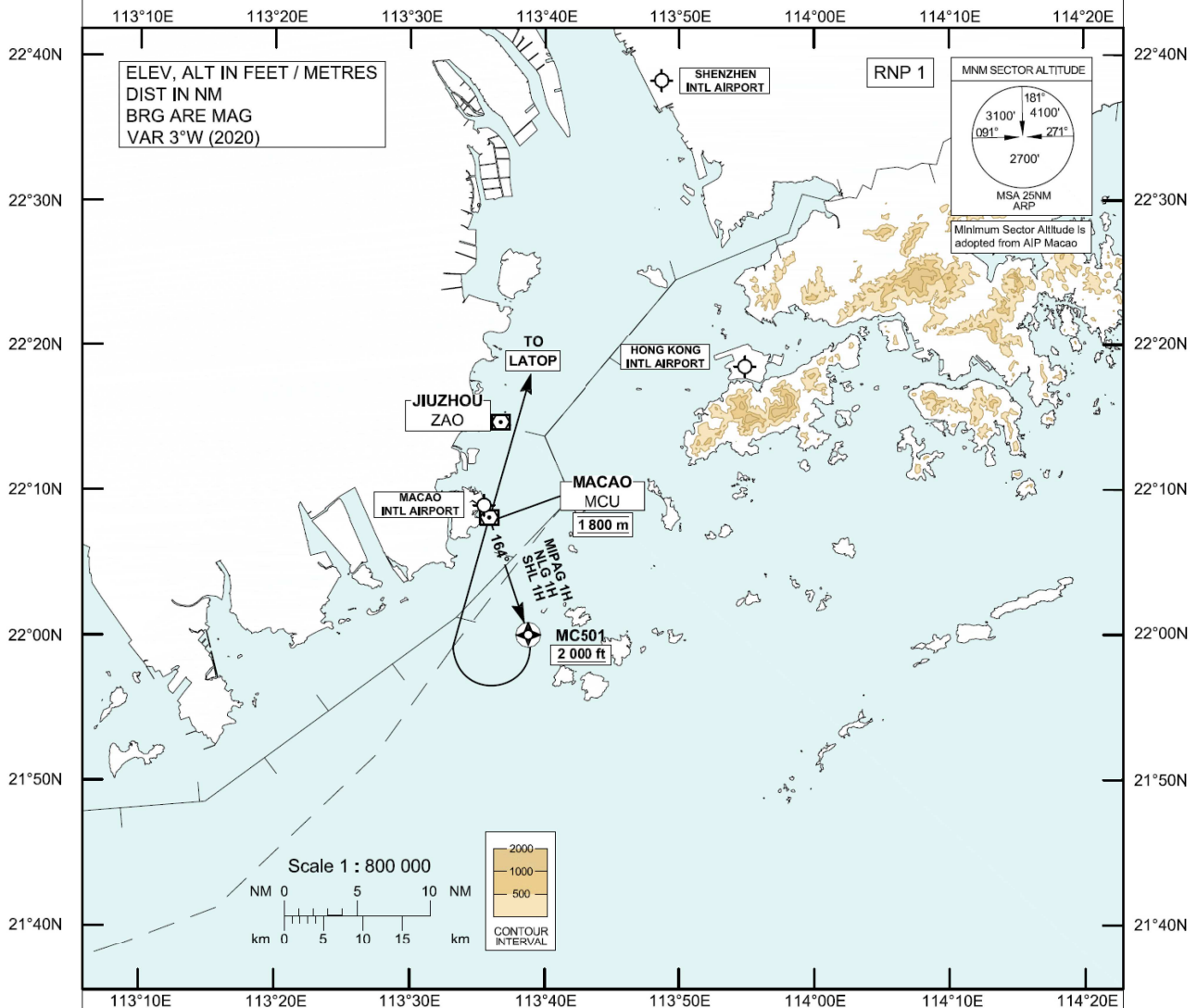**STANDARD DEPARTURE CHART-**
INSTRUMENT (SID) - ICAO

Transition Altitude 9 000 ft

HONG KONG RADAR   123.95

MACAO / Intl (VMMC)
RWY 16
RNAV (GNSS) MIPAG 1H SID
RNAV (GNSS) NLG 1H SID
RNAV (GNSS) SHL 1H SID

Aircraft shall comply with the Macao RWY 16 SID procedure as published in the AIP Macao.

ELEV, ALT IN FEET / METRES
DIST IN NM
BRG ARE MAG
VAR 3°W (2020)

RNP 1

MNM SECTOR ALTITUDE

181°
3100' 4100'
091° 271°
2700'

MSA 25NM
ARP

Minimum Sector Altitude Is
adopted from AIP Macao

Scale 1 : 800 000

NM 0   5   10 NM

km 0   5   10   15   km

2000
1000
500

CONTOUR
INTERVAL

MIPAG 1H / NLG 1H / SHL 1H SID RWY 16

Basic-RNP 1 Procedure
(Mandate procedure available to aircraft appropriately equipped and approved)

MC501 - MCU - LATOP

Continue in accordance with the SID procedure as published in the AIP Macao.

CLIMB REQUIREMENT
Cross MC501 at or above 2 000 ft (610 m), climbing to 1 800 m.
Cross MCU DVOR at 1 800 m. Expect further climb in accordance with procedure published in the AIP Macao.
These procedures require a minimum climb gradient of 3.8% until reaching 2 400 m for NLG 1H and leaving 2 400 m for MIPAG 1H and SHL 1H.

SPEED CONTROL
Maximum departure turning speed: 205 KIAS.

CHANGE: Update of MSA.

AD 2-VMMC-SID-MIPAG-H_V02_231213lh

FMC Database Coding Reference for Macao RNAV(GNSS) SIDs

Designator: NLG 1H RWY 16

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course /Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed (KIAS)	Navigation Specification
Aircraft shall comply with the Macao RWY 16 SID procedure as published in the AIP Macao										
	CF	MC501	Y	163 (160)	+3.0	-	-	+2000	-205	RNP 1
	DF	MCU	-	-	+3.0	-	R	@1800M	-205	RNP 1

Designator: SHL 1H RWY 16

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course /Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed (KIAS)	Navigation Specification
Aircraft shall comply with the Macao RWY 16 SID procedure as published in the AIP Macao										
	CF	MC501	Y	163 (160)	+3.0	-	-	+2000	-205	RNP 1
	DF	MCU	-	-	+3.0	-	R	@1800M	-205	RNP 1

Designator: MIPAG 1H RWY 16

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course /Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed (KIAS)	Navigation Specification
Aircraft shall comply with the Macao RWY 16 SID procedure as published in the AIP Macao										
	CF	MC501	Y	163 (160)	+3.0	-	-	+2000	-205	RNP 1
	DF	MCU	-	-	+3.0	-	R	@1800M	-205	RNP 1

WAYPOINT LIST

NLG 1H/SHL 1H/MIPAG 1H RWY 16	
Waypoint Identifier	Coordinates (WGS84)
MC501	22 00 03.00 N 113 38 45.76 E
MCU	22 08 08 N 113 35 52 E