
AD 2.22 FLIGHT PROCEDURES

1. ATC Clearance, Engine Start-Up and Push-back Procedures

- 1.1 All aircraft other than helicopters and locally based light aircraft shall obtain an ATC clearance prior to engine start. Pilots are to inform Hong Kong Ground/Delivery, as appropriate, of their callsign, parking bay number/location, proposed flight level if it is different from the filed flight plan and when applicable, special requirements (e.g. request for another departure runway or inability to comply with SID climb profile).
- 1.2 A Pre-Departure Clearance (PDC) data-link service is available to approved operators from Hong Kong Delivery between 0001 – 1600 UTC daily. (See the appropriate AIC for further details on PDC data-link service.) Upon receipt of the PDC data-link message the pilot shall contact Hong Kong Delivery and read back the following information :
 - a) aircraft callsign;
 - b) SID;
 - c) transponder code.
- 1.3 Pilots not participating in the PDC service shall contact Hong Kong Delivery on frequency 129.9 MHz between 0001 – 1600 UTC. All pilots shall contact Hong Kong Ground on frequency 122.55 MHz between 1601 – 2359 UTC 5 minutes prior to start to put their ATC clearance on request. Upon receipt of the ATC clearance the pilot shall read back the following information :
 - a) aircraft callsign;
 - b) destination;
 - c) route;
 - d) SID;
 - e) transponder code.
- 1.4 Pilots shall comply with instructions issued by Hong Kong Delivery regarding when to contact the relevant Hong Kong Ground frequency.
- 1.5 Once an ATC clearance has been received, unless there is a specific time restriction included in the clearance, any delay in being ready to push-back, start engines or taxi may result in the clearance being cancelled.
- 1.6 Pilots shall contact Hong Kong Ground on frequency 122.55 MHz except when notified it is sectorised in which case pilots shall contact :
 - (a) Hong Kong Ground (North) for North and West Aprons on frequency 121.6 MHz;
 - (b) Hong Kong Ground (South) for South, Cargo and Business Aviation Aprons on frequency 122.55 MHz.
- 1.7 Aircraft should not commence start-up, push-back, or any other manoeuvre on the apron, unless they have obtained approval from the relevant Hong Kong Ground.

- 1.8 The majority of parking bays have two standard push-back procedures, Push-back BLUE and Push-back RED. The normal push-back procedure is to the taxi lane abeam the adjacent parking bay, but where this would result in the aircraft entering a critical area the push-back is extended to a Tug Stop Point clear of the critical area. A limited number of parking bays have a Push-back/Tow-forward procedure, Push-back GREEN, but procedure is only available by prior arrangement with AAHK. (The push-back procedures for each parking bay are listed on the following pages and are shown on pages AD2-VHHH-99A to AD2-VHHH-99E.)
- 1.9 Under certain traffic conditions it may be necessary for Hong Kong Ground to issue non-standard push-back instructions to expedite the flow of traffic. Pilots will be issued a 'non-standard push-back' to a defined location and direction.
- 1.10 Pilots shall ensure that the push-back colour code or non-standard push-back instructions issued by Hong Kong Ground are accurately relayed to their ground crew before push-back or engine start commences.
- 1.11 There is a restriction to the starting of engines for aircraft in parking bays S103, S108, N148, N149 and W123. If aircraft in these bays are required to push-back through 180°, only one engine shall be started during the push-back, other engines shall only be started when the push-back manoeuvre has been completed.
- 1.12 When known conditions exist which necessitate that engine start-up is carried out in the parking bay prior to the commencement of push-back, or greater than idle engine thrust will be required during engine start, (e.g. cross-bleed start procedure), the pilot shall advise Hong Kong Ground of the fact when engine start or push-back clearance is requested.
- 1.13 Whilst push-back procedure is being conducted it is essential for safety reasons that communication contact is maintained between pilot and ground engineer in charge. ATC clearance will not normally be issued to aircraft whilst being pushed back, unless the pilot so requests.
- 1.14 To avoid delay to other traffic using the apron aircraft should be ready to taxi as soon as the push-back manoeuvre and engine start procedure are completed. The standard push-back for stands N68 and N70 is onto TWY B, therefore to avoid delays to other traffic it is essential that the aircraft should be ready to taxi as soon as the push-back manoeuvre is complete. If aircraft are unable to comply with these procedures pilots shall immediately inform Hong Kong Ground in order that alternative taxi instructions may be issued to other traffic.
- 1.15 Pilots are reminded that they should always use minimum power when starting engines or manoeuvring within the apron area. It is especially important when commencing to taxi that break-away thrust is kept to an absolute minimum and then reduced to idle thrust as soon as practicable.

1.16 **Standard Push-Back Procedures South Apron**Extended Push-Back Procedures in **BOLD TEXT**.

PARKING BAY NUMBER AND PUSH-BACK DESIGNATION		PUSH-BACK LOCATION AND DIRECTION (TSP - TUG STOP POINT)
E 1 / E 1R	BLUE	TSP ABEAM E 2 FACING NORTH
	RED	TSP ABEAM S 25 FACING EAST
E 2 / E 2R	BLUE	ABEAM E 3 FACING NORTH
	RED	TSP ABEAM S 25 FACING EAST
	GREEN	ABEAM E 2 FACING SOUTH
E 3 / E 3R	BLUE	ABEAM E 4 FACING NORTH
	RED	ABEAM E 2 FACING SOUTH
E 4	BLUE	TWY J FACING NORTH
	RED	ABEAM E 3 FACING SOUTH
S 21	BLUE	TSP ABEAM E 2 FACING NORTH
	RED	TSP ABEAM S 25 FACING EAST
S 23 / S 23R	BLUE	TSP ABEAM E 2 FACING NORTH
	RED	ABEAM S 25 FACING EAST
S 25 / S 25R	BLUE	TSP ABEAM E 2 FACING NORTH
	RED	ABEAM S 27 FACING EAST
	GREEN	ABEAM S 25 FACING WEST
S 27 / S 27R	BLUE	ABEAM S 25 FACING WEST
	RED	ABEAM S 29 FACING EAST
S 29 / S 29R	BLUE	TSP ABEAM S 27 FACING WEST
	RED	ABEAM S 31 FACING EAST
S 31 / S 31R	BLUE	ABEAM S 29 FACING WEST
	RED	TSP ABEAM S 41 FACING NORTH EAST
	GREEN	ABEAM S31 FACING EAST
S 33 / S 33R	BLUE	ABEAM S 31 FACING WEST
	RED	TSP ABEAM S 41 FACING NORTH EAST
S 35 / S 35R	BLUE	TSP ABEAM S 33 FACING WEST
	RED	TSP ABEAM S 41 FACING NORTH EAST
S 41 / S 41R	BLUE	TSP ABEAM S 33 FACING WEST
	RED	ABEAM S 43 FACING NORTH EAST

Extended Push-Back Procedures in **BOLD TEXT**.

PARKING BAY NUMBER AND PUSH-BACK DESIGNATION		PUSH-BACK LOCATION AND DIRECTION (TSP - TUG STOP POINT)
S 43 / S 43R	BLUE	TSP ABEAM S 33 FACING WEST
	RED	ABEAM S 45 FACING NORTH EAST
	GREEN	ABEAM S43 FACING SOUTH WEST
S 45 / S 45R	BLUE	ABEAM S 43 FACING SOUTH WEST
	RED	ABEAM S 47 FACING NORTH EAST
S 47 / S 47R	BLUE	ABEAM S 45 FACING SOUTH WEST
S 49 / S 49R	BLUE	ABEAM S 47 FACING SOUTH WEST
S 101	BLUE	TWY J FACING NORTH
	RED	TSP ABEAM S 102 FACING SOUTH
S 102	BLUE	ABEAM S 101 FACING NORTH
	RED	TSP ABEAM S 25 FACING EAST
	GREEN	ABEAM S102 FACING SOUTH
S 103	BLUE	ABEAM S 102 FACING NORTH
	RED	TSP ABEAM S 25 FACING EAST + ENGINE START RESTRICTION
	GREEN	ABEAM S103 FACING SOUTH
S 104	BLUE	ABEAM S 105 FACING NORTH
	RED	ABEAM S 31 FACING EAST
	GREEN	ABEAM S104 FACING SOUTH
S 105	BLUE	TSP ABEAM S 106 FACING NORTH
	RED	ABEAM S 104 FACING SOUTH
S 106	RED	ABEAM S 105 FACING SOUTH
S 107	RED	ABEAM S 108 FACING SOUTH
S 108	BLUE	ABEAM S 107 FACING NORTH
	RED	TSP ABEAM S 31 FACING EAST + ENGINE START RESTRICTION
	GREEN	ABEAM S108 FACING SOUTH
S 109	BLUE	TSP ABEAM S 33 FACING WEST
	RED	ABEAM S 43 FACING NORTH EAST
S 110	BLUE	TSP ABEAM S 33 FACING WEST
	RED	ABEAM S 45 FACING NORTH EAST
	GREEN	ABEAM S110 FACING SOUTH WEST
S 111	BLUE	ABEAM S 110 FACING SOUTH WEST
	RED	ABEAM S 47 FACING NORTH EAST

1.17 **Standard Push-Back Procedures North Apron**Extended Push-Back Procedure in **BOLD TEXT**.

PARKING BAY NUMBER AND PUSH-BACK DESIGNATION		PUSH-BACK LOCATION AND DIRECTION (TSP - TUG STOP POINT)
E 15	BLUE	TSP ABEAM N 24 FACING EAST
	RED	TSP ABEAM E 17 FACING SOUTH
E 16 / E 16R	BLUE	TSP ABEAM N 24 FACING EAST
	RED	ABEAM E 17 FACING SOUTH
E 17 / E 17R	BLUE	TSP ABEAM N 24 FACING EAST
	RED	ABEAM E 18 FACING SOUTH
	GREEN	ABEAM E 17 FACING NORTH
E 18	BLUE	ABEAM E 17 FACING NORTH
	RED	ABEAM E 19 FACING SOUTH
E 19	BLUE	ABEAM E 18 FACING NORTH
	RED	TWY B FACING EAST
N 20	BLUE	ABEAM N 24 FACING EAST
	RED	TSP ABEAM E 17 FACING SOUTH
N 22 / N 22R	BLUE	ABEAM N 24 FACING EAST
	RED	TSP ABEAM E 17 FACING SOUTH
N 24 / N 24R	BLUE	ABEAM N 26 FACING EAST
	RED	TSP ABEAM E 17 FACING SOUTH
	GREEN	ABEAM N 24 FACING WEST
N 26 / N 26R	BLUE	ABEAM N 28 FACING EAST
	RED	ABEAM N 24 FACING WEST
N 28 / N 28R	BLUE	ABEAM N 30 FACING EAST
	RED	ABEAM N 26 FACING WEST
N 30 / N 30R	BLUE	TSP ABEAM N 36 FACING SOUTH EAST
	RED	ABEAM N 28 FACING WEST
	GREEN	ABEAM N 30 FACING EAST
N 32 / N 32R	BLUE	TSP ABEAM N 36 FACING SOUTH EAST
	RED	ABEAM N 30 FACING WEST
N 34 / N 34R	BLUE	TSP ABEAM N 36 FACING SOUTH EAST
	RED	ABEAM N 32 FACING WEST
N 36	BLUE	TWY B7 FACING SOUTH EAST
	RED	TSP ABEAM N 32 FACING WEST

Extended Push-Back Procedures in **BOLD TEXT**.

PARKING BAY NUMBER AND PUSH-BACK DESIGNATION		PUSH-BACK LOCATION AND DIRECTION (TSP - TUG STOP POINT)
N 60 / N 60R	BLUE	ABEAM N62 FACING SOUTH EAST
	RED	TSP ABEAM N32 FACING WEST
	GREEN	ABEAM N 60 FACING NORTH WEST
N 62 / N 62R	BLUE	TSP ABEAM N64 FACING SOUTH EAST
	RED	ABEAM N60 FACING NORTH WEST
N 64 / N 64R	RED	ABEAM N62 FACING NORTH WEST
N 66 / N 66R	RED	TSP ABEAM N64 FACING NORTH WEST
N 68 / N 68R	RED	TSP TWY B FACING WEST *
N 70 / N 70R	RED	TWY B FACING WEST *
N 141	BLUE	TWY B7 FACING SOUTH EAST
	RED	ABEAM N142 FACING NORTH WEST
N 142	BLUE	ABEAM N 141 FACING SOUTH EAST
	RED	TSP ABEAM N 32 FACING WEST
	GREEN	ABEAM N 142 FACING NORTH WEST
N 143	BLUE	ABEAM N 144 FACING SOUTH
	RED	ABEAM N 26 FACING WEST
	GREEN	ABEAM N 143 FACING NORTH
N 144	BLUE	ABEAM N 145 FACING SOUTH
	RED	ABEAM N 143 FACING NORTH
N 145	RED	ABEAM N 144 FACING NORTH
N 146	RED	ABEAM N 147 FACING NORTH
N 147	BLUE	ABEAM N 146 FACING SOUTH
	RED	ABEAM N 148 FACING NORTH
N 148	BLUE	ABEAM N 147 FACING SOUTH
	RED	TSP ABEAM N 26 FACING WEST + ENGINE START RESTRICTION
	GREEN	ABEAM N 148 FACING NORTH
N 149	BLUE	TSP ABEAM N 24 FACING EAST + ENGINE START RESTRICTION
	RED	ABEAM N 150 FACING SOUTH
	GREEN	ABEAM N 149 FACING NORTH
N 150	BLUE	TSP ABEAM N 24 FACING EAST
	RED	ABEAM N 151 FACING SOUTH
	GREEN	ABEAM N 150 FACING NORTH
N 151	BLUE	ABEAM N 150 FACING NORTH

1.18 Standard Push-Back Procedures - West Apron

Extended Push-Back Procedures in **BOLD TEXT**

PARKING BAY NUMBER AND PUSH-BACK DESIGNATION		PUSH-BACK LOCATION AND DIRECTION (TSP - TUG STOP POINT)
W 40 / W 40R	BLUE	ABEAM W 42 FACING NORTH EAST
	RED	TSP TWY W1 FACING SOUTH EAST
W 42 / W 42R	BLUE	ABEAM W 44 FACING NORTH EAST
	RED	TSP TWY W1 FACING SOUTH EAST
W 44 / W 44R	BLUE	ABEAM W 46 FACING NORTH EAST
	RED	TSP TWY W1 FACING SOUTH EAST
W 46 / W 46R	BLUE	ABEAM W 48 FACING NORTH EAST
	RED	TSP ABEAM W 44 FACING SOUTH WEST
W 48 / W 48R	BLUE	ABEAM W 50 FACING NORTH EAST
	RED	ABEAM W 46 FACING SOUTH WEST
W 50	RED	ABEAM W 48 FACING SOUTH WEST
W 61 / W 61R	BLUE	ABEAM W 42 FACING NORTH EAST
	RED	TWY W1 FACING SOUTH EAST
W 63 / W 63R	BLUE	TSP ABEAM W 42 FACING NORTH EAST
	RED	ABEAM W 65 FACING SOUTH EAST
W 65 / W 65R	BLUE	TSP ABEAM W42 FACING NORTH EAST
	RED	ABEAM W 67 FACING SOUTH EAST
	GREEN	ABEAM W 65 FACING NORTH WEST
W 67 / W 67R	BLUE	ABEAM W 65 FACING NORTH WEST
	RED	ABEAM W 69 FACING SOUTH EAST
W 69 / W 69R	BLUE	ABEAM W 67 FACING NORTH WEST
	RED	ABEAM W 71 FACING SOUTH EAST
W 71 / W 71R	BLUE	ABEAM W 69 FACING NORTH WEST
W 121 / W 121R	BLUE	ABEAM W 48 FACING NORTH EAST
	RED	ABEAM W 122 FACING SOUTH WEST
W 122 / W 122L / W 122R	BLUE	ABEAM W 121 FACING NORTH EAST
	RED	ABEAM W 123 FACING SOUTH WEST
W 123 / W 123R	BLUE	ABEAM W 122 FACING NORTH EAST
W 124 / W 124L	BLUE	TWY W1 FACING NORTH WEST
	RED	ABEAM W 125 FACING SOUTH EAST
W 125 / W 125L / W 125R	BLUE	ABEAM W 124 FACING NORTH WEST
	RED	TWY W1 FACING SOUTH EAST
W126	NO PUSH-BACK REQUIRED	

1.19 Standard Push-Back Procedures - Cargo Apron

Extended Push-Back Procedure in **BOLD TYPE**

PARKING BAY NUMBER AND PUSH-BACK DESIGNATION		PUSH-BACK LOCATION AND DIRECTION
C10	BLUE	ABEAM C 13 FACING WEST
	RED	TAXILANE L FACING EAST
C11	BLUE	ABEAM C 13 FACING WEST
	RED	ABEAM C10 FACING EAST
C12	BLUE	ABEAM C13 FACING WEST
	RED	ABEAM C 11 FACING EAST
C13	BLUE	ABEAM C 14 FACING WEST
	RED	ABEAM C 12 FACING EAST
C14	BLUE	ABEAM C 15 FACING WEST
	RED	ABEAM C 13 FACING EAST
C15	BLUE	ABEAM C 16 FACING WEST
	RED	ABEAM C 14 FACING EAST
C16	BLUE	ABEAM C 17 FACING WEST
	RED	ABEAM C 15 FACING EAST
C17	BLUE	ABEAM C 18 FACING WEST
	RED	ABEAM C 16 FACING EAST
C18	BLUE	ABEAM C 19 FACING WEST
	RED	ABEAM C 17 FACING EAST
C19	BLUE	ABEAM C 20 FACING WEST
	RED	ABEAM C 18 FACING EAST
C20	BLUE	ABEAM C 21 FACING WEST
	RED	ABEAM C 19 FACING EAST
C21	BLUE	TWY L 2 FACING SOUTH
	RED	ABEAM C 20 FACING EAST
C22	BLUE	TWY L 2 FACING SOUTH
	RED	ABEAM C 20 FACING EAST
C23	BLUE	TWY L 2 FACING SOUTH
	RED	ABEAM C 20 FACING EAST
C24	BLUE	ABEAM C 21 FACING WEST
	RED	ABEAM C 19 FACING EAST
C25	BLUE	ABEAM C 20 FACING WEST
	RED	ABEAM C 18 FACING EAST

Extended Push-Back Procedure in **BOLD TYPE**

PARKING BAY NUMBER AND PUSH-BACK DESIGNATION		PUSH-BACK LOCATION AND DIRECTION
C26	BLUE	ABEAM C 19 FACING WEST
	RED	ABEAM C 17 FACING EAST
C27	BLUE	ABEAM C 18 FACING WEST
	RED	ABEAM C 16 FACING EAST
C28	BLUE	ABEAM C 17 FACING WEST
	RED	ABEAM C 15 FACING EAST
C29	BLUE	ABEAM C 16 FACING WEST
	RED	ABEAM C 14 FACING EAST
C30	BLUE	ABEAM C 15 FACING WEST
	RED	ABEAM C 13 FACING EAST
C31	BLUE	ABEAM C 14 FACING WEST
	RED	ABEAM C 12 FACING EAST
C33	BLUE	ABEAM C 31 FACING WEST
	RED	ABEAM C 34 FACING EAST
C34	BLUE	ABEAM C 31 FACING WEST
	RED	TAXILANE L FACING EAST

INTENTIONALLY

LEFT

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2. Standard Instrument Departures (SIDs)

2.1 GENERAL

- 2.1.1 RNAV(GNSS) SID procedures and conventional SID procedures follow very similar tracks and use the same set of SID identifications. See pages AD2-VHHH-97A to 97P for details of the SID procedures.
- 2.1.2 RNAV_(GNSS) SID may be flown by compliant aircraft (see page GEN 1.5-2, para 3.5). Carriage of a certified GNSS receiver is mandatory.
- 2.1.3 Non-compliant aircraft (aircraft that do not have RNP 1/P-RNAV approval or aircraft whose RNP-1/P-RNAV capability has been degraded before departure) shall fly the alternative conventional departure procedure. If radar assistance will be required due to the unserviceability of aircraft equipment or navigation aids, the pilot should inform Hong Kong Ground prior to departure and request radar assistance from Hong Kong Departure when airborne.
- 2.1.4 Due to the proximity of the FIR boundary to the west, pilots departing RWY 25L or RWY 25R are advised to maintain a careful cross-check of aircraft position after passing PRAWN. In the event of any weather avoidance manoeuvre, permission must be obtained from ATC prior to making any turn away from the prescribed departure track.

2.2 TERRAIN CLEARANCE

- 2.2.1 To maintain terrain clearance on the appropriate SID the following procedures must be applied to, unless directed by ATC.

Runway	Flyover Point	Rate of Climb (under normal operating conditions)
RWY 07L	Do not turn right before passing ROVER	4.1% or 250 ft/NM until passing 1 400 ft
RWY 07R	Do not turn right before passing PORPA	4.9% or 298 ft/NM until passing 1 400 ft
RWY 25L/25R	Do not turn left before passing PRAWN	3.3% or 201 ft/NM

2.3 SPEED CONTROL

- 2.3.1 RWY 07L/07R departures shall not exceed a speed of 220 kt IAS until established on track to RAMEN or TD DVOR.
- 2.3.2 RWY 25L/25R departures shall not exceed a speed of 230 kt IAS until established on track to RUMSY.

2.4 CLIMB REQUIREMENT

- 2.4.1 To ensure separation of SID routes from STAR routes, aircraft on LAKES B/D or OCEAN B/D SIDs must cross TROUT at or above FL 140. Pilots unable to comply with this requirement must inform ATC as soon as possible so that alternative action can be taken.
- 2.4.2 To avoid conflict with traffic in the Guangzhou FIR, aircraft on BEKOL SIDs must cross BEKOL at 4 800 m or above. Track distance from take-off to BEKOL is approximately 48 NM. Pilots unable to comply with this requirement must inform Hong Kong ATC prior to departure.

2.5 LOSS OF COMMUNICATION

2.5.1 In the event of a loss of communication aircraft shall comply with the last acknowledged clearance up to the next reporting point/waypoint in the SID/Transition procedure listed in para.5.2, then climb to the flight planned cruising level and follow the SID/Transition track to the TMA exit point.

3. Terminal Transition Routes

3.1 Within the Hong Kong TMA a number of Terminal Transition Routes (V1 – V9) are established. Operators departing from Hong Kong International Airport shall flight plan via the relevant Terminal Transition Route until exiting the Hong Kong TMA to join the appropriate ATS route. (See table ENR 3.1-7 and chart page AD2 – VHHH-85.)

4. SID Navigation Aids

Navaid	Frequency	Co-ordinates
CH DVOR	112.3 MHz	22 13 10.35 N 114 01 48.20 E
CH DME	CH 70X	22 13 11.69 N 114 01 48.75 E
LC NDB	390 kHz	22 17 43 N 113 53 43 E
NLG DVOR	117.7 MHz	22 31 54 N 113 33 48 E
NLG DME	CH 124X	22 31 54 N 113 33 48 E
SMT DVOR	114.8 MHz	22 20 15.43 N 113 58 55.46 E
SMT DME	CH 95X	22 20 15.43 N 113 58 55.46 E
TD DVOR	116.1 MHz	22 14 52.42 N 114 17 35.30 E
TD DME	CH 108X	22 14 52.42 N 114 17 35.30 E

5. SID Locations

5.1 SID FLYOVER WAYPOINTS

Flyover Waypoint	Co-ordinates	Cross Reference from Navaid
RW07L (RWY 07L DER)	22 19 21.08N 113 56 02.35E	IZSL ILS DME 2.0 NM SMT RDL 253/DME 2.8 NM
RW25R (RWY 25R DER)	22 18 34.27N 113 53 37.06E	ITFR ILS DME 2.0 NM SMT RDL 253/DME 5.2 NM
PORPA	22 20 09.10N 114 01 16.30E	ISR ILS DME 7.0 NM LKC RDL 110/DME 8.1 NM
PRAWN	22 16 05.40N 113 48 40.10E	IFL ILS DME 7.0 NM SMT RDL 248/DME 10.4 NM
ROVER	22 20 35.58N 114 01 39.12E	IZSL ILS DME 7.3 NM SMT RDL 085/DME 2.6 NM

5.2. SID REPORTING POINTS / FLYBY WAYPOINTS

Reporting Point / Flyby Waypoint	Co-ordinates		Cross Reference from Navaid
ATENA	22 24 39.85N	114 23 11.88E	CH RDL 060 / DME 22.9 NM TD RDL 030 / DME 11.1 NM
ATTOL	21 22 00.00N	113 27 26.00E	CH RDL 214 / DME 60.0 NM TD RDL 224 / DME 70.3 NM
BEKOL	22 32 36.00N	114 08 00.00E	CH RDL 019 / DME 20.2 NM TD RDL 335 / DME 19.8 NM
BREAM	21 46 46.00N	114 03 28.00E	CH RDL 179 / DME 26.4 NM TD RDL 207 / DME 30.9 NM
COLEY	22 06 41.03N	114 18 37.63E	CH RDL 113 / DME 16.9 NM TD RDL 175 / DME 8.2 NM
LAKES	21 58 41.30N	114 54 38.60E	CH RDL 108 / DME 51.1 NM TD RDL 117 / DME 38.0 NM
LOGAN	21 59 16.17N	115 16 08.46E	CH RDL 103 / DME 70.4 NM TD RDL 108 / DME 56.6 NM
OCEAN	21 48 43.00N	114 48 48.00E	CH RDL 121 / DME 50.0 NM TD RDL 134 / DME 39.0 NM
PERCH	21 30 35.00N	113 55 22.00E	CH RDL 190 / DME 42.9 NM TD RDL 207 / DME 48.7 NM
RAMEN	22 09 39.22N	114 05 09.89E	CH RDL 140 / DME 4.7 NM TD RDL 248 / DME 12.6 NM
RASSE	21 47 34.50N	115 19 49.10E	CH RDL 111 / DME 76.9 NM TD RDL 117 / DME 63.9 NM
RUMSY	22 04 56.94N	113 48 16.79E	CH RDL 239 / DME 15.0 NM TD RDL 252 / DME 28.9 NM
SAMON	21 54 23.73N	114 12 32.95E	CH RDL 154 / DME 21.2 NM TD RDL 195 / DME 20.9 NM
SANDI	20 23 46.00N	113 44 58.00E	CH RDL 190 / DME 110.0 NM TD RDL 197 / DME 114.7 NM
SKATE	21 31 55.00N	115 08 40.00E	CH RDL 125 / DME 74.5 NM TD RDL 134 / DME 64.0 NM
TROUT	21 47 54.87N	114 16 12.74E	CH RDL 154 / DME 28.5 NM TD RDL 185 / DME 26.9 NM
TUNNA	21 47 25.00N	113 57 54.00E	CH RDL 190 / DME 25.9 NM TD RDL 216 / DME 32.9 NM NLG RDL 155 / DME 49.7 NM

6. Hong Kong International Airport SIDs

6.1 RUNWAY 07 SIDS

SID	Runway	Remarks
ATTOL 2A	RWY 07R	May be used H24
ATTOL 2C	RWY 07L	May be used H24
BEKOL 3A	RWY 07R	Between 1501-2300 UTC expect ATENA 2A
BEKOL 3C	RWY 07L	Between 1501-2300 UTC expect ATENA 2C
LAKES 2A	RWY 07R	Between 1501-2300 UTC expect LOGAN 3A
LAKES 2C	RWY 07L	Between 1501-2300 UTC expect LOGAN 3C
OCEAN 2A	RWY 07R	Between 1501-2300 UTC expect RASSE 3A or SKATE 3A
OCEAN 2C	RWY 07L	Between 1501-2300 UTC expect RASSE 3C or SKATE 3C
SANDI 2A	RWY 07R	May be used H24
SANDI 2C	RWY 07L	May be used H24

6.2 RUNWAY 07 NOISE MITIGATING SIDS

SID	Runway	Remarks
ATENA 2A	RWY 07R	Normally for use between 1501-2300 UTC
ATENA 2C	RWY 07L	Normally for use between 1501-2300 UTC
LOGAN 3A	RWY 07R	Normally for use between 1501-2300 UTC
LOGAN 3C	RWY 07L	Normally for use between 1501-2300 UTC
RASSE 3A	RWY 07R	Normally for use between 1501-2300 UTC
RASSE 3C	RWY 07L	Normally for use between 1501-2300 UTC
SKATE 3A	RWY 07R	Normally for use between 1501-2300 UTC
SKATE 3C	RWY 07L	Normally for use between 1501-2300 UTC

6.3 RUNWAY 25 SIDS

SID	Runway	Remarks
ATTOL 2B	RWY 25L	May be used H24
ATTOL 2D	RWY 25R	May be used H24
BEKOL 2B	RWY 25L	May be used H24
BEKOL 2D	RWY 25R	May be used H24
LAKES 2B	RWY 25L	May be used H24
LAKES 2D	RWY 25R	May be used H24
OCEAN 2B	RWY 25L	May be used H24
OCEAN 2D	RWY 25R	May be used H24
SANDI 2B	RWY 25L	May be used H24
SANDI 2D	RWY 25R	May be used H24

7. Standard Instrument Arrivals (STARs)**7.1 GENERAL**

7.1.1 Unless specifically notified, an IFR arrival should expect ATC to issue the appropriate Standard Instrument Arrival (STAR), dependant on the inbound routeing of the flight. Hong Kong International Airport STAR procedures are given on pages AD2-VHHH-98A to AD2-VHHH-98J.

7.2 LOSS OF COMMUNICATION

7.2.1 In the event of a loss of communication :

- a) if a STAR clearance has been issued and acknowledged, aircraft shall comply with the descent planning profile and the STAR track to TD/GUAVA as appropriate, join the relevant holding pattern and descend to 4 500ft, then carry out the ILS approach;
- b) if a STAR clearance has not been issued or acknowledged, aircraft shall proceed in accordance with the STAR procedure appropriate for the ATS route and landing direction, (arrivals from SIERA should proceed in accordance with SIERA 2A or SIERA 2B STAR as appropriate), at TD/GUAVA as appropriate, join the relevant holding pattern and descend to 4 500 ft, then carry out the ILS approach.

7.3 UNSERVICEABILITY OF AIRCRAFT EQUIPMENT OR GROUND EQUIPMENT

7.3.1 Pilots shall inform ATC if they are unable to comply with the STAR procedure due to unserviceability of aircraft equipment or ground equipment and request radar assistance.

7.4 STAR COMMENCEMENT AND TERMINATION POINTS

7.4.1 Each of the STARs is identified by the corresponding FIR/TMA entry fix and terminates at TD DVOR (RWY 25) or reporting point GUAVA (RWY 07) as appropriate.

8. STAR Navigational Aids

Navaid	Frequency	Co-ordinates
CH DVOR	112.3 MHz	22 13 10.35N 114 01 48.20E
CH DME	CH70X	22 13 11.69N 114 01 48.75E
TD DVOR	116.1 MHz	22 14 52.42N 114 17 35.30E
TD DME	CH108X	22 14 52.42N 114 17 35.30E

9. **STAR Reporting Points**

Reporting Point	Co-ordinates	Cross Reference from Navaid
ACORN	20 17 35.0N 114 44 06.0E	CH RDL 163/DME 121.7 NM TD RDL 170/DME 119.4 NM
ASTRA	22 16 28.0N 115 11 35.0E	CH RDL 089/DME 64.8 NM TD RDL 090/DME 50.1 NM
BAKER	21 13 02.0N 114 39 07.0E	CH RDL 152/DME 69.3 NM TD RDL 164/DME 64.8 NM
CHERY	20 22 49.0N 115 04 57.0E	CH RDL 153/DME 124.8 NM TD RDL 160/DME 120.1 NM
CORAL	20 51 52.0N 113 05 07.0E	CH RDL 215/DME 96.5 NM TD RDL 221/DME 106.8 NM
*DAGON	19 05 18N 111 51 54E	CH RDL 215/DME 223.3 NM TD RDL 218/DME 233.1 NM
*DOTMI	22 43 06N 116 10 06E	CH RDL 078/DME 122.5 NM TD RDL 077/DME 107.9 NM
*DUMOL	19 00 00N 114 26 48E	CH RDL 175/DME 193.9 NM TD RDL 179/DME 194.4 NM
*ELATO	22 20 00N 117 30 00E	CH RDL 089/DME 193.2 NM TD RDL 090/DME 178.5 NM
GINJA	20 39 48.0N 112 02 16.0E	CH RDL 232/DME 145.0 NM TD RDL 235/DME 157.7 NM
GUAVA	22 09 36.1N 114 03 36.3E	CH RDL 157/DME 3.9 NM TD RDL 250/DME 14.0 NM
HERON	21 19 48.0N 113 53 34.0E	CH RDL 190/DME 53.7 NM TD RDL 204/DME 59.3 NM
*IDOSI	19 00 00N 112 30 00E	CH RDL 205/DME 210.8 NM TD RDL 210/DME 218.8 NM
MANGO	21 36 49.0N 114 30 53.0E	CH RDL 145/DME 45.2 NM TD RDL 164/DME 39.9 NM
MELON	22 16 10.0N 115 00 47.0E	CH RDL 089/DME 54.8 NM TD RDL 090/DME 40.1 NM
*NOMAN	20 00 00N 116 40 18E	CH RDL 133/DME 198.9 NM TD RDL 137/DME 189.4 NM
ROBIN	21 02 45.0N 114 16 06.0E	CH RDL 171/DME 71.4 NM TD RDL 183/DME 71.9 NM
*SABNO	18 59 06N 115 50 42E	CH RDL 154/DME 218.7 NM TD RDL 158/DME 213.7 NM
*SIERA	21 59 12N 113 33 12E	CH RDL 244/DME 30.0NM TD RDL 251/DME 44.1 NM
*SIKOU	20 50 36N 111 30 00E	CH RDL 242/DME 163.7 NM TD RDL 244/DME 177.4 NM

* **STAR commencement point**

18. Instrument Landing System (ILS) - General

- 18.1 RWY 07L, RWY 07R and RWY 25L ILS are equipped for CAT II landings. RWY 25R ILS is equipped for CAT IIIA landings. Operators must obtain approval prior to conducting CAT II/IIIA operations, (see page AD.1.1-3). Pilots wishing to make an ILS CAT II/IIIA approach shall notify Approach Control on initial contact.
- 18.2 The standard instrument approach at Hong Kong International Airport is the ILS/DME approach procedure. Therefore the Arrival ATIS will not include the type of approach to be expected when the ILS/DME approach procedure is in use. (When the ILS/DME is not available, the type of approach to be expected will be specified in the Arrival ATIS.)
- 18.3 No marker beacons are provided. DME equivalents for Outer Marker Fix (OMF) and Middle Marker Fix (MMF) with glidepath reference altitudes are established.
- 18.4 Aircraft unable to receive DME information due to ground or airborne equipment failure, will be provided equivalent DME ranges by the Precision Runway Monitor (PRM) radar controller (callsign 'Hong Kong Precision') on frequency 133.7 MHz. In the event of airborne DME receiver failure, pilots must inform ATC prior to commencing the approach. Range information will be provided at the following positions :

ILS/DME Approach	Positions at which equivalent DME ranges are provided by PRM controller	
	Final Approach Point (FAP)	Outer Marker Fix (OMF)
RWY 07L	IZSL DME 5.3 NM	IZSL DME 4 NM
RWY 07R	ISR DME 5.3 NM	ISR DME 4 NM
RWY 25L	IFL DME 14.1 NM	IFL DME 4 NM
RWY 25R	ITFR DME 14.1 NM	ITFR DME 4 NM

- 18.5 Due to the proximity of the FIR boundary to the west, pilots carrying out RWY 07L or RWY 07R ILS approach are advised to maintain a careful cross-check of aircraft position after passing reporting point SOKOE by the use of appropriate navigational aids to ensure the aircraft remains on the prescribed track. In the event of any weather avoidance manoeuvre, permission must be obtained from ATC prior to making any turn away from the prescribed track.
- 18.6 The ILS approach procedures include specific speed restrictions. These speed restrictions are applicable to aircraft that are radar vectored to join the initial or intermediate approach as well as aircraft commencing the approach from the initial approach fix, (RWY 07L/07R IAF GUAVA, RWY 25L/25R IAF TD DVOR or TH TVOR). Pilots unable to comply with these speed restrictions should inform ATC prior to commencing the approach so that alternative action can be taken.
- 18.7 Pilots are warned that during ILS CAT I operations RWY 07R and RWY 25L GP signals may be liable to interference from aircraft taxiing in the vicinity of the GP aerial. Pilots should therefore closely monitor their ILS approach profile and rate of descent.

18.8 Due to terrain some of the ILS LLZ and GP signals at Hong Kong International Airport do not have the standard protected areas. The standard ICAO protected areas for ILS signal coverage are :

- a) LLZ signal 17 NM within 35° each side of the course line and 25 NM within 10° each side of the course line;
- b) GP signal 10 NM within 8° each side of the centreline.

Pilots are reminded that use of the ILS signals outside of the following coverage areas may lead to false capture or reverse sense indications :

RWY	LLZ Coverage Area	GP Coverage Area
RWY 07L	Standard left of LLZ course	Standard left and right of RWY centreline
	17 NM within 28° right of LLZ course and 25 NM within 10° right of the LLZ course	
RWY 07R	17 NM within 25° left of LLZ course and 25 NM within 10° left of the LLZ course	Standard left and right of RWY centreline
	17 NM within 19° right of LLZ course and 25 NM within 10° right of the LLZ course	
RWY 25L	17 NM within 28° left of LLZ course and 25 NM within 10° left of the LLZ course	15 NM within 7° left of RWY centreline
	Standard right of LLZ course	Standard right of RWY centreline
RWY 25R	Standard left of LLZ course	Standard left of RWY centreline
	Between 20 NM - 25 NM within 4° right of LLZ course below 5 500 ft	15 NM within 6° right of RWY centreline

18.9 If ground based navigational aids are not available, ATC will provide an alternative clearance or give radar assistance.

19. RWY 07L ILS APPROACH

19.1 Requests to proceed direct from a point within the TMA to SOKOE or LIMES for an ILS approach RWY 07L may be approved subject to traffic.

19.2 RWY 07L ILS NAVIGATION AIDS

NAV Aid/IDENT	Frequency	Co-ordinates	Remarks
Localizer/IZSL	111.1 MHz	22 19 21.08 N 113 56 02.35 E	Course 073°
Glide Path	331.7 MHz	22 18 46.29 N 113 54 01.55 E	3° glide slope
DME/IZSL	CH 48X	22 18 46.29 N 113 54 01.55 E	Co-located with GP
CH VOR	112.3 MHz	22 13 10.35 N 114 01 48.20 E	Co-located with CH DVOR
CH DME	CH 70X	22 13 11.69 N 114 01 48.75 E	
LKC DVOR	113.2 MHz	22 22 44.12 N 113 53 01.50 E	
LKC DME	CH 79X	22 22 44.12 N 113 53 01.50 E	Co-located with LKC DVOR
NLG DVOR	117.7 MHz	22 31 54 N 113 33 48 E	
NLG DME	CH 124X	22 31 54 N 113 33 48 E	Co-located with NLG DVOR
SMT DVOR	114.8 MHz	22 20 15.43 N 113 58 55.46 E	
SMT DME	CH 95X	22 20 15.43 N 113 58 55.46 E	Co-located with SMT DVOR
TD DVOR	116.1 MHz	22 14 52.42 N 114 17 35.30 E	
TD DME	CH 108X	22 14 52.42 N 114 17 35.30 E	Co-located with TD DVOR
TH TVOR	115.5 MHz	22 14 20.25 N 114 17 19.49 E	
TH DME	CH 102X	22 14 20.25 N 114 17 19.49 E	Co-located with TH TVOR

19.3 RWY 07L ILS REPORTING POINTS

Reporting Point	Co-ordinates	Cross Reference from Navaid
GUAVA	22 09 36.1 N 114 03 36.3 E	TD RDL 250/DME 14.0 NM
LIMES	22 06 25.6 N 113 46 32.6 E	NLG RDL 157/DME 28.0 NM
SAMPU	22 25 39.19N 114 15 40.91E	TD RDL 353/DME 10.8 NM
SOKOE	22 04 41.2 N 113 50 38.1 E	TD RDL 250/DME 27.0 NM

19.4 RWY 07L ILS/DME and LLZ/DME Approach based on 'TD' DVOR

See AD-VHHH-93 A and B for procedure details.

20. **RWY 07L VOR/DME Approach**

20.1 Requests to proceed direct from a point within the TMA to SOKOE or LIMES for a VOR/DME approach RWY 07L may be approved subject to traffic.

20.2 **RWY 07L VOR/DME NAVIGATION AIDS**

NAV Aid/IDENT	Frequency	Co-ordinates	Remarks
NLG DVOR	117.7 MHz	22 31 54 N 113 33 48 E	
NLG DME	CH 124X	22 31 54 N 113 33 48 E	Co-located with NLG DVOR
SMT DVOR	114.8 MHz	22 20 15.43 N 113 58 55.46 E	
SMT DME	CH 95X	22 20 15.43 N 113 58 55.46 E	Co-located with SMT DVOR
TD DVOR	116.1 MHz	22 14 52.42 N 114 17 35.30 E	
TD DME	CH 108X	22 14 52.42 N 114 17 35.30 E	Co-located with TD DVOR

20.3 **RWY 07L VOR/DME REPORTING POINTS**

Reporting Point	Co-ordinates	Cross Reference from Navaid
GUAVA	22 09 36.1 N 114 03 36.3 E	TD RDL 250/DME 14.0 NM
LIMES	22 06 25.6 N 113 46 32.6 E	NLG RDL 157/DME 28.0 NM
SOKOE	22 04 41.2 N 113 50 38.1 E	TD RDL 250/DME 27.0 NM

20.4 **RWY 07L VOR/DME Approach Chart**

See chart AD2-VHHH-93C for procedure details.

21. RWY 07R ILS Approach

21.1 Requests to proceed direct from a point within the TMA to SOKOE or LIMES for an ILS approach runway 07R may be approved subject to traffic.

21.2 Pilots are warned that RWY 07R GP signals may be liable to interference from aircraft taxiing in the vicinity of the GP aerial. Pilots should therefore closely monitor their ILS approach profile and rate of descent.

21.3 RWY 07R ILS Navigation Aids

NAV Aid/IDENT	Frequency	Co-ordinates	Remarks
Localizer/ISR	109.3 MHz	22 18 29.89 N 113 56 07.90 E	Course 073°
Glide Path	332.0 MHz	22 17 47.64 N 113 54 09.59 E	3° glide slope
DME/ISR	CH 30X	22 17 47.64 N 113 54 09.59 E	Co-located with GP
CH VOR	112.3 MHz	22 13 10.35 N 114 01 48.20 E	
CH DME	CH 70X	22 13 11.69 N 114 01 48.75 E	Co-located with CH DVOR
LKC DVOR	113.2 MHz	22 22 44.12 N 113 53 01.50 E	
LKC DME	CH 79X	22 22 44.12 N 113 53 01.50 E	Co-located with LKC DVOR
NLG DVOR	117.7 MHz	22 31 54 N 113 33 48 E	
NLG DME	CH 124X	22 31 54 N 113 33 48 E	Co-located with NLG DVOR
TD DVOR	116.1 MHz	22 14 52.42 N 114 17 35.30 E	
TD DME	CH 108X	22 14 52.42 N 114 17 35.30 E	Co-located with TD DVOR
TH TVOR	115.5 MHz	22 14 20.25 N 114 17 19.49 E	
TH DME	CH 102X	22 14 20.25 N 114 17 19.49 E	Co-located with TH TVOR

21.4 RWY 07R ILS REPORTING POINTS

Reporting Point	Co-ordinates	Cross Reference from Navaid
GUAVA	22 09 36.1 N 114 03 36.3 E	TD RDL 250/DME 14.0 NM
LIMES	22 06 25.6 N 113 46 32.6 E	NLG RDL 157/DME 28.0 NM
PORPA	22 20 09.1 N 114 01 16.3 E	ISR DME 7.0 NM SMT RDL 095/DME 2.2 NM
SOKOE	22 04 41.2 N 113 50 38.1 E	TD RDL 250/DME 27.0 NM

21.5 RWY 07R ILS/DME and LLZ/DME Approach based on 'TD' DVOR

See AD-VHHH-9 A and B for procedure details.

22. RWY 25L ILS Approach

- 22.1 Requests to proceed direct from a point within the TMA to MIRRS for an ILS approach RWY 25L may be approved subject to traffic.
- 22.2 Pilots are warned that RWY 25L GP signals may be liable to interference from aircraft taxiing in the vicinity of the GP aerial. Pilots should therefore closely monitor their ILS approach profile and rate of descent.

22.3 RWY 25L ILS Navigation Aids

NAV Aid/IDENT	Frequency	Co-ordinates	Remarks
Localizer/IFL	108.9 MHz	22 17 43.13 N 113 53 42.80 E	Course 253°M
Glide path	329.3 MHz	22 18 19.77 N 113 55 49.30 E	3° glide slope
DME/IFL	CH 26X	22 18 19.77 N 113 55 49.30 E	Co-located with GP
SMT DVOR	114.8 MHz	22 20 15.43 N 113 58 55.46 E	
SMT DME	CH 95X	22 20 15.43 N 113 58 55.46 E	Co-located with SMT DVOR
TD DVOR	116.1 MHz	22 14 52.42 N 114 17 35.30 E	
TD DME	CH 108X	22 14 52.42 N 114 17 35.30 E	Co-located with TD DVOR
TH TVOR	115.5 MHz	22 14 20.25 N 114 17 19.49 E	
TH DME	CH 102X	22 14 20.25 N 114 17 19.49 E	Co-located with TH TVOR

22.4 RWY 25L ILS REPORTING POINTS

Reporting Point	Co-ordinates	Cross Reference from Navaid
LOTUS	22 23 18.26 N 114 11 05.60 E	IFL DME 15.0 NM
MIRRS	22 24 17.1 N 114 14 09.3 E	IFL DME 18.0 NM
PRAWN	22 16 05.4 N 113 48 40.1 E	IFL DME 7.0 NM SMT RDL 248/DME 10.4 NM

22.5 RWY 25L ILS/DME and LLZ/DME Approach from 'TD' DVOR

See AD2-VHHHH-92 A and B for procedure Details.

23. RWY 25R ILS Approach

23.1 Requests to proceed direct from a point within the TMA to PLOVE for an ILS approach RWY 25R may be approved subject to traffic.

23.2 RWY 25R ILS Navigation Aids

NAV Aid/IDENT	Frequency	Co-ordinates	Remarks
Localizer/ITFR	110.9 MHz	22 18 34.27 N 113 53 37.07 E	Course 253°M
Glide path	330.8 MHz	22 19 16.43 N 113 55 35.09 E	3° glide slope
DME/ITFR	CH 46X	22 19 16.43 N 113 55 35.09 E	Co-located with GP
CH DVOR	112.3 MHz	22 13 10.35 N 114 01 48.20 E	
CH DME	CH 70X	22 13 11.69 N 114 01 48.75 E	Co-located with CH DVOR
LKC DVOR	113.2 MHz	22 22 44.12 N 113 53 01.50 E	
LKC DME	CH 79X	22 22 44.12 N 113 53 01.50 E	Co-located with LKC DVOR
TD DVOR	116.1 MHz	22 14 52.42 N 114 17 35.30 E	
TD DME	CH 108X	22 14 52.42 N 114 17 35.30 E	Co-located with TD DVOR

23.3 RWY 25R ILS REPORTING POINTS

Reporting Point	Co-ordinates	Cross Reference from Navaid
PLOVE	22 25 06.3 N 114 13 57.9 E	ITFR DME 18.0 NM
RIVER	22 24 07.55 N 114 10 54.23 E	ITFR DME 15.0 NM

23.4 RWY 25R ILS/DME and LLZ/DME Approach from 'TD' DVOR

See AD2-VHHH-94 A and B for procedure details.

24. **RWY 25R VOR/DME Approach**

24.1 **RWY 25R VOR/DME NAVIGATION AIDS**

NAV Aid/IDENT	Frequency	Co-ordinates	Remarks
NLG DVOR	117.7 MHz	22 31 54 N 113 33 48 E	
NLG DME	CH 124X	22 31 54 N 113 33 48 E	Co-located with NLG DVOR
SMT DVOR	114.8 MHz	22 20 15.43 N 113 58 55.46 E	
SMT DME	CH 95X	22 20 15.43 N 113 58 55.46 E	Co-located with SMT DVOR
TD DVOR	116.1 MHz	22 14 52.42 N 114 17 35.30 E	
TD DME	CH 108X	22 14 52.42 N 114 17 35.30 E	Co-located with TD DVOR

24.2 **RWY 25R VOR/DME Approach Chart**

See AD2-VHHH-94C for procedure details.

25 Procedures for Local Flights in Hong Kong Aerodrome Traffic Zone (ATZ) and Control Zone (CTR)

25.1 General

25.1.1 Local flights operating in the Aerodrome Traffic Zone (ATZ) are under the control of Hong Kong Aerodrome Control. During parallel runway operations the ATZ is split into two sectors. The Dividing line is mid-way between the two runways - the north runway (RWY 07L/25R) is under the control of AMC North, operating on frequency 118.2 MHz, call-sign 'Hong Kong Tower North', and the south runway (RWY 07R/25L) is under the control of AMC South, operating on frequency 118.4 MHz, call-sign 'Hong Kong Tower South'.

25.1.2 Non-IFR flights within the CTR Zones (see chart page AD2-VHHH-102), are under the control of Hong Kong Zone Control operating on frequency 120.6 MHz, call sign 'Hong Kong Zone'.

25.1.3 Flights within the CTR above 2 000 ft AMSL are under the control of Hong Kong Approach Control on frequency 119.1 MHz or Departure Control on frequency 123.8 MHz.

25.1.4 To enhance flight safety, it is recommended that all local operators display landing lights whilst entering, leaving or operating within the ATZ or CTR Zones.

25.2 Vertical Limits and Altitude Restrictions

25.2.1 The vertical limits are :

- a) ATZ surface up to 2 000 ft AAL;
- b) CTR surface up to 9 000 ft AMSL.

25.2.2 Non-IFR flights within the CTR Zones are normally restricted to a maximum altitude of 2 000 ft AMSL, but the actual altitude is dependant on the runway in use at Hong Kong International Airport :

RWY in Use	CTR Zone	Maximum Altitude
RWY 07L/R	South Outer Zone	500 ft
	Delta Zone	Only with ATC approval
	Island Zone routes :	
	Green Island – Ma Wan Crossing	500 ft
	Green Island – Silvermine	800 ft
	Green Island – Cheung Chau	1 000 ft
RWY 25L/R	Green Island – Lama	1 000 ft
	Green Island – west of Star Ferry	1 000 ft
	East of Star Ferry	1 500 ft
	South Outer Zone	1 200 ft
	Delta Zone	Only with ATC approval

25.2.3 In addition, flights in Ma Wan Zone above 500 ft AMSL, Tuen Mun Zone above 1 000 ft AMSL and Lantau Zone above 2 000 ft AMSL including operations at landing sites above these levels, are subject to specific approval from Hong Kong Zone.

25.3 ATZ AND CTR ENTRY AND EXIT ROUTES

25.3.1 Subject to ATC approval, pilots shall normally comply with the following standard exit and entry routes and altitudes within the ATZ and CTR Zones (see chart AD2-VHHH-103) :

Radio Callsign	Route Direction	Routeing
East Pass	In/Out	Entering/Leaving Island Zone from/to UCARA Port Shelter Single engine aircraft not permitted
Fan Lau (See Note 1)	North/South	Transiting to/from West Lantau Corridor and Island Zone
Gold Coast Corridor (See Note 2)	East/West (one direction at a time)	Transiting Ma Wan Zone between Pearl Island and Brothers Point Upper limit 500 ft AMSL Width 0.5 NM. Helicopters only
Lei Yue Mun	In/Out	Entering/Leaving Island Zone from/to Waglan Zone Inbound to CTR 1 500 ft Outbound from CTR not above 1 000 ft (If weather conditions preclude the use of 1 500 ft inbound, operations shall be restricted to one direction at a time)
Ma Wan Crossing (See Note 2 and 3)	In/Out	Transiting from/to Ma Wan Zone and Island Zone Upper limit 500 ft AMSL
Pak Mong	In/Out	Entering/Leaving ATZ for Ma Wan Zone
Pillar Point	In/Out	Entering/Leaving ATZ for Tuen Mun Zone
Sha Chau	In/Out	Entering/Leaving ATZ for Tuen Mun Zone
Sham Shek	In/Out (one direction at a time)	Entering/Leaving ATZ for West Lantau Corridor
Sha Tin Pass	In/Out	Entering/Leaving Island Zone from/to UCARA New Town Single engine aircraft not permitted
Silvermine	In/Out	Entering/Leaving ATZ and Ma Wan Zone for Lantau Zone Helicopters only

South Pass	In/Out	Transiting Island Zone between Hong Kong South and Victoria Harbour Fixed wing aircraft and single engine helicopters not permitted
Toll Plaza (see Note 2, 4 and 5)	East/West (one direction at a time)	Transiting from/to North Lantau Expressway and Kap Shui Mun. Upper limit 800 ft AMSL for twin engine aircraft, 1 000 ft AMSL for single engine aircraft
Tung Chung Pass	In/Out	Entering/Leaving ATZ for Lantau Zone Helicopters only Inbound to ATZ 2 000 ft AMSL Outbound from ATZ not above 1 500 ft AMSL (If weather conditions preclude the use of 2 000 ft inbound, operations shall be restricted to one direction at a time)
West Lantau Corridor (See Note 6)	North/South	Transiting from/to Tai O and Fan Lau Width 1 NM between Fan Lau and Tai O, 0.5 NM at Sham Shek Upper limit 500 ft AMSL north of Peaked Hill (Kai Yet Kok), 1 000 ft AMSL south of Peaked Hill (Kai Yet Kok)

Note 1 : Pilots should note traffic information on non-IFR helicopters operating between Macau and Hong Kong routeing south of Lantau island.

Note 2 : Operators should limit their requests for use of these routes to essential operations only due to the close proximity of the Hong Kong International Airport approach/departure routes.

Note 3 : Silvermine is the primary route for helicopters to transit between ATZ, Ma Wan Zone and Lantau Zone.

Note 4 : Helicopters with underslung load are not permitted.

Note 5 : The use of this route will be subject to ATC clearance - traffic at 1 000 ft is not separated from RWY 25 arrivals or RWY 07 departures. Aircraft from Island Zone awaiting ATC clearance to transit the Toll Plaza route may hold to the west of Tsing Yi Island not above 500 ft AMSL, remaining clear of VHR12.

Note 6 : Radio coverage on the western coast of Lantau may be intermittent, pilots should note relevant traffic information prior to entering the West Lantau Corridor.

26 Helicopter Departure and Arrival Procedures

26.1 DEPARTURE FROM GFS/BAC TO PAK MONG OR SILVERMINE

26.1.1 **Kilo East Departure** Subject to ATC approval and when traffic permits, lift off from TWY K in an easterly direction, then turn south between TWY Z3 and the Fire Station to follow the airport coastline until abeam the western roundabout on Chun Wan Road (see chart AD2-VHHH-106, Route A).

26.1.2 **For departure in other directions** Turn south as soon as practicable after lift off and track along the airport coastline until abeam the western roundabout on Chun Wan Road.

26.1.3 From abeam the western roundabout, track along Chun Wan Road to Cathay City, then follow the North Lantau Expressway (NLE) to Pak Mong at not above 500 ft AMSL, remaining over water and a distance of 500 ft from the Lantau coastline (see chart AD2-VHHH-106, Route B).

26.1.4 Alternatively, from abeam the western roundabout, follow the airport coastline to overfly Tower 2B of the cable car ropeway, then track over the channel between the airport island and Lantau, to follow the NLE to Pak Mong at not above 500 ft AMSL, remaining over water and a distance of 500 ft from the Lantau coastline (see chart AD2-VHHH-106, Route C).

26.1.5 During Special VFR operations pilots are required to report passing AFFC (radio c/s 'Freight Centre') to Hong Kong Tower when departing from the airport.

26.1.6 Helicopters departing from sites at the airport that require to cross the south runway, e.g. HAECO maintenance area, shall initially route as directed by ATC, then follow Route A, B or C as appropriate.

26.2 ARRIVALS FROM PAK MONG OR SILVERMINE TO GFS/BAC

26.2.1 Follow the reciprocal of paras. 26.1.3 or 26.1.4 above to AFFC at not above 500 ft AMSL. From AFFC follow ATC instructions to commence an approach. ATC approval must be obtained before overflying or landing on TWY K.

26.2.2 Helicopters operating to sites on the airport that require to cross the south runway, e.g. Temporary Parking Apron, shall initially comply with para 26.2.1 above then the final approach route will be as directed by ATC.

26.2.3 If holding is required, follow ATC instructions and comply with para. 26.3 below.

26.3 HELICOPTER HOLDING PROCEDURES

26.3.1 The following holding procedures shall be used by helicopters awaiting clearance for landing at the airport.

Location	VFR/SVFR	Altitude AMSL	Remarks
Tai O	VFR and SVFR	Not above 1 000 ft	Over water west of Tai O.
Sham Shek	VFR	Not above 1 000 ft	
Pak Mong	VFR and SVFR	Not above 1 000 ft	
Tung Chung Bay	VFR	800 ft - 1 000 ft	
Freight Centre	VFR and SVFR	Not below 800 ft	Bounded by roundabouts to the NE and W of AFFC building and Lantau coast. Remain 1 000 m south of South Runway and have full length of runway in sight at all times.

Location	VFR/SVFR	Altitude AMSL	Remarks
Cathay City	VFR and SVFR	Not above 800 ft	Secondary hold when weather precludes use of Freight Centre hold. Remain 1 000 m south of south runway. Hold over water between Cathay City and Tung Chung Ferry Pier.

27 Helicopter Runway Crossing Procedures

27.1 ROUTES

- 27.1.1 Helicopters shall cross the runways via one of the two Runway Crossing Corridors – Runway 25 Crossing Corridor at the eastern boundary of the airport and Runway 07 Crossing Corridor at the western boundary of the airport (see chart AD2-VHHH-105). Helicopters are not normally permitted to cross over the airport. During parallel runway operations helicopters are not permitted to hold between the runways.
- 27.1.2 Runway 25 Crossing Corridor is a direct track between Holding Point ECHO and Abeam Cathay City, passing over RWY 25L/25R approach lights and east of Sky City.
- 27.1.3 Runway 07 Crossing Corridor is a corridor between Holding Point WHISKEY and Sha Lo Wan, passing over RWY 07L approach lights, west of HAECO hangar and immediately west of RWY 07R threshold. Helicopters overflying the airport should use the eastern part of the corridor and helicopters approaching or departing the airport should use the western part of the corridor.
- 27.1.4 The recommended altitude for the Runway Crossing Corridors is 800 ft AMSL for wake turbulence avoidance. Runway 07 Crossing Corridor is wide enough to permit helicopters approaching or departing the airport to manoeuvre and cross above the glidepath profile of landing traffic.
- 27.1.5 ATC will normally issue a conditional crossing clearance with specific instructions to cross behind landing traffic. Pilots should be aware that there is normally a 5 mile spacing between arrivals. Once the relevant traffic has been visually identified, pilots should adjust their speed and track to ensure the crossing is completed with the minimum of delay after the landing aircraft has passed. Holding between the two runways is not permitted.
- 27.1.6 Because of the extra distance involved when crossing the north runway from the southern holding points, or crossing the south runway from the northern holding points, once a pilot has received a conditional crossing clearance and the relevant landing traffic has been positively identified, the helicopter may depart the holding point and position to cross behind the landing aircraft, but under no circumstances shall it proceed beyond the centreline of the airport until the landing aircraft has passed the applicable Crossing Corridor. (The centreline of the airport is taken as the spine of the Passenger Terminal Building and the north side of the HAECO hangar.)

27.1.7 Pilots unable to comply with these procedures, e.g. when operating with underslung loads, should provide adequate prior notification to ATC to facilitate alternative plans.

27.2 HELICOPTER HOLDING PROCEDURES FOR RUNWAY CROSSING

27.2.1 The following holding procedures shall be used by helicopters awaiting a runway crossing:

Location	VFR/SVFR	Altitude AMSL	Remarks
WHISKEY	VFR	Maximum 1 000 ft	Remain at least 1 000 m north of north runway
ECHO	VFR	Maximum 1 000 ft	Remain at least 1 000 m north of north runway
Sha Lo Wan	VFR	Not above 1 000 ft	Remain at least 1 000 m south of south runway
Cathay City	VFR	Not above 800 ft	Remain at least 1 000 m south of south runway
	SVFR	Not above 500 ft	
Tai O	VFR and SVFR	Not above 1 000 ft	
Pillar Point	VFR and SVFR	Not above 1 000 ft	
Sha Chau	VFR and SVFR	500 ft – 1 000 ft	

27.2.2 Helicopter holding patterns are right hand orbits with a speed restriction of not more than 70 kt IAS.

27.2.3 Helicopters operating SVFR may be subject to extensive delay in waiting to cross the runways. Therefore runway crossings should be limited to flights of an urgent nature only. Other flights should consider re-routeing and crossing the extended runway centre-line via Yam O – Brothers Point route. (When planning a SVFR flight operators should make allowances for possible holding delays and the alternative routeing.)

28 Rejoining Procedures for Fixed Wing Aircraft

28.1 Three visual holding areas are established over prominent geographical features in the CTR to assist in the sequencing of VFR flights with other traffic. The holding areas are:

Location	Altitude AMSL	Runway in Use	Routeing
Green Island Left hand hold	Maximum 2 000 ft	RWY 25	For flights from the south
Soko Island Left hand hold	Maximum 2 000 ft	RWY 07	For flights from the south
Lung Kwu Chau/ Sha Chau Left hand hold	Maximum 1 500 ft	RWY 07	For flights from the north
	Maximum 1 000 ft	RWY 25	

- 28.2 A visual holding pattern is established within the ATZ to assist in the sequencing of VFR flights with other traffic. Details of the holding pattern are:

Holding Pattern	Altitude AMSL	Runway in Use
ATZ Hold Left hand hold	1000 ft	RWY25
ATZ Hold Right hand hold		RWY 07

29. Procedures for Local Flights in Uncontrolled Airspace Reporting Areas (UCARAs)

29.1 GENERAL

29.1.1 Special areas have been defined to permit aircraft operations to take place under VFR. The associated procedures have been developed to allow such flying to take place without interference to aircraft operating in accordance with IFR and/or in the Hong Kong Aerodrome Traffic Zone and Control Zone. The six areas are designated as Uncontrolled Airspace Reporting Areas (UCARAs): Mirs Bay, North Border, New Town, Ninepins, Port Shelter and Tolo.

29.1.2 UCARA airspace is classified as Category G with an additional requirement for two-way radio communication.

29.2 LATERAL LIMITS

29.2.1 The lateral boundaries of the UCARAs are indicated on page AD2-VHHH-102.

29.3 VERTICAL LIMITS

29.3.1 The vertical limits of the UCARAs are :

- | | |
|--|----------------------------|
| a) New Town, Port Shelter and Ninepins | Surface to 2 000 ft AMSL |
| b) Mirs Bay and Tolo | Surface to 3 000 ft AMSL |
| c) North Border | Surface to 2 000 ft AMSL * |

Note * Normally aircraft will be restricted to 1 000 ft AMSL or below. For operations above 1 000 ft prior permission from Hong Kong ATC is required which will be subject to co-ordination with Zhuhai ATC.

29.4 FLIGHT NOTIFICATION

29.4.1 Flight notification shall be submitted to Hong Kong Aerodrome Control in accordance with Regulations for Local Flights in Hong Kong (page AD2-VHHH-17 para 1.1.4).

29.4.2 Aircraft or helicopters landing at Shek Kong aerodrome or any other site in UCARAs shall report their arrival to 'Hong Kong Information' immediately prior to landing. If no radio contact is made with 'Hong Kong Information' or if outside the notified hours of operation, pilots shall report to Hong Kong Aerodrome Control by telephone (tel no 2910 6822) as soon as possible after landing.

29.4.3 Pilots must note that if no landing report is received within 30 minutes of the estimated time of arrival, alerting action will be initiated by ATC.

29.5 COMMUNICATIONS

29.5.1 Pilots shall establish and maintain two-way communication with 'Hong Kong Information' on entering and when operating within UCARAs.

29.5.2 Pilots shall report their position and altitude as follows:

- a) When entering /leaving each UCARA;
- b) Every 15 minutes if no other communication have been made within that period.

29.5.3 When 'Hong Kong Information' is not available, pilots should broadcast their positions on frequency 122.4 MHz at appropriate intervals and when crossing UCARA boundaries, for the information of other aircraft in the area.

29.5.4 In order to enhance flight safety in the vicinity of the entry/exit routes to/from the Shek Kong Aerodrome Reporting Area (SKARA), pilots are to include in their initial transmission on leaving the SKARA, the name of the entry/exit route, as well as the UCARA they are entering.

29.6 RADIO COMMUNICATION FAILURE PROCEDURES

29.6.1 Fixed wing aircraft shall proceed to Shek Kong Aerodrome, carry out a standard joining procedure to the circuit keeping a good look-out whilst making all normal transmissions. Carry out a standard circuit to land, at all times exercising extreme caution with respect to other aircraft in the vicinity. After landing pilots are to taxi clear of the runway and shutdown. Pilots shall contact Hong Kong Aerodrome Control by telephone (tel. no. 2910 6822) as soon as possible after landing.

29.6.2 Helicopters shall land at a suitable helicopter landing site and pilots shall contact Hong Kong Aerodrome Control by telephone as soon as possible after landing.

30 Flight Information Service

30.1 Hong Kong Flight Information Service provides a flight information service and an alerting service between 0900 and 1700 local time, daily, to non-IFR flights operating within the UCARAs. Between 1701 and 0859 local time, alerting service only is available. The radio call-sign is 'Hong Kong Information' and the frequency is 122.40 MHz primary and 121.0 MHz secondary.

30.2 It is emphasised that the service offered by Hong Kong Flight Information Service is an information service only and collision avoidance is entirely the responsibility of the pilot –in-command. Traffic information will normally be provided to an aircraft only when it reports entering a UCARA sector or makes a periodic 'ops normal' report. Aircraft already operating within a UCARA are expected to maintain their own traffic watch between 'ops normal' reports by monitoring the FIS frequency for the transmissions of other aircraft.

- 30.3 Outside of the hours of operation of Hong Kong Flight Information Service pilots should make 'blind' transmissions on the Hong Kong Information frequency and maintain a particularly good look-out for any deterioration of weather conditions.

31 Procedures for Entry and Exit to/from Shek Kong Aerodrome Reporting Area (SKARA)

- 31.1 Prior permission must be obtained from the appropriate military authority for any flight intending to operate within the Shek Kong Aerodrome Reporting Area (SKARA). (Details of the flight procedures applicable within the SKARA will be provided by the military authority.)
- 31.2 Aircraft shall enter or exit the Shek Kong Aerodrome Reporting Area (SKARA) via the following routes:

Radio Callsign	Route	Co-ordinates (WGS 84)	Co-ordinates (UTM Grid)
Kadoorie Gap	SKARA to/from UCARA New Town	22 26 22N 114 07 23E	KK 039843
Fire Station Gap	SKARA to/from UCARA New Town	22 28 14N 114 06 38E	KK 027878
Mai Po	SKARA to/from UCARA North Border	22 27 41N 114 03 09E	JK 973868
Pagoda	SKARA to/from CTR Tuen Mun Zone	22 27 48N 114 00 25E	JK 920872
Kam Tin Gap	SKARA to/from CTR Tuen Mun Zone	22 26 00N 114 02 57E	JK 963838

(AD2-VHHHH-62 to AD2-VHHHH-74 reserved)