missed approaches shall be handled the same way as operational missed approaches. Timely coordination shall be made to ensure separation between aircraft carrying out the missed approach and departing flights.

8.14. Use of Radar Information by AMC

8.14.1. Radar information shall normally only be used as an aid to provide additional information. They should not be used for the purpose of radar vectoring or other forms of radar control.

8.14.2. The radar information may be used by AMC to determine the distance from touchdown and spacing of arriving aircraft in order to achieve the maximum runway utilisation.

8.15. VFR and SVFR Procedures

8.15.1. General

8.15.1.1. The CTR and ATZ are Class C airspace. Within Class C airspace ATC shall provide the following separation and services:

TYPE OF FLIGHT	SEPARATION PROVIDED	SERVICE PROVIDED
IFR	IFR from IFR	Air Traffic Control Service
	IFR from Special VFR	
	IFR from VFR	
Special VFR	Special VFR from IFR	Air Traffic Control Service
	Special VFR from Special VFR	
VFR	VFR from IFR	Air Traffic Control Service
	VFR from VFR	Traffic information (avoidance advice on request) NOTE: VFR traffic is subject to an ATC clearance

8.15.1.2. VFR/SVFR aircraft are required to file a valid VFR/SVFR flight plan when operating within the CTR/ATZ/UCARAs. A valid VFR/SVFR flight plan is one that consists of VRPs, CTR Zones and entry/exit routes (for aircraft operating in multiple CTR Zones). AMC shall withhold clearance to depart from aircraft that do not have a valid VFR/SVFR flight plan.

8.15.1.3. AMC shall allocate VFR and SVFR traffic outbound from the ATZ a VFR/SVFR SSR code prior to handover to ZNC. The pilot shall also be instructed to select Mode C to ensure that false TCAS alerts are not generated.

8.15.1.4. AMC shall assume the track of any VFR/SVFR traffic operating within the ATZ. For VFR/SVFR traffic outbound from the ATZ, AMC shall hand off the traffic to ZNC prior to reaching the ATZ boundary. The assumption of VFR/SVFR tracks does **not** constitute a provision of any kind of radar service by AMC.

8.15.2. Special VFR

8.15.2.1. A Special VFR (SVFR) flight is a flight made in the CTR at night or in weather conditions when the pilot cannot comply with VFR, in respect of which permission has been given for the flight to be made in accordance with special instructions instead of in accordance with IFR. Such flights must be conducted clear of cloud and in sight of the surface.

8.15.3. Local VFR Fixed Wing Flights in CTR and ATZ (General)

8.15.3.1. IFR flights shall normally have priority over VFR operations.

8.15.3.2. The CTR and ATZ VFR Entry and Exit Routes, as well as holding areas for arrival flights are listed in AIP Hong Kong.

8.15.3.3. VFR/SVFR fixed wing flights are generally not permitted to transit (i.e. enter/leave the ATZ without arriving/departing at HKIA) the ATZ. However, AMC may elect to approve such operations subject to workload.

8.15.4. Local VFR Fixed Wing Flights in CTR and ATZ (Arrival and Departure Procedures)

8.15.4.1. A VFR movement is permitted on a runway at the same time as an IFR movement on other runways. For a simultaneous VFR and IFR arrival, the concerned AMC sectors shall coordinate amongst themselves to ensure that the VFR traffic's flight path remains clear of the IFR traffic, and relevant traffic information shall be passed to both aircraft to ensure traffic awareness.

8.15.4.2. Entry/exit routes for VFR fixed wing flights are flexible and will depend on the flight plan, traffic situation and prevailing weather conditions. AMC shall coordinate with ZNC for a time at which the VFR traffic will be permitted to enter the ATZ.

8.15.4.3. When a VFR departure from the south runway requests to leave the ATZ to the north crossing the extended centreline of the north runway, AMS shall coordinate with AMM and AMN prior to releasing the traffic. The aircraft shall be instructed to track on the runway centreline not above 500 ft and contact AMN as soon as practicable after departure. AMN shall ensure that the aircraft does not commence a turn to the north before the end of the departure runway, and there is no traffic within 3 NM from touchdown for the north runway. AMM will **not** contact the aircraft at any point (unless it is departing from the centre runway).

8.15.4.4. To mitigate pilot concerns and TCAS alerts, VFR fixed-wing traffic rejoining RWY 25L via Toll Plaza should be restricted to not above 1000 ft to provide an altitude buffer with IFR arrivals on RWY 25C/R. When practicable it is also prudent to sequence the VFR arrival in a manner that avoids side-by-side intercept with traffic on RWY 25C/R.

8.15.5. Local VFR Fixed Wing Flights in CTR and ATZ (Fixed Wing Circuit Procedures)

8.15.5.1. Fixed wing circuit operations shall primarily take place on the north runway.

8.15.5.2. The following conditions are applicable to fixed wing circuit operations within the CTR:

- Subject to approval by AMC;
- All circuits and manoeuvres shall be made over water to the north of the airport avoiding built-up areas on the coast;
- Holding should only be permitted in the Lung Kwu Chau / Sha Chau Holding Pattern;
- Actual and forecast weather conditions shall be a minima of;
  - By day a ceiling of 1500 ft and visibility of 8 km;
  - By night a ceiling of 2000 ft and visibility of 8 km.
- Crews shall give ATC prior notification when practice asymmetric manoeuvres or other performance limitation exercises are planned.

8.15.5.3. The following points on fixed wing circuit operations shall be noted:

- When there is no other traffic the aircraft will position onto a 2 NM final;
- If required to orbit visually on final RWY 07R, the minimum distance for a right-hand orbit is 5 NM final, due terrain;
- When rejoining from West Lantau Corridor, the aircraft will position for a 4 NM final;
- When departing RWY 25L, a left turn to the West Lantau Corridor, or right turn to the north, can be made at the upwind end of the runway;
- With prior coordination between the relevant AMC(s), the traffic may be positioned for the south runway for the final landing.

8.15.6. Local Helicopter VFR Flights in the ATZ (General)

8.15.6.1. AMC shall assign a discrete SSR code to all VFR/SVFR flights intending to operate in the ATZ / CTR.

8.15.6.2. Experience shows that helicopters approaching the airport from Silvermine, Pillar Point or Sha Chau may be perceived as conflicts by TCAS systems of other arriving or departing traffic. Notwithstanding that adequate separation is being provided in accordance with published procedures, timely helicopter traffic information should be passed to relevant arriving or departing traffic to allay any concerns. The following guidelines should be used when passing traffic information:

- For an IFR departure and a VFR helicopter rejoining from Silvermine, traffic information should be given to the departure prior to take-off;
- For an IFR arrival and a VFR helicopter rejoining from north of the airport, traffic information should be given to the arrival before the helicopter comes within 5 NM of the arrival.

8.15.7. Local Helicopter VFR Flights in the ATZ (Departure and Arrival Procedures)

8.15.7.1. When wind conditions permit, helicopters should normally conform with runway movements by departing and approaching in the direction of the runway in use through published departure and arrival routes.

When RWY 07s are in use, the **Kilo East** departure shall be utilised.
When RWY 25s are in use, the **Kilo West** departure shall be utilised.

Refer to AIP Hong Kong for more details regarding the published departure and arrival routes.

8.15.7.2. Whenever a helicopter is operating in the area between the south runway and the imaginary line 1000 m south of the south runway, no movements are permitted on the south runway unless another form of separation is assured.

8.15.7.3. Due to terrain, the minimum altitude for VFR/SVFR helicopters entering the ATZ via Silvermine is around 1100 ft. However, such helicopters shall descend below 1000 ft as soon as practicable after crossing Silvermine.

8.15.7.4. Holding locations for arriving helicopters are detailed in AIP Hong Kong. VFR or SVFR helicopters holding at the Freight Centre or Cathay City are deemed geographically separated from south runway IFR traffic. However relevant traffic information should be passed to both the helicopter and the IFR traffic.

8.15.7.5. The Cathay City holding area is a secondary holding area for use when:

- Weather conditions preclude holding at the Freight Centre holding area – pilots holding at Freight Centre must have the full length of the south runway in sight;
- Operational procedures preclude holding at the Freight Centre holding area – helicopters with underslung loads are not permitted to hold at the Freight Centre.

8.15.7.6. The Freight Centre is a mandatory reporting position for outbound SVFR helicopters routing via Pak Mong or Silvermine. There shall be no south runway movement from the time a SVFR helicopter is airborne until the helicopter has reported passing Freight Centre.

8.15.7.7. VFR/SVFR helicopters using the Lantau Expressway route between Pak Mong and Toll Plaza are not separated from RWY 07L/C/R (except RWY 07C "T" SIDs), RWY 07R missed approach path or RWY 25L arrivals. Helicopters are only permitted to use this route when there will be no delay to the IFR traffic or positive separation can be provided. As a guideline, the sector between Pak Mong and Toll Plaza takes 3 to 4 minutes to complete.

8.15.7.8. VFR/SVFR helicopters using the Ma Wan Corridor – Toll Plaza route are not separated from RWY 07L/C/R (except RWY 07C "T" SIDs) or RWY 25L arrivals. As above, helicopters are only permitted to use this route when there will be no delay to the IFR traffic or positive separation can be provided.

8.15.7.9. The Lantau Expressway route between Pak Mong and Toll Plaza is considered to be separated from RWY 25C/R arrivals. However, the instruction to follow the expressway shall be included in the Special VFR clearance.

8.15.7.10. The route between Sha Lo Wan and Tai O is considered to be separated from North / Centre runway arrivals and departures. However, the instruction to follow the coastline shall be included in the Special VFR clearance.

8.15.8. Local Helicopter VFR Flights in the ATZ (Runway Crossing Procedures)

8.15.8.1. Helicopter runway crossing routes as well as holding locations for helicopters awaiting runway crossing are detailed in AIP Hong Kong.

8.15.8.2. The specific procedures to be carried out for a helicopter requiring to cross the runway extended centrelines vary depending on the mode of operation at HKIA.

Procedures during ADM mode:

- AMN and AMS are responsible for issuing clearance to cross their respective extended centrelines;
- When crossing and/or holding (at WSB/EXPO) is in progress,
  - AMM shall be notified to allow traffic information to be issued to centre runway departing traffic for situational awareness;
  - FAD shall be notified to allow traffic information to be issued to arriving traffic.

Procedures during other modes of operation:

- Each AMC is responsible for issuing clearance to cross their respective extended centrelines.

8.15.8.3. In all cases, the AMC which the helicopter is with prior to crossing (henceforth known as **AMC1**) shall coordinate with the other AMC (henceforth known as **AMC2**) regarding the clearance limit of the helicopter. Where appropriate, the helicopter may be held at West Sea Berth (WSB) or EXPO depending on the runway in use, provided that the centre runway is not being used for arrivals. AMC1 shall transfer the helicopter to AMC2 once it is clear of any traffic in the first runway area.

8.15.8.4. Helicopters operating with underslung loads should be routed around the airport over water. Overflight of the airport is not normally permitted.

8.15.8.5. As there is a potential wake-turbulence hazard to crossing helicopters from runway movements AMC shall include the warning "caution wake turbulence" in any crossing clearance if it occurs less than 3 minutes after an aircraft movement of WTC M or greater on the relevant runway.

8.15.8.6. The following phraseologies shall be used when issuing a crossing clearance with no holding required. Items in brackets should only be added if appropriate.

"(Behind landing traffic at xx miles final RWY xxx), cross 07 corridor northbound for Sha Chau, (caution wake turbulence)",
"(Behind landing traffic at xx miles final RWY xxx), cross 25 corridor southbound for Cathay City, (caution wake turbulence)"

In cases where holding is required, AMC1 shall use the following phraseologies:

"(Behind landing traffic at xx miles final RWY xxx), cross 07 corridor, clearance limit West Sea Berth, (caution wake turbulence)",
"(Behind landing traffic at xx miles final RWY xxx), cross 25 corridor, clearance limit Expo, (caution wake turbulence)"

8.15.8.7. Upon handoff from AMC1, AMC2 may instruct the helicopter to hold at WSB / EXPO if necessary due to traffic. The following phraseologies shall be used:

"Hold at WSB / EXPO due traffic", OR
"Hold at WSB / EXPO, report visual with traffic at xxx miles final RWY xxx"

Once clear of traffic, AMC2 shall instruct the helicopter to depart WSB / EXPO northbound or southbound as appropriate.

8.15.8.8. Due to the lack of visual reference over the water in the areas of Holding Points WHISKEY and ECHO, controllers should be vigilant in ensuring that helicopters remain well to the north of the airport and do not conflict with north runway traffic, especially in hazy conditions. The minimum holding distance from the north runway is 1000 m. If there is any doubt, the helicopter should be instructed to hold at Sha Chau.

8.15.8.9. During Special VFR conditions, the normal spacing between arrivals does not permit adequate time for helicopters to complete the runway crossing manoeuvre, therefore the relevant AMC should coordinate with APP and FAD for a 14 NM gap between landing traffic to allow for an uninterrupted crossing of all 3 runways.

8.15.8.10. Due to the delays that may be experienced by helicopters operating Special VFR in waiting to cross the airport, pilots may be offered the option of re-routing to the north east of the airport via the Yam O – Brothers Point route at 500 ft if weather and traffic conditions permit.

8.15.9. Local Helicopter VFR Flights in the ATZ (GFS Dispersal Procedures)

8.15.9.1. Two helipads are located at the western end of the GFS dispersal area. Use of these helipads is normally restricted to GFS helicopters.

8.15.9.2. To ensure clearance from obstacles close to the helipads, GFS helicopters may request to lift off from the dispersal and then fly over TWY K during the initial lift-off manoeuvre or they may request to taxi to TWY K and lift off from the taxiway. Arrivals may request to approach over TWY K and then land at the dispersal. **AMC shall effect prior coordination with GMC for any helicopter take-off, approach or landing via TWY K**. Controllers should be particularly alert to potential conflicts with traffic departing HKBAC at Q3.

8.15.9.3. As there is a potential wake-turbulence hazard to helicopters landing or departing at GFS dispersal or TWY K from south runway movements AMC shall include the warning "caution wake turbulence" in any departure or arrival clearance if it occurs less than 3 minutes after an aircraft south runway movement of WTC M or greater.

8.15.9.4. Helicopter arrivals or departures from the GFS dispersal or TWY K are not permitted at the same time as movements on the south runway.

8.15.9.5. Helicopter arrivals or departures from the GFS dispersal or TWY K may be permitted whilst aircraft are taxiing on TWY K or holding adjacent to the GFS dispersal provided relevant traffic information is passed to both the helicopter and the aircraft. However helicopters shall not overfly aircraft on TWY K – it is the helicopter pilot's responsibility to ensure that the helicopter manoeuvres at a safe distance from the other traffic.

8.15.9.6. The GFS helicopter landing site LT07, Nei Lak Shan (2400 ft AMSL) is located on the southern boundary of the ATZ. GFS helicopters inbound to this site will request permission from AMC to climb to approach this site.

8.15.10. Local Helicopter VFR Flights in the ATZ (Non-GFS Helicopter Landing Sites)

8.15.10.1. There are 2 designated locations where helicopters may land, depending on parking area, helicopter size and purpose of flight. These are:

- Taxiway junction K / Q3 for parking at HKBAC or Bays X1, X2 – There is no helipad within BAC and helicopters shall not make landings or takeoffs directly to/from the BAC apron. The same applies to parking bays X1 and X2. Only one helicopter at a time may taxi in the BAC apron or TWY Q3. Control of helicopters within the BAC apron is not an ATC responsibility.

  Although not an ATC responsibility, controllers should be aware that there are size restrictions on helicopters entering the BAC area. AS332L Super Puma helicopters or smaller may ground taxi and AS355 Twin Squirrel sized helicopters or smaller may air taxi to/from the apron. Larger types such as the AS332L2 Super Puma must be parked at alternative locations.

- Taxiway junction H / H2 for parking at HAECO Maintenance Apron or Bays X456, X458 – There is no helipad within the HAECO area. Helicopters will ground or air taxi via H2 to / from a maintenance bay or bays X456, X458 as appropriate.

8.15.10.2. Flight movements to/from these locations are subject to the following conditions:

- Approach / departure paths should be aligned with either TWY K or H, as appropriate, and normally conform to the runway in use.
- Takeoffs and landings are not permitted at the same time as South runway movements.
- **AMC shall coordinate with GMC prior to any helicopter takeoff or landing on TWYs K or H.**
- Helicopter movements may be permitted whilst other aircraft are taxiing or holding on TWYs K, H, V or J, as appropriate, provided relevant traffic information has been passed to both the helicopter and the aircraft. However helicopters shall not overfly other aircraft on the taxiways – it is the helicopter pilot's responsibility to manoeuvre at a safe distance from the other traffic.
- In all cases there is a potential wake-turbulence hazard to the helicopter from larger aircraft movements on the South runway. AMC shall include the warning "caution wake turbulence" in any departure or arrival clearance for helicopter movements occurring within 3 minutes after a South runway movement. Subject to other taxiway traffic, pilots may adjust their approach profile and touchdown point to minimise exposure to wake turbulence hazard.

8.15.10.3. In the unusual situation of a helicopter requiring parking on the main passenger apron, this should be handled as a runway movement and air/ground taxied to/from the parking area via the taxiways.

8.15.11. Shenzhen – Hong Kong VFR/SVFR Flights

8.15.11.1. VFR/SVFR flights from/to Shenzhen shall:

- Route to / from the ATZ via LUKBU not above 1000 ft;
- Contact ZNC 120.6 MHz.

8.15.11.2. Such flights will normally be parked at HKBAC. Larger helicopters that cannot be accommodated at HKBAC shall be directed to other airport locations. Refer to Section 8.15.10 above for the relevant operational procedures.

9. ZONE CONTROL (ZNC)

9.1. Callsigns & Frequencies

POSITION	TEXT CALL SIGN	VOICE CALL SIGN	FREQUENCY	CODE	CJS
Zone Control	VHHH_Z_TWR	"Hong Kong Zone"	120.600	ZNC	ZN

9.2. Responsibilities

9.2.1. ZNC is responsible for the safe and orderly operation of non-IFR flights within the CTR Zones and to ensure that aircraft under its control are properly separated from traffic under the control of AMC, APP or DEP. It is also responsible for the provision of flight information and alerting services to non-IFR flights within the CTR Zones.

9.2.2. ZNC shall coordinate with FIS in respect of any flight intending to operate in UCARA North Border due to the requirement to coordinate with Zhuhai Approach for any operations in this area.

9.2.3. ZNC shall coordinate with APP/DEP in respect of:

- Non-IFR flights intending to operate above the altitude limit laid down for each CTR Zone;
- Non-IFR flights intending to operate beyond the lateral boundaries of the CTR, except those entering the UCARAs;
- Non-IFR flights intending to operate above the altitude limit laid down for standard VFR routes within CTR Zones.

9.2.4. ZNC shall coordinate with AMC in respect of non-IFR flights requiring to enter the ATZ.

9.2.5. ZNC shall coordinate with FIS in respect of non-IFR flights entering/leaving the CTR Zones from/to the UCARAs.

9.2.6. ZNC shall pass the following information to Macau Tower:

- The route, transfer point estimate and altitude for Hong Kong – Macau helicopters.

9.2.7. When ZNC is closed, AMC shall assume the responsibilities of ZNC. In cases where multiple AMCs are available, the individual AMCs shall coordinate amongst themselves to decide which AMC shall be responsible for ZNC.

9.3. Logon Requirements

9.3.1. Prior to opening ZNC, both GMC1 and at least one AMC must be open.

9.4. VFR/SVFR Operations in CTR Zones

9.4.1. The CTR is categorised as Class C airspace. ZNC is therefore required to provide positive separation, either lateral or vertical, between VFR/SVFR and IFR flights and between individual SVFR flights. A traffic information service is to be provided between VFR flights.

9.4.2. ZNC may authorise VFR/SVFR flights to operate within the specified CTR Zones up to the following altitudes, without coordination with AMC, APP or Zhuhai:

- Tuen Mun Zone – 1000 ft (but also see Section 9.5.12)
- Lantau Zone – 2000 ft
- South Outer Zone – RWY 07L/C/R 500 ft, RWY 25L/C/R 1200 ft
- Island Zone – RWY 25L/C/R: 2000 ft
    - RWY 07L/C/R: Refer to chart and note the restrictions below:
        - Green Island – Ma Wan Corridor 1000 ft
        - Green Island – Silvermine 800 ft
        - Green Island – Cheung Chau 1000 ft
        - Green Island – Lamma 1000 ft
        - Green Island – West of Star Ferry 1000 ft
- Waglan Zone – 2000 ft

9.5. ZNC Procedures (General)

9.5.1. VFR/SVFR traffic that complies with standard routes and altitude restrictions (including HK – Macau helicopters), operating in airspace delegated to Approach Control, may remain with ZNC in order to minimise APP/DEP workload.

9.5.2. VFR/SVFR aircraft are required to file a valid VFR/SVFR flight plan when operating within the CTR/ATZ/UCARAs. A valid VFR/SVFR flight plan is one that consists of VRPs, CTR Zones and entry/exit routes (for aircraft operating in multiple CTR Zones). ZNC shall withhold clearance to enter the CTR from aircraft that do not have a valid VFR/SVFR flight plan.

9.5.3. All VFR/SVFR as well as Hong Kong – Macau helicopter flights operating within the ATZ and CTR shall be allocated a discrete SSR code and the setting shall be confirmed. If necessary pilots shall be reminded to select mode C to avoid generating false TCAS alerts.

9.5.4. ZNC may monitor traffic on the radar display as an aid to situational awareness and assessment of relevant traffic information. However, when passing information care must be taken not to imply that a radar service or positive separation is being provided.

9.5.5. When passing traffic information ZNC should include the altitude, if known, to assist pilots in sighting and planning their flight path relative to other traffic.

9.5.6. Due to terrain, the minimum altitude for VFR/SVFR helicopters leaving the ATZ via Silvermine is around 1100 ft. However, such helicopters shall descend below 1000 ft as soon as practicable after crossing Silvermine.

9.5.7. Due to the large area of the Island Zone, controllers should instruct pilots operating in that zone to make position reports at prominent or operationally significant locations, e.g. Stonecutters, Stanley, Lamma or Hei Ling Chau, to enhance situational awareness and traffic information.

9.5.8. Ma Wan Zone specifically protects the IFR arrival/departure airspace to the east of the airport. VFR operations in this area are normally restricted to the Toll Plaza Crossing – Gold Coast Corridor which, not above 500 ft AMSL, is deemed separated from all published IFR routes except for all RWY 07L/C SID tracks.

9.5.9. When RWY 07L/C/R are in use, the maximum altitude of VFR traffic operating in the Island Zone shall be as listed above, unless coordinated with DEP, to cater for the missed approach and departure climb gradient of IFR traffic.

9.5.10. The Delta Zone from SFC to 2000 ft shall be delegated to FAD when RWY 07L/C/R are in use and DEP when RWY 25L/C/R are in use. All VFR/SVFR operations in this area shall be coordinated with FAD/DEP. Aircraft operating not above 500 ft may be retained by ZNC following coordination.

9.5.11. The South Outer Zone from 500 ft – 2000 ft shall be delegated to FAD when RWY 07L/C/R are in use. When RWY 25L/C/R are in use, the portion of the zone from 1200 ft – 2000 ft shall be delegated to DEP. All VFR/SVFR operations within the aforementioned altitudes shall be coordinated with FAD/DEP.

9.5.12. ZNC shall give Zhuhai Approach prior notification of any traffic intending to operate above 1000 ft in the northern half of the Tuen Mun CTR which lies within the Hong Kong – Zhuhai Non-Transgression Zone (NTZ). The NTZ is depicted as the area between the Hong Kong – Zhuhai boundary and the adjacent dashed line on the Hong Kong TMA ASR.

9.5.13. Radio coverage in the West Lantau Corridor (WLC) from Tai O to Fan Lau may be intermittent due to shielding. ZNC shall ensure that essential ATC instructions / traffic information are acknowledged before traffic enters the corridor. Macao helicopters on Route A shall constitute traffic, particularly those westbound. Due to terrain, aircraft southbound in the WLC may not sight other traffic until close to Fan Lau, therefore in the interests of flight safety ZNC may consider providing a vertical buffer between the traffic, subject to co-ordination with APP/DEP.

9.5.14. If an IFR aircraft is inbound on the RNAV transition track for RWY 25R with a VFR aircraft operating in the Tai Lam Chung area, ZNC shall coordinate with FAD such that traffic information may be provided to the IFR aircraft before reaching TOPUN.

9.5.15. VFR helicopters rejoining the ATZ from West Lantau Corridor are **not separated** from RWY 25L RNAV departures and missed approach aircraft. ZNC shall instruct such helicopters to hold at Mount Rooster below 500 ft and transfer to AMS. The route between Mount Rooster and Fan Lau below 500 ft is separated from all instrument arrival and departure procedures.

9.5.16. Where necessary, VFR helicopters departing from the ATZ via West Lantau Corridor when RWY 25L/C/R are in use may be held at Sha Lo Wan to facilitate south runway movements. Those helicopters departing via West Lantau Corridor shall report passing Mount Rooster and cross Fan Lau below 500 ft.

9.5.17. ZNC shall assume the track of any VFR/SVFR/Hong Kong – Macau helicopter traffic operating within the CTR Zones. For VFR/SVFR traffic inbound to the ATZ, ZNC shall hand off the traffic to AMC prior to reaching the ATZ boundary. The assumption of tracks does **not** constitute a provision of any kind of radar service by ZNC.

9.5.18. For VFR traffic leaving the CTR Zones to the UCARAs, ZNC shall hand off the traffic to FIS prior to reaching the CTR Zone boundary.

9.6. ZNC Procedures (Gold Coast Corridor)

9.6.1. The Gold Coast Corridor is an off-shore corridor of length 2 NM and width 0.5 NM between Pearl Island and Brothers Point and the maximum operating altitude shall normally be 500 ft AMSL. The corridor is bi-directional, but limited to a single direction at any one time.

9.6.2. Traffic operating on the Gold Coast Corridor is **not separated** from departures from RWY 07L/C. Helicopters requesting to use the corridor should hold east of Ma Wan Island or west of Pillar Point at 500 ft from the time the IFR departure enters the runway until it has passed 1500 ft.

9.7. ZNC Procedures (Ma Wan Corridor and Toll Plaza Route)

9.7.1. Silvermine is the primary route between the ATZ, Lantau Zone and Ma Wan Zone, however, Ma Wan Corridor is available as an alternative route. The operating altitude of the Ma Wan Corridor is 1000 ft AMSL.

9.7.2. Traffic at 1000 ft AMSL transiting the Toll Plaza Route is not separated from RWY 07L/C/R IFR departures (except RWY 07C "T" SIDs) or RWY 25L IFR arrivals. Aircraft from Island Zone awaiting clearance to transit the Toll Plaza Route may be held.

9.7.3. When the Ma Wan Corridor is used the traffic shall transit over the Lantau Highway Toll Plaza via the Toll Plaza Route at an altitude of 800 ft AMSL for twin engine aircraft and 1000 ft AMSL for single engine aircraft.

9.7.4. The Ma Wan Corridor – Toll Plaza route is not separated from RWY 07L/C/R IFR departures (except RWY 07C "T" SIDs) or RWY 25L IFR arrivals. An e astbound helicopter should not proceed beyond Pak Mong, and a westbound helicopter should not proceed beyond the Ma Wan Corridor, until positive separation has been established with the IFR traffic.

9.7.5. The sector between Pak Mong and Toll Plaza takes about 3 – 4 minutes to complete. Helicopters on this route should only be approved when there will be no delay to IFR traffic or if the required separation can be provided.

9.7.6. Helicopters crossing the extended runway centreline to the east of the airport should route Brothers Point – Yam O (or vice versa) at 500 ft. This route is **not separated** from all RWY 07 departures and all RWY 25 arrivals.

9.8. ZNC Procedures (Kai Tak ATZ)

9.8.1. When Kai Tak AMC is closed, the Kai Tak ATZ is notified as closed (i.e. it becomes part of the CTR Island Zone), unless there will be a runway movement at Kai Tak within 5 minutes, in which case the Kai Tak ATZ is notified as open and is delegated from ZNC to the sector responsible for covering Kai Tak Airport top down. Once the runway movement is complete, ZNC shall be notified and the Kai Tak ATZ will be notified as closed.

9.8.2. When Kai Tak AMC is open, the Kai Tak ATZ is notified as open unless otherwise coordinated.

9.8.3. When the Kai Tak ATZ is notified as open, transit flights through the Kai Tak ATZ shall be individually coordinated and movements at the GFS Kai Tak dispersal are not permitted.

9.9. Hong Kong – Macau VFR Helicopter Procedures

9.9.1. There are three standard Hong Kong – Macau VFR/SVFR helicopter routes, A, B1 and C1:

- Route A: Sky Shuttle Heliport – Green Island – Cheung Chau Buoy – Fan Lau – TANGO – Macau Heliport.
- Route B1: Macau Heliport – UNIFORM – HVB01 – HVB03 – HVB04 – Cheung Chau South – Green Island – Sky Shuttle Heliport.
- Route C1: Macau Heliport – QUBEC – HVC02 – HVC03 – Lighthouse – Waypoint 2 – Cheung Chau South – Green Island – Sky Shuttle Heliport.

9.9.2. Routing via Lei Yue Mun and Hong Kong South due to adverse weather conditions in the western harbour may be approved during day time.

9.9.3. An additional SVFR-only route, Route A2, for Macau helicopters is available to permit operations with lower weather minima:

- Route A2: Sky Shuttle Heliport – HOROT – LEVKE – WAVOS – ZEXEK – CHAKO – HASAN – FATUT – FOVOG – GOGRE – Macau Heliport.

Due to high terrain adjacent to this route, controllers should not permit track shortening or direct routing.

9.9.4. The operating restrictions on the VFR/SVFR routes are dependent on the runway in use:

ROUTE	FLIGHT RULES	NORMAL USAGE	MAX ALT RWY 07	MAX ALT RWY 25
A	VFR/SVFR	Westbound	500 ft	500 ft
A2	SVFR	Westbound	500 ft	500 ft
B1	VFR only	Eastbound	500 ft	500 ft
C1	VFR/SVFR	Eastbound	VFR 500ft, SVFR 1000 ft	1200 ft

Note 1: All 4 routes are bi-directional but normally used in a single direction.

Note 2: The maximum altitudes listed above are only applicable to the western portion of the routes, i.e. west of Fan Lau / HVB03 / Waypoint 2 / HASAN.

Note 3: It is the operator's responsibility to notify ATC whenever weather conditions en-route are unsuitable for VFR operations.

9.9.5. Helicopters at 500 ft or below should normally contact ZNC; however, during RWY 07 operations traffic on Route C1 not above 1000 ft shall contact APP when between Macau ATZ boundary and Waypoint 2 for radar identification.

9.9.6. Similarly, during RWY 25 operations traffic on Route C1 not above 1200 ft shall contact DEP between Macau ATZ boundary and Waypoint 2 for radar identification. ZNC shall notify APP/DEP to expect traffic along these tracks.

Note: Radar identification is solely for the purpose of monitoring the helicopter's position relative to the MVA areas and IFR traffic, and no radar service will be provided in respect of terrain clearance or vectors.

9.9.7. During a runway change ZNC shall coordinate with APP/DEP in respect of any new clearance that may be required for Macau VFR helicopters already airborne.

9.9.8. Helicopters on Route A between Cheung Chau Buoy and TANGO and Route C1 between HVC02 and Cheung Chau South are deemed to be geographically separated for the purpose of SVFR operations.

9.9.9. ZNC and Macau Tower shall exchange timely information in respect of Hong Kong – Macau VFR/SVFR helicopter movements:

- Routing;
- Altitude and estimate for transfer point;
- For inbound helicopters, the contact frequency.

Note: For outbound helicopters the ETA TANGO is normally ATD + 12 mins.

9.9.10. Occasionally, when unfavourable conditions, especially turbulence, exist on other routes, Route C1 may be requested and used for two-way VFR operations subject to the following restrictions:

- Day and VMC;
- Standard Eastbound altitude 500 ft, standard Westbound altitude 1000 ft (Hong Kong QNH);
- A limit of one helicopter in each direction at any time.

9.9.11. Whenever the Route C1 VFR two-way mode is in use ZNC shall:

- Inform APP/DEP and obtain approval for any operation above 1000 ft;
- Retain control of both Eastbound and Westbound helicopters in the CTR;
- Ensure the helicopters have a serviceable transponder, set to the correct code.

9.9.12. While operating in this mode, route C1 shall be treated as active up to 1000 ft and vertical separation shall be provided from IFR traffic as appropriate.

9.10. Hong Kong – Macau IFR Helicopter Procedures (Enroute)

9.10.1. There are two IFR routes for Hong Kong – Macau helicopters:

- Track J (Eastbound): Macau Heliport – (visual segment) MCU DVOR – MCU RDL 116 – QUBEC – MCU RDL 116/DME 20 NM – WALIN

  (Westbound): WALIN – Intercept MCU RDL 116 – MCU RDL 116/DME 20 NM – PEARL – QUBEC – MCU RDL 116/DME 1.1 NM (Missed Approach Point) – (visual segment) Macau Heliport

- Track L (Westbound): KEMTE – Intercept TD RDL 225 – TD RDL 225/DME 21.5 NM – Intercept MCU RDL 116 – PEARL – QUBEC - MCU RDL 116/DME 1.1 NM (Missed Approach Point) – (visual segment) Macau Heliport

Note 1: If MCU or TD DVOR/DME are not available, these IFR procedures shall not be used.
Note 2: Route J westbound is not available for departing helicopters and should only be flown by helicopters diverting back to Macau from WALIN.

9.10.2. Only one helicopter is permitted on the IFR route system at a time.

9.10.3. Route J shall be regarded as active once approval has been passed to Macau TWR and Route L shall be regarded as active when clearance to depart from Sky Shuttle Heliport has been issued.

9.10.4. VFR/SVFR flights on routes B1 and C1 shall not be permitted when the IFR routes are active unless vertical or geographical separation can be provided.

9.10.5. ZNC is responsible for coordination between Hong Kong ATSU and Macau TWR.

9.10.6. When Macau TWR requests approval for Route J, ZNC shall:

- Coordinate with APP/DEP and inform Macau TWR if request approved and contact frequency, or expected delay and reason.
- Notify APP/DEP:
  - When the helicopter departs Macau and ETA QUBEC,
  - If the helicopter carries out a missed approach.

9.10.7. When a helicopter at Sky Shuttle Heliport requests Route L to Macau, ZNC shall:

- Request **prior approval** from Macau TWR before releasing the helicopter on an IFR route. This is to facilitate integration with other IFR movements at Macau Airport.
- Notify APP/DEP:
  - When the helicopter departs Sky Shuttle Heliport on Route L;
  - When the helicopter continues visually in the Macau ATZ or makes a missed approach;
  - If a missed approach helicopter requests an ILS approach at Macau, advise Macau TWR the frequency to contact.
- Notify Macau TWR when the helicopter has departed Sky Shuttle Heliport on Route L, together with the ETA for PEARL.

9.11. Sky Shuttle Heliport RNP 037 Approach Procedure

9.11.1. The RNP 037 approach procedure is published to facilitate descent from the IFR Macau – Hong Kong route to visually route CUSDO – Western Harbour – Sky Shuttle Heliport.

9.11.2. The Initial Approach Fix (IAF) for the approach is WALIN on Route JULIET. The initial approach altitude is 1800 ft. If holding is required a standard one minute left-hand holding pattern is established at WALIN, inbound course 022 °M. The minimum holding altitude is 1800 ft.

9.11.3. The Missed Approach Point (MAPt) is CUSDO. Climb to 900 ft turning left direct to FIDLA then climb to 1300 ft and track 220 °M to ZEXEK then climb to 1800 ft and track 202 °M to WALIN and hold.

9.11.4. ZNC is responsible for the RNP 037 holding/approach/missed approach portion of the route and the provision of separation between IFR helicopter traffic and other VFR/SVFR traffic operating in the CTR Zones.

9.11.5. Because the operating altitudes of Route J and L are below the MVA and MSA for the area, deviation from the approved track or holding patterns shall not be permitted by ATC unless the helicopter first climbs to the appropriate MVA.

9.11.6. Helicopters on Route J shall contact ZNC at MCU RDL 116/D20 NM. Subject to other ZNC traffic, ZNC shall clear the helicopter for a "RNP 037 Approach". When the helicopter reports able to continue visually, ZNC shall apply normal VFR/SVFR separation procedures with other traffic in the CTR Island Zone. If the helicopter

carries out a missed approach, advise APP/DEP (as appropriate). If the helicopter is diverting back to Macau, transfer the helicopter to APP/DEP prior to it reaching MCU RDL 116/DME 20 NM and notify Macau TWR with the ETA PEARL.

9.11.7. If it is necessary to delay or hold the helicopter prior to commencing an approach, the helicopter shall enter the holding pattern at WALIN at 1800 ft.

9.12. Sky Shuttle Heliport IFR Departure Procedure

9.12.1. The approved departure procedure for Route L is initially VFR/SVFR from Sky Shuttle Heliport – IONIC (IDF) to join the RNAV KEMTE departure. Clearance for the departure shall be issued using the following phraseology: "Cleared RNAV KEMTE departure, climb via SID to 1600 ft".

9.12.2. During the initial visual segment ZNC shall apply normal VFR/SVFR separation procedures with other traffic within the CTR. When clear of other ZNC traffic and prior to reaching MCU RDL 116/DME 20 NM, the helicopter shall be transferred to the appropriate APP/DEP frequency.

9.13. Oil Rig Support Helicopters

9.13.1. Oil rig support helicopters operating VFR between "VW" and QUBEC not above 1000 ft transit the SW corner of the South Outer Zone. Operationally, helicopters normally fly at 500 ft within this route sector and contact ZNC, irrespective of runway in use. For flights above 500 ft (max 1000 ft) ZNC shall coordinate with FAD when RWY 07 is in use. In the case of RWY 25, flights are permitted, without coordination, to operate VW - Q – ZAO up to 800 ft, provided they do not deviate east of track in the sector between Q and ZAO.

9.13.2. Northbound helicopters shall contact Macau Tower 5 minutes prior to position "Q". ZNC shall be responsible for passing the "Q" estimate to Macau.

9.13.3. Although Macau Tower is primarily responsible for resolving traffic conflictions between oil rig helicopters and other VFR traffic at Q, it is highly recommended to provide a vertical buffer (at least 300 ft) whenever there are direct conflicts. This will require coordination between ZNC / Macau Tower and, if RWY 07 is in use, FAD.

9.13.4. Southbound helicopters shall contact CFIS prior to position "VW".

9.14. VFR Helicopters to/from Shenzhen

9.14.1. The standard VFR entry/exit/transfer point is LUKBU at not above 1000 ft.

9.14.2. Flights in either direction should not proceed beyond LUKBU unless they have established 2-way communication with the accepting ATC unit.

Note: In view of the short distance from the airport to LUKBU and in light of experience, it is advisable to pre-coordinate such movements with Zhuhai Approach, with a provisional LUKBU estimate, before releasing the helicopter for departure. Airborne holding delays may otherwise be incurred pending acceptance of the flight. The appropriate Zhuhai contact frequency should also be confirmed.

9.15. Helicopter Operations at the Peninsula Hotel

9.15.1. The following information on helicopter operations at the Peninsula Hotel Heliport is provided for general guidance:

- There are two helipads on the roof of the hotel at an elevation of 394 ft AMSL;
- The nominal approach and departure paths of the heliport would normally limit the helicopter's take-off/landing activities to the south;
- No navigational aids are provided at the heliport, all flights are VFR or SVFR;
- Hours of operation are generally between 0700 local time and sunset only, though this may be ignored on VATSIM.

9.16. Helicopter Operations at the GFS Kai Tak Dispersal

9.16.1. There is a single helipad at the former RWY 31 threshold of Kai Tak Airport for GFS helicopters. This helipad is uncontrolled and ATC is not responsible for the provision of Air Traffic Services at the dispersal. However, traffic information shall be passed to aircraft in the area where appropriate.

9.16.2. When the Kai Tak ATZ is notified as open, movements at the GFS Kai Tak Dispersal are not permitted.

9.17. Helicopter Operations at other Landing Sites

9.17.1. All other helipads within the CTR are uncontrolled – ATC is not responsible for the provision of Air Traffic Services. However, traffic information shall be passed to aircraft in the area where appropriate.

9.18. Use of Radar Information by ZNC

9.18.1. The radar information provided to ZNC should only be used as an aid to provide additional information; it should not be used for the purpose of radar vectoring or other forms of radar control.

9.18.2. Zone Control is a non-radar service and controllers are not rated to provide a radar service whilst performing ZNC duties.

9.18.3. The radar information derived may be used by ZNC to assist in passing relevant traffic information to VFR traffic. However standard identification and verification procedures are not used and low level radar coverage within the CTR may be limited by terrain. Therefore information or advice passed to aircraft must be supported by pilot reports or visual sighting by pilots.

9.18.4. If not already assigned an SSR code, ZNC shall allocate each VFR/SVFR and Hong Kong – Macau helicopter flight operating within or entering CTR airspace a SSR code. The pilot shall also be instructed to select Mode C to ensure that false TCAS alerts are not generated.

9.18.5. To maintain a consistent level of service to pilots and to avoid any misconception about the type of ATC service being provided, ZNC should pass reports of traffic information by reference to geographical location and track, e.g. “passing Central for Silvermine” or, “abeam Tsing Yi for Peninsula”;

If a pilot requests more specific information, the response should be prefixed with the phrase ‘believed to be’, highlighting the lack of positive identification, e.g. the relative position of the other traffic e.g. “believed to be 11 o’clock, two miles”.

9.18.6. ZNC should not assume the accuracy of VFR or SVFR traffic Mode C altitude information, unless the data has been verified with the pilot, the altitude information should not be passed to other aircraft – it should only be used as a general indication (VFR and SVFR traffic frequently make un-notified altitude changes). If altitude information is required to be passed to the pilot to assure separation, the transmission should be prefixed with the phrase “unconfirmed”.

9.18.7. There may be isolated occasions when ZNC detects an imminent conflict between VFR traffic and has reason to believe that the pilots concerned may not be aware of. Under such circumstances, ZNC action should be limited to passing relative traffic information in a timely manner, e.g. "(callsign) caution, helicopter traffic believed to be 11 o'clock, 1 mile crossing left to right at a similar altitude".

Note: ZNC should not pass avoiding action to VFR flights, the pilot is responsible for the most appropriate course of action.

9.19. Assessment of Relevant Traffic

9.19.1. Assessment of what constitutes relevant traffic in a VFR environment is not clear-cut and also varies with controller experience. As a general guideline, a "3 NM" rule of thumb is suggested. In other words, pass traffic information on traffic that is, or is expected to be, within 3 NM of the subject aircraft's flight path. While this will cover most situations encountered in local day-to-day operations, bear in mind this raw figure is not a "one size fits all" solution and in some circumstances may need to be adjusted to cater for large differences in aircraft performance, non-standard manoeuvres or special flight requirements.

10. FLIGHT INFORMATION SERVICE (FIS)

10.1. Callsigns & Frequencies

POSITION	TEXT CALL SIGN	VOICE CALL SIGN	FREQUENCY	CODE	CJS
Flight Information Service	VHHH_F_TWR	"Hong Kong Information"	121.000	FIS	FI
Centre Flight Information Service	N/A	"Hong Kong Information"	N/A	CFIS	CF

Note: Although a separate position in the real world, CFIS is permanently consolidated with FIS on VATSIM. Controllers shall **not** open CFIS separately.

10.2. Responsibilities

10.2.1. Flight Information Service (FIS) is a non-radar traffic information service provided to all traffic operating in the Uncontrolled Aircraft Reporting Areas (UCARAs). FIS serves to reduce the risk of collision between aircraft by relaying details of other aircraft reported in the same area in UCARAs. The responsibility for collision avoidance remains entirely the responsibility of the pilot and the accuracy of the information broadcast by FIS is dependent on the information received from participants.

10.2.2. Similarly, Centre Flight Information Service (CFIS) is a non-radar traffic information service provided to all traffic (particularly oil rig support helicopters) operating in Class G airspace in the HK FIR except those in the UCARAs.

10.2.3. FIS is responsible for the provision of an alerting service. Overdue action shall be initiated if no report is received within 30 minutes of the due time.

10.2.4. FIS shall give Zhuhai Approach prior notification of any traffic intending to operate in UCARA North Border up to 1000 ft. Monitor the tracks of traffic operating in the UCARA North Border and advise the pilot if it appears the flight may be crossing the northern boundary of the area.

10.2.5. FIS shall request approval from Zhuhai Approach for any traffic requiring to operate in UCARA North Border above 1000 ft.

10.2.6. FIS/CFIS shall assume the track of any traffic operating within Class G airspace. The assumption of tracks does **not** constitute a provision of any kind of radar service by FIS/CFIS.

10.2.7. When FIS is closed, ZNC shall assume the responsibilities of FIS. If ZNC is also closed, then the AMC assuming the responsibilities of ZNC shall also assume the responsibilities of FIS.

10.3. Logon Requirements

10.3.1. Prior to opening FIS, GMC1, at least one AMC and ZNC must all be open.

10.4. Helicopter Operations (FIS)

10.4.1. Helicopters landing at sites in the UCARAs will not be issued a landing clearance. It is the pilot's responsibility to ensure that the landing site is available and serviceable.

10.5. Oil Rig Support Helicopter Operations (CFIS)

10.5.1. General

10.5.1.1. Oil rig support helicopter tracks covered by CFIS are:

- Track H: IFR/VFR primary bi-directional route;
- Track VH: VFR secondary bi-directional route;
- Track VW: VFR secondary bi-directional route;
- Track D: IFR secondary bi-directional route.

10.5.1.2. Abbreviated R/T callsigns for oil rig support helicopter flights should be used in the form "H23D" (instead of CHC23D). They will be used in R/T communication and coordination between concerned ATC units. However, the FPL format would remain unchanged.

10.5.2. Track Information

10.5.2.1. Details regarding the altitude restrictions and routing of each track are tabulated below.

10.5.2.2. VFR Tracks:

TRACK	ROUTING	LESS THAN 50 NM FROM BIGEX	50 NM OR GREATER FROM BIGEX
H	HENGA – AOTOU - SESAN	2000 ft AMSL or less	Below 8000 ft AMSL and in accordance with ICAO semi-circular cruising level
VH	HENGA – PING SHAN – Along Eastern Coast of DAPENG WAN – DAPENG	2000 ft AMSL or less	Below 8000 ft AMSL and in accordance with ICAO semi-circular cruising level
VW	ZAO – QUBEC – HVC02 – HVW01 – VW	ZAO – Q: 500 ft AMSL or less (RWY 07), 800 ft AMSL or less (RWY 25) Q – VW: 1000 ft AMSL or less VW – rig: 2000 ft AMSL or less	Below 8000 ft AMSL and in accordance with ICAO semi-circular cruising level

10.5.2.3. IFR Tracks

TRACK	ROUTING	LESS THAN 50 NM FROM BIGEX	50 NM OR GREATER FROM BIGEX
H	HENGA – AOTOU - SESAN	Base to rig: 5000 ft AMSL Rig to base: 4000 ft AMSL	Below 8000 ft AMSL and in accordance with ICAO semi-circular cruising level
D	ZUH – ROMEO - DELTA	Base to rig: 4000 ft AMSL or 6000 ft AMSL under coordination with Zhuhai and HK Rig to base: 5000 ft AMSL	Below 8000 ft AMSL and in accordance with ICAO semi-circular cruising level

10.5.3. ATC Handling Procedures (General)

10.5.3.1. Flight Information Service and Alerting Service shall be provided to oil rig support helicopter flights and other known traffic operating in Class G airspace over the South China Sea. The radar data shall only be used for the purpose of providing information and advice with reference to other known traffic.

10.5.4. ATC Handling Procedures (Track H)

10.5.4.1. Helicopters routing via Track H shall remain in contact with CFIS from SESAN all the way to the rigs and vice versa. The transfer of control point with Zhuhai Approach is SESAN.

10.5.4.2. In the event of unavailability of Track H, routing via Huang Mao Shan – Qing Zhou shall be used (Track HT). The transfer of control point with Zhuhai Approach is Qing Zhou (QZ).

10.5.4.3. Point HOTEL to the south of SESAN is designated as a holding point for helicopters tracking northbound via Track H. Helicopters may utilise this point to absorb delay in order to comply with Zhuhai Approach sequencing requirements.

10.5.5. ATC Handling Procedures (Track VH)

10.5.5.1. Helicopters routing via Track VH shall remain in contact with CFIS from DAPENG all the way to the rigs and vice versa. The transfer of control point with Zhuhai Approach is DAPENG.

10.5.5.2. Because Track VH passes very close to the eastern boundary of UCARA Mirs Bay, any traffic operating in UCARA Mirs Bay should be given information on the oil rig support helicopter.

10.5.6. ATC Handling Procedures (Track VW)

10.5.6.1. Southbound helicopters routing via Track VW shall be transferred from ZNC at VW. They shall remain in contact with CFIS from VW all the way to the rigs and vice versa.

10.5.6.2. Northbound helicopters on Route VW shall be transferred to ZNC prior to VW for traffic information. For such cases, ZNC will be responsible to effect the transfer to Macau Tower.

10.5.7. ATC Handling Procedures (Track D)

10.5.7.1. Helicopters routing via Track D are controlled by MCU within controlled airspace. Southbound helicopters will be transferred to CFIS upon leaving controlled airspace.

10.5.7.2. CFIS shall transfer northbound helicopters to MCU prior to entering controlled airspace.

10.6. Meteorological Information

10.6.1. It is the pilot's responsibility to comply with the weather minima for Class G airspace. During periods of marginal weather conditions, FIS may request weather observations from pilots for the information of other pilots.

10.6.2. Taking into account the rapid weather developments which can occur locally in summer, any local warnings issued by Hong Kong Observatory, such as those for thunderstorms, strong wind or heavy rain, should be passed, upon first receipt by ADC, to traffic operating in the UCARAs (or other Class G airspace where applicable) and CTR Zones which may be affected.

10.7. FIS/CFIS Procedures and Use of Radar Information

10.7.1. Within Class G airspace the Flight Information Service provided is dependent on pilots' reports.

10.7.2. On receipt of a pilot's UCARA entry report, FIS shall provide the Hong Kong QNH and information on any other aircraft operating within that UCARA, e.g. "one DA42, two C172s and one H175 operating in TOLO", or if there are no reports, "no known traffic in TOLO".

10.7.3. Similarly, on first contact with an aircraft in Class G airspace other than the UCARAs, CFIS shall provide the Hong Kong QNH and information on any other aircraft operating within that area.

10.7.4. Pilots should be instructed to make regular "ops normal" calls (e.g. every 15 minutes) whilst operating within Class G airspace for traffic monitoring and alerting action purposes. On receipt of such periodic reports FIS/CFIS shall provide current traffic information as described in the sections above.

10.7.5. Carriage of SSR transponders is not mandatory for flights solely within the UCARAs, except those using the published Aerobatic Area up to 3500 ft. Nevertheless, for aircraft that are transponder equipped, FIS shall assign a discrete VFR code. For flights operating in North Border area, a transponder code will also assist in monitoring the flight's progress and coordination with Zhuhai Approach.

10.7.6. The radar information provided is solely for use as an aid to assist in monitoring VFR traffic and facilitating an alerting service. Except in emergency, FIS shall not use radar derived information for the provision of traffic information or any type of radar service.

10.7.7. For VFR traffic leaving the UCARAs to the CTR Zones, FIS shall hand off the traffic to ZNC prior to reaching the CTR Zone boundary.

10.8. Shek Kong Aerodrome Reporting Area (SKARA)

10.8.1. The SKARA is Class G airspace similar to the UCARAs and pilots should make "blind transmissions" on the advisory frequency prior to entering the SKARA at one of the designated entry points.

10.8.2. When a pilot has stated the intention to land at Shek Kong or in the case of a helicopter, to land at a site within the SKARA, the pilot may cancel the flight plan with FIS as they enter the SKARA at the designated entry point and report their arrival to FIS immediately prior to landing. FIS acknowledgement of such reports by R/T shall include the time of flight plan cancellation.

10.9. Designated Aerobatic Area

10.9.1. The designated aerobatic area, established in UCARAs Tolo and Mirs Bay, north of the extended centreline of RWY 07L / 25R, is called “Aerobatic Area” on R/T.

10.9.2. Usage of the aerobatic area is subject to the following conditions:

- Operating altitude not above 3500 ft;
- In VMC only;
- The aerobatic aircraft has a serviceable transponder;
- The aircraft shall remain at or below 3000 ft (ie the upper limit of Tolo and Mirs Bay) and request ATC clearance through FIS prior to climb.
- ATC shall provide separation between the aerobatic aircraft and other IFR traffic. However, the pilot of the aerobatic aircraft is responsible for maintaining own separation and for collision avoidance with other local traffic within the area.

10.9.3. FIS shall coordinate with DEP (RWY 07) or FAD (RWY 25) for clearance availability and the frequency for transfer, and shall pass traffic information on the aerobatic flight to other traffic in Tolo and Mirs Bay.

GLOSSARY OF TERMS

ABBREVIATION	DEFINITION
ADC	Aerodrome Control Unit
ATZ	Aerodrome Traffic Zone
CTR	Control Zone
LOA	Letters of Agreement
TWY	Taxiway
CJS	Controller Jurisdiction Symbol
CDC	Clearance Delivery
GMC	Ground Movements Control
AMC	Air Movements Control
ZNC	Zone Control
UCARA	Uncontrolled Aircraft Reporting Area
RET	Rapid Exit Taxiway
MAP	Missed Approach Procedure
WTC	Wake Turbulence Category
AMSL	Above Mean Sea Level
ATD	Actual Time of Departure
ATSU	Air Traffic Services Unit
SSR	Secondary Surveillance Radar
MVA	Minimum Vectoring Altitude
MSA	Minimum Sector Altitude
IDF	Initial Departure Fix
FPL	Flight Plan

RECORD OF REVISION

DATE	REV.	REVISION CONTENT	APPROVAL
29 MAR 2015	1	Added squawk code list to Appendix B Added Figure 10.1 to Section 10 Relocate ATIS requirement and voice server requirement to HKVACC-SOP011 and HKVACC-SOP012 Corrected RWY numbering in Appendix A Revise section numbering	A. TANG
24 OCT 2015	2	Revised Section 6.1.2.1. Revised 8.2.4 and 8.2.7. Added examples of flight plan inspections (now Section 8.3) Section 8.6 is added regarding the implementation of pre-departure clearance. Section 9.2.5 is modified to reflect the change that allows pushback colour system to be used on VATSIM. Section 9.3 regarding pushback procedures is added. Added Section 9.5 regarding hand off to TWR Omitted Section 11.3 in Revision 001	A. TANG
17 JUN 2016	3	Added Section 4.2, 9.5 "Crossing the South Runway", 9.7 A. Tang "From the Runway", Revised Section 9.3.1, 9.5.1 Rewrite Section 10. Updated Appendix A to include the recently added M503 airway	A. TANG
3 AUG 2018	4	Redone section 9 Added new diagram Added position Midfield Ground to Frequency and section 9	B. BROWN
14 JUN 2020	5	Updated section 5 Revised section 6.3 Updated section 7 Updated section 9 figure 9.1 Updated section 9 phraseology Revised section 10.2.7 regarding helicopter departure Updated appendix A	J. CHENG
1 DEC 2021	6	Updated delivery frequency Updated runway designators Updated appendix A	J. CHENG

14 JUL 2022	7	Added North Runway Information Updated Section 5.1 Updated Section 6.1 Updated Section 9.1, 9.5 Updated Section 10.1 Updated Section 11 Update Appendix A Updated some minor phraseology	J. WAI
30 MAR 2023	8	Updated Centre Runway Closure Procedures (6.1, 11) Removed section on conflicting VHHX frequencies (5.1) Updated Ground Sectorisation (9.1) Updated ATZ Sectorisation (10.1.1) Updated Squawk Range (Appendix B)	J. WAI
01 MAR 2024	9	Removed Appendix A & B Added Section 5.3 & 5.4 Updated Section 7.4 (Add Changeover Time) Updated Section 8.2 (Flight Plan Inspection) Updated Section 8.3 & 8.4 (IFR Clearance Format & Phraseology) Updated Section 9.2 (Helicopter Taxi & Departure Procedures) Updated Section 9.3 (Push and Start Phraseology) Updated Section 9.4 (Helicopter Taxi Phraseology) Added Section 9.4.4 (Protection of Aircraft Vacating from the Runway) Updated Section 10.2 (ATZ VFR Procedures) Added Section 10.3 (ATZ Helicopter Procedures) Added Sections 10.4.4, 10.4.5 & 10.4.6 (Alternating Departures & Wake Turbulence Separation) Added Section 10.5.2 (Final Approach Speed Control) Added Section 10.5.6 (Guidance on Handling Aircraft Without Latest Scenery) Updated Section 10.5.7 (Prioritisation of IFR over SVFR/VFR) Added Section 10.6 (Reduced Runway Separation Minimums) Added Section 10.7 (Flow Control Procedures) Updated Section 10.8 (Radar Tracking) Updated Section 9.2.6 (Guidance on Secondary Holding Points) Updated Controller Position Names to match reality	T. SIU

05 OCT 2024	10	Updated phraseology for IFR clearances	T. SIU
28 NOV 2024	11	Added Ground Movements Control West 2 and Air Movements Control Midfield for 3RS Added 3RS Procedures to Section 6 Updated Section 7.3 and added Section 7.4 Updated Section 9.1.6 Updated Section 9.2.2 Updated Section 9.4.3 Updated Section 9.4.6 Updated some taxi phraseologies Updated Section 9.5 Added Section 9.6.2 Updated Section 10.2.4 and Section 10.2.5 Updated helicopter holding areas for 3RS Updated Section 10.4.7 and Section 10.4.9 Updated RRSM Procedures	T. SIU
07 DEC 2024	12	Updated GMC Positions Updated VFR Procedures	T. SIU
30 OCT 2025	13	Complete rewrite for readability and organisation Updated various procedures Added FIS section	T. SIU