

Doc No.: HKVACC-SOP001-R12

Date Issued: 07 DEC 2024

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

STANDARD OPERATING PROCEDURE (SOP)

DOCUMENT NUMBER: HKVACC-SOP001-R12

DATE ISSUED: 07 DEC 2024

REVISION: 12

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

EFFECTIVE DATE: 07 DEC 2024

SCOPE: Outlines standard techniques for online ATC service at Hong Kong International Airport (VHHH) on VATSIM.

1. PURPOSE

- 1.1. This Standard Operating Procedure (SOP) sets forth the procedures for all controllers providing aerodrome 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 aerodrome ATC positions at Hong Kong International Airport (VHHH) and other controllers who interface with aerodrome controllers at VHHH.

4. BACKGROUND

- 4.1. Over time, controllers have found that having aircraft arrive and depart via pre-approved runways provides for a more orderly traffic flow and reduces the need for communication among controllers at VHHH. 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.
- 4.2. Prior to reading the remainder of this SOP document, controllers shall have a proficient understanding of the Standard Instrument Departure (SID) system and the airspace structure of Hong Kong FIR. A prerequisite of this SOP is SOP051 document.

5. REQUIREMENTS

5.1. FREQUENCIES

5.1.1. The following frequencies shall be used at all times for aerodrome control positions at Hong Kong International Airport. Frequencies other than listed may not be used. (*Refer to AIP AD 2.18*)

POSITION	TEXT CALL SIGN	CODE	VOICE & COORDINATION CALL SIGN	FREQUENCY
Clearance Delivery	VHHH_DEL:	CDC	"Hong Kong Delivery"	122.150
Ground Movements Control 1	VHHH_1_GND	GMC1	"Hong Kong Ground"	121.600
Ground Movements Control 2	VHHH_2_GND	GMC2	"Hong Kong Ground"	122.550
Ground Movements Control 3	VHHH_3_GND	GMC3	"Hong Kong Ground"	121.875
Ground Movements Control 4	VHHH_4_GND	GMC4	"Hong Kong Ground"	122.600
Ground Movements Control 5	VHHH_5_GND	GMC5	"Hong Kong Ground"	122.125
Air Movements Control (South)	VHHH_S_TWR	AMS	"Hong Kong Tower"	118.400
Air Movements Control (North)	VHHH_N_TWR	AMN	"Hong Kong Tower"	118.700
Air Movements Control (Midfield)	VHHH_C_TWR	AMM	"Hong Kong Tower"	118.200

Note: when only one frequency is online, the callsigns marked in red shall be used.

5.1.1. When any position covering Hong Kong aerodrome is online, the controller may elect to set up voice Automatic Terminal Information Service (ATIS). There are two separate frequencies for ATIS, arrival ATIS and departure ATIS. Controllers should open both frequencies simultaneously using the provided vATIS profile.

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

5.2. While communicating over voice and broadcasting ATIS, controllers shall always refer to and follow the SOP document HKVACC-SOP-011 "ATC Coordination" and other VATSIM regulations governing the broadcast of ATIS.

5.3. When there are two or more controllers wishing to operate Ground Movements Control positions, both Clearance Delivery (VHHH_DEL) and Ground Movements Control 1 (VHHH_1_GND) must be open before additional Ground sectors can be opened.

5.4. When there are two or more controllers wishing to operate Air Movements Control positions or Hong Kong Zone Control, both Ground Movements Control 1 (VHHH_1_GND) and Air Movements Control South (VHHH_S_TWR) must be open before additional Tower sectors can be opened.

6. RUNWAY-IN-USE

6.1. There are three runways at VHHH: **the North Runway (07L/25R), Centre Runway (07C/25C) and the South Runway (07R/25L).**

6.1.1. PREFERENTIAL RUNWAY SYSTEM

6.1.1.1. The final decision of direction of operations is always based on real-world operations. Controllers should visit Hong Kong Civil Aviation Department (CAD) Automatic Terminal Information Service (ATIS) website (<https://atis.cad.gov.hk/>) for the latest weather and runway-in-use information to determine runway-in-use.

6.1.1.2. Between 1700 – 2359 UTC daily, scheduled maintenance takes place on one of the three runways on a rotational basis. The scheduled maintenance periods are published in AIP supplements and any amendments are normally promulgated by NOTAM.

6.1.1.3. If real world data is unavailable, Runway 07L/R will be nominated as the runway in use whenever the tailwind component, including gust values, is 10kt or less when the runway is dry, or 5kt or less when the runway is not dry.

6.1.2. THREE RUNWAY OPERATIONS

6.1.2.1. When all three runways are available (normally between 0000 – 1459 UTC daily), the following operating mode will normally be adopted to allow simultaneous operation of all three runways:

6.1.2.1.1. Runway 07 Operations

- Runway 07L: Arrivals Only
- Runway 07C: Departures Only (via BEKOL, LEKEN – V601/V611 or DALOL – V621/V631)
- Runway 07R: Mixed Arrivals and Departures (via DALOL – V641/V651 or PECAN – V10/V11/V12)

6.1.2.1.2. Runway 25 Operations

- Runway 25R: Arrivals Only
- Runway 25C: Departures Only (via DALOL or PECAN)
- Runway 25L: Mixed Arrivals and Departures (via BEKOL or LEKEN)

6.1.2.2. Aircraft will operate via dependent parallel approaches to Runways 07L/07R or Runways 25L/25R.

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

6.1.2.4. Arrivals who do not have the North Runway shall be assigned the South Runway.

6.1.3. DUAL AND SINGLE RUNWAY OPERATIONS

6.1.3.1. Between 1500 – 2259 UTC daily, the South Runway (07R/25L) is not available for normal operations.

6.1.3.2. Between 1500 – 1659 UTC daily, the North Runway (07L/25R) and Centre Runway (07C/25C) will operate in Segregated Mode, i.e. one runway for arrival and one runway for departure. The North Runway (07L/25R) is the normal arrival runway and the Centre Runway (07C/25C) is the normal departure runway.

6.1.3.3. Between 1700 – 2259 UTC daily, only one runway, either the North Runway (07L/25R) or Centre Runway (07C/25C), will remain operational in Mixed Arrivals and Departures Mode.

6.1.3.4. Between 2300 – 2359 UTC daily, dual runway operations will resume using a combination of North/Centre, Centre/South or North/South runways depending on the maintenance schedule.

6.2. All IFR arrival aircraft shall by default use **ILS approach** to land. Other approach methods may be used with ATC approval if the pilot is unable to perform ILS approach.

6.3. See Section 7 of this SOP document for noise abatement procedures.

7. NOISE ABATEMENT PROCEDURES

7.1. As per Hong Kong AIP AD 2.21 and AD 2.22, **Noise Abatement Procedures** are adopted on VATSIM for Hong Kong International Airport (VHHH). Controllers shall be familiar with these procedures controlling during noise abatement hours (**1500 to 2259 UTC**).

7.2. During noise abatement hours, controllers shall refer to CAD ATIS website for the current runway-in-use.

7.3. Radius-to-Fix SID procedures are issued as the default procedure to all aircraft, except for daytime (2300 – 1459 UTC) departures via Runway 07C, which shall be issued departures with the "T" designator. The "T" departures shall not be issued during noise abatement hours.

7.4. As per Section 7.3, daytime departures via Runway 07C shall be assigned departures with the "T" designator. Controllers shall ensure that aircraft are flying the correct SID depending on time-of-day by the time the aircraft departs. This means that aircraft departing Runway 07C should begin to be issued alternative SIDs (e.g. LARIT -> LEKEN when approaching noise abatement hours, and LEKEN -> LARIT when approaching daytime hours) at least 15 minutes before the changeover time.

8. CLEARANCE DELIVERY

8.1. AREA OF RESPONSIBILITY

8.1.1. Clearance Delivery does not have its own sector. All ground movements are handled by Ground Movements Control.

8.2. FLIGHT PLAN INSPECTION

8.2.1. Clearance Delivery shall examine each field of the flight plan submitted by the pilot and ensure that the **route and altitude** is sound and appropriate prior to issuing IFR clearance. If an incorrect route or altitude is filed, the Delivery controller shall advise the pilot and provide a correct alternative. If the pilot accepts the alternative, the Delivery controller shall amend the flight plan accordingly. In the case where an amendment to a submitted flight plan is necessary, no Pre-Departure Clearance (PDC) shall be issued. (Refer to SOP007 for details on PDC)

8.2.2. The Delivery controller shall check for the **runway-in-use** (this is determined by Air Movements Control and announced on ATIS), **noise abatement procedures** and **runway closure**. If Air Movements Control is not online, the Delivery controller may recommend pilots to depart from a specific runway under consideration of **Section 6.1** (-> current tailwind component, METAR and TAF). However, pilots have the final say whenever Air Movements Control is not online.

8.2.3. It is the **responsibility of the Delivery controller to issue a SID to departing IFR aircraft**. In such a situation, the route in the flight plan submitted by the pilot will begin with the transition route (e.g. V621, V631, V641, etc.) except for departures via BEKOL. The Delivery controller shall prepend the cleared SID into the aircraft's flight plan after the enroute clearance has been given. The departure runway shall also be included to allow EuroScope to display the SID routing correctly. **Ensure that airfields are not included in the route.** (for example: DALOL1X/07R DALOL V631 ENVAR... if cleared DALOL1X departure)

8.2.4. IFR departing aircraft unable to follow a standard SID / unable RNP1 may be cleared on the RAMEN/RUMSY contingency SIDs, subject to the approval of Hong Kong Approach/Departure. These SIDs are also available on pilot request. If the pilot advises that are unable to follow the contingency departures, then they may be cleared via radar

vectors departure. In both cases, the departure and the runway shall be prepended into the aircraft's flight plan. (e.g. RAMEN2A/07R or RDVR/07R)

8.2.5. IFR departing aircraft following SID will have an initial climb altitude of **5000 feet**. To reflect this altitude, the Delivery controller shall set **the temporary altitude** of IFR departing aircraft to **5000 feet** prior to issuing clearance.

8.2.6. To check the cruising altitude of the flight plan, the Delivery controller shall first identify the departure route under which the aircraft will fly within Hong Kong FIR. Generally, with the exception of aircraft departing towards PRC airspace (using Chinese RVSM metric altitudes, except for Sanya Oceanic FIR), the Delivery controller shall assign an altitude according to the ODD-EVEN rule with reference to the altitudes available within the Letters of Agreement with each neighbouring FIR. These altitudes may also be found within the Hong Kong vACC Cue Card. The ODD-EVEN rule within a RVSM airspace, simply put, assigns altitude of flight according to the magnetic track of the aircraft.

8.2.7. Assignment of cruising altitude for aircraft departing via BEKOL shall base upon the metric RVSM system in China. Controllers may refer to the VATPRC division website for the Chinese RVSM Flight Level Allocation Scheme (vatprc.net/rvsm) or the Hong Kong vACC Cue Card.

8.2.8. The Delivery controller shall check if the voice flag is set in the remarks section and add or correct it if required:

- /v for voice
- /r for receive-voice
- /t for text-only

8.2.9. **Clearance Delivery does not issue clearance to VFR aircraft.** VFR departing aircraft can contact Ground Movements Control directly for taxi clearance.

8.2.10. In the real world, an IFR flight plan contains a variety of information. However, some of this information may not necessarily pertain to the work of virtual ATC on VATSIM. For EuroScope users, certain fields in the flight plan window are considered optional for the purposes of issuing IFR clearance. These fields are highlighted in yellow in Figure 8.1.

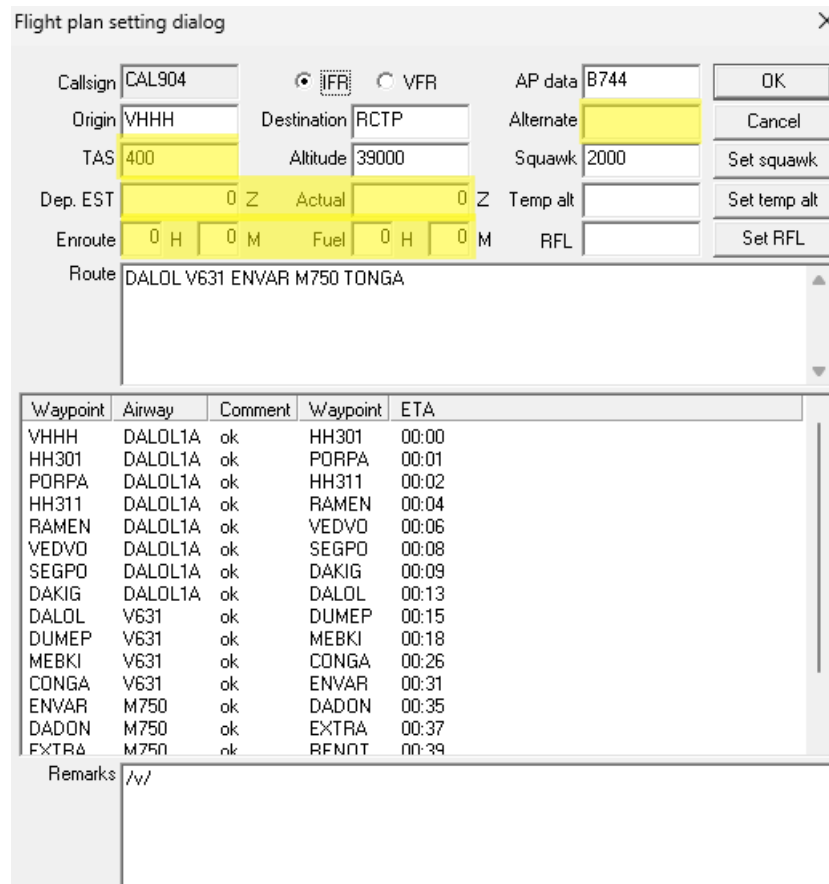


Figure 8.1: A sample EuroScope flight plan window. The fields highlighted in yellow are considered optional for issuing clearance.

8.2.11. Controllers may refer to SOP001-ANNEX-1 for detailed examples on flight plan inspection.

8.2.12. Controllers shall refer to the Hong Kong vACC Cue Card for a list of available SIDs. Should the automatic squawk code assignment function provided by the TopSky plugin fail, then controllers may also refer to the Cue Card for a list of available squawks.

8.3. IFR CLEARANCE FORMAT

- 8.3.1. The format of the IFR clearance issued by VHHH_DEL shall follow the rules set forth by ICAO Doc 4444 Section 6.3.2.3.
- 8.3.2. When radar vectors departure is used, the Delivery controller shall specify “**radar vectors departure**”, the **departure runway** and the assigned **initial climb altitude** (usually 5000 feet, check with Hong Kong Departure) in the IFR clearance. The Air Movements Control controller responsible for their departure runway shall also be notified of these after departure instructions so that they may issue it in the takeoff clearance.
- 8.3.3. It is mandatory that the Delivery controller ensures that pilots have received the latest **ATIS**. If pilots do not mention the latest or a wrong ATIS letter, the Delivery controller shall ask pilots to (re-)check the ATIS. If ATIS is not available, the Delivery controller shall state the latest QNH instead.

8.4. PHRASEOLOGY

Phraseology:

DEL: (Callsign), **CLEARED TO ____**, **FLIGHT PLANNED ROUTE**. **CLIMB VIA ____** **DEPARTURE TO ____ FEET**, **SQUAWK ____**. **DEPARTURE INFORMATION / QNH ____**.

Example 1: CATHAY 401, CLEARED TO TAIPEI TAOYUAN, FLIGHT PLANNED ROUTE, CLIMB VIA DALOL1X DEPARTURE TO 5000 FEET, SQUAWK 3301. DEPARTURE INFORMATION A CURRENT.

Example 2: CATHAY 401, CLEARED TO TAIPEI TAOYUAN, FLIGHT PLANNED ROUTE. RUNWAY 07R, CLIMB VIA RADAR VECTORS DEPARTURE TO 5000 FEET, SQUAWK 3301. DEPARTURE INFORMATION A

8.5. PRE-DEPARTURE CLEARANCE

- 8.5.1. In lieu of issuing clearance on the frequency in the conventional manner, the Delivery controller now has the option of issuing pre-departure clearance (PDC) via private text message. This reduces the communication needed over the frequency and can speed up the clearance delivery process. The Delivery controller shall refer to **SOP007** document for detailed procedures of issuing PDC.

8.6. RADAR TRACKING

- 8.6.1. VHHH_DEL shall not use radar tracking (F3 and F4 on the keyboard) at all times.

9. GROUND MOVEMENTS CONTROL

9.1. AREA OF RESPONSIBILITY

- 9.1.1. Ground Movements Control ([VHHH_1_GND](#), [VHHH_2_GND](#), [VHHH_3_GND](#), [VHHH_4_GND](#) & [VHHH_5_GND](#)) owns all ground movement areas of the airport, including all taxiways, aprons and inactive or closed runways. Ground Movements Control does not own any active runway and may not taxi aircraft across an active runway without prior approval from the controller responsible for the Air Movements Control position.
- 9.1.2. Ground Movements Controllers can refer to the diagram for sectorisation details between [GMC1/2/3/4/5](#).
- 9.1.3. Pilots shall contact Ground Movements Control on frequency [121.600](#) except when notified it is sectorised.
- 9.1.4. Ground positions should normally be opened in the following order: [GMC1](#) → [GMC2](#) → [GMC3](#) OR [GMC4](#) → [GMC5](#). Controllers shall refer to the table below to determine the area of responsibility of each position.
- 9.1.5. Alternative sectorisation combinations can be negotiated, but only under explicit coordination between the various ground controllers.

Positions on the left take over positions on the right if offline				AoR
VHHH_1_GND	VHHH_1_GND	VHHH_1_GND		GMC1
		VHHH_3_GND		GMC3
	VHHH_2_GND	VHHH_2_GND		GMC2
		VHHH_4_GND	VHHH_4_GND	GMC4
			VHHH_5_GND	GMC5

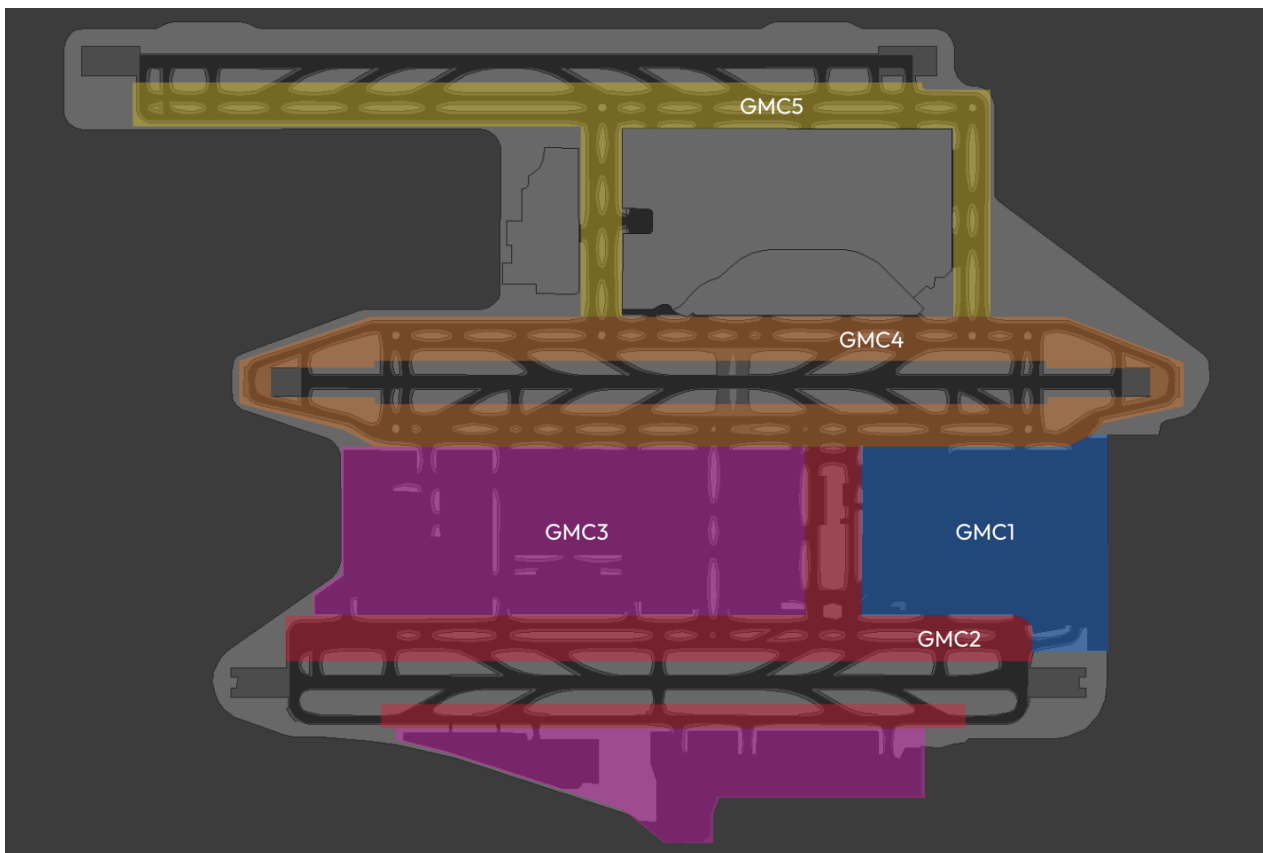


Figure 9.1: Illustration of VHHH aerodrome area of responsibility

9.2. PREPARATIONS

9.2.1. Ground controllers shall ensure that the current weather conditions meet **Visual Meteorological Conditions (VMC)** before issuing taxi clearance for VFR aircraft.

- Ground visibility not lower than 5000 meters
- Ceiling (BKN and OVC clouds) not lower than 1500 feet AGL

9.2.2. Ground Movements Control shall issue taxi clearance to the appropriate runway for their departure as determined by Air Movements Control and announced on ATIS. If Air Movements Control is offline, the controller responsible for the Air Movements Control position shall determine the departure runway-in-use based on weather conditions. If Air Movements Control ATC service is not available, the ground controller shall determine the runway-in-use following the method listed in Section 6.1. The HKO ATIS website can be used as reference.

9.2.3. Ground controllers shall be familiar with the **push back colour procedures** within Hong Kong AIP AD2.99A to AD2.99D. **Ground controllers shall use the colour-coded procedures**

when issuing push back and start up clearance. Although memorisation is not required, ground controllers shall also be familiar with the parking / gate number arrangement according to the aerodrome charts.

- 9.2.4. Ground controllers shall provide the current QNH to the pilot when issuing taxi clearance to the runway, unless it has been confirmed that the pilot has received the latest ATIS information. If the ATIS information has changed between the time the aircraft received its departure clearance and the time the aircraft is issued push back clearance, the ground controller shall advise the pilot that new ATIS information is available.
- 9.2.5. For arrival traffic, **the ground controller shall ask the pilot if a specific parking or gate is requested.** If the pilot has no parking or gate preference, the ground controller shall assign a gate or parking based on the nature of the flight. (e.g. passenger aircraft should go to the gate, cargo aircraft should go to the cargo terminal, Government Flying Service aircraft should go to the GFS hangar, business jets should go to the BAC apron). Alternatively, controllers may assign the parking stand generated by the Ground Radar Plugin.
- 9.2.6. There are two holding points at the end of each runway. When Air Movements Control ATC service is available and the airport is busy, Ground Movements Control shall coordinate with the controller responsible for the Air Movements Control position to assign aircraft into both holding points. By default, holding points other than the ones at the furthest end of each runway (e.g. holding points starting from J2 / J10 for RWY 07R / RWY 25L) require coordination with Air Movements Control.
- 9.2.7. Helicopters should be instructed to taxi to **TWY K for departure**, unless if they are on the GFS helipad, in which case the pilot should be asked if they would prefer to depart from the helipad or from taxiway K. Once reaching taxiway K, they shall be handed off to Air Movements Control.
- 9.2.8. Alternative departure locations for helicopters may be arranged under explicit coordination with Air Movements Control (e.g. departure from H2 intersection, departure from a runway, etc).
- 9.2.9. Controllers shall note that the Hong Kong Business Aviation Centre and Government Flying Service aprons are non-movement areas, meaning that aircraft can manoeuvre around the apron without approval from the ground controller. Controllers shall only issue clearance for startup (not pushback).

9.3. PUSH BACK AND START UP

9.3.1. Prior to issuing push back and start up clearance, ground controllers should ensure that no other aircraft is in the immediate vicinity of that aircraft, and that such aircraft may not interfere with other aircraft taxiing on the taxiway after pushing back. Ground controllers shall also ensure that the aircraft is squawking the correct transponder code with Mode C before issuing push back clearance. **When a high volume of traffic is present at the aerodrome or within the airspace, it might be necessary for the ground controller to hold push back and start up activities for a specific amount of time to avoid over-crowding the manoeuvring area, subject to coordination with other controllers on duty.** If holding is required, the ground controller shall use the following phraseology to instruct the aircraft to hold at the gate or parking.

(Reference Document: ICAO Doc 9432 4th Edition, Section 4.3)

Phraseology:

G: (Callsign), **STANDBY, EXPECT ___ MINUTE(S) DELAY DUE ___.**

Example 1: CATHAY 507, STANDBY, EXPECT ONE MINUTE DELAY DUE BOEING 777 TAXIING BEHIND.

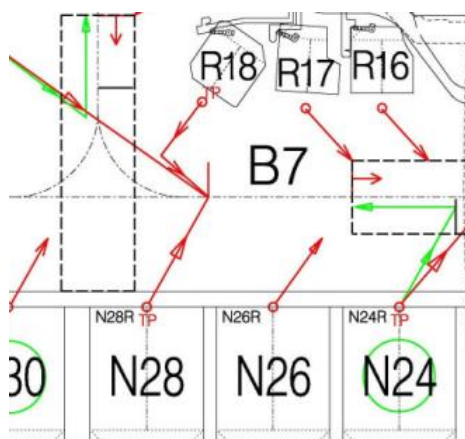
Example 2: CATHAY 507, STANDBY. EXPECT THREE MINUTES DELAY DUE AIRBUS A330 ON YOUR RIGHT PUSHING BACK.

G: (Callsign) **STANDBY, EXPECT PUSH BACK AND START UP AT ___ DUE ___.**

Example 3: OASIS 101, STANDBY. EXPECT PUSH BACK AND START UP AT 1530 ZULU DUE FLOW CONTROL IN TERMINAL AIRSPACE.

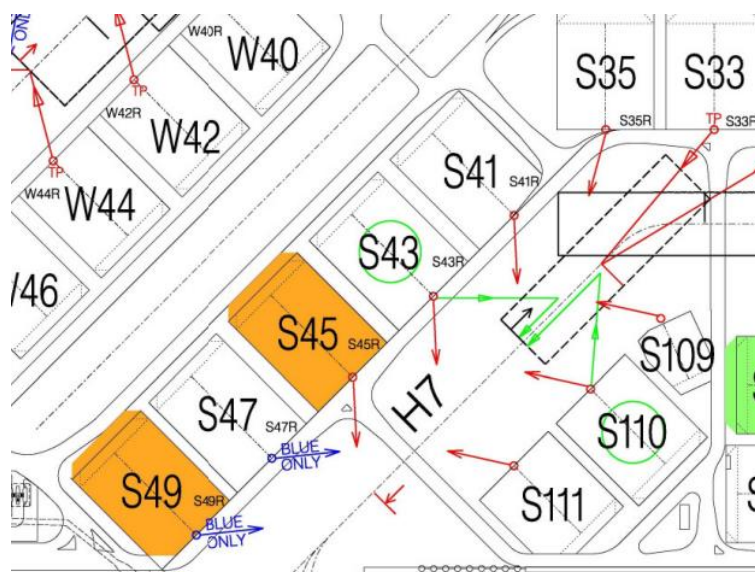
9.3.2. Once confirmed there is no potential interference, the ground controller shall refer to the aircraft pushback procedures listed in **AD2.99A** to **AD2.99D** for the best and most logical pushback direction.

9.3.2.1. Example 1: An aircraft is parked at gate N28 requesting push back clearance to the south runway (RWY07R/25L). The best way is to have the aircraft facing west after pushing back. Therefore, in this case **RED** shall be used.



(Source: Hong Kong AIP AD2.99A)

9.3.2.2. Example 2: An aircraft is parked at gate S33 requesting push back clearance to the south runway (RWY07R/25L). However, another aircraft is pushing back from stand S49 using the pushback colour **BLUE** procedure. Therefore, the aircraft at gate S33 should be assigned pushback colour **RED** for efficiency.



(Source: Hong Kong AIP AD2.99B)

9.3.3. The following phraseology shall be used for push back and start up clearance:

Phraseology:

G: (Callsign), **STARTUP APPROVED, PUSH BACK COLOUR ____.**

Example 1: CATHAY 401, STARTUP APPROVED, PUSH BACK COLOUR BLUE.

9.3.4. In case pilots are unfamiliar with the push back colour system, the ground controller may refer the pilot to the diagrams mentioned above, which are on the Hong Kong AIP website. These diagrams are also available on the Hong Kong vACC website. Alternatively, the ground controller may remind the pilot of the direction of pushback **after** the push back colour is advised.

9.3.5. **Ground Movements Control shall issue a VFR squawk code and the current QNH to fixed wing VFR departures along with the startup clearance. In the absence of Air Movements Control, helicopter VFR departures shall also be issued with a VFR squawk code and the current QNH.**

9.4. TAXI CLEARANCE

(Reference Document: ICAO Doc 9432 4th Edition, Section 4.4)

9.4.1. When issuing taxi clearance to aircraft, the ground controller shall consider any potential conflict that may occur. When needed, the controller shall instruct the aircraft to hold short of certain taxiway(s).

9.4.2. When needed, aircraft may be instructed to follow other aircraft and/or give way to other aircraft.

9.4.3. When multiple Ground Movements Control sectors are online, controllers shall instruct aircraft to hold short of the taxiway closest to the sector boundary before handing off the aircraft. The controller shall ensure that the aircraft will not enter the receiving controller's sector prior to handing the aircraft off.

9.4.4. Controllers shall note the use of the phraseology "Position on Kilo" for helicopters departing from TWY K. Similarly, "Position on Hotel Two" can be used for helicopters departing from the intersection between TWY H and TWY H2. **This instruction is usually given by Air Movements Control but in the absence of Air Movements Control, this instruction may be given by Ground Movements Control.**

9.4.5. Controllers shall avoid taxiing aircraft in directions that would conflict with arriving aircraft vacating the runway. For example, when RWY 07R is in use, aircraft taxiing towards J1 shall

not be instructed to taxi on J between J6 and J11.

9.4.6. Since many pilots do not have updated scenery for VHHH, controllers should note that the old Taxiways A11/A12 and the section of Taxiway A connecting the two no longer exist. Since the old Taxiway A10 is now A11, all aircraft should be assigned Taxiway A11 (although they exist at slightly different positions for each scenery). Taxiway B is to be kept clear for traffic to/from the Terminal 1 North apron.

9.4.7. Taxiways B1 and B12 are Wrap Around Taxiways established to allow aircraft to bypass the Centre Runway when taxiing. These two taxiways are under the jurisdiction of [Ground Movements Control 4](#). Controllers do not need to coordinate with Air Movements Control regarding the use of these taxiways, however controllers shall avoid taxiing aircraft on the Wrap Around Taxiway closest to the departure end of the Centre Runway when the Centre Runway is in use for departures. (e.g. When Runway 07C is in use, aircraft shall not be taxied via Taxiway B12). Additionally, when the Centre Runway is in use for arrivals, both Wrap Around Taxiways shall **not** be used and aircraft crossing the Centre Runway shall use the holding points specified in Section 9.5.3.

Phraseology:

G: (Callsign), **TAXI VIA** (Taxiway sequence) **TO** (Destination). (Additional Information)

Example 1: CATHAY 101, TAXI VIA BRAVO SEVEN, BRAVO, WHISKEY, HOTEL TO JULIET ONE HOLDING POINT RUNWAY ZERO SEVEN RIGHT. *QNH ONE-ZERO-ZERO-SEVEN* (*only add QNH if it changes or ATIS has not been set up yet)

Wheeled Helicopters:

Example 2: BRAVO FIVE ONE SIX, TAXI VIA QUEBEC THREE, KILO, POSITION ON KILO.

Non-Wheeled Helicopters:

Example 3: CASEVAC 35, AIR TAXI VIA QUEBEC THREE, KILO, POSITION ON KILO.

G: (Callsign) **BEHIND** (Aircraft Type) (Direction) **TAXI VIA** (Taxiway Sequence) **TO** (Destination).

Example: SPEEDBIRD 32, BEHIND CATHAY PACIFIC AIRBUS A330 PASSING LEFT TO RIGHT, TAXI VIA BRAVO SEVEN, HOTEL TO JULIET ONE HOLDING POINT RUNWAY ZERO SEVEN RIGHT, BEHIND.

Phraseology:

(Departing from TWY K)

G: (Callsign), **POSITION ON KILO.**

Example 1: RESCUE 35, POSITION ON KILO.

(Departing from intersection between TWY H and TWY H2)

G: (Callsign), **POSITION ON HOTEL TWO.**

Example 2: RESCUE 35, POSITION ON HOTEL TWO.

G: (Callsign) **HOLD SHORT** (Taxiway/Runway).

Example: CARGOLUX 7432, HOLD SHORT RUNWAY ZERO SEVEN RIGHT.

Example 2: UPS 5, HOLD SHORT HOTEL.

G: (Callsign) **GIVE WAY TO** (Aircraft Type) (Direction) **TAXI VIA** (Taxiway Sequence) **TO** (Destination).

Example: CATHAY 749, GIVE WAY TO COMPANY AIRBUS A321 ON YOUR RIGHT, TAXI VIA WHISKEY, WHISKEY TWO, STAND WHISKEY FOUR TWO.

9.5. RUNWAY CROSSINGS

9.5.1. Occasionally, it may be necessary for aircraft within the aerodrome to cross a runway. To prevent runway incursions, **all aircraft needing to cross an active runway is required to contact the relevant Tower controller for authorisation, except when the Tower controller authorises the relevant Ground controller to issue a runway crossing clearance.**

9.5.2. Crossing clearances for the South Runway shall be issued via **J1-K1, J6-K4, or J11-K7.**

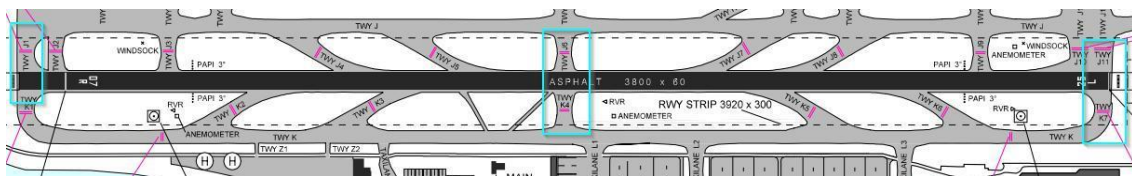


Figure 9.5a: Locations for crossing the South Runway

- 9.5.3. Crossing clearances for the Centre Runway shall be issued via **B2-B3, A1-F1, A2-F2, A11-F7, A12-F8, or B10-B11.**



Figure 9.5b: Locations for crossing the Centre Runway

- 9.5.4. Since many pilots do not have updated scenery for VHHH, controllers may instruct aircraft to cross the centre runway via the old taxiways **T** or **B6** if needed. Since Runway 07C is now re-open, controllers shall issue a runway crossing clearance even when instructing an aircraft to cross the runway via these taxiways. See the diagram below for reference.

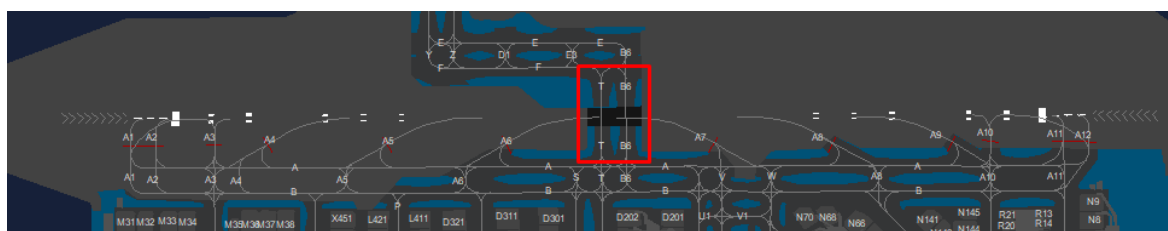


Figure 9.5c: Taxiways T and B6 for pilots with outdated scenery

- 9.5.5. When the aircraft approaches the intersecting taxiway, the ground controller shall instruct the aircraft to contact Tower for authorisation, except when the Tower controller authorises the Ground controller to issue a runway crossing clearance. Until such authorisation is given, aircraft shall hold short of the runway at the holding point on the intersecting taxiway indicated on the aerodrome chart. Once the aircraft has crossed the runway and has **COMPLETELY** vacated the runway, the Tower / Ground controller shall instruct the aircraft to taxi onto the closest taxiway parallel to the runway and contact the Ground controller (if the Tower controller issued the crossing clearance).

Phraseology:

GND: (Callsign), **CONTACT TOWER ON** (Frequency).

TWR: (Callsign), **CROSS RUNWAY** (Runway designator).

After crossing:

TWR: (Callsign), **TAXI VIA** (The nearest taxiway parallel to the runway). **CONTACT GROUND ON** (Frequency).

9.6. HANDOFF TO TOWER

9.6.1. Ground controllers may handoff aircraft taxiing to active runways for departure as they approach the designated holding point. It is not necessary for the Ground controller to wait until the aircraft has reached the designated holding point to perform the handoff. During high volume of departure traffic, ground controllers shall coordinate with Tower controllers for a specific handoff point (e.g. after passing N for RWY 07R departure) to improve the flow of traffic. This also allows VFR/SVFR departure traffic to receive VFR clearance from Air Movements Control and be instructed to hold at a holding point in high traffic volume.

9.6.2. To mitigate against incorrect SID selection for pilots departing Runway 07C, the Ground Movements Control controller shall instruct aircraft departing Runway 07C to report their assigned SID when handing aircraft off to Air Movements Control using the phraseology below.

Phraseology:

GND: (Callsign), **REPORT YOUR SID TO TOWER ON** (Frequency).

9.7. FROM THE RUNWAY

9.7.1. Once an aircraft has landed, or if a departure aircraft has aborted takeoff, the Tower controller shall instruct such aircraft to:

- (a). Taxi onto the nearest taxiway parallel to the runway-in-use
- (b). Contact the appropriate ground controller according to Ground control sectors

9.7.2. Once such aircraft has contacted the Ground controller, the ground controller shall instruct the aircraft to taxi to the destination (e.g. gate, cargo ramp, BAC or a runway-in-use for aircraft aborted takeoff).

9.8. RADAR TRACKING

- 9.8.1. All Ground Movements Control controllers shall not use radar tracking (F3 and F4 functions on the keyboard) at all times.

10. AIR MOVEMENTS CONTROL

10.1. AIRSPACE

- 10.1.1. Air Movements Control airspace is divided into three sectors: Air Movements Control North (**VHHH_N_TWR**), Air Movements Control Midfield (**VHHH_C_TWR**) and Air Movements Control South (**VHHH_S_TWR**). VHHH_N_TWR is responsible for operations on the north runway (RWY 07L/25R), VHHH_C_TWR is responsible for operations on the centre runway (RWY 07C/25C) and VHHH_S_TWR is responsible for operations on the south runway (RWY 07R/25L). The sector is split **along the centreline of the centre runway, with the Midfield sector owning the centre runway only (i.e. no airspace)**. When there is only one tower controller present, such controller shall control all three sectors and use the preferred frequency (**118.400**) and text call sign (**VHHH_S_TWR**). Although Hong Kong Zone Control uses the _TWR suffix, it is not an Air Movements Control position, as such it does not control any part of the Hong Kong ATZ. See SOP006 for details on Hong Kong Zone Control.
- 10.1.2. When two Tower controllers are online, one controller shall open Air Movements Control South (VHHH_S_TWR) and own the AMS and AMM sectors, while the other controller shall open Air Movements Control North (VHHH_N_TWR) and own the AMN sector.
- 10.1.3. When three Tower controllers are online, each controller shall own their respective sector.
- 10.1.4. Air Movements Control is responsible for the **Category C airspace within Aerodrome Traffic Zone (ATZ) (SFC to 2000 feet)**, per Hong Kong AIP AD2.17. Aircraft outside of the ATZ shall be controlled by Hong Kong Zone Control (VHHH_Z_TWR). Refer to chart AD 2-VHHH-CTR-1 for details.

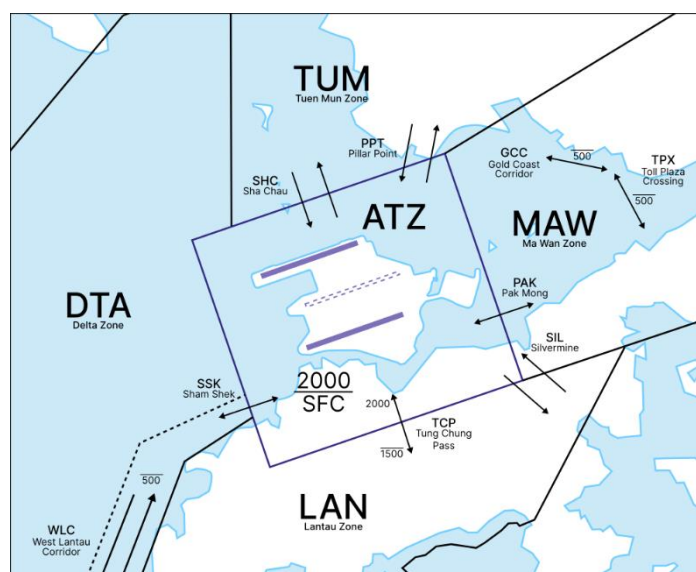


Figure 10.1: Location of Hong Kong ATZ in relation to other control zones

10.2. SPECIAL INSTRUCTIONS FOR VFR AND SVFR TRAFFIC

10.2.1. VFR and SVFR departing aircraft shall file a valid flight plan with a valid route prior to requesting taxi clearance to the active runway. A valid route shall contain all CTR zones and entry/exit routes that the aircraft will fly after departure. A detailed discussion of this can be found in the SOP006 document. The only exception to providing a valid route is when an aircraft remains in circuit within the ATZ. For VFR traffic, Air Movements Control shall ensure that the current weather meets VFR minima prior to issuing clearance. A SSR transponder code shall be assigned with the clearance.

10.2.2. When there is a controller responsible for Hong Kong Zone Control, Air Movements Control shall coordinate with Zone Control regarding the clearance limit of a VFR / SVFR aircraft. Normally, VFR and SVFR aircraft leaving the ATZ are cleared to a **specific VRP / zone within Hong Kong CTR**. Controllers should note that the clearance limit shall **not** be one of the following, unless otherwise coordinated with the respective unit:

- Other controlled ATZs
- Anywhere outside the Hong Kong CTR
- UCARA
- Repeated VRPs (as filed in the flight plan)

In all four cases above, the clearance limit shall be the VRP / zone just before the aforementioned "point". In cases where the pilot requests to hold/stay at a certain VRP / zone for an extended period of time, then the clearance limit shall be that specific VRP / zone. In all cases, a new VFR clearance will need to be issued when the pilot is ready to proceed further. For VRPs that are not directly accessible via a straight-out departure, additional instructions to join the traffic circuit and the VRP at which the aircraft can expect to leave the ATZ shall be given.

The clearance shall be issued in the following format:

Phraseology:

T: (Callsign), **CLEARED TO** (Zone / VRP within CTR), **STANDARD ALTITUDE RESTRICTIONS**, (After Departure Instructions), (QNH).

Example:

BHLC, CLEARED TO HARBOUR, STANDARD ALTITUDE RESTRICTIONS.

Controllers shall instruct aircraft to follow standard altitude restrictions on entry/exit routes as per AIP AD 2.19.3.1. It is not necessary to instruct aircraft to maintain VFR at or below a certain altitude once the aforementioned instruction has been given.

For example, assume an aircraft has filed a flight plan with the route:
ATZ PAK MAW MWC ISL FAN WLC SSK ATZ

The clearance shall then be:

Phraseology:

Example:

BHLC, CLEARED TO SHAM SHEK, STANDARD ALTITUDE RESTRICTIONS, QNH 1013.

Another example with the aircraft joining the circuit:
ATZ PAK MAW MWC ISL HBR KTZ, Runway 25s in use

Phraseology:

Example:

BHLC, CLEARED TO HARBOUR, STANDARD ALTITUDE RESTRICTIONS, FROM CROSSWIND RUNWAY 25L JOIN RIGHT HAND CIRCUIT RUNWAY 25R, QNH 1013.

10.2.3. When there is no controller responsible for Hong Kong Zone Control, the Air Movements Control controller may only clear aircraft to the boundary of the Hong Kong ATZ (e.g. Pak Mong, Sham Shek, Silvermine) in the VFR clearance. The aircraft shall be instructed to monitor advisory 122.800 MHz upon approaching the boundary.

10.2.4. VFR/SVFR traffic in the air requesting a different route to the one in their flight plan shall be given a new VFR clearance. This clearance shall be given with respect to Section 10.2.2, 10.2.3 & 10.2.4. Controllers are reminded that routes leaving the ATZ require coordination with Hong Kong Zone Control (VHHH_Z_TWR). The Air Movements Control controller shall amend the aircraft's flight plan with the new route. Once this has been done, and the clearance correctly read back, the controller may instruct the aircraft to track to the filed VRP that leaves the ATZ.

10.2.5. The reference runway for the **fixed wing** traffic circuit shall be the northern runway (RWY 07L/25R), as the traffic circuit for the southern runway leads aircraft over the centre runway. As such, for departures from the south runway, controllers shall instruct aircraft to join the RWY 07L/25R circuit from crosswind. The clearance shall be issued in the following format:

Phraseology:

T: (Callsign), (Circuit Joining Instruction), (QNH).

Example:

BHLC, **AFTER DEPARTURE** JOIN LEFT HAND CIRCUIT RUNWAY 07L, QNH 1013.

Similarly, aircraft on the RWY 07L/25R circuit switching to RWY 07R/25L for landing shall be instructed to join the traffic circuit for RWY 07R/25L **from base**. See example below:

Phraseology:

T: (Callsign), **FROM BASE JOIN LEFT / RIGHT HAND CIRCUIT RUNWAY** (Runway).

Example:

BHLC, **FROM BASE JOIN LEFT HAND CIRCUIT RUNWAY 07R**.

10.2.6. Aircraft entering the ATZ from other CTR zones shall be given runways-in-use on initial contact. **A clearance to perform a manoeuvre inside the ATZ / clearance limit within the ATZ implies a clearance into the ATZ (e.g. joining a leg of the circuit or clearing aircraft directly to Hong Kong).** See example below:

Phraseology:

T: (Callsign), (Runways-in-use), (QNH), (Additional Instructions).

Example:

BHLC, **RUNWAYS 07L AND 07R IN USE**, QNH 1013, **JOIN LEFT HAND CIRCUIT RUNWAY 07L**.

10.2.7. VFR pilots are self-responsible for being separated visually from all traffic. Air Movements Control shall ensure that weather minima are fulfilled and issue traffic information to VFR aircraft to aid them in maintaining separation.

10.2.8. VFR and SVFR aircraft remaining in the circuit shall fly a left-hand circuit if RWY 07s are in use or right-hand circuit if RWY 25s are in use. This is to avoid terrain on Lantau Island

south of the airport.

10.2.9. When the aerodrome is experiencing a high volume of traffic, if necessary, the Air Movements Control controller shall instruct VFR aircraft on the ground to hold at runway holding points other than those at each end of the runway in order to give way to IFR traffic.

10.2.10. VFR/SVFR departing **helicopter flights** shall be instructed to use **Kilo West / Kilo East** departure depending on the runway-in-use, or an instruction to “**track along the coastline**” if not leaving the ATZ via **Tung Chung Pass / Silvermine / Pak Mong**. More information about helicopter operations within Hong Kong ATZ can be found in the sections below.

10.2.11. **Where necessary, fixed wing VFR aircraft transiting the ATZ shall be instructed to join the circuit and/or overfly any runway. Controllers shall avoid issuing instructions that would lead to aircraft overflying the airport terminals.**

10.3. HONG KONG ATZ HELICOPTER PROCEDURES

10.3.1. DEPARTURE PROCEDURES

10.3.1.1. By default, helicopters shall depart from TWY K, where they will follow either the Kilo West or Kilo East departure. These two departures route traffic towards the Chun Wan Road Roundabout, where they can then track via one of the published transit routes or proceed directly to the next VRP on their flight plan. The Kilo East departure which routes over the fire station is assigned when RWY 07s are in use, while the Kilo West departure which routes over the GFS apron is assigned when RWY 25s are in use. Controllers may refer to AIP AD 20.1.1 and AIP AD 20.1.2 for more details.

10.3.1.2. Three transit routes are available for the Kilo West / Kilo East departures. By default, Transit Route A is the route which takes the helicopter from TWY K to Chun Wan Road Roundabout, therefore it is normally omitted in the clearance. Transit Route B routes helicopters on an eastbound track along Chun Wan Road, where they then track direct to Pak Mong or Silvermine. Similarly, Transit Route C routes helicopters along the airport coastline before tracking direct to Pak Mong or Silvermine. In all cases, helicopters are required to remain 1000m south of the RWY 07R/25L centreline. **Transit Routes B & C shall not be issued to helicopters not leaving the ATZ at Silvermine or Pak Mong.**

10.3.1.3. During Special VFR operations, Air Movements Control may additionally instruct helicopters to report passing “**Freight Centre**” on departure from the airport as per AIP AD 20.1.4.

- 10.3.1.4. Helicopters departing from the GFS helipad may directly join the Kilo East / Kilo West departures after they have departed. Helicopters departing from the junction between TWY H and TWY H2 are given an additional instruction to cross the RWY 07R centreline before joining the Kilo East / Kilo West departures.

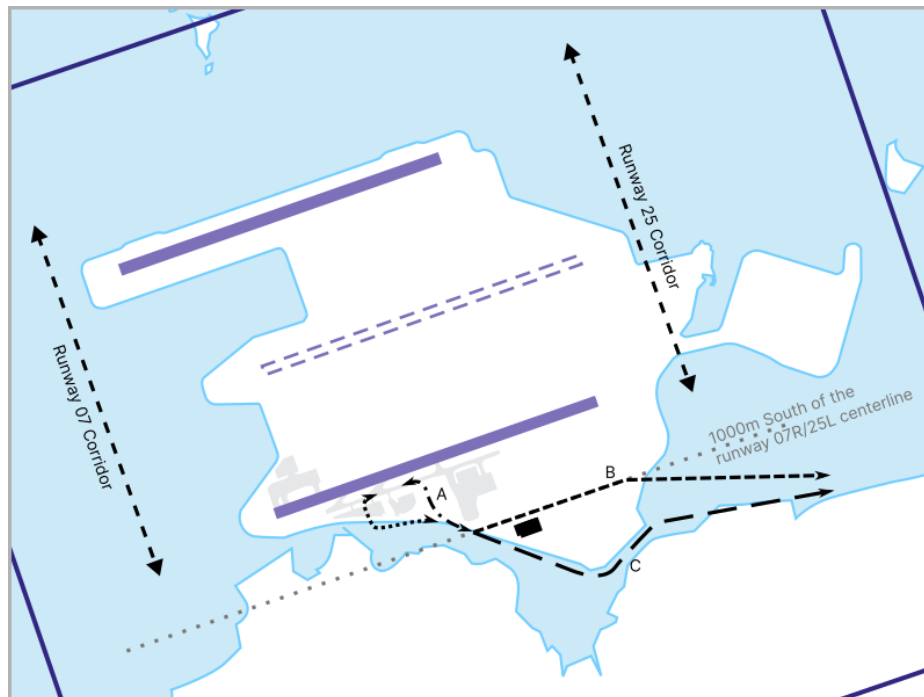


Figure 10.3.1: Kilo East / Kilo West departures and their transit routes

- 10.3.1.5. Clearances for VFR/SVFR helicopters shall be provided with respect to Section 10.2.2. This clearance shall be provided by Air Movements Control along with the VFR squawk code, QNH and the startup clearance. Note that the departure instruction (i.e. Kilo East / West departure or “track along the coastline”) is not given in this clearance, rather it is given with the lift clearance.

See the following example:

Phraseology:

T: (Callsign), **STARTUP APPROVED, CLEARED TO** (Zone / VRP within CTR), **STANDARD ALTITUDE RESTRICTIONS, (QNH)**, (Squawk).

Example:

BHLC, CLEARED TO CHEUNG CHAU, STANDARD ALTITUDE RESTRICTIONS, **QNH 1013**, SQUAWK 5201.

10.3.1.6. Taxi clearances for departing helicopters shall be given by Air Movements Control, who shall also coordinate with the relevant Ground Movements Control regarding the use of the taxiways. Air Movements Control is normally responsible for instructing aircraft to "Position on Kilo / Hotel Two" as per Section 9.4.4.

10.3.1.7. As mentioned in Section 10.3.1.5, the departure instruction for helicopters is given in the lift clearance. Controllers should also note that helicopters are "cleared to lift" rather than "cleared for takeoff".

See the following example:

Phraseology:

T: (Callsign), KILO EAST / WEST DEPARTURE TO (VRP) / AFTER DEPARTURE TRACK ALONG THE COASTLINE TO (VRP), SURFACE WINDS (Wind Direction) DEGREES (Wind Speed) KNOTS, CLEARED TO LIFT.

Example:

BHLC, KILO EAST DEPARTURE TO SILVERMINE, SURFACE WINDS 090 DEGREES 5 KNOTS, CLEARED TO LIFT.

10.3.2. ARRIVAL PROCEDURES

10.3.2.1. The Kilo Approach from Silvermine or Pak Mong is available to helicopters landing at Hong Kong International Airport. It routes via the reciprocal of Transit Route B until reaching the western roundabout of Chun Wan Road, before then following the reciprocal of Kilo East / Kilo West departure until landing on TWY K. The approach clearance can be provided as soon as the clearance into the ATZ has been correctly read back.

10.3.2.2. GFS helicopters follow the Kilo Approach until reaching the Chun Wan Road roundabout, where they then land on the GFS helipad. Controllers shall note the use of the following phraseology for GFS helicopters:

Phraseology:

(Clearing for the approach)

T: (Callsign), **CLEARED TO GFS.**

Example: RESCUE 35, CLEARED TO GFS.

(Clearing to land)

T: (Callsign), **CLEARED GFS DISCRETION.**

Example: RESCUE 35, CLEARED GFS DISCRETION.

As the GFS apron is a non-movement area, clearing the helicopter for “GFS discretion” essentially means that landing is at their discretion. Whilst real world examples have shown that winds are not typically given with their landing clearance, Air Movements Control controllers are still advised to give the winds to landing GFS helicopters.

- 10.3.2.3. For all other helicopters, controllers shall note the use of the following phraseology for clearing the Kilo Approach:

Phraseology:

T: (Callsign), **CLEARED KILO APPROACH.**

Example: BHLC, **CLEARED KILO APPROACH.**

- 10.3.2.4. Unlike in the real world, the Kilo Approach on VATSIM is also available to helicopters arriving from Sham Shek or Tung Chung Pass. This is since helicopters would never approach from the west in the real world, but to allow flexibility for controllers, the Kilo Approach has been made available from Sham Shek or Tung Chung Pass. The phraseology remains the same.

10.3.3. TRANSIT PROCEDURES

- 10.3.3.1. Two runway crossing corridors are available to helicopters intending to transit the ATZ. **These corridors must be used if transiting the ATZ.** When RWY 07s are in use, the Runway 07 Corridor is used. Conversely, when RWY 25s are in use, the Runway 25 Corridor is used.
- 10.3.3.2. The Runway 07 Corridor allows helicopters to transit via Sha Lo Wan / Holding Area Whiskey. It passes over the Runway 07L / 07C approach lights, west of the HAECO hangar and immediately west of the Runway 07R threshold. Pilots using the corridor shall maintain an altitude of 800 – 1000ft AMSL for wake turbulence avoidance.
- 10.3.3.3. The Runway 25 Corridor allows helicopters to transit via Cathay City / Holding Area Echo. It passes over the Runway 25L / 25C / 25R approach lights and east of Sky City. Pilots using the corridor shall also maintain an altitude of 800 – 1000ft AMSL for wake turbulence avoidance.
- 10.3.3.4. As these corridors start at Sha Lo Wan / Holding Area Whiskey and Cathay City / Holding Area Echo respectively, the Air Movements Control controller shall first instruct the helicopter to track to one of these VRPs before issuing the crossing clearance.

10.3.3.5. The West Sea Berth (WSB) and Expo (EXPO) holding areas are established for tactical use by Air Movements Control. These intermediate holding areas allow helicopters to cross the near-side extended runway centreline even if the far-side extended runway centreline is not clear (as the holding areas are established on the RWY 07C / 25C extended runway centreline). **These two holding areas are not available for use when RWY 07C / 25C is being operated as an arrival runway.**

10.3.3.6. The crossing clearance shall be given in the following format:

Phraseology:

T: (Callsign), **CLEARED TO (VRP) VIA RUNWAY (Runway) CORRIDOR.**

Example: BHLC, CLEARED TO HOLDING AREA WHISKEY VIA RUNWAY 07 CORRIDOR.

10.3.4. HOLDING PROCEDURES

10.3.4.1. There are multiple holding areas available to helicopters in the Hong Kong ATZ. These holding areas have published altitude restrictions and are right hand orbits with a speed restriction of not more than 70 KIAS.

10.3.4.2. Controllers shall note the use of the following phraseology for instructing aircraft to hold at a holding area:

Phraseology:

T: (Callsign), **HOLD AT (Holding Area) AS PUBLISHED.**

Example 1: BHLC, HOLD AT SHA LO WAN AS PUBLISHED.

Example 2: BHLC, Hold at Holding Area Whiskey as published.

Note that for Holding Areas Whiskey and Echo, the phrase "Holding Area" is added to the instruction. For other VRPs with a geographical name, this is not mandatory.

10.3.4.3. Holding areas and their associated restrictions are listed below for reference:

Name (Code)	Altitude Restrictions	Other Restrictions
Pillar Point (H1)	At or below 1000ft AMSL	N/A
Sha Chau (H2)	500 – 1000ft AMSL	N/A
Echo (H3)	At or below 1000ft AMSL	VFR only, remaining at least 1000m north of RWY 07L / 25R
Whiskey (H4)	At or below 1000ft AMSL	VFR only, remaining at least 1000m north of RWY 07L / 25R
Pak Mong (H5)	At or below 1000ft AMSL	N/A

Cathay City (H6)	At or below 800ft AMSL, at or below 500ft AMSL when SVFR	Remaining at least 1000m south of RWY 07R / 25L
Freight Centre (H7)	At or above 800ft AMSL	N/A
Sha Lo Wan (H8)	At or below 1000ft AMSL	Remaining at least 1000m south of RWY 07R / 25L
Tung Chung Bay (H9)	800 – 1000ft AMSL	N/A
Sham Shek (H10)	At or below 1000ft AMSL	N/A
West Sea Berth (WSB)	800 – 1000ft AMSL	Holding area dimensions: 600m x 1800m, remaining at least 1000m from the extended centrelines of RWY 07L / 25R and RWY 07R / 25L
Expo (EXPO)	800ft – 1000ft AMSL	Holding area dimensions: 600m x 1800m, remaining at least 1000m from the extended centrelines of RWY 07L / 25R and RWY 07R / 25L

10.3.4.4. Pillar Point, Sha Chau, Pak Mong & Sham Shek all require coordination with Hong Kong Zone Control before they can be used, as they lie on the boundary of the Hong Kong ATZ. Additionally, Tai O (H11) and Mount Rooster (H12) are also holding areas depicted in chart AD VHHH-VFR-2, however it has not been listed here as it is not located within Hong Kong ATZ.

10.3.5. OTHER INFORMATION

10.3.5.1. Due to the proximity of TWY K to the southern runway (RWY 07R/25L), takeoffs and landings are not permitted on the southern runway whenever helicopters are operating within the area between the southern runway and the 1000m line south of the RWY 07R / 25L centreline. For clarity, the Tung Chung Bay and Freight Centre holding areas are considered outside of the 1000m area and therefore takeoffs and landings are permitted on RWY 07R / 25L when these holding areas are in use.

10.3.5.2. There are numerous helipads located in and around the Hong Kong ATZ. As they are uncontrolled, the Air Movements Control controller shall not issue takeoff/landing clearance to helicopters departing or arriving at these helipads. Instead, the helicopter can be instructed to report airborne/on ground. Note that helipads that lie on the boundary of the Hong Kong ATZ require coordination with Hong Kong Zone Control.

10.3.5.3. Controllers shall ensure that TWY K between Q1 and L1 is free of traffic before clearing a helicopter to land/liftoff from TWY K. If Ground Movements Control is

online, then Air Movements Control South shall coordinate with Ground Movements Control to ensure that the area is free of traffic.

- 10.3.5.4. For helicopters arriving or departing from the junction between TWY H and TWY H2, controllers shall ensure that the area around the helicopter and RWY 07R is free of traffic before clearing a helicopter to land/liftoff. If the relevant Ground sectors are online, then coordination shall be performed to ensure that the area is free of traffic.

10.4. DEPARTING TRAFFIC

- 10.4.1. Once an aircraft has been handed off from the Ground controller and is approaching the specified holding point, depending on the traffic situation, the Tower controller may issue one of the following instructions to the aircraft:

Hold short of runway	When there is activity on the runway or if the aircraft would cause a conflict by entering the runway
Line up and wait	When entering the runway will not cause any conflict but the runway is not clear of preceding arrival aircraft or the separation between the aircraft in question and the preceding departure is not enough
Takeoff Clearance	When the runway is clear of activity and the spacing between the aircraft in question and the preceding aircraft is sufficient (VFR/SVFR traffic: VFR/SVFR clearance precedes the takeoff clearance)

- 10.4.2. For IFR departing aircraft requiring **radar vectors**, the Tower controller shall provide a **heading and the initial climb altitude along with the takeoff clearance**.

Phraseology:

T: (Callsign), **AFTER DEPARTURE FLY** (Heading), **CLIMB TO** (Altitude), **SURFACE WINDS** (Wind Direction) **DEGREES** (Wind Speed) **KNOTS**, **RUNWAY** (Runway), **CLEARED FOR TAKEOFF**.

Example 1: CATHAY 505, AFTER DEPARTURE FLY RUNWAY HEADING, CLIMB TO 5000FT, SURFACE WINDS 100 DEGREES 9 KNOTS, RUNWAY 07R, CLEARED FOR TAKEOFF.

- 10.4.3. IFR departing aircraft on different SIDs shall be sequenced alternatively where possible. For example, assume that there are 3 departing aircraft. Two of them are flying an DALOL departure, whilst the third aircraft is flying a PECAN departure. The first aircraft to depart would then be one of the aircraft on the DALOL departure, followed by the aircraft on the PECAN departure, and finally the other aircraft on the DALOL departure.

10.4.4. IFR departing aircraft shall be separated with respect to the Distance-based Wake Turbulence Separation Minima as found in AIP ENR 1.6.6.1.1:

Distance-based Wake Turbulence Separation Minima					
		Follower			
		SUPER	HEAVY	MEDIUM	LIGHT
Leader	SUPER	-	5 NM	7 NM	8 NM
	HEAVY	-	4 NM	5 NM	6 NM
	MEDIUM	-	-	-	5 NM

- Indicates Wake Turbulence Separation is not applicable

Figure 10.4: Distance-based Wake Turbulence Separation Minima Table

10.4.5. In cases where wake turbulence separation is not applicable (e.g. aircraft of wake turbulence category SUPER following an aircraft of wake turbulence category HEAVY) then the minimum spacing between these aircraft shall be 4 NM / 90 seconds. Additionally, a minimum separation of 2 minutes is required for two successive aircraft on the same SID. Minimum separation of 3 minutes is required between a propeller-type aircraft departure and a jet-type aircraft departure.

10.4.6. If the departing aircraft has to abort takeoff, the Tower controller shall use the following phraseology and instruct the aircraft twice. After the instruction, the Tower controller shall confirm that the aircraft has acknowledged the cancel takeoff instruction. This is a common occurrence on VATSIM when an aircraft randomly connects to the network while on an active runway. Once conditions permit, if the aircraft needs to return to the end of the runway for takeoff, the Tower controller shall instruct the aircraft to hold short of the closest taxiway parallel to the active runway and hand off the aircraft to Ground.

Cancelling takeoff clearance:

Phraseology:

(Takeoff roll commenced) TWR: (Callsign) **STOP IMMEDIATELY.** (Callsign) **STOP IMMEDIATELY.**

ACKNOWLEDGE.

(Takeoff roll not commenced) TWR: (Callsign) **HOLD POSITION, CANCEL TAKEOFF CLEARANCE. I SAY AGAIN CANCEL TAKEOFF CLEARANCE DUE** (Reason).

Example 1:

VHHH_S_TWR: Oasis 100, hold position, cancel takeoff clearance. I say again cancel takeoff clearance due aircraft connected online on runway.

10.4.7. When all three runways are in use, independent parallel departures are approved on the Centre Runway (RWY 07C / 25C) and the South Runway (RWY 07R / 25L), but only when aircraft departing the Centre Runway have been assigned a departure ending in "T". Controllers shall note that simultaneous parallel departures are not allowed for aircraft departing via radar vectors, unless when the aircraft is departing on runway heading from Runway 07R / 25L.

10.4.8. Conditional clearances for 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 it can be observed by the departing aircraft.

10.4.9. Clearances to enter the runway shall include the intersection from which the aircraft is to depart from, if the aircraft is executing an intersection departure (i.e. not full length) or if the aircraft is not at the holding point.

10.4.10. Once a departure aircraft is airborne, the Tower controller shall hand off the aircraft to the Departure controller.

10.5. ARRIVAL TRAFFIC

10.5.1. Once an IFR arrival aircraft is handed off from the Approach/Director controller to the Tower controller, the Tower controller may issue one of the following instructions:

Continue approach	When there is activity on the runway or if the preceding aircraft has not vacated the same runway
Landing Clearance	When the runway is clear of activity

10.5.2. Air Movements Control controllers shall not adjust the speed of IFR arrival aircraft without the prior approval of the Approach/Director controller. If speed adjustment is necessary,

or if there is not enough spacing between arriving aircraft, then the Air Movements Control controller shall coordinate with the Approach/Director controller for such adjustments.

- 10.5.3. When a landing clearance cannot be granted, the Tower controller shall provide traffic information to such aircraft, particularly the other aircraft that is preventing the landing clearance from being issued.
- 10.5.4. **MISSED APPROACH:** A missed approach can be initiated by either the pilot or the controller. On VATSIM, a pilot may call for go-around at *Decision Height (DH)* or *Decision Altitude (DA)* primarily due to weather or unforeseen obstruction to the runway (Refer to Section 8.6.9 of the HKvACC Training Manual TM-GEN-001 for a detailed discussion). Only when necessary, the Tower controller may instruct the aircraft to go-around when there is unforeseen obstruction to the runway, or the runway is not clear of activity when the aircraft is at or below DH. The latter should be rare, and all controllers shall practise safe and sound separation to prevent that from happening. **Once an aircraft has started the go-around, the controller cannot cancel the go-around clearance.**
- 10.5.5. Aircraft is assumed to follow the published missed approach procedure when a go-around is necessary. The Tower controller shall advise landing aircraft on missed approach to follow the published missed approach procedure if unsure. This is especially important during major events online.
- 10.5.6. Since the opening of the third runway (RWY 07L/25R), a considerable number of pilots have begun making approaches to RWY 07L when they do not have updated scenery, meaning that they are in fact approaching RWY 07C/25C.
- 10.5.6.1. When the Tower controller notices this happening, they shall ask the aircraft if they are able to accept a visual sidestep to RWY 07R/25L, provided that the runway is clear, the pilot has the airport in sight, and approval has been given from the Final Approach Director controller.
- 10.5.6.2. If they are not able to accept a sidestep, the Tower controller shall instruct the aircraft to go-around. **Sidesteps are only allowed if the traffic is more than 6 NM from touchdown, or 8 NM for RWY 25L / 25R.**

10.5.6.3. In case of missed approach, the aircraft shall follow the missed approach procedure for the original runway.

Visual Sidestep:

Phraseology:

Tower: (Callsign) **ARE YOU ABLE TO SIDESTEP TO** (Runway)?

Pilot: **AFFIRMATIVE**, (Callsign).

Tower: (Callsign) **SIDESTEP TO** (Runway).

Go around (requested by the pilot):

Phraseology:

Pilot: (Callsign) **GOING AROUND**.

Tower: (Callsign) **ROGER**. (instruction if applicable)

Example 1:

OHK100: Oasis 100 going around.

VHHH_S_TWR: Oasis 100, roger. Follow published missed approach procedure (if unsure aircraft will follow published missed approach) OR Oasis 100, roger. Fly runway heading, climb to 5000ft. (if a specific instruction is given by the APP/DEP controller)

Go around (requested by the controller):

Phraseology:

Tower: (Callsign) **GO AROUND**. (instruction, if requested by APP/DEP to deviate from published missed approach) (Reason, if communication permits)

Pilot: **GOING AROUND**, (Callsign).

Example 2:

VHHH_S_TWR: Oasis 100, go around. OR Oasis 100, go around. Fly runway heading. Climb to 5000ft.

Aircraft entered runway without permission. (if a specific instruction is given by the APP/DEP controller)

OHK100: Going around, Oasis 100.

10.5.7. As IFR aircraft have priority over VFR/SVFR aircraft, the Tower controller shall give priority to IFR arrival aircraft when there is VFR/SVFR traffic in the ATZ or in the circuit. When necessary, the Tower controller shall instruct the VFR/SVFR traffic to extend downwind in the circuit, take up orbits or hold at one of the designated holding areas if the VFR/SVFR traffic is a helicopter.

Traffic Information

Phraseology:

Tower: *UNKNOWN* **TRAFFIC** (direction, distance and other information)

Tower: *UNKNOWN* **TRAFFIC** (figure) **O' CLOCK** (bearing by clock reference and distance) **MILES** (direction of flight) (information)

Tower: (traffic) (significant point)

- **SLOW / FAST MOVING**
- **CLOSING**
- **OPPOSITE / SAME DIRECTION**
- **OVERTAKING**
- **CROSSING LEFT TO RIGHT / RIGHT TO LEFT**

Tower: If known:

- (type of aircraft)
- (level) / (relative level) (figures) *NOT CONFIRMED*
- **CLIMBING / DESCENDING**

Example:

VHHH_S_TWR: BHLC, traffic is a Cathay Pacific Boeing 777, at your 10 o'clock, on 5 mile final RWY 07L.

10.5.8. Once an aircraft has landed, the Tower controller shall instruct the aircraft to taxi onto the nearest taxiway parallel to the runway-in-use and contact the relevant Ground controller.

10.6. REDUCED RUNWAY SEPARATION MINIMUMS (RRSM)

10.6.1. Reduced Runway Separation Minimums (RRSM) may be applied between a departing aircraft and a succeeding landing aircraft or between two successive landing aircraft on the same runway provided the following conditions exist:

- Visibility of at least 5km;
- Ceiling in the Departure/Missed Approach Area 3000ft AMSL or more;
- During daylight hours from 30 minutes after sunrise to 30 minutes before sunset;
- The second aircraft is able to see the first aircraft clearly and continuously until the first aircraft is clear of the runway;
- No unfavourable surface wind conditions (including significant tailwind up to 5 kts / turbulence or wind shear up to 15 kts, microburst activity within 4 NM of departure, final approach and missed approach sectors)
- Braking action not adversely affected by water or other contaminants (i.e. RRSM will be suspended whenever the runway is wet or there is pilot report of poor braking action)

10.6.2. When RRSM is applied, the successive landing aircraft may be given clearance to land before the first aircraft has vacated the runway-in-use after landing or crossed the departure end of the runway provided there is reasonable assurance that the following separation distances will exist when the landing aircraft crosses the threshold:

RWY 07L / 25R

Landing following departure:

The departing aircraft is/will be airborne and has passed a point at least 2400m from the threshold (abeam TWY C8 for RWY 07L or TWY C5 for RWY 25R).

Landing following landing:

The preceding aircraft has landed and has passed a point at least 2400m from the threshold (abeam TWY C8 for RWY 07L or TWY C5 for RWY 25R), is in motion and will vacate the runway without backtracking.

RWY 07C / 25C

Landing following departure:

The departing aircraft is/will be airborne and has passed a point at least 2400m from the threshold (abeam TWY F6/A8 for RWY 07C or TWY F3 for RWY 25C).

Landing following landing:

The preceding aircraft has landed and has passed a point at least 2400m from the threshold (abeam TWY F6/A8 for RWY 07C or TWY F3 for RWY 25C), is in motion and will vacate the runway without backtracking.

RWY 07R / 25L

Landing following departure:

The departing aircraft is/will be airborne and has passed a point at least 2900m from the threshold (abeam TWY K6 for RWY 07R or TWY K2 for RWY 25L).

Landing following landing:

The preceding aircraft has landed and has passed a point at least 2900m from the threshold (abeam TWY K6 for RWY 07R or TWY K2 for RWY 25L), is in motion and will vacate the runway without backtracking.

10.6.3. Warnings are to be provided to the second aircraft when issuing the landing clearance in line with ICAO standard phraseology, e.g:

Phraseology:

(Preceding aircraft to vacate the runway)

T: (Callsign), **PRECEDING** (Aircraft Type) **ABOUT TO VACATE THE RUNWAY, SURFACE WINDS** (Wind Direction) **DEGREES** (Wind Speed) **KNOTS, RUNWAY** (Runway), **CLEARED TO LAND.**

Example 1: CATHAY 523, PRECEDING BOEING 777 ABOUT TO VACATE THE RUNWAY, SURFACE WINDS 050 DEGREES 7 KNOTS, RUNWAY 07R, CLEARED TO LAND.

(Departing aircraft about to rotate)

T: (Callsign), **PRECEDING** (Aircraft Type) **ABOUT TO ROTATE, SURFACE WINDS** (Wind Direction) **DEGREES** (Wind Speed) **KNOTS, RUNWAY** (Runway), **CLEARED TO LAND.**

Example 2: CATHAY 523, PRECEDING BOEING 777 ABOUT TO ROTATE, SURFACE WINDS 050 DEGREES 7 KNOTS, RUNWAY 07R, CLEARED TO LAND.

10.6.4. Pilots are required to notify ATC in advance if they anticipate not being able to comply with any of the above requirements.

10.7. FLOW CONTROL PROCEDURES

10.7.1. When the aerodrome is experiencing high volumes of traffic, it may be necessary for Air Movements Control to make use of different holding points to sequence traffic. Once an aircraft has been handed off from the Ground controller, the Tower controller may assign a different holding point to the aircraft. The goal is to spread traffic evenly across all active holding points.

10.7.2. When a gate hold is necessary (e.g. when the holding points become saturated), the Air Movements Control controller may coordinate with the Ground controllers to hold aircraft at the gate until the holding points are no longer saturated.

10.8. HONG KONG ZONE CONTROL

10.8.1. Although not an aerodrome control position, Hong Kong Zone Control is operated from the control tower at Hong Kong International Airport in real life. As such, S2+ rated controllers may operate Hong Kong Zone Control (VHHH_Z_TWR) on VATSIM. When there is no separate controller operating Hong Kong Zone Control, Air Movements Control South shall be responsible for covering Hong Kong Zone Control. Controllers shall refer to SOP006 for details on Hong Kong Zone Control.

10.9. RADAR TRACKING

10.9.1. All Air Movements Control positions shall not use radar tracking (F3 and F4 functions on the keyboard) for IFR aircraft. However, the Tower controller **shall use radar tracking for VFR aircraft flying within the ATZ.**

11. DEVIATION FROM THE AIP OF HKSAR

11.1. While it is the goal of VATSIM to simulate real-world navigation environment, there are certain circumstances where strictly following real-world regulations may not fit the context or needs of the VATSIM online environment. In the interest of the VATSIM community, certain exemptions are granted to deviate from the AIP of Hong Kong or real-world operations.

11.2. AIRCRAFT RESTRICTIONS

11.2.1. Regarding AIP GEN 1.2, the noise certificate requirement for subsonic jet landing or departing Hong Kong International Airport (VHHH) is waived on VATSIM as this would prevent VATSIM members from using historic or older aircraft in the Hong Kong airspace.

11.2.2. In addition, non-jet aircraft may use Hong Kong International Airport (VHHH) without aircraft type restrictions on VATSIM.

11.2.3. Restrictions pertaining foreign registered aircraft conducting local flights are waived on VATSIM (Refer to AIP AD 2.20 Section 1).

11.2.4. Restrictions on local flights at VHHH in AIP AD 2.20 Section 2 is not applicable on VATSIM.

11.3. VFR FLIGHTS IN UCARA

11.3.1. Pilots conducting VFR flights in Uncontrolled Airspace Reporting Areas (UCARA) are to monitor the VATSIM advisory frequency (122.800 MHz) rather than any local advisory frequency.

11.4. KILO APPROACH FROM SHAM SHEK / TUNG CHUNG PASS

11.4.1. Helicopters landing at Hong Kong International Airport are permitted to initiate the Kilo Approach from Sham Shek and Tung Chung Pass as per Section 10.3.2.4.

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	<p>Added North Runway Information</p> <p>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</p>	J. WAI
30 MAR 2023	8	<p>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)</p>	J. WAI
01 MAR 2024	9	<p>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</p>	T. SIU

05 OCT 2024	10	Updated phraseology for IFR clearances	T. SIU
28 NOV 2024	11	<p>Added Ground Movements Control West 2 and Air Movements Control Midfield for 3RS</p> <p>Added 3RS Procedures to Section 6</p> <p>Updated Section 7.3 and added Section 7.4</p> <p>Updated Section 9.1.6</p> <p>Updated Section 9.2.2</p> <p>Updated Section 9.4.3</p> <p>Updated Section 9.4.6</p> <p>Updated some taxi phraseologies</p> <p>Updated Section 9.5</p> <p>Added Section 9.6.2</p> <p>Updated Section 10.2.4 and Section 10.2.5</p> <p>Updated helicopter holding areas for 3RS</p> <p>Updated Section 10.4.7 and Section 10.4.9</p> <p>Updated RRSM Procedures</p>	T. SIU
07 DEC 2024	12	<p>Updated GMC Positions</p> <p>Updated VFR Procedures</p>	T. SIU