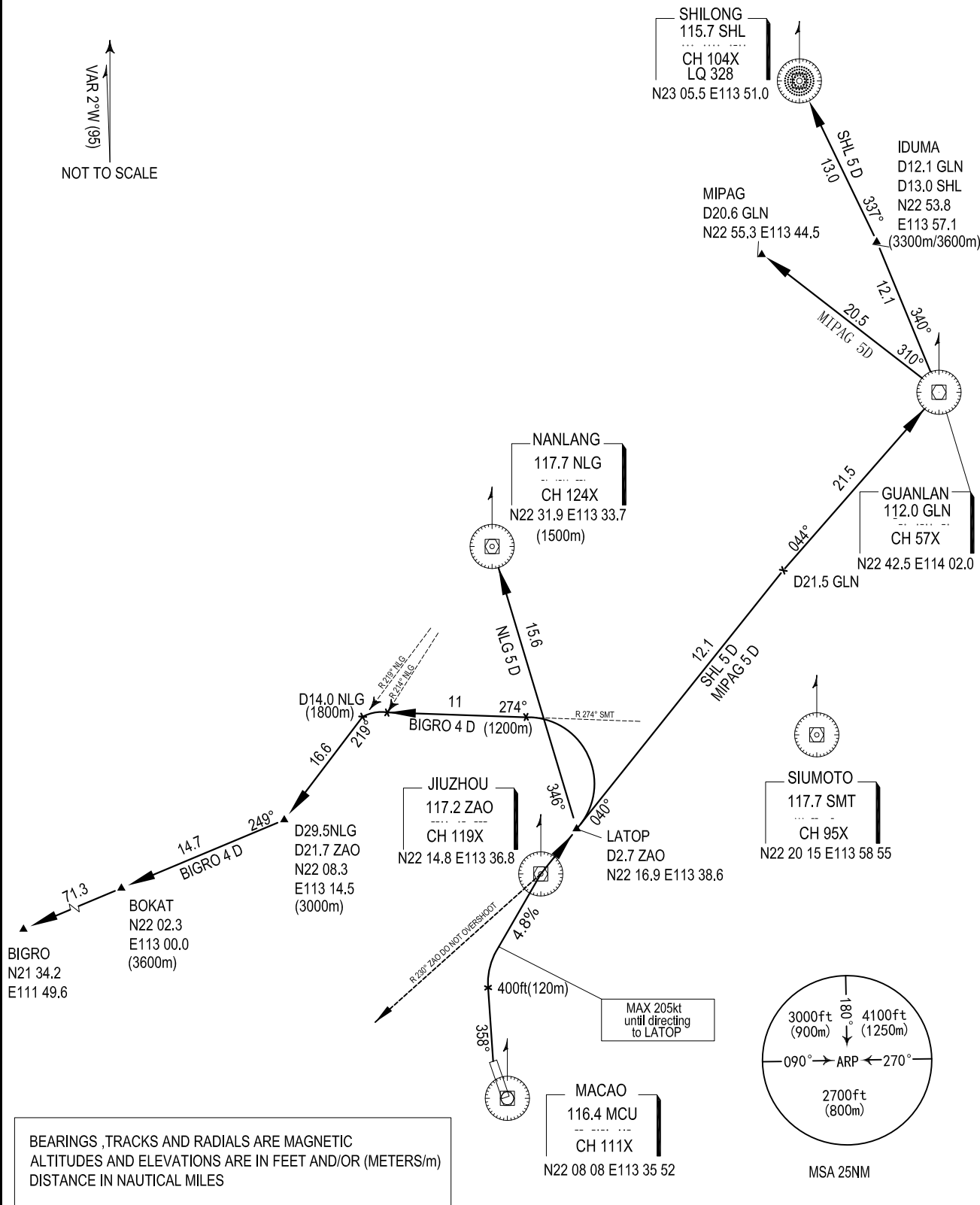
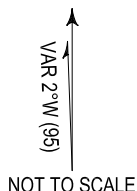


TWR : MACAO Tower 118.0
APP : Zhuhai Approach 120.35 (124.25) (1)
APP : HONG KONG Radar 126.3 / 119.1 (2)
ATIS : MACAO 126.4
MAX DEP TURNING SPEED :205kt
TA 9000ft(2700m)



Radio Failure Procedure : Squawk A / 7600

BIGRO 4 D (minimum climb gradient of 4.8% required until leaving 1800 m)

Depart on track 358°M and climb to 400 ft (120 m). Then turn right and continue climb to ZAO. Leave ZAO on R040°. Turn left at LATOP to intercept SMT R274° at 1200 m. Then continue climbing, at NLG R214° turn left to intercept NLG R219° at 1800 m. To NLG R219° DME 29.5 at 3000 m, turn right at heading 249°M, to BOKAT at 3600 m, to BIGRO.

MIPAG 5 D (minimum climb gradient of 4.8% required until leaving 3300m)

Depart on track 358°M and climb to 400 ft (120 m). Turn right to ZAO and continue climbing to 3300 m and maintain. On ZAO R040°, at GLN DME 21.5 turn right on GLN R224° to GLN, turn left on GLN R310° to MIPAG.

NLG 5 D (minimum climb gradient of 4.8% required until reaching 1500 m)

Depart on track 358°M and climb to 400 ft (120 m). Then turn right and continue climb to ZAO. Leave ZAO on R040°. At LATOP turn left to establish on NLG R166° and reach 1500m by NLG.

SHL 5 D (minimum climb gradient of 4.8% required until leaving 3300m)

Depart on track 358°M and climb to 400 ft (120 m). Then turn right and continue climb to ZAO. Leave ZAO on R040°, continue climbing to 3300 m and maintain, at GLN DME 21.5 proceed on GLN R224° to GLN. Leave GLN on R340° to IDUMA at 3300 m/3600 m. Turn left at IDUMA and proceed to SHL via SHL R157°.

REMARK:

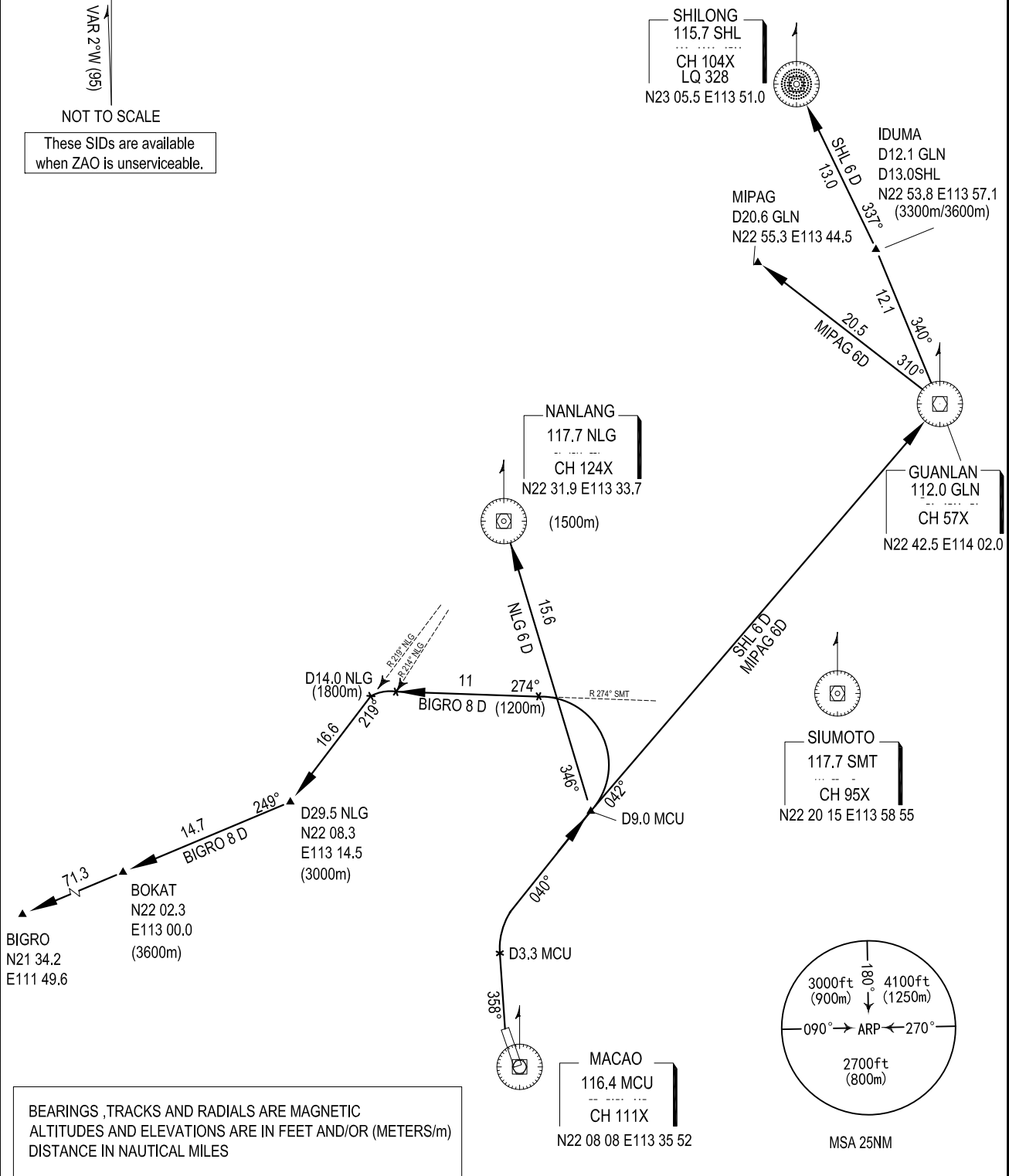
- (1) Aircraft are NOT TO OVERSHOOT JIUZHOU DVOR (ZAO 117.2 MHz) R230° which defines the northern limit for flights taking off RWY 34 due to NOISE ABATEMENT for Zhuhai City.
- (2) Aircraft unable to comply with the minimum climb gradient must inform Macao ground control at first contact to allow special coordination.
- (3) Maximum departure turning speed: 205 kt IAS.
- (4) Owing to the proximity of the Hong Kong international airport, pilots departing on RWY 34 towards Hong Kong direction are reminded the need to follow the standard SID track until LKC DVOR. Any deviation from the standard SID track could result in direct conflict with Hong Kong traffic.

TWR : MACAO Tower 118.0
APP : Zhuhai Approach 120.35 (124.25) (1)
APP : HONG KONG Radar 126.3 / 119.1 (2)
ATIS : MACAO 126.4
MAX DEP TURNING SPEED :205kt IAS
TA 9000ft(2700m)



NOT TO SCALE

These SIDs are available when ZAO is unserviceable.



Radio Failure Procedure : Squawk A / 7600

BIGRO 8 D (minimum climb gradient of 4.8% required until leaving 1800 m)

Depart on track 358°M, at MCU DME 3.3NM turn right on track 040°M and continue climbing. Turn left at MCU DME 9.0NM to intercept SMT 274° at 1200m. Then continue climbing, at NLG R214° turn left to intercept NLG R219° at 1800m. To NLG R219° DME 29.5 at 3000 m, turn right at heading 249°M, to BOKAT at 3600 m, to BIGRO.

MIPAG 6 D (minimum climb gradient of 4.8% required until leaving 3300m)

Depart on track 358°M, at MCU DME 3.3NM turn right on track 040°M and continue climbing. By MCU DME 9.0NM establish on GLN R222°, continue climbing to 3300m and maintain, to GLN, turn left on GLN R310° to MIPAG.

NLG 6 D (minimum climb gradient of 4.8% required until reaching 1500 m)

Depart on track 358°M, at MCU DME 3.3NM turn right on track 040°M and continue climbing. At MCU DME 9.0NM turn left to establish on NLG R166° and reach 1500m by NLG.

SHL 6 D (minimum climb gradient of 4.8% required until leaving 3300m)

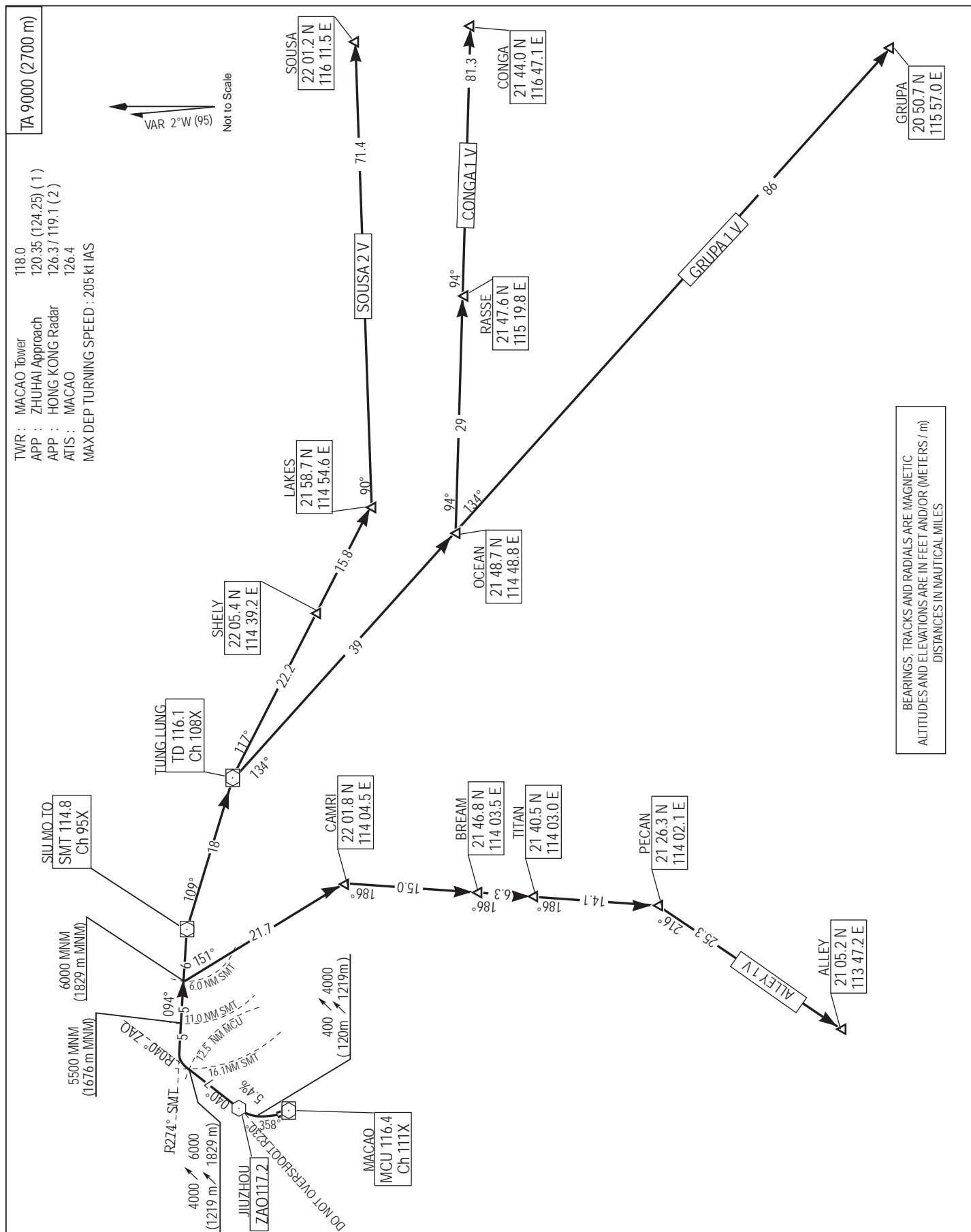
Depart on track 358°M, at MCU DME 3.3NM turn right on track 040°M and continue climbing. By MCU DME 9.0NM establish on GLN R222°, continue climbing to 3300m and maintain. Leave GLN on R340° to IDUMA at 3300m. Turn left at IDUMA and proceed to SHL via SHL R157°.

REMARK:

- (1) These SIDs are available when ZAO is unserviceable.
- (2) Aircraft unable to comply with the minimum climb gradient must inform Macao ground control at first contact to allow special coordination.
- (3) Maximum departure turning speed: 205 kt IAS.
- (4) Owing to the proximity of the Hong Kong international airport, pilots departing on RWY 34 towards Hong Kong direction are reminded the need to follow the standard SID track until LKC DVOR. Any deviation from the standard SID track could result in direct conflict with Hong Kong traffic.

SID MACAO RWY 34

(ALLEY 1 V, CONGA 1 V, GRUPA 1 V, SOUSA 2 V)



ALLEY 1 V (minimum climb gradient of 5.4% required until leaving 5500 ft)

Depart on track 358°M and climb to 400 ft (120 m). Then turn right and continue climb to ZAO. Leave ZAO on R040° climbing to 4000 ft, at SMT DME 16.1 (MCU DME 12.5) turn right to establish on SMT R274°, continue climbing to pass 5500 ft by SMT DME 11.0 and reach 6000 ft by SMT DME 6.0. Further climb when instructed by ATC. From SMT DME 6.0 turn right to CAMRI. From CAMRI turn right direct to BREAM, then TITAN and then PECAN. From PECAN turn right to ALLEY. Continue on Terminal Transition Routes published in Hong Kong AIP.

If SMT is not available, ALLEY 1 V is not permitted.

CONGA 1 V (minimum climb gradient of 5.4% required until leaving 5500 ft)

Depart on track 358°M and climb to 400 ft (120 m). Then turn right and continue climb to ZAO. Leave ZAO on R040° climbing to 4000 ft, at SMT DME 16.1 (MCU DME 12.5) turn right to establish on SMT R274°, continue climbing to pass 5500 ft by SMT DME 11.0 and reach 6000 ft by SMT DME 6.0. Further climb when instructed by ATC. From SMT track direct to TD. From TD track direct to OCEAN and then turn left direct to RASSE and CONGA. Continue on Terminal Transition Routes published in Hong Kong AIP.

If SMT is not available, CONGA 1 V is not permitted.

If TD is not available, expect radar vectors to CONGA.

GRUPA 1 V (minimum climb gradient of 5.4% required until leaving 5500 ft)

Depart on track 358°M and climb to 400 ft (120 m). Then turn right and continue climb to ZAO. Leave ZAO on R040° climbing to 4000 ft, at SMT DME 16.1 (MCU DME 12.5) turn right to establish on SMT R274°, continue climbing to pass 5500 ft by SMT DME 11.0 and reach 6000 ft by SMT DME 6.0. Further climb when instructed by ATC. From SMT track direct to TD. From TD track direct to OCEAN and then GRUPA. Continue on Terminal Transition Routes published in Hong Kong AIP.

If SMT is not available, GRUPA 1 V is not permitted

If TD is not available, expect radar vectors to GRUPA.

SOUSA 2 V (minimum climb gradient of 5.4% required until leaving 5500 ft)

Depart on track 358°M and climb to 400 ft (120 m). Then turn right and continue climb to ZAO. Leave ZAO on R040° climbing to 4000 ft, at SMT DME 16.1 (MCU DME 12.5) turn right to establish on SMT R274°, continue climbing to pass 5500 ft by SMT DME 11.0 and reach 6000 ft by SMT DME 6.0. Further climb when instructed by ATC. From SMT track direct to TD. From TD turn right direct to SHELY then LAKES. From LAKES turn left direct to SOUSA. Continue on Terminal Transition Routes published in Hong Kong AIP.

If SMT is not available, SOUSA 2 V is not permitted.

If TD is not available, expect radar vectors to SHELY.

REMARK:

- (1) Aircraft are NOT TO OVERSHOOT JIUZHOU DVOR (ZAO 117.2 MHz) R230° which defines the northern limit for flights taking off RWY 34 due to NOISE ABATEMENT for Zhuhai City.
- (2) Procedure Design Gradient based only on airspace restriction.
- (3) Aircraft unable to comply with the minimum climb gradient must inform MACAO ground control at first contact to allow special coordination.
- (4) Maximum departure turning speed: 205 kt IAS until ZAO DVOR.
- (5) Standard Instrument Departure Procedures (SIDs) transiting Hong Kong Airspace

Speed Restriction

Aircraft shall fly at 250 kt or less below FL 110.

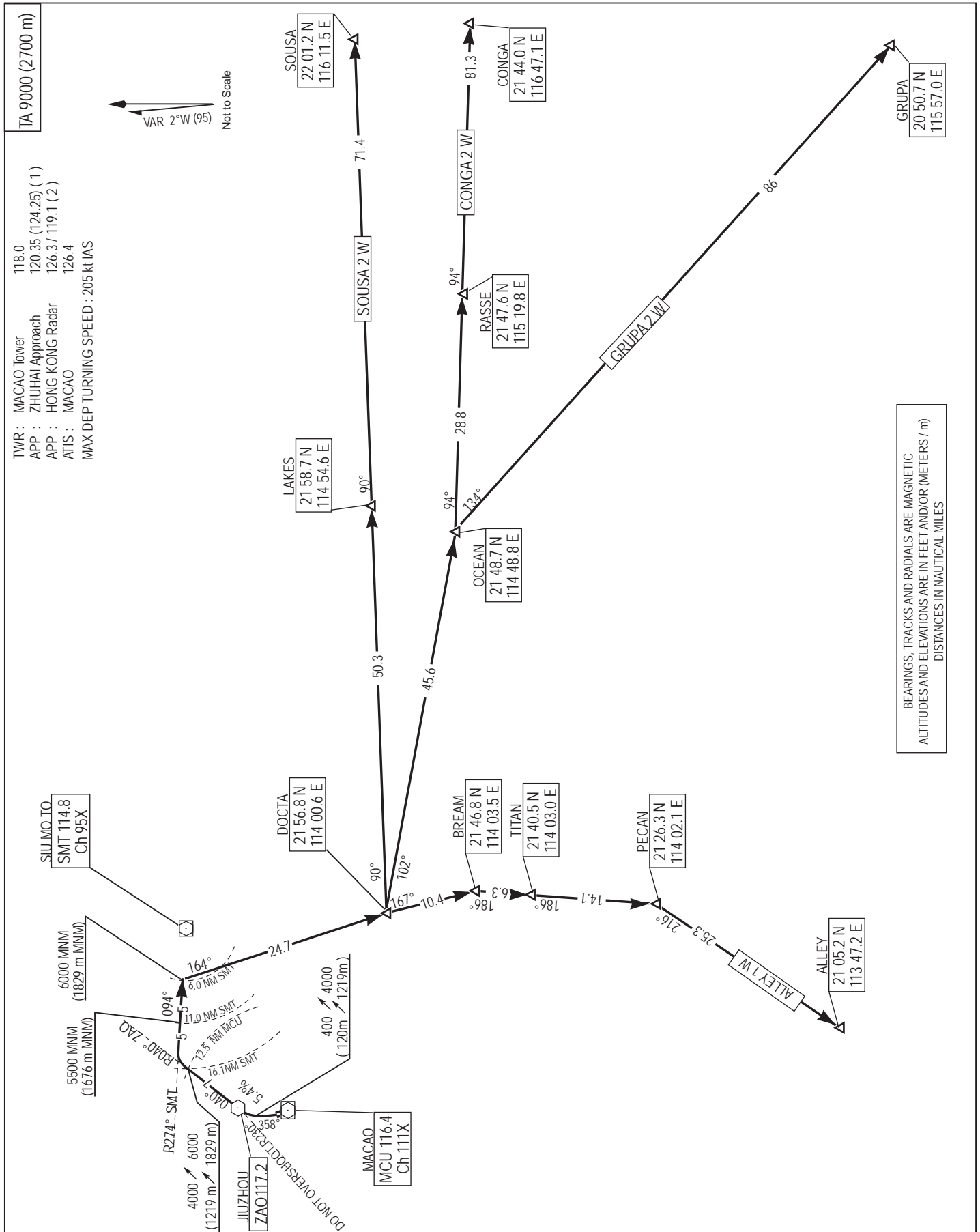
Loss of communication

In the event of loss of communication, aircraft shall comply with the last acknowledged clearance up to the next reporting point in the SID, then climb to the flight planned cruising level and follow the flight planned route to join the appropriate airway.

- (6) Owing to the proximity of the Hong Kong international airport, pilots departing on RWY 34 towards Hong Kong direction are reminded the need to follow the standard SID track until LKC DVOR. Any deviation from the standard SID track could result in direct conflict with Hong Kong traffic.
- (7) If ZAO is unserviceable, Depart on track 358°M, at MCU DME 3.3NM turn right on track 040°M. Then turn right by MCU DME 13.8NM (SMT DME 16.2NM) at altitude 4000ft to intercept SMT R274°, continue climbing to pass 5500ft by SMT DME 11.0NM and reach 6000ft by SMT DME 6.0NM. Further climb when instructed by ATC and continues the original SID.

SID MACAO RWY 34

(ALLEY 1 W, CONGA 2 W, GRUPA 2 W, SOUSA 2 W)



ALLEY 1 W (minimum climb gradient of 5.4% required until leaving 5500 ft)

Depart on track 358°M and climb to 400 ft (120 m). Then turn right and continue climb to ZAO. Leave ZAO on R040° climbing to 4000 ft, at SMT DME 16.1 (MCU DME 12.5) turn right to establish on SMT R274°, continue climbing to pass 5500 ft by SMT DME 11.0 and reach 6000 ft by SMT DME 6.0. Further climb when instructed by ATC. From SMT DME 6.0 turn right to DOCTA and then BREAM. From BREAM turn right direct to TITAN and then PECAN. From PECAN turn right to ALLEY. Continue on Terminal Transition Routes published on Hong Kong AIP.

If SMT is not available, ALLEY 1 W is not permitted.

CONGA 2 W (minimum climb gradient of 5.4% required until leaving 5500 ft)

Depart on track 358°M and climb to 400 ft (120 m). Then turn right and continue climb to ZAO. Leave ZAO on R040° climbing to 4000 ft, at SMT DME 16.1 (MCU DME 12.5) turn right to establish on SMT R274°, continue climbing to pass 5500 ft by SMT DME 11.0 and reach 6000 ft by SMT DME 6.0. Further climb when instructed by ATC. At SMT DME 6.0 turn right direct to DOCTA. Expect to cross DOCTA FL140 or above. From DOCTA turn left direct to OCEAN then turn left direct to RASSE and CONGA. Continue on Terminal Transition Routes published in Hong Kong AIP.

If SMT is not available, CONGA 2 W is not permitted.

GRUPA 2 W (minimum climb gradient of 5.4% required until leaving 5500 ft)

Depart on track 358°M and climb to 400 ft (120 m). Then turn right and continue climb to ZAO. Leave ZAO on R040° climbing to 4000 ft, at SMT DME 16.1 (MCU DME 12.5) turn right to establish on SMT R274°, continue climbing to pass 5500 ft by SMT DME 11.0 and reach 6000 ft by SMT DME 6.0. Further climb when instructed by ATC. At SMT DME 6.0 turn right direct to DOCTA. Expect to cross DOCTA FL140 or above. From DOCTA turn left direct to OCEAN then turn right direct to GRUPA. Continue on Terminal Transition Routes published in Hong Kong AIP.

If SMT is not available, GRUPA 2 W is not permitted.

SOUSA 2 W (minimum climb gradient of 5.4% required until leaving 5500 ft)

Depart on track 358°M and climb to 400 ft (120 m). Then turn right and continue climb to ZAO. Leave ZAO on R040° climbing to 4000 ft, at SMT DME 16.1 (MCU DME 12.5) turn right to establish on SMT R274°, continue climbing to pass 5500 ft by SMT DME 11.0 and reach 6000 ft by SMT DME 6.0. Further climb when instructed by ATC. At SMT DME 6.0 turn right direct to DOCTA. Expect to cross DOCTA FL140 or above. From DOCTA turn left direct to LAKES and SOUSA. Continue on Terminal Transition Routes published in Hong Kong AIP.

If SMT is not available, SOUSA 2 W is not permitted.

REMARK:

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