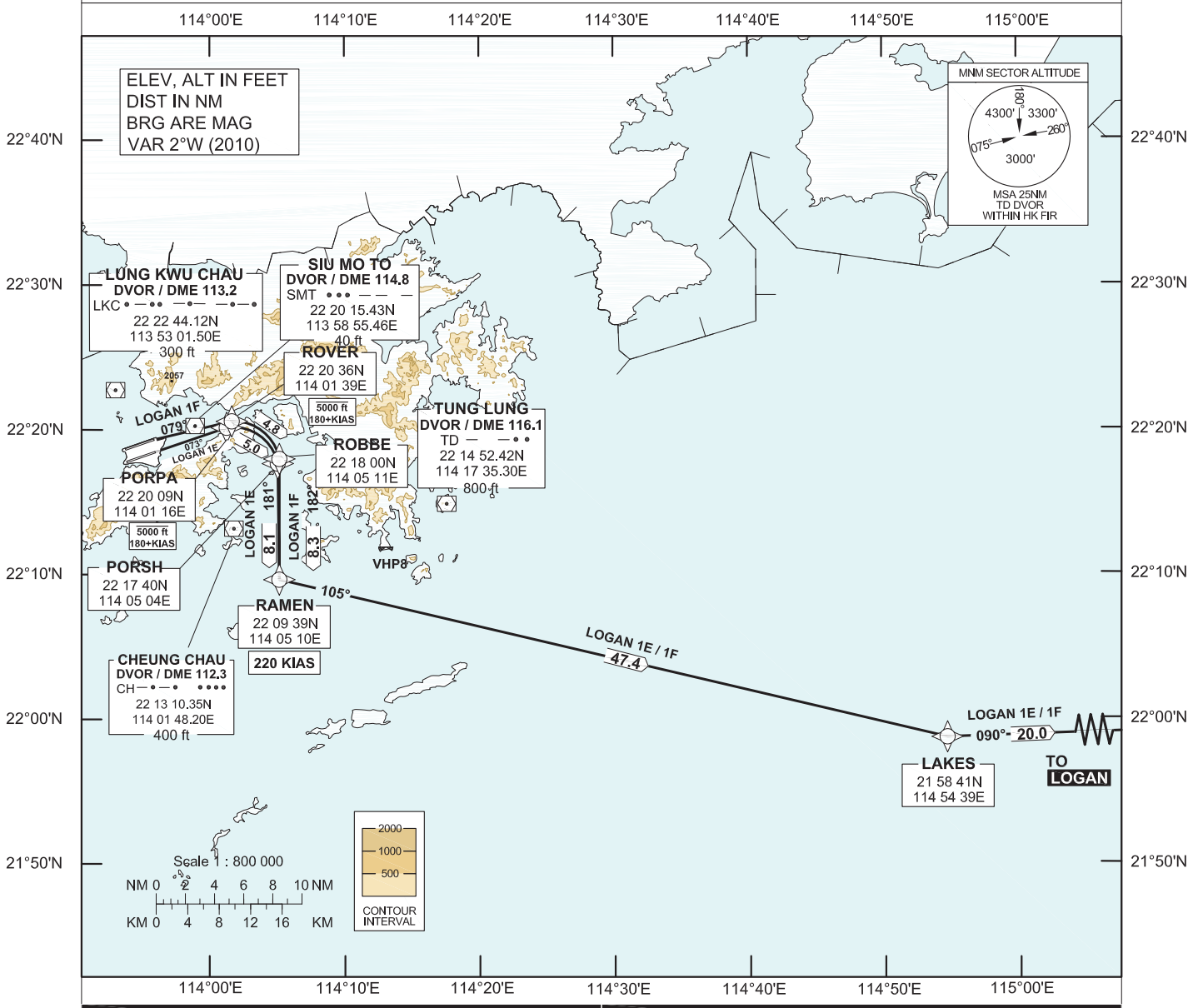
STANDARD DEPARTURE CHART-INSTRUMENT (SID) - ICAO

Transition Altitude 9 000 ft

Hong Kong Tower South	118.4
Hong Kong Tower North	118.2
Hong Kong Departure	123.8

HONG KONG / Intl (VHHH)
RNAV (GNSS) LOGAN 1E SID RWY 07R
RNAV (GNSS) LOGAN 1F SID RWY 07L

1. For RNAV (GNSS) SID, aircraft must be approved by State of Registry in accordance with ICAO RNP 1 standard or equivalent (see GEN 1.5 para 3.5.2 on page GEN 1.5-2). Carriage of certified GNSS receiver is mandatory.
2. In the event that PBN performance ceases to comply with the requirements for RNP 1 after departure, pilots must notify ATC as soon as possible. ATC assistance would be provided as necessary.
3. **Radius-to-fix (RF) leg is required.** Aircraft shall have RF capability as stipulated in the Aircraft Flight Manual or its FMS manual. Aircraft that do not have RF capability shall use RNAV (GNSS) LOGAN 3A / RNAV (GNSS) LOGAN 3C as detailed in AD 2-97 LOGAN AC.
4. (DER) - Departure End of Runway.
5. **Noise Mitigating SID for use between 1501 - 2300 UTC (see VHHH AD 2.21 para 2.4 on page AD 2-22).**
6. Aircraft with RF capability are encouraged to fly the procedure.



LOGAN 1E SID RWY 07R

RNP 1 Procedure
PORPA[A5000-,K180+;R] - PORSH[R,2.6485,221738.37N 1140212.21E] - RAMEN[K220;L] - LAKES[L] - LOGAN

CLIMB REQUIREMENT
Initial climb to 5 000 ft. Expect further climb when instructed by ATC. Cross PORPA at 5 000 ft or below.

TERRAIN CLEARANCE
Minimum climb gradient of 4.9% (298 ft/NM) until leaving 1 400 ft is required.

SPEED RESTRICTION
Speed restriction of 180 KIAS or greater at PORPA and 220 KIAS until RAMEN.

LOGAN 1F SID RWY 07L

RNP 1 Procedure
RWY07L(DER)[R] - ROVER[A5000-,K180+;R] - ROBBE[R,2.6577,221759.91N 1140218.84E] - RAMEN[K220;L] - LAKES[L] - LOGAN

CLIMB REQUIREMENT
Initial climb to 5 000 ft. Expect further climb when instructed by ATC. Cross ROVER at 5 000 ft or below.

TERRAIN CLEARANCE
Minimum climb gradient of 4.1% (250 ft/NM) until leaving 1 400 ft is required.

SPEED RESTRICTION
Speed restriction of 180 KIAS or greater at ROVER and 220 KIAS until RAMEN.

CHANGE: Update of text.

FMC Database Coding Reference for Hong Kong RNAV$_{(GNSS)}$ SIDs

Designator: LOGAN 1E Runway 07R (Noise Mitigating Procedure)

Serial Number	*Path Descriptor*	*Waypoint Identifier*	*Fly-over*	*Course/ Track (°M)*	*Magnetic Variation*	*Distance (NM)*	*Turn Dir*	*Altitude (ft)*	*Speed (KIAS)*	Navigation Specification
01	CF	PORPA	-	073	+2.0	5.0	R	5000-	180+	RNP 1
02	RF Centre: VH991 r = 2.6485NM	PORSH	-	-	+2.0	5.0	R	-	-	RNP 1
03	TF	RAMEN	-	181	+2.0	8.1	L	-	220	RNP 1
04	TF	LAKES	-	105	+2.0	47.4	L	-	-	RNP 1
05	TF	LOGAN	-	090	+2.0	20.0	-	-	-	RNP 1

Designator: LOGAN 1F Runway 07L (Noise Mitigating Procedure)

Serial Number	*Path Descriptor*	*Waypoint Identifier*	*Fly-over*	*Course/ Track (°M)*	*Magnetic Variation*	*Distance (NM)*	*Turn Dir*	*Altitude (ft)*	*Speed (KIAS)*	Navigation Specification
01	CF	RW07L (DER)	Y	073	+2.0	-	-	-	-	RNP 1
02	FA	RW07L (DER)	Y	073	+2.0	-	R	430+	-	RNP 1
03	CF	ROVER	-	079	+2.0	5.3	R	5000-	180+	RNP 1
04	RF Centre: VH992 r = 2.6577NM	ROBBE	-	-	+2.0	4.8	R	-	-	RNP 1
05	TF	RAMEN	-	182	+2.0	8.3	L	-	220	RNP 1
06	TF	LAKES	-	105	+2.0	47.4	L	-	-	RNP 1
07	TF	LOGAN	-	090	+2.0	20.0	-	-	-	RNP 1

Waypoint and Coordinates

Waypoint Identifier	*Coordinates (WGS-84)*
RWY 07L (DER)	22 19 21.08N 113 56 02.35E
PORPA	22 20 09.10N 114 01 16.30E
PORSH	22 17 40.38N 114 05 03.56E
ROVER	22 20 35.58N 114 01 39.12E
ROBBE	22 17 59.70N 114 05 10.78E
RAMEN	22 09 39.22N 114 05 09.89E
LAKES	21 58 41.30N 114 54 38.60E
LOGAN	21 59 16.17N 115 16 08.46E
RF Arc Centre Identifier	***Coordinates (WGS-84)***
VH991	22 17 38.37N 114 02 12.21E
VH992	22 17 59.91N 114 02 18.84E