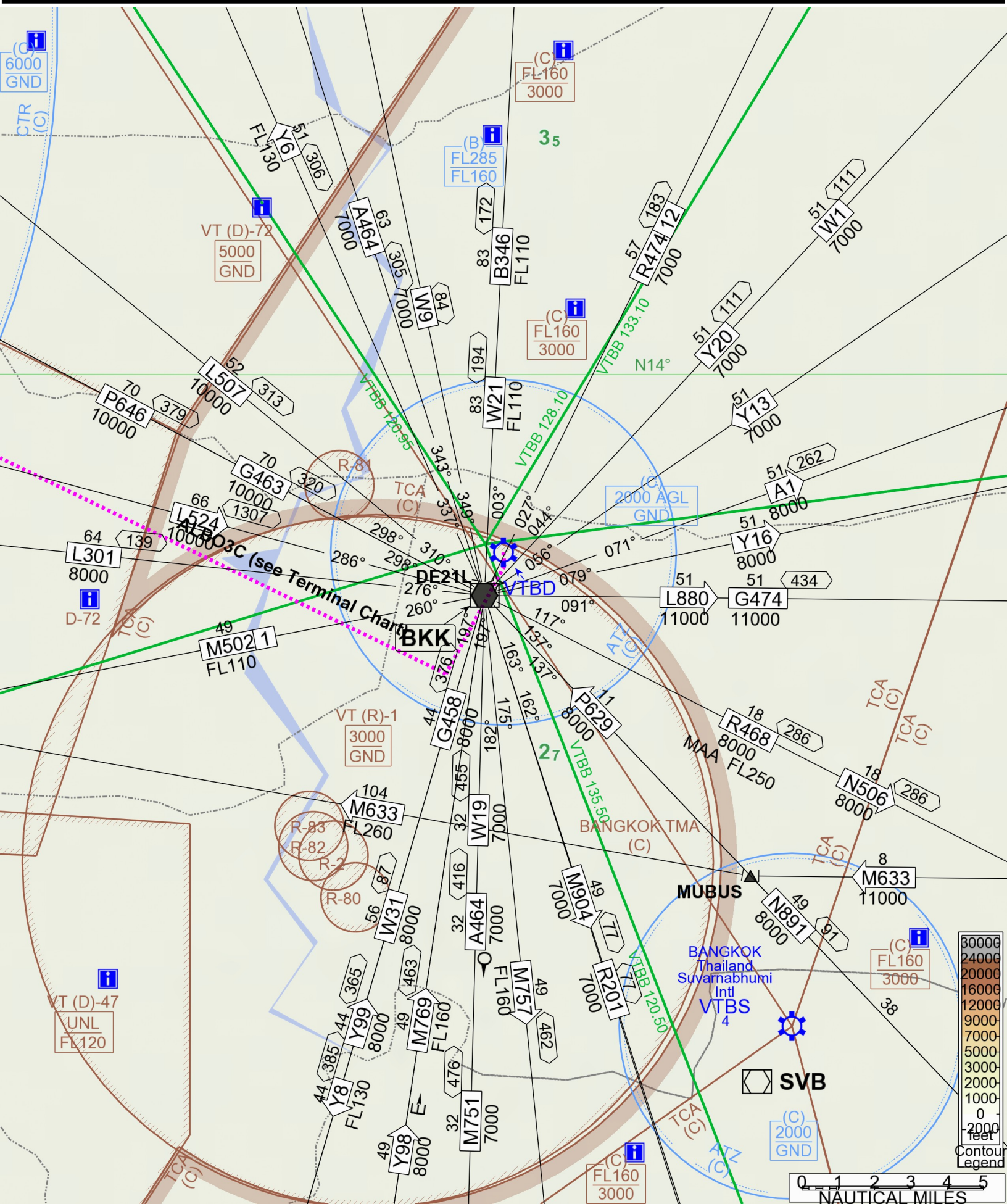
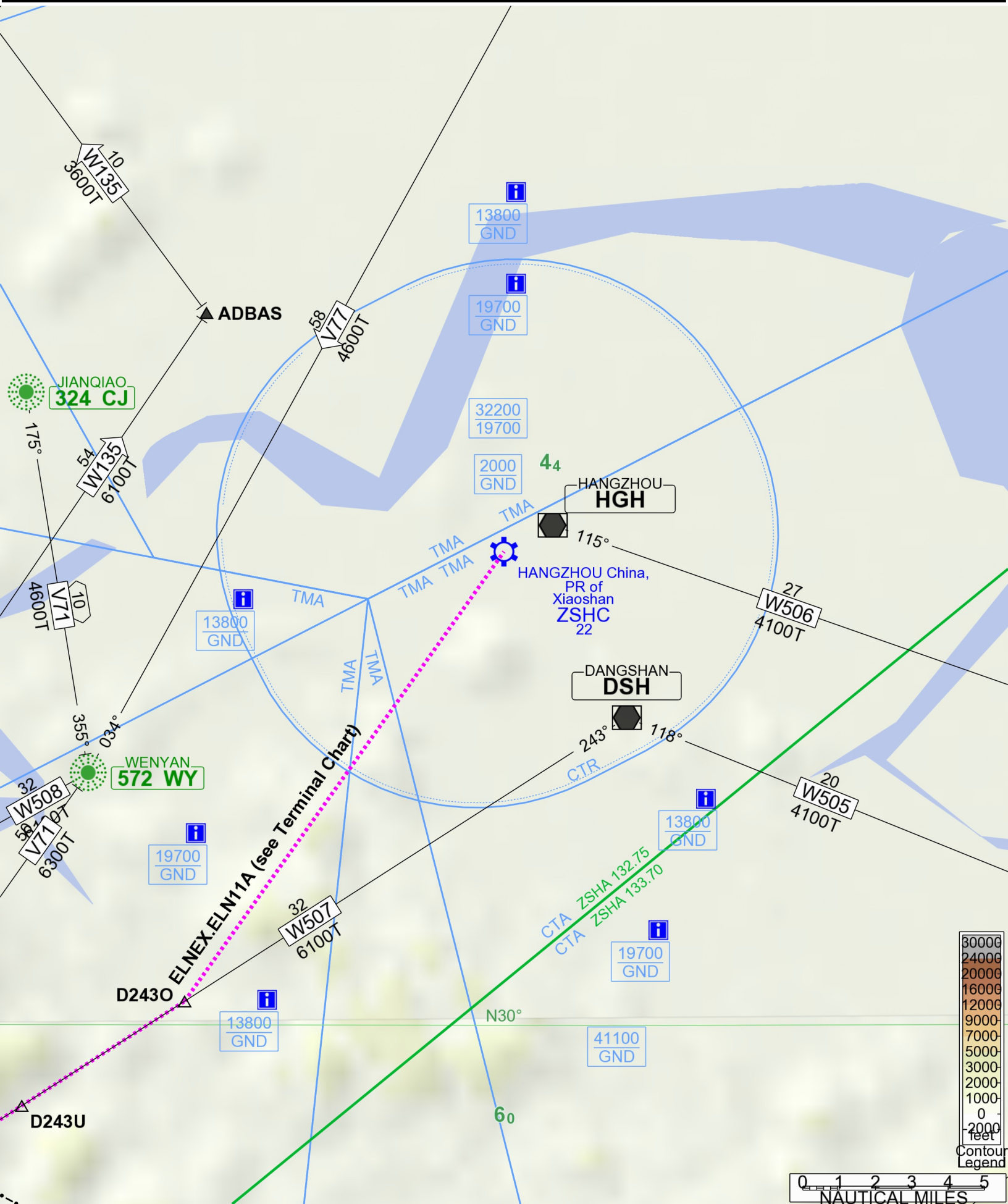


List of pages in this Trip Kit

Trip Kit Index
Departure and Destination AIQ568
Entire Route AIQ568
Strip Charts AIQ568
Airport Information For VTBD
Terminal Charts For VTBD
Airport Information For ZSHC
Terminal Charts For ZSHC
Revision Letter For Cycle 12-2024
Change Notices
Notebook
FIR/UIR Communications
Operational Notes Operational Notes
Regional Notes Regional Notes
Reference Notes Reference Notes





10
W135
3600T

▲ ADBAS

58
V77
4600T

13800
GND

19700
GND

32200
19700

2000
GND

44

HANGZHOU
HG

HANGZHOU China,
PR of
Xiaoshan
ZSHC
22

DANGSHAN
DSH

27
W506
4100T

175°

54
W135
6100T

10
V71
4600T

13800
GND

355°
034°

32
W508
V71
6300T

58
V71
6300T

WENYAN
572 WY

19700
GND

D2430

32
W507
6100T

13800
GND

D243U

N30°

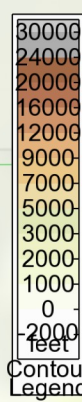
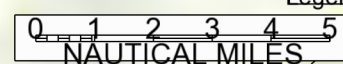
CTA ZSHA 132.75
CTA ZSHA 133.70

13800
GND

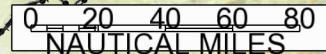
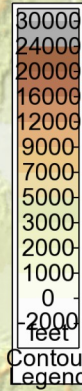
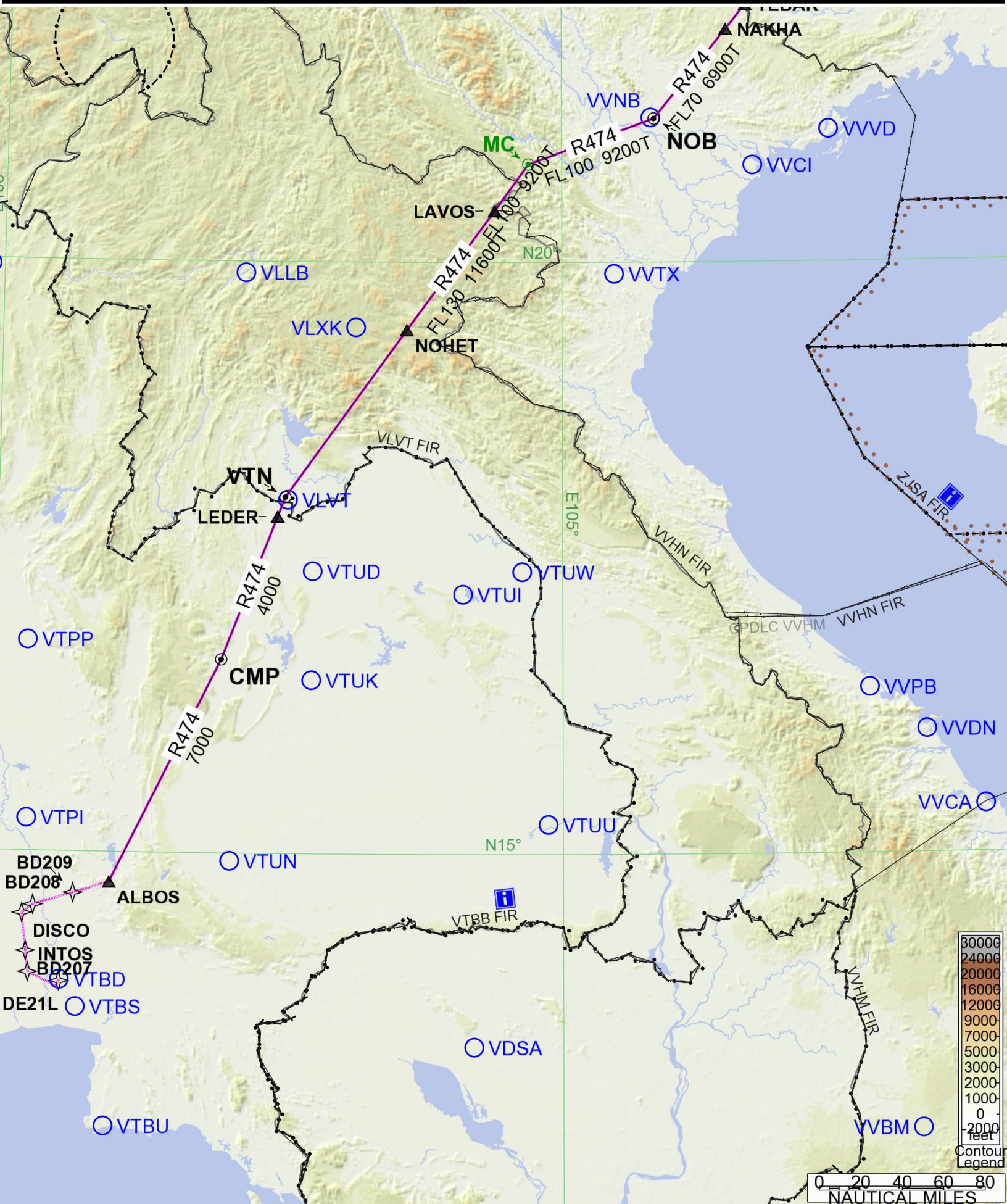
19700
GND

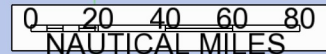
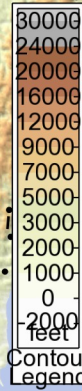
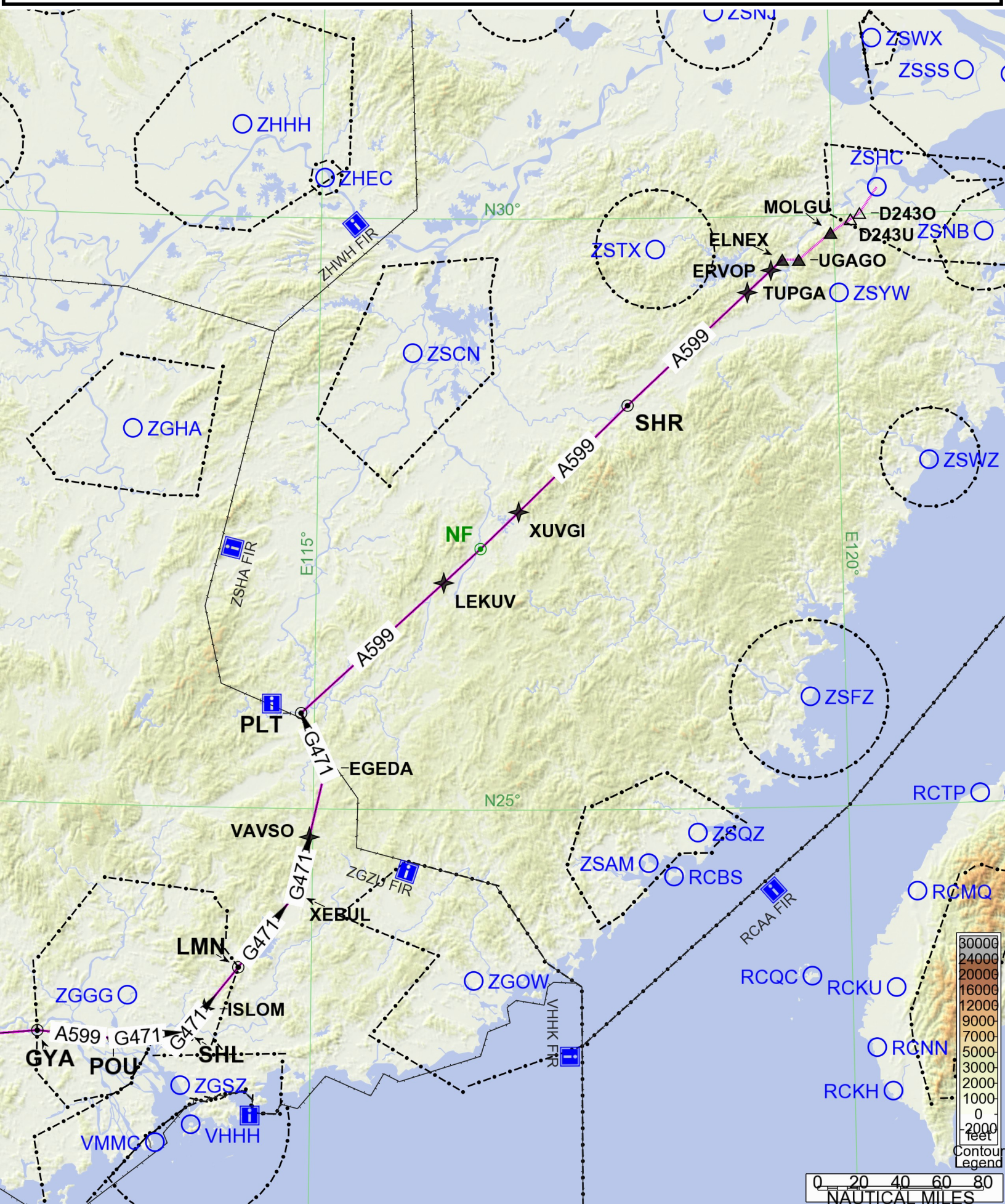
41100
GND

60









General Information

Location: BANGKOK THA
ICAO/IATA: VTBD / DMK
Lat/Long: N13° 54.9', E100° 36.3'
Elevation: 9 ft

Airport Use: Public
Daylight Savings: Not Observed
UTC Conversion: -7:00 = UTC
Magnetic Variation: 0.6° W

Customs: Yes
Airport Type: IFR
Landing Fee: Yes
Control Tower: Yes
Jet Start Unit: No
LLWS Alert: Yes
Beacon: Yes

Sunrise: 2307 Z
Sunset: 1131 Z

Runway Information

Runway: 03L
Length x Width: 12139 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 7 ft
Lighting: Edge, ALS, Centerline
Stopway: 492 ft

Runway: 03R
Length x Width: 11483 ft x 148 ft
Surface Type: asphalt
TDZ-Elev: 5 ft
Lighting: Edge, ALS

Runway: 21L
Length x Width: 11483 ft x 148 ft
Surface Type: asphalt
TDZ-Elev: 7 ft
Lighting: Edge, ALS
Displaced Threshold: 1148 ft
Stopway: 328 ft

Runway: 21R
Length x Width: 12139 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 7 ft
Lighting: Edge, ALS, Centerline, TDZ
Stopway: 492 ft

Communication Information

ATIS: 126.400 Arrival Service
ATIS: 118.550 Departure Service
Don Mueang Tower: 118.100
Don Mueang Ground: 122.500
Don Mueang Ground: 121.900
Don Mueang Clearance Delivery: 127.700
Bangkok Approach: 119.100
Bangkok Approach: 119.250
Don Mueang Approach: 119.400
Bangkok Approach: 124.350
Bangkok Approach: 121.100
Bangkok Approach: 120.300
Bangkok Approach: 125.200
Bangkok Approach: 126.300
Bangkok Approach: 133.400
Bangkok Approach: 122.350
Don Mueang Arrival: 133.000

GENERAL

1. LOW VISIBILITY PROCEDURES (LPV)

- 1.1 Rwy 21R is equipped with ILS and is approved for CAT II operations and low visibility take-off (LVTO).
- 1.2 Low visibility procedures will be established when a visibility of less than RVR 550 M or a cloud base of less than 200'.
- 1.3 Rwy exist.
 - 1.3.1 All Rwy exist are equipped with GREEN/YELLOW coded taxiway centre line lights to indicate the boundary of the localizer sensitive area.
 - 1.3.2 Pilots should select the first convenient exit and continue on the Twy centre line lead-off lights toward to Twy B for a designated parking stand.
 - 1.3.3 The following route restrictions shall be used during low visibility operations.
 - a) When vacating on Twy O taxi route is O-B or O-N and B.
 - b) When vacating on Twy R taxi route is R-B.
 - c) When vacating on Twy S taxi route is S-B.
 - d) When vacating on Twy C(S) taxi route is C(S)-B.
 - 1.3.4 Pilots are required to make a "RUNWAY VACATED" call giving due allowance for the size of the aircraft to ensure that the entire aircraft has vacated the localizer sensitive area.
- 1.4 Rwy holding positions.
 - 1.4.1 Departing aircraft are required to use the Twy D and B(N) which are CAT II holding positions.
 - 1.4.2 Intersection take-offs are not permitted.
- 1.5 CAT II approach and landing.
 - 1.5.1 Pilots will be informed by ATIS or RTF when low visibility procedures are in operation.
 - 1.5.2 Pilots must request an ILS CAT II approach on first contact with Bangkok Approach. Pilots may carry out a practise ILS CAT II approach if traffic conditions permitted.
 - 1.5.3 Aircraft will be vectored to intercept the localizer at least 10 NM from touchdown.
 - 1.5.4 Special procedures and safeguarding will be applied during CAT II operations to protect aircraft operating in low visibility and to avoid interference to the ILS signals in accordance with ICAO DOC 9365: Manual of All-Weather Operations.
- 1.6 Low visibility take-off.

Pilots wishing to conduct an ILS guided take-off shall inform ATC on start-up in order to ensure that the protection of the localizer sensitive area is provided.
- 1.7 Rwy 21L is not permitted for landing and take-off in low visibility procedures.

2. SPEED CONTROL

- 2.1 All aircraft when flying below 10,000' are subject to a speed limitation of 250 KT unless previously removed by ATC.
- 2.2 Procedures required that aircraft should fly at 210 KT during the intermediate approach phase. ATC will request speed reductions to within the band 160 KT to 180 KT on, or shortly before closing heading to the ILS, and 160 KT when established on the ILS to final approach points; all speeds to be flown as accurately as possible. Aircraft unable to conform to these speeds should inform ATC and state what speed will be used.
- 2.3 At other times, speed control may be applied on a tactical basis to the extent determined by the Radar Controller. Pilots unable to conform to speed specified by the Radar Controller should immediately inform ATC stating what speeds will be used.
- 2.4 ATC will notify that the aircraft may keep its preferred speed without restriction and will use the phrase "**NO (ATC) SPEED RESTRICTIONS**". An instruction to notify that the aircraft need no longer comply with the previously issued speed restriction, the phrase "**RESUME NORMAL SPEED**" will be used.

Note: An instruction to "resume normal speed" does not delete speed restrictions that are applicable to published procedures of upcoming segments of flight, aircraft shall comply with the speed restrictions specified in 2.1, 2.2 and 2.3.
- 2.5 Except as detailed in 2.1, 2.2 and 2.3, all aircraft navigating under conditions of RNAV (GNSS) SIDs/STARs shall conform to speed limitation as published in the procedures.

GENERAL (CONTD)

2.6 En-route holding and Initial Approach Waypoint (IAWP) holding will be in accordance with ICAO standard holding speeds requirement.

Note 1: En-route holding; MOCHI, BATOK, GOMES, RYN, JASSY, PASTA, TARDY, OSUKA, TL, NOBER.

Note 2: IAWP holding: ARONS, CAROS, DANNY, NAUTY, SILVA, CABIN, DAREN, GIPSY, NUMAN, TERRY.

3. NOISE ABATEMENT PROCEDURES

In order to alleviate problems of noise within the vicinity of Bangkok/Don Mueang Intl Airport, the noise abatement procedures in accordance with ICAO DOC 8168-OPS-611 (PAN-OPS) shall be applied for all take-off and landings.

3.1 Departure Procedures

Pilots are to adopt one of the two procedures listed below for all take-offs:

3.1.1 Procedure for alleviating noise close to the airport.

3.1.1.1 The noise abatement procedure is not to be initiated at less than 800' above airport elevation.

3.1.1.2 The initial climb speed to the noise abatement initiation point shall not be less than V₂ plus 10 KT.

3.1.1.3 On reaching an altitude at or above 800', adjust and maintain engine in power/thrust accordance with the noise abatement power/thrust schedule. MAINTAIN a climb speed of V₂ plus 10 to 20 kt with flaps and slats in the take-off configuration.

3.1.1.4 At no more than an altitude equivalent to 3000', while maintaining a positive rate of climb, accelerate and retract flaps/slats on schedule; at 3000' accelerate to enroute climb speed.

3.1.2 Procedure for alleviating noise distant from the airport:

3.1.2.1 The noise abatement procedure is not to be initiated at less than 800' above airport elevation.

3.1.2.2 The initial climbing speed to the noise abatement initiation point is V₂ plus 10 to 20 KT.

3.1.2.3 On reaching an altitude equivalent to at least 800' decrease aircraft body angle/angle of pitch while maintaining a positive rate of climb. Accelerate towards VZF and reduce power with the initiation of the first flaps/slats retraction.

3.1.2.4 Maintain a positive rate of climb and accelerate to maintain a climb speed of VZF plus 10 to 20 KT. On reaching 3000' transition to normal enroute climb speed.

3.2 Arrival Procedure

Reverse thrust above idle shall not be used between 1800 and 2200 UTC, except for safety reasons.

4. APPROACH PROCEDURES WITH RADAR CONTROL

4.1 All procedures are designed to maximize departure and arrival capacity in Bangkok Terminal Control Area and minimize noise disturbance in areas overflown.

4.2 The final approach may be carried out by means of ILS or other available instrument approach systems at the discretion of the pilot.

4.3 The spacing provided between aircraft will be designed to achieve maximum runway utilization within the parameters of safe separation minima including vortex effect and runway occupancy. It is important to the validity of the separation provided and the achievement of optimum runway capacity that runway occupancy time is kept to a minimum consistent with the prevailing conditions.

4.4 The horizontal radar separation minimum shall be 5 NM except within Bangkok Terminal Control Area, Bangkok Control Zone and Don Mueang Aerodrome Traffic Zone, a reduced separation of 3 NM may be applied.

4.5 Missed approach procedures

4.5.1 As directed by ATC.

4.5.2 In the absence of instructions from ATC, aircraft shall follow the missed approach procedures which contained on the Instrument Approach Charts.

GENERAL (CONTD 1)**5. STANDARD INSTRUMENT DEPARTURES/ARRIVALS
(RNAV SIDs/STARs)**

Aircraft departing from or arriving at Don Mueang International Airport will normally be assigned the RNAV SIDs/STARs.

NOTE: Pilots of Non-RNAV equipped aircraft shall inform ATC and request for radar vectors.

**6. SPEED CONTROL AND ALTITUDE RESTRICTIONS PROMULGATION
IN BANGKOK TERMINAL CONTROL AREA**

In order to facilitate the air traffic flow procedure of departing and arriving aircraft within Bangkok Terminal Control Area, speed control procedures and altitude restricted must be applied to optimize the spacing between aircraft and reduce the overall delay of traffic.

6.1 Speed control

- 6.1.1 Speed control shall be in force at all times unless otherwise instructed. Pilots will be individually advised by ATC when speed control is cancelled.
- 6.1.2 All departing and arriving aircraft are to apply speed of not more than 250 KT when flying at or below altitude of 10,000'.
- 6.1.3 Departing aircraft shall comply with speed control restrictions as published in the RNAV SIDs Procedures unless otherwise advised by ATC.
- 6.1.4 Arriving aircraft shall comply with speed control restrictions as published on the RNAV STARs Charts and Instrument Approach Procedures unless otherwise advised by ATC.
- 6.1.5 En route and terminal holding speed shall be in accordance with ICAO standard holding speeds requirement. Pilots shall resume speed control procedures when leaving the holding fix.
- 6.1.6 ATC may issue further speed adjustment instructions during various flight phases or/and when required by traffic situation.
- 6.1.7 All speed restrictions are to be flown as accurately as possible. If unable to conform to these procedures, pilots should immediately inform ATC and state the speed to be used so that an alternative action can be taken.

6.2 Altitude restrictions

When a departing aircraft on a SID is cleared to climb to a level higher than the initially cleared level or the level(s) specified in the SID, the aircraft shall nevertheless follow the published vertical profile, unless such restrictions are explicitly cancelled by ATC.

- 6.2.1 Departing aircraft intending to cruise below the transition level shall follow an appropriate SID track and comply with individual ATC climb instructions.
- 6.2.2 When an arriving aircraft on a STAR is cleared to descend to a level lower than the level or the level(s) specified in the STAR, the aircraft shall nevertheless follow the published vertical, unless such restrictions are explicitly cancelled by ATC. Published minimum levels based on terrain clearance shall always be strictly applied.
- 6.2.3 To facilitate safe traffic integration and provide vertical separation between converging traffic in Bangkok Terminal Control Area, pilots shall plan their descent profile in accordance with the published STAR procedures or their descent profile against distance to touchdown.
- 6.2.4 All altitude restrictions are to be flown as accurately as possible. If unable to conform to these restrictions, pilots should immediately inform ATC so that an alternative action can be taken.

7. RADIO COMMUNICATION FAILURE PROCEDURE**7.1 General**

- 7.1.1 Radio communication is considered to be failed, if during two minutes that the pilot or the ATC unit doesn't answer the repeated calls through all available communication channels.
- 7.1.2 The transponder is set to be Mode A/C code 7600 as soon as the pilot has detected communication failure.
- 7.1.3 The pilot shall use all available facilities to re-establish communication with ATC unit directly or by means of the other aircraft. If necessary, the emergency frequency 121.5 MHz may be used.
- 7.1.4 In any case of radio communication failure, the pilot shall continue listening on the appropriate radio frequency and transmitting the position reports, actions and flight conditions. The pilot shall comply with one of the following procedures.

GENERAL (CONTD 2)**7. RADIO COMMUNICATION FAILURE PROCEDURE (CONTD)****7.2 Total radio communication failure for arriving aircraft**

7.2.1 If in VMC, continue to fly in VMC and land at the nearest suitable aerodrome.

7.2.2 If in IMC or when the pilot of an IFR flight considers it inadvisable to complete the flight in accordance with para 7.2.1, the pilot shall:

7.2.2.1 If a specific STAR procedure has been designated and acknowledged prior to the occurrence of radio communication failure, comply with the radio communication failure procedures.

Proceed according to the STAR route to the termination point AROKA for Rwy 21L/21R or DOTLI for Rwy 03L/R and descend in accordance with the published all speed and altitude restrictions of the relevant STAR procedure, thence:

a) For Rwy 21L/21R: at AROKA and maintain altitude 3000'. The pilot shall make a right holding pattern as published and carry out the appropriate approach procedure.

b) For Rwy 03L/03R: At DOTLI, carry out the appropriate approach procedure.

7.2.2.2 If no specific STAR procedure has been designated or acknowledged prior to the occurrence of radio communication failure, endeavor to ascertain the landing direction from any available means in para 7.5. The pilot then should proceed in accordance with the STAR procedure appropriate to its ATS route and landing direction and comply with the radio communication failure procedures.

7.2.3 When an arriving aircraft is being radar vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure. Pilot should proceed in the most direct manner possible to rejoin the STAR procedure appropriate to its ATS route and landing direction.

7.2.4 Pilots should ensure that they remain at or above the minimum sector altitude. If the aircraft is below the minimum sector altitude, pilots shall immediately climb to the minimum sector altitude.

7.3 Total radio communication failure for missed approach aircraft

7.3.1 The pilot shall set the aircraft transponder to Mode A/C code 7600 and fly to or proceed direct to (in case of radar vector) the appropriate missed approach holding point at 3000' (For Rwy 21L/21R) or 4000' (For Rwy 03L/03R) and hold.

7.3.2 The pilot then shall climb and maintain 4000' (For Rwy 21L/21R) or 5000' (For Rwy 03L/03R) in the holding pattern and complete one holding then start commencing an appropriate approach procedure and landing direction in accordance with para 7.5 below, thence

a) For Rwy 21L/21R: maintain altitude 4000' and proceed direct to BKK VOR then transition to IAF and carry out an appropriate approach procedure.

b) For Rwy 03L/03R: maintain altitude 5000' and proceed direct to DOTLI, carry out the appropriate approach procedure. Except ILS or LOC Y Rwy 03L and VOR Rwy 03R: maintain altitude 5000' and proceed direct to BKK VOR then transition to IAF and carry out an appropriate approach procedure.

7.4 Partial radio communication failure for arriving aircraft

7.4.1 Aircraft unable to receive: pilots shall adopt the total radio communication failure procedures specified in para 7.2.

7.4.2 Aircraft able to receive: following verification that aircraft is able to receive ground transmissions by squawk ident, ATC will continue to issue and repeat instructions and/or clearance to the pilot.

GENERAL (CONTD 3)**7.5 Identification of runway in use**

- 7.5.1 A pilot endeavours to obtain information on the landing runway from the following sources: ATIS, D-ATIS, ACARS, satellite phone, etc. If unable, the pilot should rely on the best available information such as aerodrome weather forecasts, meteorological reports or any other relevant information obtained prior to the communication failure and should decide on the most appropriate landing direction.
- 7.5.2 To assist the pilot in ascertaining the landing direction, the ILS and approach lighting for the runway in use will be switched on. If the approach lights for the runway-in-use are sighted but the ILS signal is not received, the pilot shall assume that the ILS is inoperative and shall proceed to land on the runway on which the approach lights have been sighted.

7.6 Total radio communication failure for departing aircraft

- 7.6.1 The pilot shall set the aircraft transponder to Mode A/C code 7600 and comply with the last acknowledged clearance up to the next reporting point on the SID, then climb to the planned cruising level in accordance with the published all speed and altitude restrictions of the relevant SID procedure. Thereafter, the pilot shall comply with the flight planned routing.
- 7.6.2 Whenever a pilot experiences total radio communication failure immediately after departure and it is deemed unsafe for the flight to continue to its destination, the pilot shall adhere to the procedures below:
- 7.6.2.1 The pilot shall set the aircraft transponder to Mode A/C code 7600.
- 7.6.2.2 The pilot shall comply with the last assigned altitude in accordance with the published all speed and altitude restrictions of the relevant SID procedure.
- 7.6.2.3 The pilot shall climb/descend to maintain 8500' for 2 minutes then proceed direct to BKK VOR and hold. If fuel dumping is necessarily required before making an approach to land, after maintaining altitude at 8500' for 2 minutes, the pilot shall proceed to the nearest suitable fuel dumping area and start dumping fuel. When it is completed, the pilot must fly direct to BKK VOR and hold.
- 7.6.2.4 The pilot is required to make a left holding pattern over BKK VOR with inbound course 120° and one-minute-leg to complete one holding then start commencing an appropriate approach procedure and landing direction in accordance with para 7.5.

7.7 Partial radio communication failure for departing aircraft

- 7.7.1 Aircraft unable to receive: pilots shall adopt the total radio failure procedures specified in para 6.6.2.
- 7.7.2 Aircraft able to receive: following verification that aircraft is able to receive ground transmissions by squawk ident, ATC will continue to issue and repeat instructions and/or clearances to the pilot.

7.8 Aircraft overflying Bangkok Terminal Control Area

- 7.8.1 The pilot shall set the aircraft transponder to Mode A/C code 7600.
- 7.8.2 If in VMC, the pilot shall continue to fly in VMC and land at the nearest suitable aerodrome.
- 7.8.3 If in IMC, or when the pilot of an IFR flight considers it inadvisable to complete the flight in accordance with para 7.8.2, the pilot shall maintain the last assigned speed and level, or minimum flight altitude if higher, for a period of ten minutes following the aircraft's failure to report its position over a compulsory reporting point and thereafter adjust level and speed in accordance with the filed flight plan.

7.9 Departing or overflying aircraft under radar control

- 7.9.1 The pilot shall set the aircraft transponder to Mode A/C code 7600.
- 7.9.2 The pilot shall maintain the last assigned heading, speed and level, or minimum flight altitude if higher, for a period of two minutes following:
- 7.9.2.1 The time the last assigned level or minimum flight altitude is reached; or
- 7.9.2.2 The time the transponder is set to 7600; or
- 7.9.2.3 The aircraft's failure to report its position over a compulsory reporting point. Whichever is later, and thereafter adjust level and speed in accordance with the filed flight plan.

GENERAL (CONTD 4)

7.9.3 After a period of two minutes, the pilot shall proceed in the most direct manner possible to rejoin the SID procedure appropriate to its ATS route or the flight planned route no later than the next significant point, taking into consideration to the applicable minimum flight altitude.

7.10 Alternative methods for communicating with ATC

Pilots may endeavour to communicate with ATC by telephone network.

8. AIRCRAFT TRANSPONDER FAILURE PROCEDURES
8.1 Control of aircraft experiencing transponder failure procedure

8.1.1 When a transponder failure is detected to be unserviceable prior to departure, ATC shall confirm with the pilot of his transponder operations using the following phraseologies.

Phraseologies

"C/S, CONFIRM TRANSPONDER ON", or
 "C/S, CHECK YOUR TRANSPONDER OPERATED NORMALLY", or
 "C/S, TRANSPONDER NOT RECEIVED, CHECK FUNCTIONALITY"

When it has been confirmed that aircraft transponder fails, ATC shall advise the pilot to repair it before departure. However, the surface radar blind spot, where the transponder might not be easily detected, should be taken into consideration.

Phraseologies

"C/S, ADVISE TRANSPONDER REPAIRED BEFORE DEPARTURE", or
 "C/S, ADVISE RETURN TO BAY FOR TRANSPONDER REPAIRING"

8.1.2 When transponder appears to be unserviceable after the aircraft is airborne, ATC must inform the pilot of his transponder failure using the following phraseologies.

Phraseologies

"C/S, CONFIRM TRANSPONDER ON", or
 "C/S, CHECK YOUR TRANSPONDER OPERATED NORMALLY", or
 "C/S, TRANSPONDER NOT RECEIVED, CHECK FUNCTIONALITY"

When it has been confirmed that aircraft transponder fails, ATC shall advise the pilot to return to his departure airport as well as relay all necessary information to Aerodrome Control Tower and all concerned units.

Phraseologies

"C/S, ADVISE RETURN TO LAND AT (DEPARTURE AERODROME) FOR
 TRANSPONDER REPAIRING, REQUEST YOUR INTENTION",
 "C/S, ADVISE RETURN TO BAY FOR TRANSPONDER REPAIRING"

In case pilot decide to proceed to first intended landing or nearest suitable aerodrome, primary radar separation shall be provided. However, the pilot shall be reminded that delays can be expected and some requests might not be granted e.g. route to be flown, cruising altitude/level.

8.2 Control of aircraft overflying Bangkok FIR or aircraft intending to land at Don Mueang International Airport with its failed transponder procedure

8.2.1 ATC must immediately inform the pilot of his transponder failure so that he could check its operations and repair it.

8.2.2 ATC shall control, according to the filed flight plan, the aircraft experiencing transponder failure to land safely at Don Mueang International Airport.

8.2.3 ATC shall control, according to the filed flight plan, the over-fly aircraft experiencing transponder failure to land safely at the destination aerodrome.

8.2.4 Approach Control shall coordinate closely with Don Mueang Tower and/or other concerned units regarding the problem.

8.3 The above procedures shall be applied to all aircraft except state aircraft and military aircraft

GENERAL (CONTD 5)

8.4 Aircraft intending to land at Don Mueang International Airport with its failed transponder might be assigned to fly along an RNAV STAR and controlled solely by Suvarnabhumi PSR which normally covers up to 80 NM

9. OPERATION OF MODE S TRANSPONDERS ON GROUND**9.1 Mode S transponder**

Aircraft operators intending to use Don Mueang International Airport should ensure that mode S transponders are able to operate when the aircraft is on the ground.

9.2 For aircraft that are capable of reporting aircraft identification (i.e. call signs in flight), the aircraft identification should also be entered via FMS or control panel. The ICAO defined format for aircraft identification (i.e. same format as used in flight plan e.g. AIQ3321, TLM634, NOK9820) shall be used.

9.3 Flight crew should select XPDR or the equivalent according to specific installation. It must also be ensured that the transponder is operational/activate (i.e. OUT OF STAND-BY, or OFF POSITION) and the assigned mode A code is selected in accordance with the following.

9.3.1 For a departing flight, upon received pushback clearance.

9.3.2 For an arriving flight, continuously until the aircraft is fully parked at the stand.

9.4 To prevent possible interference to radar surveillance system, TCAS should be functioned;

9.4.1 For departure, when aircraft are entering the runway or line up clearance is received;

9.4.2 For arrival, until aircraft have vacated the runway.

9.5 During on ground, pilot of aircraft not equipped with mode S transponder shall operate the transponder and select mode A code as individually directed by the ATC until:

9.5.1 For departure, when receiving pushback clearance.

9.5.2 For arrival, until aircraft have completely parked.

9.6 Tracking and identifications of airport surface vehicles

9.6.1 To provide tracking and identification of any authorized movement of vehicle operating on runway(s) at Don Mueang International Airport, authorized vehicle should be equipped with mode S squitter box to inform its position when it is on the runway and the squitter box shall be activated at all time until it vacates the runway. However, the mode S squitter box on vehicle is optional, but for safety reason is highly recommended to install it on every vehicle.

10. START UP PROCEDURES

- a. When flight formalities have been completed and the aircraft is ready to start-up, all IFR aircraft are to call Don Mueang Delivery for ATC clearance on frequency 127.7 MHz, giving parking stand number or location and proposed flight level.
- b. Pilots are to call Don Mueang Ground on 121.9 MHz for push back and start-up and should give parking stand number or location and ATIS information.

1. Unless other ATC restriction is imposed, the aircraft must be pushed back within 5 minutes from the time ATC clearance is received otherwise the ATC clearance will be cancelled.

Additionally, in order to provide a more flexible ground traffic movement, all domestic departures shall no longer be required to push back within 5 minutes after clearance received.

2. If the ATC clearance includes a departure time restriction in order to establish longitudinal separation, pilots shall maintain listening watch on Don Mueang Ground in readiness for push back and are to call Don Mueang Ground in the appropriate time with the departure time restriction. Pilots who fail to comply with these requirements or amended departure time restriction will result in cancellation of ATC clearance.

GENERAL (CONTD 6)**11. WARNING FOR TAXIING AIRCRAFT**

- a. Pilots should exercise extreme caution when maneuvering on the apron due to the proximity of other aircraft, ground staff and equipments. In case the point that aircraft assigned to park at terminal contact gates, engine power should be restricted to the absolute minimum required to reduce the adverse effect of jet blast when making the turn to parking bay. Pilots who cannot follow this procedure must stop before making the turn, then request ATC for towing-in. If accident occurred during aircraft taxiing or turning. Pilots and airline operators must take responsibility to all of the damages.
- b. In order to prevent jet blast damage the aircraft parking on area close to taxiway B (North), all taxiing aircraft have to reduce to minimum power while taxiing along taxiway B (North).
- c. Aircraft landing Rwy 21L, when vacating the Rwy to the right on Twy S, must hold short of Rwy 21R at the holding position and remain on Tower frequency 119.1 MHz for permission to cross the Rwy. Changing of frequency shall not be done unless advised. The aircraft shall continuously guard the VHF emergency frequency 121.5 MHz at all times for reasons of safety.

11.1 Allocation of aircraft parking bays

All aircraft parking bays are allocated by Ground/Apron controller with regard to aircraft type and the prevailing or anticipated traffic situation.

11.2 Aircraft marshalling and towing services

The marshalling of scheduled and non-scheduled into the bays either manually and the pushing out of aircraft for departure shall be under the responsibility of the aircraft operator or its appointed ground handling agency.

11.3 Taxiing procedures**11.3.1 Arriving Aircraft**

Aircraft entering the aprons are to follow closely to the taxiway and apron centerlines so as to avoid reducing safety distances between them and parking aircraft.

11.3.2 Departing Aircraft

When start-up clearance is issued by ATC, then push back onto apron centerline and/or abeam centerline of taxiway B.

12. PROVISION OF AERODROME AIR TRAFFIC SERVICES**12.1 Aerodrome air traffic services are generally sectorized as follows:**

- 12.1.1 AD Control Serviced are provide at Air Traffic Control Tower South (TWR-S).
- 12.1.2 Air Traffic Control Tower North (TWR-N) will be used as contingency tower.

13. FUEL DUMPING PROCEDURE AND IN-FLIGHT FUEL MANAGEMENT PROCEDURES**13.1 Introduction**

An aircraft in emergency or other urgent situations may need to dump fuel so as to reduce to maximum landing mass in order to affect a safe landing.

13.2 Fuel Dumping Areas

- 13.2.1 North fuel dumping area: between R-335 and R-355, distance of 30 to 50 NM from BKK VOR, altitude at or above 8500'.
- 13.2.2 East fuel dumping area: between R-090 and R-110, distance of 30 to 50 NM from BKK VOR, altitude at or above 8500'.
- 13.2.3 South fuel dumping area: between R-190 and R-210, distance of 30 to 50 NM from BKK VOR, altitude at or above 8500'.

13.3 In-flight Fuel Management Procedures**13.3.1 Definition**

Minimum fuel: The term used to describe a situation in which an aircraft's fuel supply has reached a state where the flight is committed to land at a specific aerodrome and no additional delay can be accepted.

Mayday fuel: Describes the nature of the distress conditions when the calculated usable fuel predicted to be available upon landing at the nearest aerodrome where a safe landing can be made is less than the planned final reserve fuel.

GENERAL (CONTD 7)

13.3.2 Actions taken by pilot

13.3.2.1 The pilot-in-command shall continually ensure that the amount of usable fuel remaining on board is not less than the fuel required to proceed to an aerodrome where a safe landing can be made with the planned final reserve fuel remaining upon landing.

13.3.2.2 The pilot-in-command shall request delay information from ATC when unanticipated circumstances may result in landing at the destination aerodrome with less than the final reserve fuel plus the fuel required either to proceed to an alternate aerodrome or the fuel required to operate to an isolated aerodrome.

13.3.2.3 The pilot-in-command shall advise ATC of a minimum fuel state by declaring "MINIMUM FUEL" when, having committed to land at a specific aerodrome, the pilot calculates that any changes to the existing clearance to that aerodrome may result in landing with less than planned final reserve fuel.

NOTE 1: The declaration of "MINIMUM FUEL" informs ATC that all planned aerodrome options have been reduced to a specific aerodrome of intended landing and any changes to the existing clearance may result in landing with less than planned final reserve fuel. This is not an emergency situation but an indication that an emergency situation is possible should any additional delays occur.

NOTE 2: It should be noted that Pilots should not expect any form of priority handling as a result of a "MINIMUM FUEL" declaration. ATC will, however, advise the flight crew of any additional expected delays as well as coordinate when transferring control of the aircraft to ensure that other ATC units are aware of the flight's fuel state.

13.3.2.4 The pilot-in-command shall declare a situation of distress related to the amount of fuel available on board the aircraft by broadcasting "MAYDAY, MAYDAY, MAYDAY, FUEL" when the calculated usable fuel predicted to be available upon landing at the nearest aerodrome where a safe landing can be made is less than the planned final reserve fuel.

NOTE 1: The planned final reserve fuel refers to the value calculated in Annex 6 - Operation of Aircraft, Chapter 4, item 4.3.6.3 e) 1) or 2) and is the minimum amount of fuel required upon landing at any aerodrome.

NOTE 2: The words "MAYDAY FUEL" describe the nature of the distress conditions as required in Annex 10, Volume II, Chapter 5.3.2.1, b) 3).

NOTE 3: Guidance on procedures for in-flight fuel management is contained in the Fuel Planning Manual (Doc 9976).

13.3.3 Actions taken by ATC

13.3.3.1 When a pilot reports a state of "MINIMUM FUEL", ATC shall respond to the pilot who indicates or suggests that he is becoming short of fuel or who has declared "MINIMUM FUEL" as follows:

13.3.3.1.1 Inform the pilot of either:

- a) The estimated delay, if pilots are en-route to, joining or are established in holding point such as IAWPs; or
- b) The estimated track mileage, if pilots are being vectored to an instrument approach; or

13.3.3.1.2 Coordinate when transferring control of the aircraft to ensure other ATC units to be aware of the flight's fuel state.

13.3.3.1.3 Standard phraseology

Pilot transmission: (C/S), MINIMUM FUEL

Controller transmission: (C/S), ROGER [NO DELAY EXPECTED or EXPECT (delay information)]

13.3.3.2 When a pilot reports a state of "MAYDAY, MAYDAY, MAYDAY FUEL".

This is an emergency and the aircraft shall be given priority over other traffic in the landing sequence. The aircraft will be committed to a landing, as in the event of any delay or a go-around, there may be insufficient fuel remaining for a safe landing.

13.3.3.2.1 Standard phraseology

Pilot transmission: (C/S) MAYDAY, MAYDAY, MAYDAY FUEL

Controller transmission: (C/S) ROGER MAYDAY

**AIRPORT COLLABORATIVE DECISION MAKING
(A-CDM) AT DON MUEANG INTL AIRPORT**

1. DEFINITION OF TERMS COMMONLY USED IN A-CDM

1.1 Target Off-Block Time (TOBT) - The time that an Aircraft Operator (AO) or Ground Handler (GH) estimates that an aircraft will be ready, all doors closed, boarding bridge removed, push back vehicle available and ready to start-up and push back immediately upon reception of clearance from the Aerodrome Control Tower (TWR).

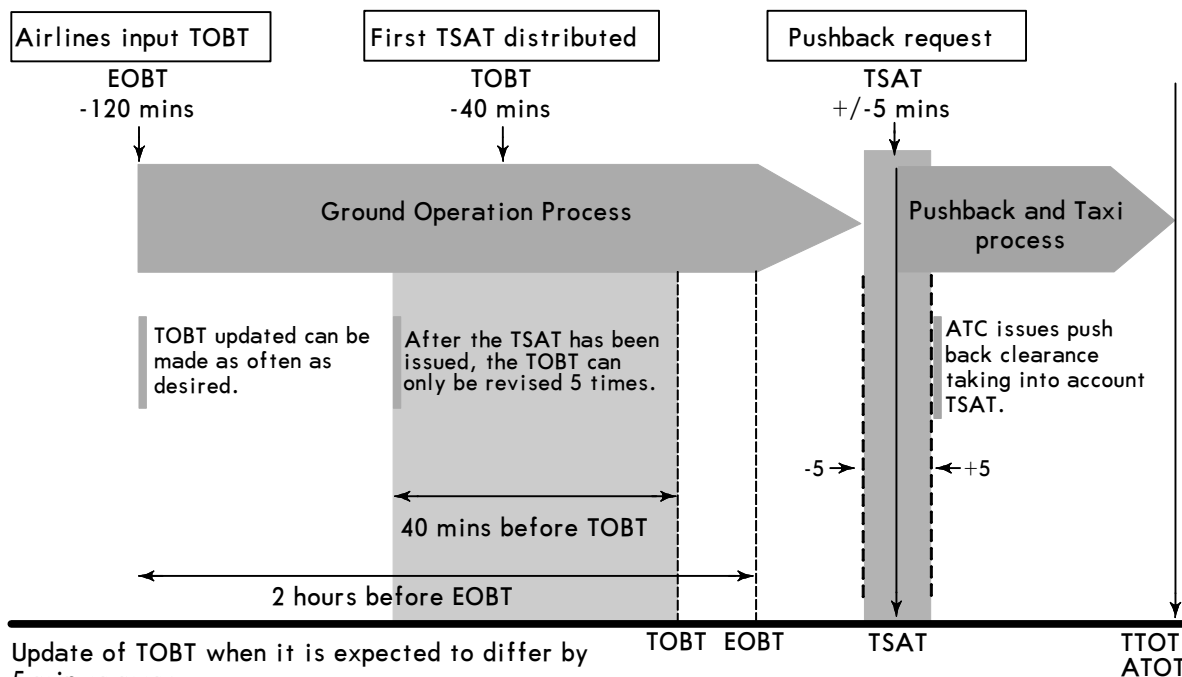
1.2 Target Start-Up Approval Time (TSAT) - The time provided by ATC taking into account TOBT, CTOT and/or the traffic situation that an aircraft can expect start-up/push back approval.

1.3 Calculated Take-Off Time (CTOT) - A time calculated and issued by the appropriate Central Management unit, as a result of tactical slot allocation, at which a flight is expected to become airborne.

2. DON MUEANG A-CDM PROCEDURES

2.1 Don Mueang A-CDM Procedure Overview

The chart below describes the simple overview of the Pre-Departure process at Don Mueang International Airport from the time that airlines input the TOBT to the time that aircraft is airborne. It includes the responsibilities and procedures in brief, as described below.



2.2 Target Off-Block Time (TOBT) Procedures

2.2.1 General

The TOBT is the essential contribution of airlines to the A-CDM process which establishes the Pre-Departure Sequence taking into account operators preferences and operational constraints. Airlines or person responsible for the TOBT are required to access and manually input the TOBT into the A-CDM Portal in order that the start-up approval time (TSAT) can be expected.

AIRPORT COLLABORATIVE DECISION MAKING (A-CDM) AT DON MUEANG INTL AIRPORT(CONTD)

2.2 Target Off-Block Time (TOBT) Procedures (contd)

2.2.2 Person Responsible for TOBT

Airline operator (AO) is responsible for the input of and adherence to the TOBT. However, AO may prefer to delegate this function to ground handler (GH). It is the responsibility of the AO/GH to communicate and ensure that the pilot of a flight has the correct TOBT and TSAT prior to requesting ATC clearance.

AO need to ensure that a timely, accurate and stable TOBT is provided. If it becomes obvious that the TOBT cannot be respected, it shall be updated by the person responsible for the TOBT as early as possible.

2.2.3 TOBT Input and Revision

The following has to be taken into account for the input and/or revision of the TOBT:

- a) The first TOBT can be input at 120 minutes (2 hours) prior to EOBT.
- b) A TOBT input must be at least the present time.
- c) The TOBT revision can be made as often as desired until the TSAT has been issued (40 minutes prior to TOBT).
- d) After the TSAT has been issued, the TOBT can only be revised not more than 5 times to ensure a stable operation.
- e) New TOBT must differ by at least 5 minutes (+/-5 minutes) from the latest input TOBT to protect a stable Pre-Departure Sequence.

2.2.4 Flights with Calculated Take-Off Time (CTOT)

Flights with CTOT will usually take priority when calculating TSATs in order to minimize potential CTOT delay.

2.2.5 TOBT Deletion

- a) TOBT can be deleted by users with permission to input/revise the TOBT.
- b) If the TOBT is deleted, the TSAT is automatically deleted.
- c) The TOBT has to be deleted in the following cases:
 - TOBT is unknown (e.g. technical problems with the aircraft), or
 - The permitted number of TOBT revision (5 times) after the generation of the TSAT has been exceeded.
- d) If a new TOBT is known, the process shall continue and the person responsible for the the TOBT has to enter a new TOBT.

2.2.6 TOBT Reporting Channels

The TOBT is reported or updated by the following ways:

- A-CDM Portal Web Based Application (<https://acdm.airportthai.co.th>)
- A-CDM Portal Mobile Application

2.3 Target Start-Up Approval Time (TSAT) Procedures

2.3.1 General

The TSAT is calculated based on the following key parameters:

- Target Off-Block Time (TOBT)
- Calculated Take-Off Time (CTOT)
- Operational Capacity
- Variable Taxi Time (VTT)
- Parking Stand
- Departure Runway

2.3.2 TSAT Distribution

2.3.2.1 The TSAT is displayed/distributed 40 minutes prior to the TOBT.

2.3.2.2 After TSAT has been distributed, the TOBT can only be revised not more than 5 times to ensure a stable sequence and CTOT allocation.

2.3.2.3 Subsequent TOBT revision triggers a recalculation of TSAT. It should therefore be noted that an incorrect TOBT leads to disadvantages for further sequencing and/or CTOT allocation of regulated flights.

2.3.2.4 The TSAT may not be final and can be revised due to air traffic management.

AIRPORT COLLABORATIVE DECISION MAKING (A-CDM) AT DON MUEANG INTL AIRPORT (CONTD 1)

2.3 Target Start-Up Approval Time (TSAT) Procedures (contd).

2.3.3. TSAT Reporting Channels

2.3.3.1 The TSAT will be issued to airlines or person responsible for TOBT via the same reporting channels as the TOBT:

- A-CDM Portal Web Based Application (<https://acdm.airportthai.co.th>)
- SMS via digital trunked radio system
- A-CDM Portal Mobile Application

2.3.3.2 The AO/GH is responsible for updating and ensuring that the pilot of a flight has the correct TOBT and TSAT prior to requesting ATC clearance.

2.4 Start-Up and Push Back Procedures

2.4.1 General

Start-up and push back approval are issued taking into account the TOBT and TSAT.

The sequence of the start-up and push back request is no longer a factor. The following rules apply:

2.4.2 Start-Up and Push Back Procedures

2.4.2.1 Pilot shall ensure that aircraft is ready for start-up and

a) Push back, or

a) In case of self-maneuvring authorized by Airport Authority, the aircraft shall be ready to power back then taxi or taxi out from parking stand.

Remark:

-For IFR flight, pilot shall contact CDC (127.7MHz) for ATC Clearance within 5 minutes prior to TOBT (Period: TOBT - 5 minutes) and monitor defined ground frequency without delay.

-ATC may verify or advise any changes of TSAT due to air traffic clearance restriction or flow measures.

2.4.2.2 Pilot shall monitor defined ground control frequency in accordance with aircraft parking stand. If there is any change of TSAT, Ground Control will update the pilot as soon as possible.

2.4.2.3 Pilot shall contact Ground Control for start-up and push back within window (TSAT +/- 5 minutes). In case of self-maneuvring operation after start-up completed pilot shall also request power back then taxi or taxi out in a period of TSAT window. When the pilot request for pushing back, these three scenarios may occur:

1. Before TSAT window: Flight will be requested to call again when it is within the TSAT window.
2. Within TSAT window: Flight will be planned for outbound sequence and may expect start-up approval directly or within a few minutes depending on actual operational situation.
3. After TSAT window: The TSAT of the flight has expired. Flight will be denied start-up approval. Pilot has to contact its AO/GH to update the TOBT and shall contact ATC again when TOBT update has resulted in an updated TSAT.

2.4.2.4 Ground Control will issue start-up and push back clearance taking TSAT into account.

Remark:

The aircraft may be allowed to commence push back before the assigned time (TSAT) due to traffic condition such as bay replacement, and etc. However, the flight should not expect an earlier departure time as the planned pre-departure sequence will be maintained.

2.4.2.5 If a flight is unable to push back due to the aircraft being unready, TSAT will be cancelled. Pilot must notify the AO/GH to update the TOBT for a new TSAT.

- a) Non-compliance to initial TSAT may result in an aircraft losing its existing position in the pre-departure sequence. Delays can be expected as a result of re-sequencing based on new TOBT input.
- b) Flight will not be allowed to depart until a valid TOBT is entered and revised TSAT is given and complied with.

VTBD/DMK
DON MUEANG INTL

 **JEPPESEN**
29 MAR 24 (10-1P12)

BANGKOK, THAILAND
AIRPORT BRIEFING

AIRPORT COLLABORATIVE DECISION MAKING (A-CDM) AT DON MUEANG INTL AIRPORT (CONTD 2)

3. A-CDM IN ADVERSE CONDITION

3.1 Adverse Conditions consist of collaborative management of the capacity of an airport during periods of predicted or unpredicted reduction of airport capacity.

The aim is to achieve a common situation awareness for the A-CDM partners, including better information for the passengers, in anticipation of a disruption and expeditious recovery after the disruption.

3.2 In case of adverse conditions or any circumstances where predicted or unpredicted reduction of airport capacity may be expected, the following procedures shall be applied:

3.2.1 The pilot shall contact Ground Control for start-up and push back at TSAT +/- 5 minutes.

3.2.2 If there is any change of TSAT, Ground control will update the pilot accordingly.

4. NON A-CDM OPERATION

4.1 In case of unavailability or maintenance of A-CDM system, TSAT will not be provided and Non A-CDM Operation shall be performed.

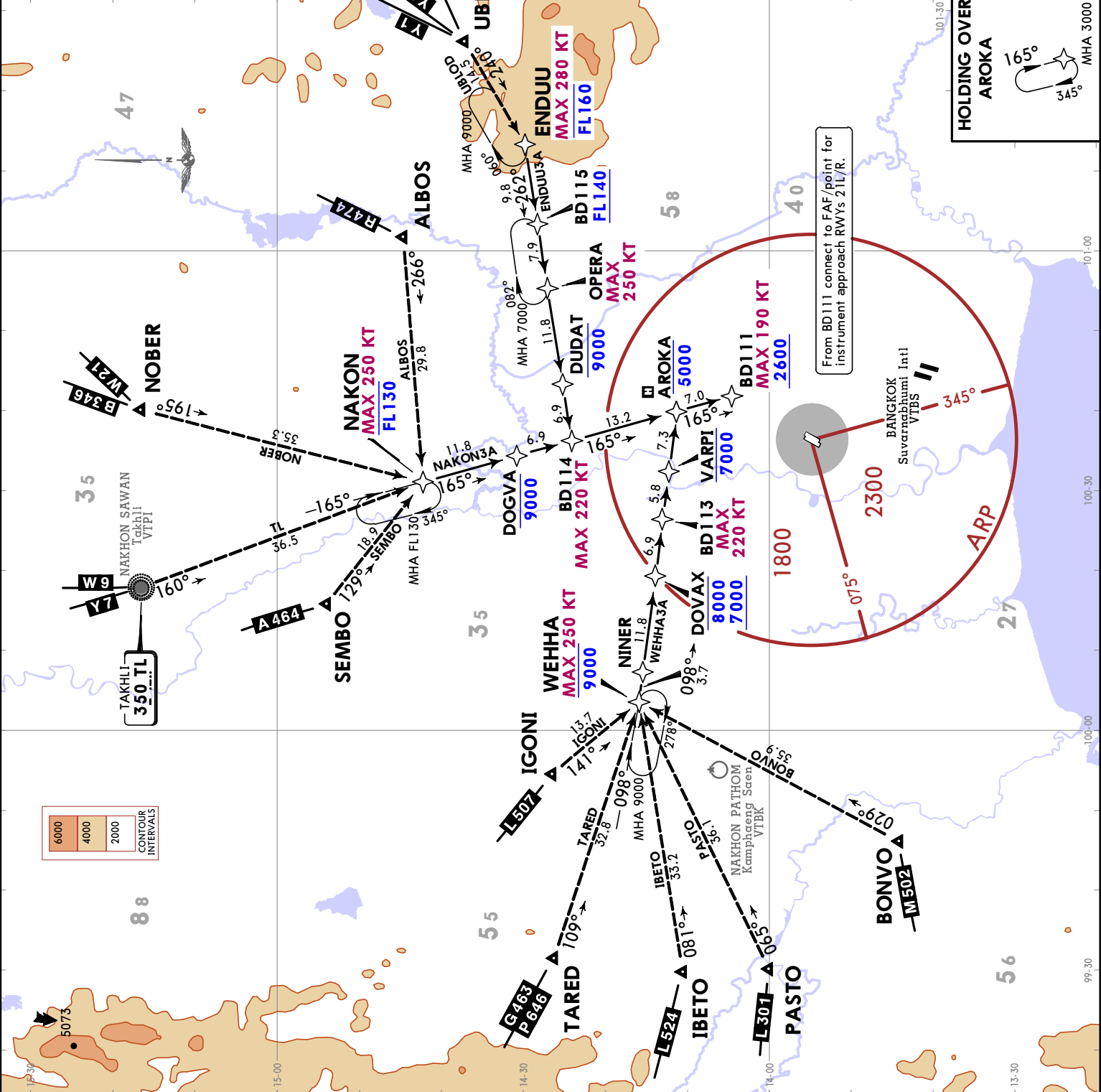
4.2 During period of Non A-CDM Operation, pilot shall request for ATC clearance when the aircraft is ready for pushback. ATC will then issue start-up/pushback clearance on a first-come-first-serve basis.

JEPPESEN BANGKOK, THAILAND
 15 APR 22 **10-2** **EFF 21 APR** **RNAV STAR**

D-ATIS 126.4	Apt Elev 9	Alt Set: hPa Trans level: FL130
RNAV1 required GNSS or DME/DME/IRU required		
1. RADAR required. 2. For non-RNAV equipped aircraft, pilot shall inform ATC in order to get RADAR guidance. 3. Pilot should plan for possible descent as depicted on STAR, actual descent clearance will be given by ATC. 4. If unable to comply with flight restrictions, advise ATC immediately.		

**ENDUU3A [ENDU3A]
 NAKON3A [NAKO3A]
 WEHHA3A [WEHA3A]
 RWYS 21L/R RNAV ARRIVALS**

**SPEED: MAX 250 KT AT OR BELOW
 10000 UNLESS OTHERWISE
 AUTHORIZED BY ATC**



1. Set the aircraft transponder to mode A/C code 7600.
2. Proceed according to the STAR route to AROKA for RWYs 21L/R, descend in accordance with the published all speed and altitude restrictions of the relevant STAR procedure, then at AROKA make a hold as published and MAINTAIN altitude 3000, then carry out the appropriate instrument approach procedure.
3. When an arriving aircraft is being RADAR vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure, pilot should proceed in the most direct manner possible to rejoin the STAR procedure appropriate to its ATIS route and landing direction and then comply with the procedures in item 2. above.

VTBD/DMK DON MUEANG INTL

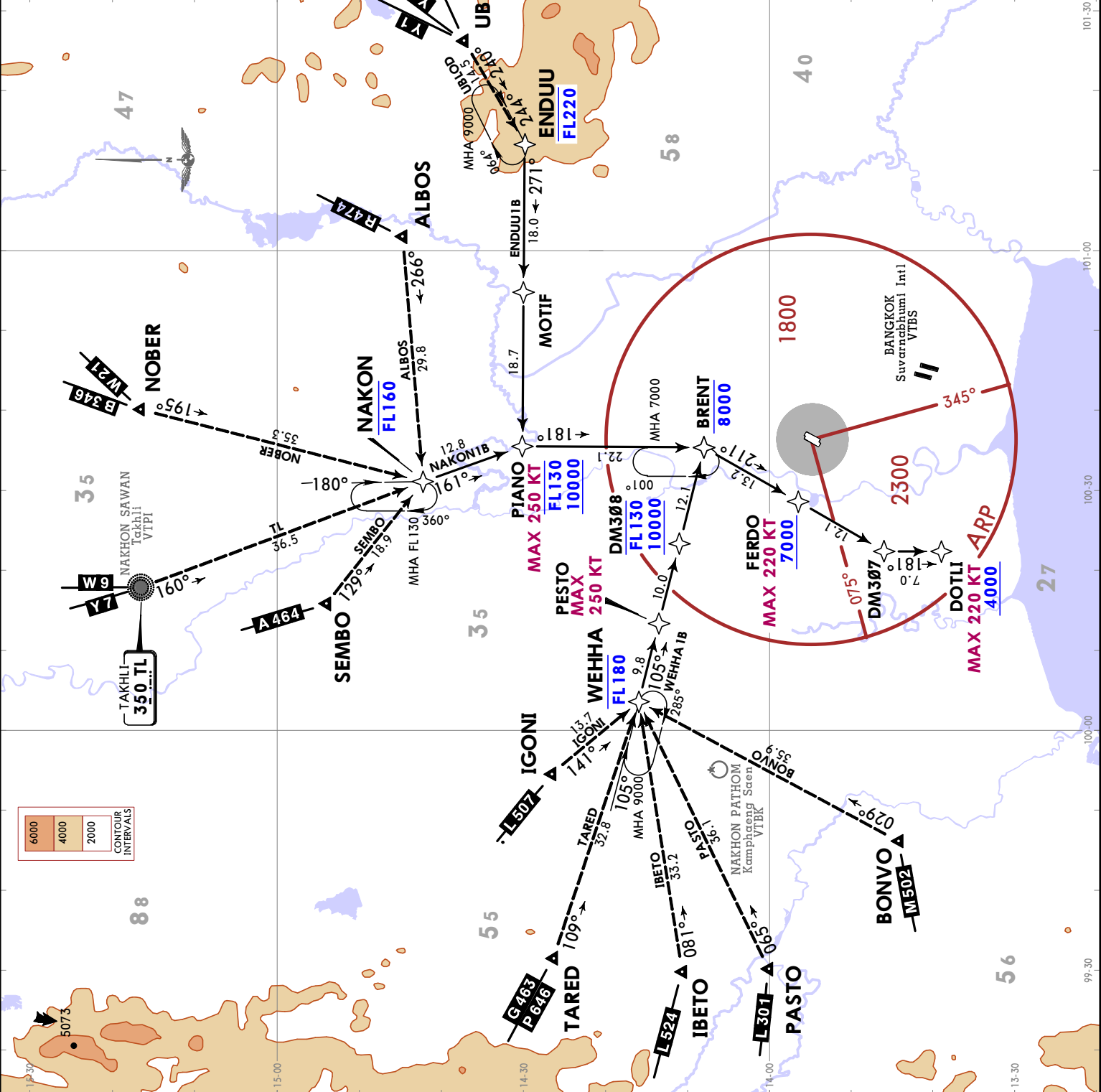
CHANGES: Airway Y-20 added.

JEPPESEN
15 APR 22 (10-2A) Eff 21 Apr
BANGKOK, THAILAND
RNAV STAR

VTBD/DMK
DON MUEANG INTL

D-ATIS 126.4	Apt Elev 9	Alt Set: hPa Trans level: FL130
RNAV1 required GNS5 or DME/DME/IRU required		
1. RADAR required. 2. For non-RNAV equipped aircraft, pilot shall inform ATC in order to get RADAR guidance. 3. Pilot should plan for possible descent as depicted on STAR, actual descent clearance will be given by ATC. 4. If unable to comply with flight restrictions, advise ATC immediately.		

ENDUU1B [ENDUU1B]
NAKON1B [NAKO1B]
WEHHA1B [WEHA1B]
RWYS 03L/R RNAV ARRIVALS
SPEED: MAX 250 KT AT OR BELOW 10000 UNLESS OTHERWISE AUTHORIZED BY ATC



1. Set the aircraft transponder to mode A/C code 7600.
2. Proceed according to the STAR route to DOTLI for RWYs 03L/R, descend in accordance with the published all speed and altitude restrictions of the relevant STAR procedure, then at DOTLI carry out the appropriate instrument approach procedure.
3. When an arriving aircraft is being RADAR vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure, pilot should proceed in the most direct manner possible to rejoin the STAR procedure appropriate to its ATS route and landing direction and then comply with the procedures in Item 2. above.

D-ATIS 126.4 Alt Elev 9 hPa Trans level: FL130

RNAV1 required GNSS or DME/DME/IRU required

1. RADAR required. 2. For non-RNAV equipped aircraft, pilot shall inform ATC in order to get RADAR guidance. 3. Pilot should plan for possible descent as depicted on STAR, actual descent will be given by ATC. 4. If unable to comply with flight restrictions, advise ATC immediately.

SABAI3A [SABA3A]
SEHNA3A [SEHN3A]
RWYS 21L/R RNAV ARRIVALS
SPEED: MAX 250 KT AT OR BELOW
10000 UNLESS OTHERWISE AUTHORIZED BY ATC

ANREN ▲ **L880**
G474

M633
DULEM

GOMES ▲ **R468**
N508

NUGPA ▲ **P629**

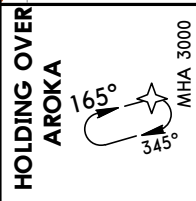
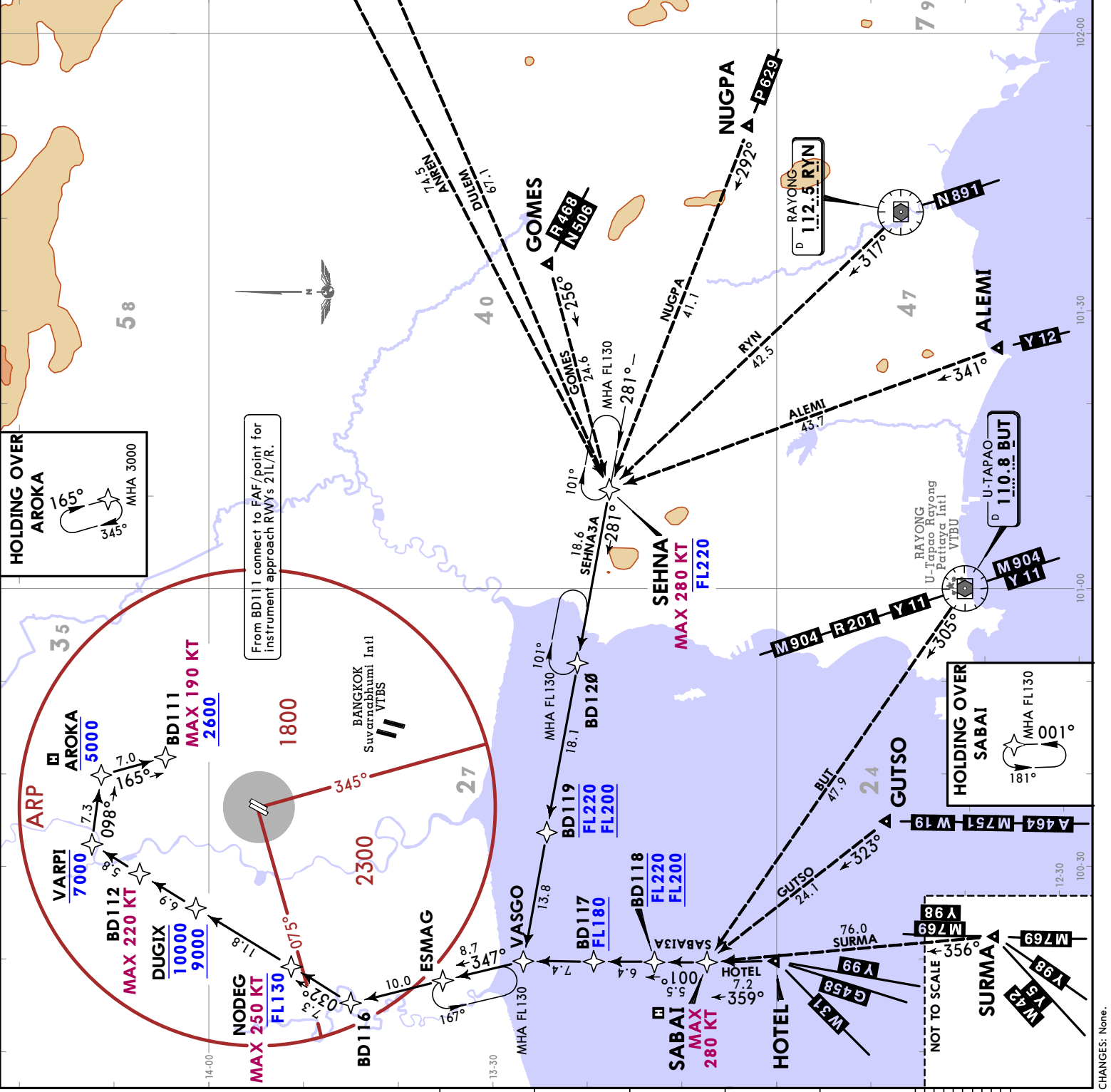
RYN ▲ **D**
112.5 RYN

SEHNA **MAX 280 KT**
FL220

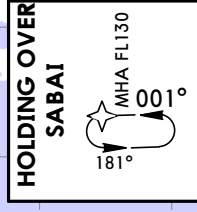
RAYONG
U-Tapao Rayong
Partiaya Intl
VTBU

M904 **R201** **Y11**
U-TAPAO
110.8 BUT

HOLDING OVER SABAI
MHA FL130
100°
181°



From BD111 connect to FAF/point for Instrument approach RWYs 21L/R.



NOT TO SCALE

VTBD/DMK
DON MUEANG INTL

1. Set the aircraft transponder to mode A/C code 7600.

2. Proceed according to the STAR route to AROKA for RWYs 21L/R, descend in accordance with the published all speed and altitude restrictions of the relevant STAR procedure, then at AROKA make a hold as published and MAINTAIN altitude 3000, then carry out the appropriate instrument approach procedure.

3. When an arriving aircraft is being RADAR vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure, pilot should proceed in the most direct manner possible to rejoin the STAR procedure appropriate to its ATS route and landing direction and then comply with the procedures in item 2. above.

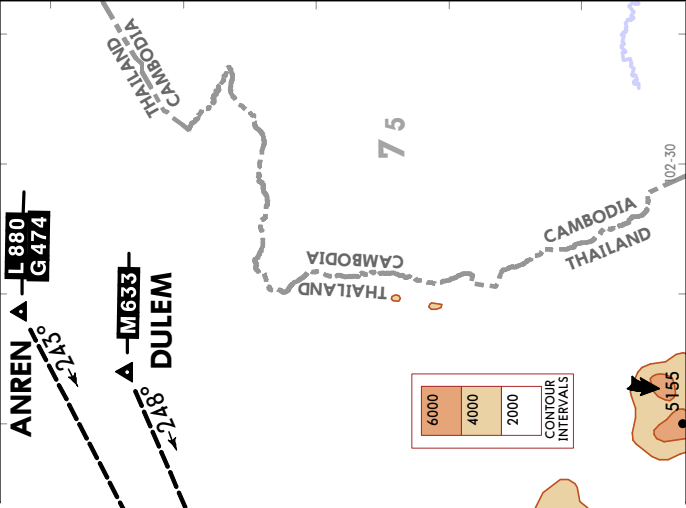
D-ATIS 126.4
Alt Elev 9
Trans level: FL130

RNAV1 required GNS5 or DME/DME/IRU required

1. RADAR required. 2. For non-RNAV equipped aircraft, pilot shall inform ATC in order to get RADAR guidance. 3. Pilot should plan for possible descent as depicted on STAR, actual descent clearance will be given by ATC. 4. If unable to comply with flight restrictions, advise ATC immediately.

SABA11B [SABA1B]
SEHNA1B [SEHNA1B]

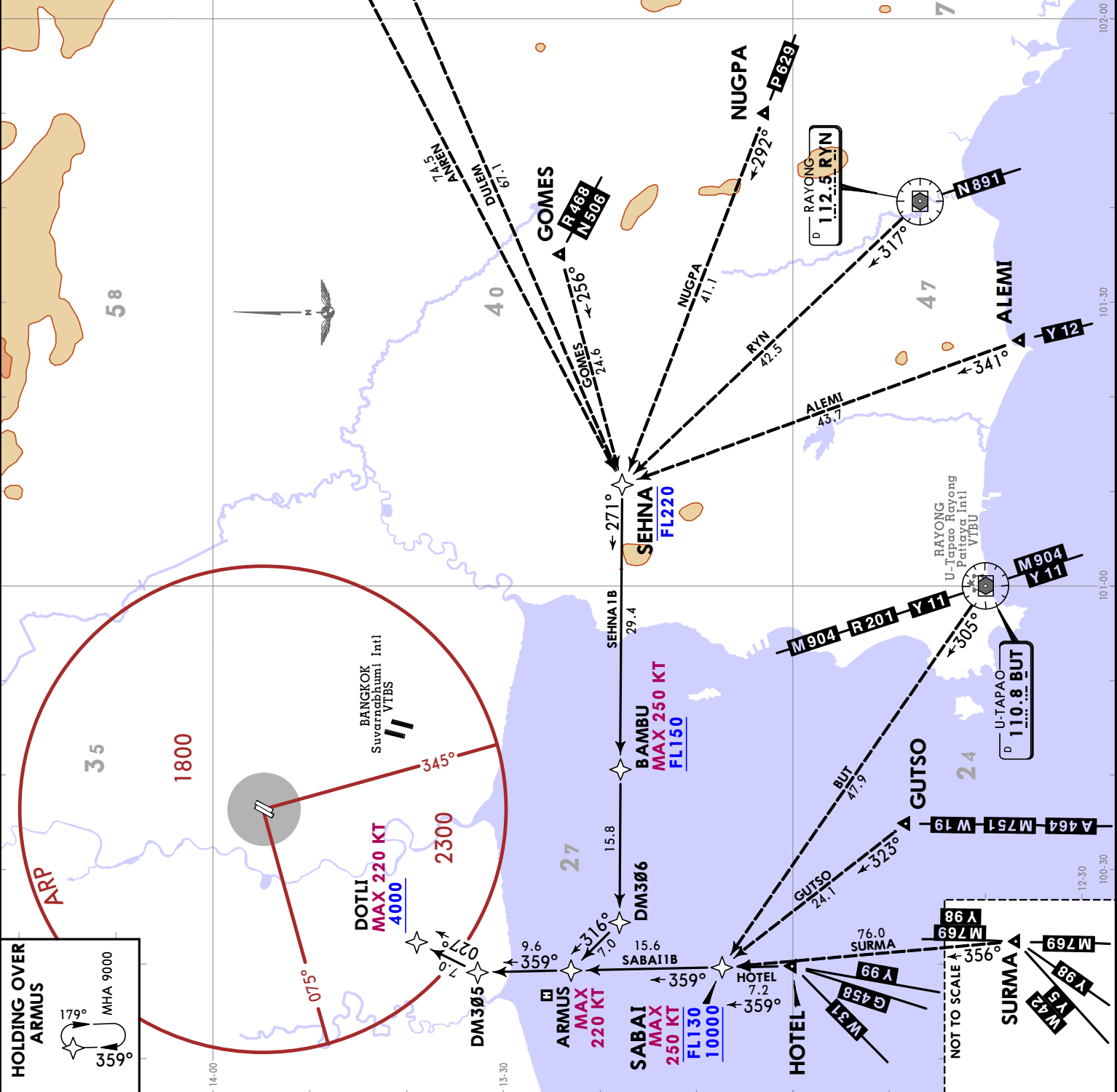
RWYS 03L/R RNAV ARRIVALS
**SPEED: MAX 250 KT AT OR BELOW
10000 UNLESS OTHERWISE
AUTHORIZED BY ATC**



1. Set the aircraft transponder to mode A/C code 7600.

2. Proceed according to the STAR route to DOTLI for RWYs 03L/R, descend in accordance with the published all speed and altitude restrictions of the relevant STAR procedure, then at DOTLI carry out the appropriate instrument approach procedure.

3. When an arriving aircraft is being RADAR vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure, pilot should proceed in the most direct manner possible to rejoin the STAR procedure appropriate to its ATS route and landing direction and then comply with the procedures in item 2. above.



Apt Elev **9** Trans alt: 11000

1. RNAV1 required. 2. GNSS or DME/DME/IRU required. 3. RADAR required.
 4. For non-RNAV equipped aircraft, pilot shall inform ATC in order to get RADAR guidance. 5. Pilot should plan for possible climb as depicted on SID, actual climb clearance will be given by ATC. 6. If unable to comply with flight restrictions, advise ATC when aircraft commences to pushback or taxi to the holding point for departure. 7. No turn before DER. 8. Initial climb clearance 8000 or as directed by ATC.

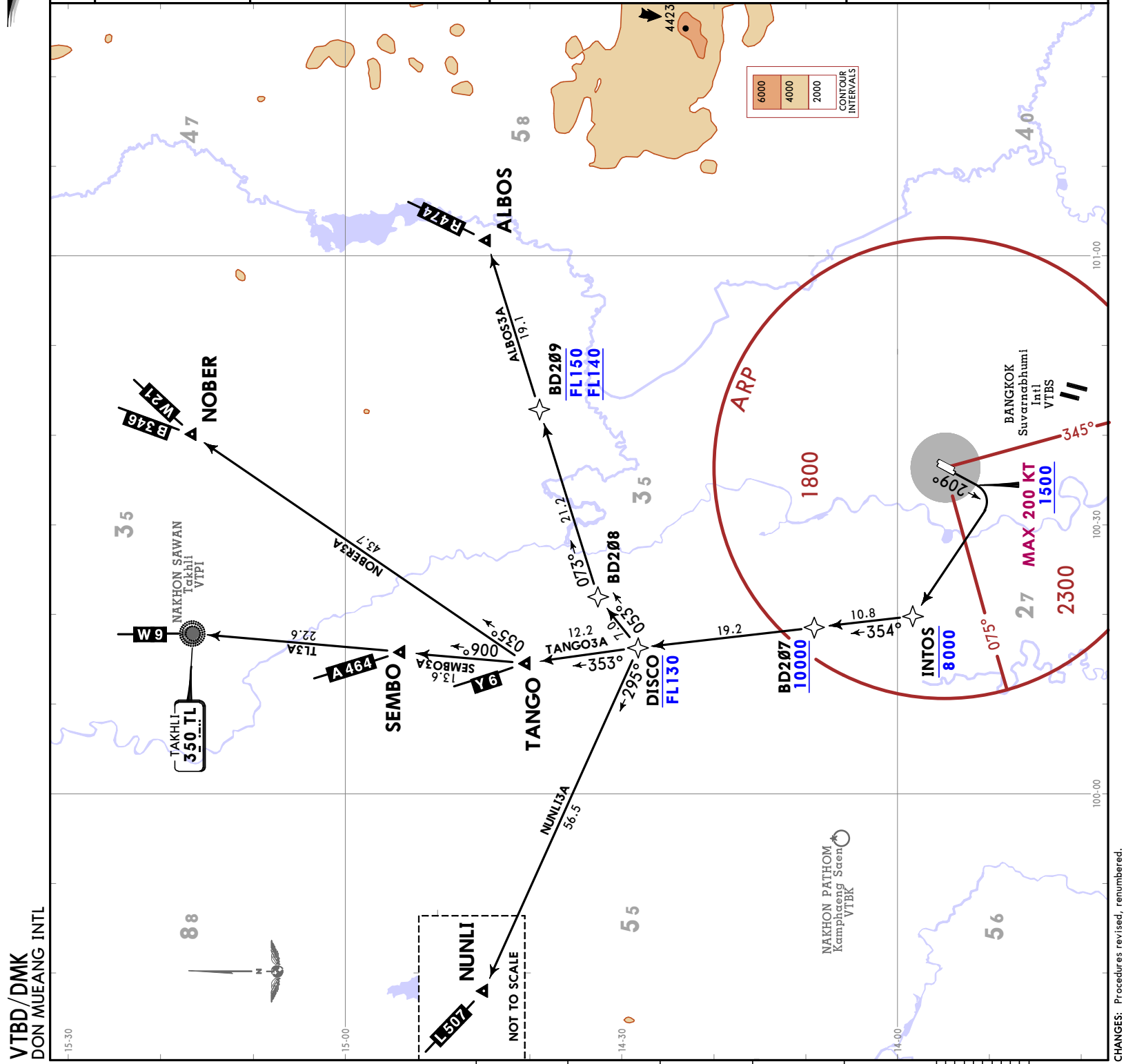
ALBOS3A [ALB03A]
NOBER3A [NOBE3A]
NUNLI3A [NUNL3A]
SEMBO3A [SEMB3A]

TANGO3A [TANG3A], TL3A [TL3A]
RWY 21R RNAV DEPARTURES
SPEED: MAX 250 KT AT OR BELOW
10000 UNLESS OTHERWISE AUTHORIZED BY ATC

COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST
 1. Set the aircraft transponder to mode A/C code 7600.
 2. Comply with the last acknowledged clearance up to the next reporting point in the SID, then climb to the flight planned cruising level in accordance with the published air speed and altitude restrictions of the relevant SID procedure. Thereafter comply with the flight planned routing and level.
 3. When a departing aircraft is being RADAR vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure, the pilot shall MAINTAIN the last assigned heading, speed and level, or minimum flight altitude if higher. After a period of two minutes, the flight shall rejoin in the most direct manner possible to rejoin the SID procedure appropriate to its ATS route or the flight plan route no later than the next significant point. Thereafter comply with the flight planned routing and level.

These SIDs require a minimum climb gradient of 450 per NM (7.4%) until passing 1500 for airspace restrictions only.

Grnd speed-KT	75	100	150	200	250	300
450 per NM	563	750	1125	1500	1875	2250



Apt Elev 9
 Trans alt: 11000

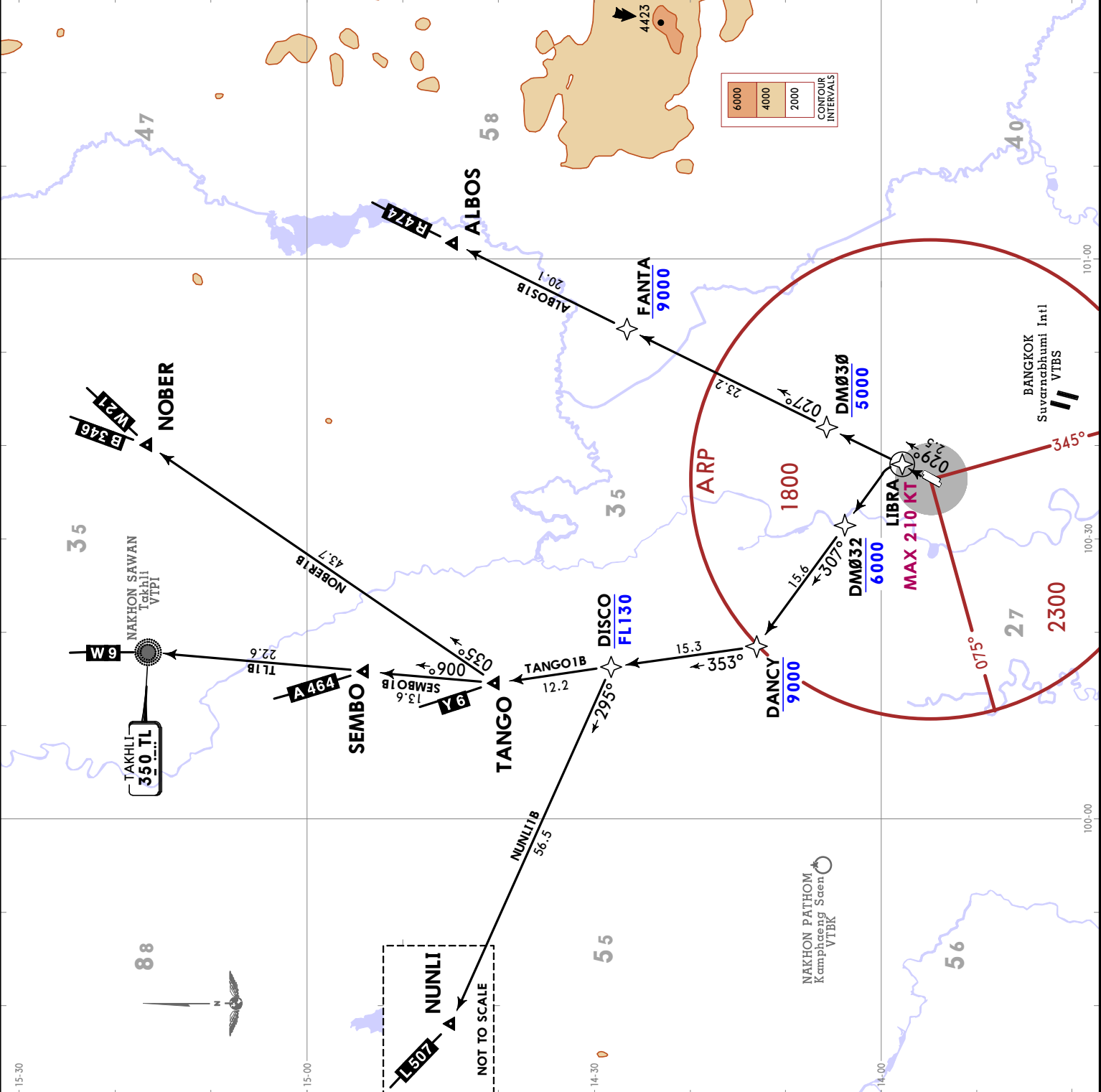
1. RNAV1 required. 2. GNSS or DME/DME/IRU required. 3. RADAR required.
 4. For non-RNAV equipped aircraft, pilot shall inform ATC in order to get RADAR guidance. 5. Pilot should plan for possible climb as depicted on SID, actual climb clearance will be given by ATC. 6. If unable to comply with flight restrictions, advise ATC when aircraft commences to pushback or taxi to the holding point for departure. 7. ALBOS1B: Initial climb clearance 5000 or as directed by ATC. NOBER1B, NUNLI1B, SEMBO1B, TANGO1B, TL1B: Initial climb clearance 6000 or as directed by ATC.

ALBOS1B [ALBO1B]
 NOBER1B [NOBE1B]
 NUNLI1B [NUNL1B]
 SEMBO1B [SEMB1B]
 TANGO1B [TANG1B], TL1B [TL1B]
 RWY 03L RNAV DEPARTURES
SPEED: MAX 250 KT AT OR BELOW 10000 UNLESS OTHERWISE AUTHORIZED BY ATC

COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST
 1. Set the aircraft transponder to mode A/C code 7600.
 2. Comply with the last acknowledged clearance up to the next reporting point in the SID, then climb to the flight planned cruising level in accordance with the published all speed and altitude restrictions of the relevant SID procedure. Thereafter comply with the flight planned routing and level.
 3. When a departing aircraft is being RADAR vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure, the pilot shall MAINTAIN the last assigned heading, speed and level, or minimum flight altitude if higher. After a period of two minutes, the flight shall rejoin in the most direct manner possible to rejoin the SID procedure appropriate to its ATS route or the flight plan route no later than the next significant point. Thereafter comply with the flight planned routing and level.

These SIDs require a minimum climb gradient of 255 per NM (4.2%) until passing LIBRA.

Grnd speed-KT	75	100	150	200	250	300
255 per NM	319	425	638	850	1063	1275



Apt Elev 9
 Trans alt: 11000

1. RNAV1 required. 2. GNSS or DME/DME/IRU required. 3. RADAR required.
 4. For non-RNAV equipped aircraft, pilot shall inform ATC in order to get RADAR guidance. 5. Pilot should plan for possible climb as depicted on SID, actual climb clearance will be given by ATC. 6. If unable to comply with flight restrictions, advise ATC when aircraft commences to pushback or taxi to the holding point for departure. 7. No turn before DER. 8. Initial climb clearance 8000 or as directed by ATC.

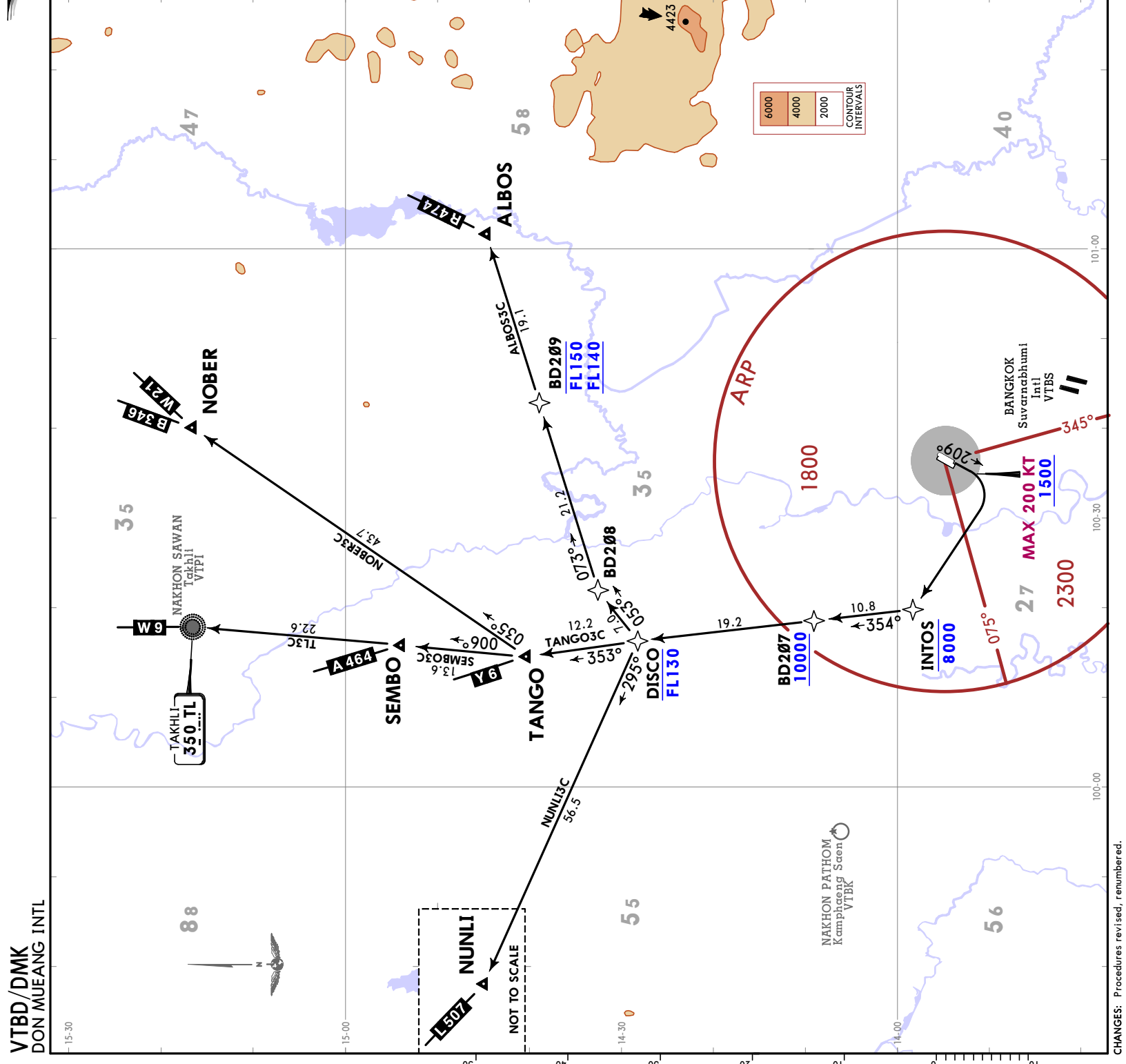
ALBOS3C [ALBOS3C]
NOBER3C [NOBE3C]
NUNL3C [NUNL3C]
SEMBO3C [SEMB3C]

TANGO3C [TANG3C], TL3C [TL3C]
RWY 21L RNAV DEPARTURES
SPEED: MAX 250 KT AT OR BELOW
10000 UNLESS OTHERWISE
AUTHORIZED BY ATC

COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST
 1. Set the aircraft transponder to mode A/C code 7600.
 2. Comply with the last acknowledged clearance up to the next reporting point in the SID, then climb to the flight planned cruising level in accordance with the published all speed and altitude restrictions of the relevant SID procedure. Thereafter comply with the flight planned routing and level.
 3. When a departing aircraft is being RADAR vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure, the pilot shall MAINTAIN the last assigned heading, speed and level, or minimum flight altitude if higher. After a period of two minutes, the flight shall rejoin in the most direct manner possible to rejoin the SID procedure appropriate to its ATS route or the flight plan route no later than the next significant point. Thereafter comply with the flight planned routing and level.

These SIDs require a minimum climb gradient of 425 per NM (7.0%) until passing 1500 for airspace restrictions only.

End speed-KT	75	100	150	200	250	300
425 per NM	531	708	1063	1417	1771	2125



Trans alt: 11000

1. RNAV 1 required. 2. GNSS or DME/DME/IRU required. 3. RADAR required.
 4. For non-RNAV equipped aircraft, pilot shall inform ATC in order to get RADAR guidance. 5. Pilot should plan for possible climb as depicted on SID, actual climb clearance will be given by ATC. 6. If unable to comply with flight restrictions, advise ATC when aircraft commences to pushback or taxi to the holding point for departure. 7. ALBOSID: Initial climb clearance 5000 or as directed by ATC. NOBERID, NUNLID, SEMBOID, TANGOID, TLID: Initial climb clearance 6000 or as directed by ATC.

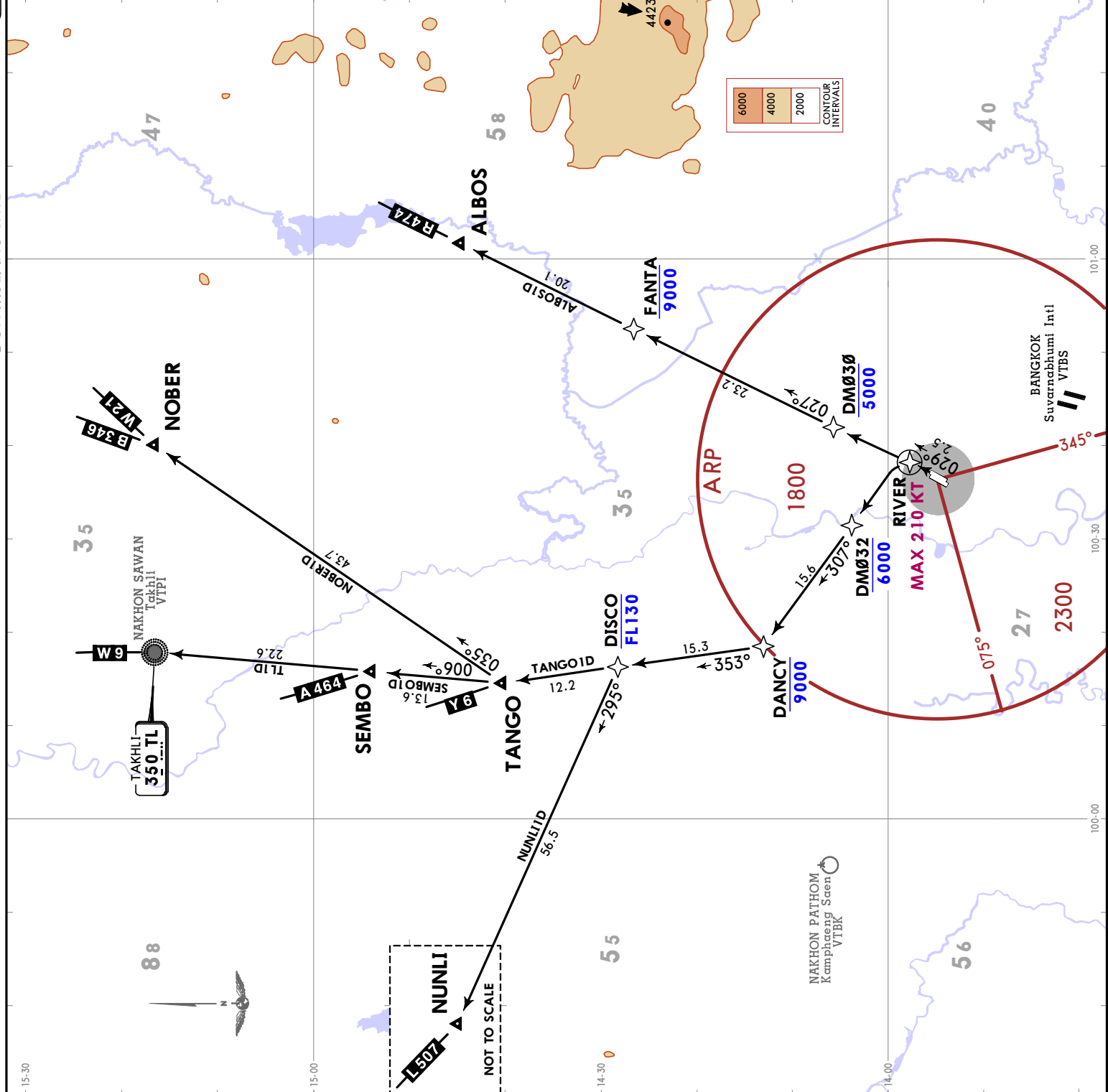
**ALBOSID [ALBO1D]
 NOBERID [NOBE1D]
 NUNLID [NUNL1D]
 SEMBOID [SEMB1D]**

**TANGOID [TANG1D], TLID [TL1D]
 RWY 03R RNAV DEPARTURES
 SPEED: MAX 250 KT AT OR BELOW
 10000 UNLESS OTHERWISE
 AUTHORIZED BY ATC**

COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST
 1. Set the aircraft transponder to mode A/C code 7600.
 2. Comply with the last acknowledged clearance up to the next reporting point in the SID, then climb to the flight planned cruising level in accordance with the published all speed and altitude restrictions of the relevant SID procedure. Thereafter comply with the flight planned routing and level.
 3. When a departing aircraft is being RADAR vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure, the pilot shall MAINTAIN the last assigned heading, speed and level, or minimum flight altitude if higher. After a period of two minutes, the flight shall rejoin in the most direct manner possible to rejoin the SID procedure appropriate to its ATS route or the flight plan route no later than the next significant point. Thereafter comply with the flight planned routing and level.
 LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST

NOBERID, NUNLID, SEMBOID, TANGOID, TLID:
 These SIDs require a minimum climb gradient of 255 per NM (4.2%) until passing RIVER.

Grnd speed-KT	75	100	150	200	250	300
255 per NM	319	425	638	850	1063	1275



Apt Elev **9** Trans alt: 11000

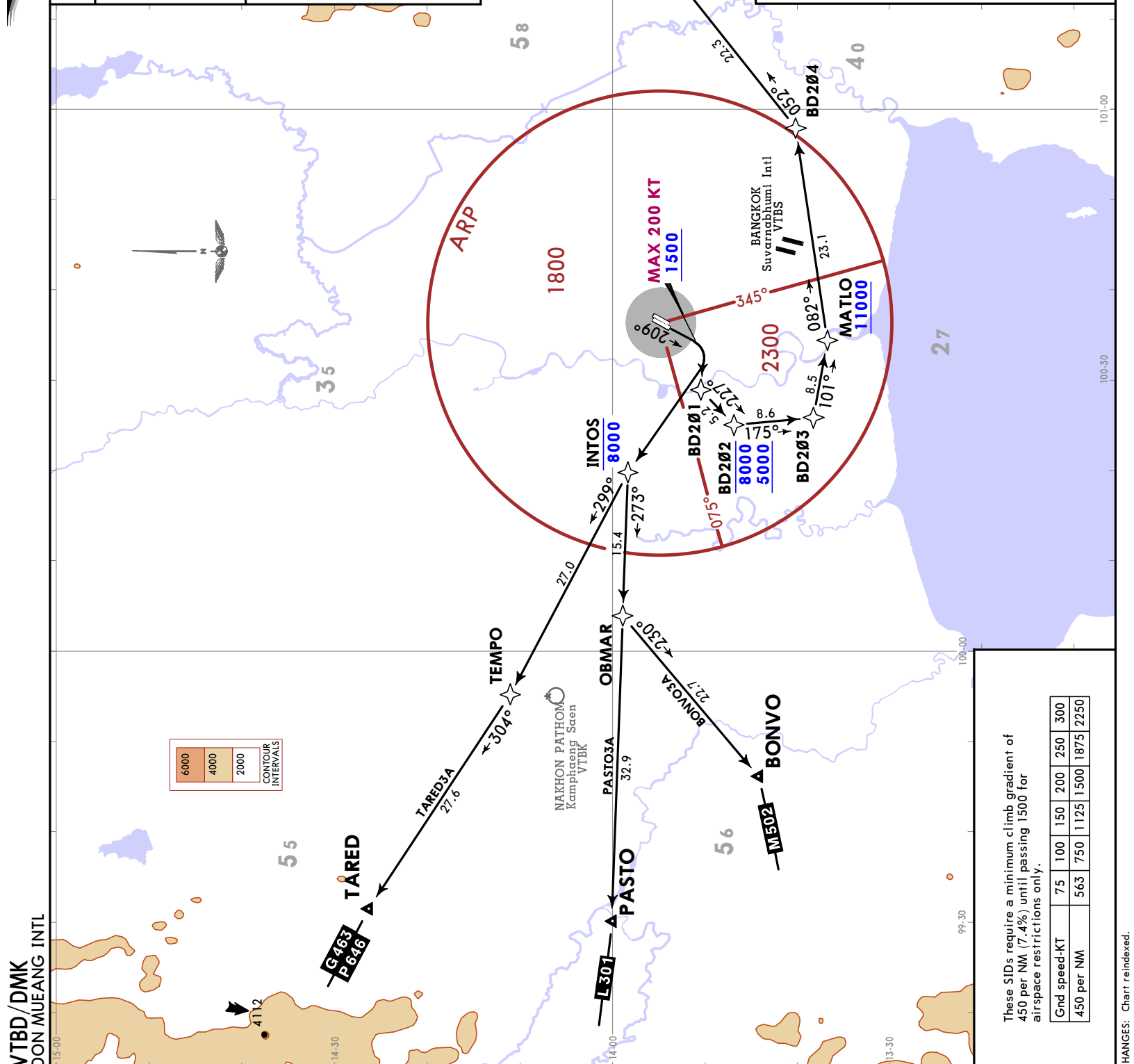
1. RNAV1 required. 2. GNSS or DME/DME/IRU required. 3. RADAR required.
 4. For non-RNAV equipped aircraft, pilot shall inform ATC in order to get RADAR guidance. 5. Pilot should plan for possible climb as depicted on SID, actual climb clearance will be given by ATC. 6. If unable to comply with flight restrictions, advise ATC when aircraft commences to pushback or taxi to the holding point for departure. 7. No turn before DER. 8. Initial climb clearance 8000 or as directed by ATC.

BONVO3A [BONV3A]
PASTO3A [PAST3A]
ROBKA3A [ROBK3A]
TARED3A [TARE3A]
UPKUP3A [UPKU3A]

RWY 21R RNAV DEPARTURES
SPEED: MAX 250 KT AT OR BELOW 10000 UNLESS OTHERWISE AUTHORIZED BY ATC

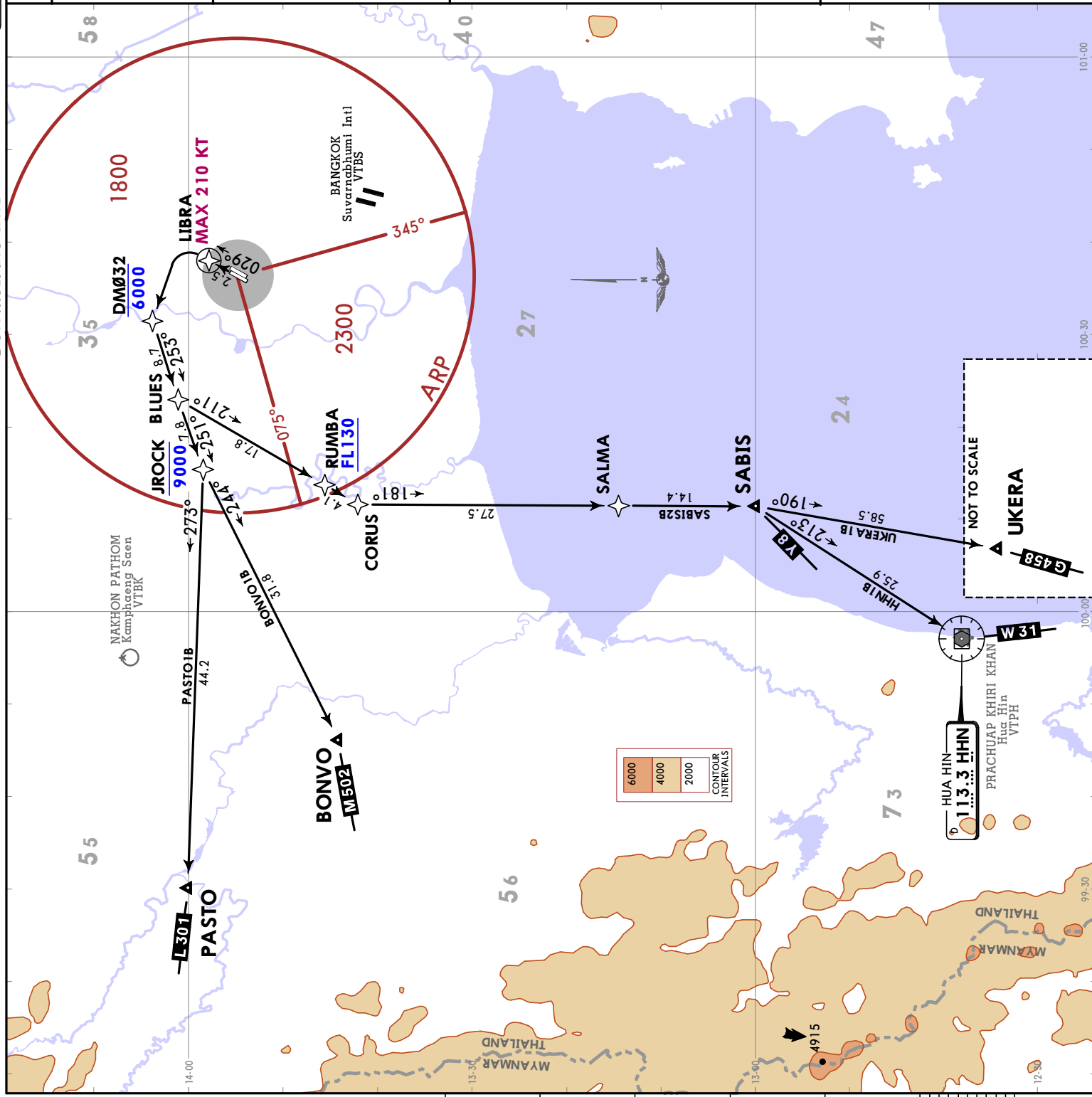
ROBKA ▲ **411**
UPKUP
BD205
BD204
MATLO 11000
BD203
BD202
INTOS 8000
TEMPO
OBMAR
BONV3A
BONVO

101-30
 COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST
 1. Set the aircraft transponder to mode A/C code 7600.
 2. Comply with the last acknowledged clearance up to the next reporting point in the SID, then climb to the flight planned cruising level in accordance with the published all speed and altitude restrictions of the relevant SID procedure. Thereafter comply with the flight planned routing and level.
 3. When a departing aircraft is being RADAR vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure, the pilot shall MAINTAIN the last assigned heading, speed and level, or minimum flight altitude if higher. After a period of two minutes, the flight shall rejoin in the most direct manner possible to rejoin the SID procedure appropriate to its ATS route or the flight plan route no later than the next significant point. Thereafter comply with the flight planned routing and level.



These SIDs require a minimum climb gradient of 450 per NM (7.4%) until passing 1500 for airspace restrictions only.

Gnd speed-KT	75	100	150	200	250	300
450 per NM	563	750	1125	1500	1875	2250



Apt Elev 9
 Trans alt: 11000

1. RNAV1 required. 2. GNSS or DME/DME/IRU required. 3. RADAR required.
 4. For non-RNAV equipped aircraft, pilot shall inform ATC in order to get RADAR guidance. 5. Pilot should plan for possible climb as depicted on SID, actual climb clearance will be given by ATC. 6. If unable to comply with flight restrictions, advise ATC when aircraft commences to pushback or taxi to the holding point for departure. 7. Initial climb clearance 6000 or as directed by ATC.

BONVO1B [BONV1B]
HHN1B [HHN1B]
PASTO1B [PAST1B]
SABIS2B [SABI2B]
UKERA1B [UKER1B]

RWY 03L RNAV DEPARTURES
SPEED: MAX 250 KT AT OR BELOW
10000 UNLESS OTHERWISE
AUTHORIZED BY ATC

COMMS LOST COMMS LOST COMMS LOST COMMS LOST
 1. Set the aircraft transponder to mode A/C code 7600.
 2. Comply with the last acknowledged clearance up to the next reporting point in the SID, then climb to the flight planned cruising level in accordance with the published all speed and altitude restrictions of the relevant SID procedure. Thereafter comply with the flight planned routing and level.
 3. When a departing aircraft is being RADAR vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure, the pilot shall MAINTAIN the last assigned heading, speed and level, or minimum flight altitude if higher. After a period of two minutes, the flight shall rejoin in the most direct manner possible to rejoin the SID procedure appropriate to its ATS route or the flight plan route no later than the next significant point. Thereafter comply with the flight planned routing and level.

These SIDs require minimum climb gradients of BONVO1B, PASTO1B: 255 per NM (4.2%) until passing LIBRA.
 HHN1B, SABIS2B, UKERA1B: 352 per NM (5.8%) until FL130 for airspace restrictions only.

Gnd speed-KT	75	100	150	200	250	300
255 per NM	319	425	638	850	1063	1275
352 per NM	440	587	880	1173	1467	1760

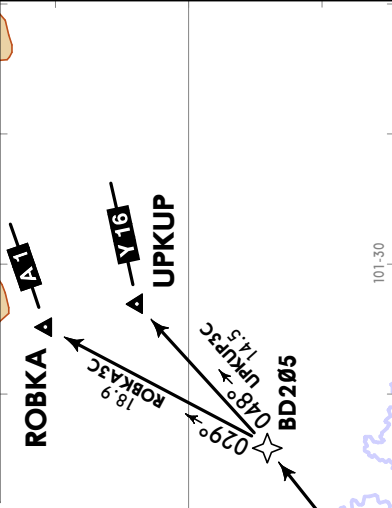
Apt Elev 9
 Trans alt: 11000

1. RNAV1 required. 2. GNSS or DME/DME/IRU required. 3. RADAR required.
 4. For non-RNAV equipped aircraft, pilot shall inform ATC in order to get RADAR guidance. 5. Pilot should plan for possible climb as depicted on SID, actual climb clearance will be given by ATC. 6. If unable to comply with flight restrictions, advise ATC when aircraft commences to pushback or taxi to the holding point for departure. 7. No turn before DER.
 8. Initial climb clearance 8000 or as directed by ATC.

BONVO3C [BONV3C]
PASTO3C [PAST3C]
ROBKA3C [ROBK3C]
TARED3C [TARE3C]
UPKUP3C [UPKU3C]

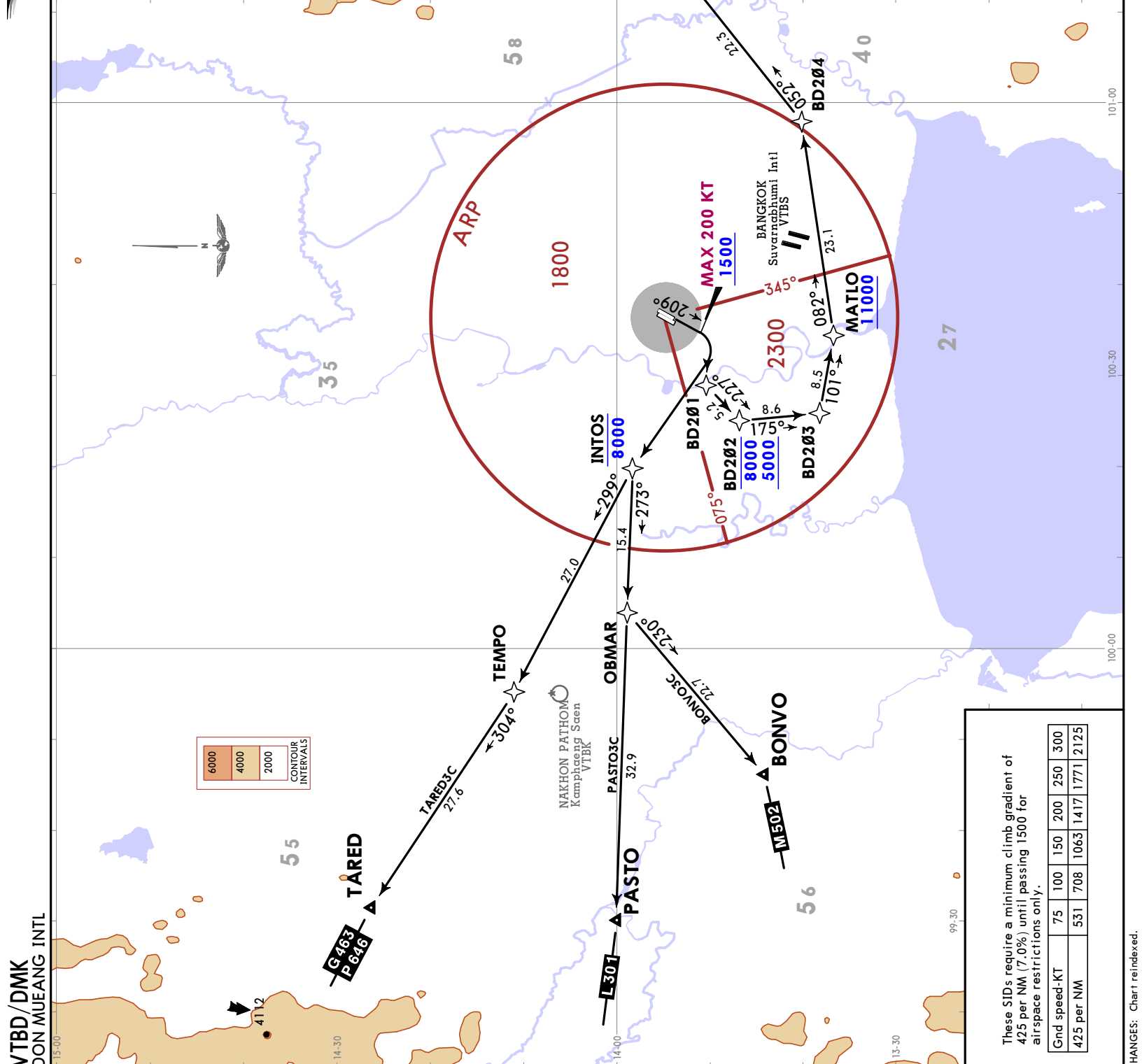
RWY 21L RNAV DEPARTURES

SPEED: MAX 250 KT AT OR BELOW 10000 UNLESS OTHERWISE AUTHORIZED BY ATC



COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST
 101-30

1. Set the aircraft transponder to mode A/C code 7600.
 2. Comply with the last acknowledged clearance up to the next reporting point in the SID, then climb to the flight planned cruising level in accordance with the published all speed and altitude restrictions of the relevant SID procedure. Thereafter comply with the flight planned routing and level.
 3. When a departing aircraft is being RADAR vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure, the pilot shall MAINTAIN the last assigned heading, speed and level, or minimum flight altitude if higher. After a period of two minutes, the flight shall rejoin in the most direct manner possible to its ATS route or the flight plan route no later than the next significant point. Thereafter comply with the flight planned routing and level.



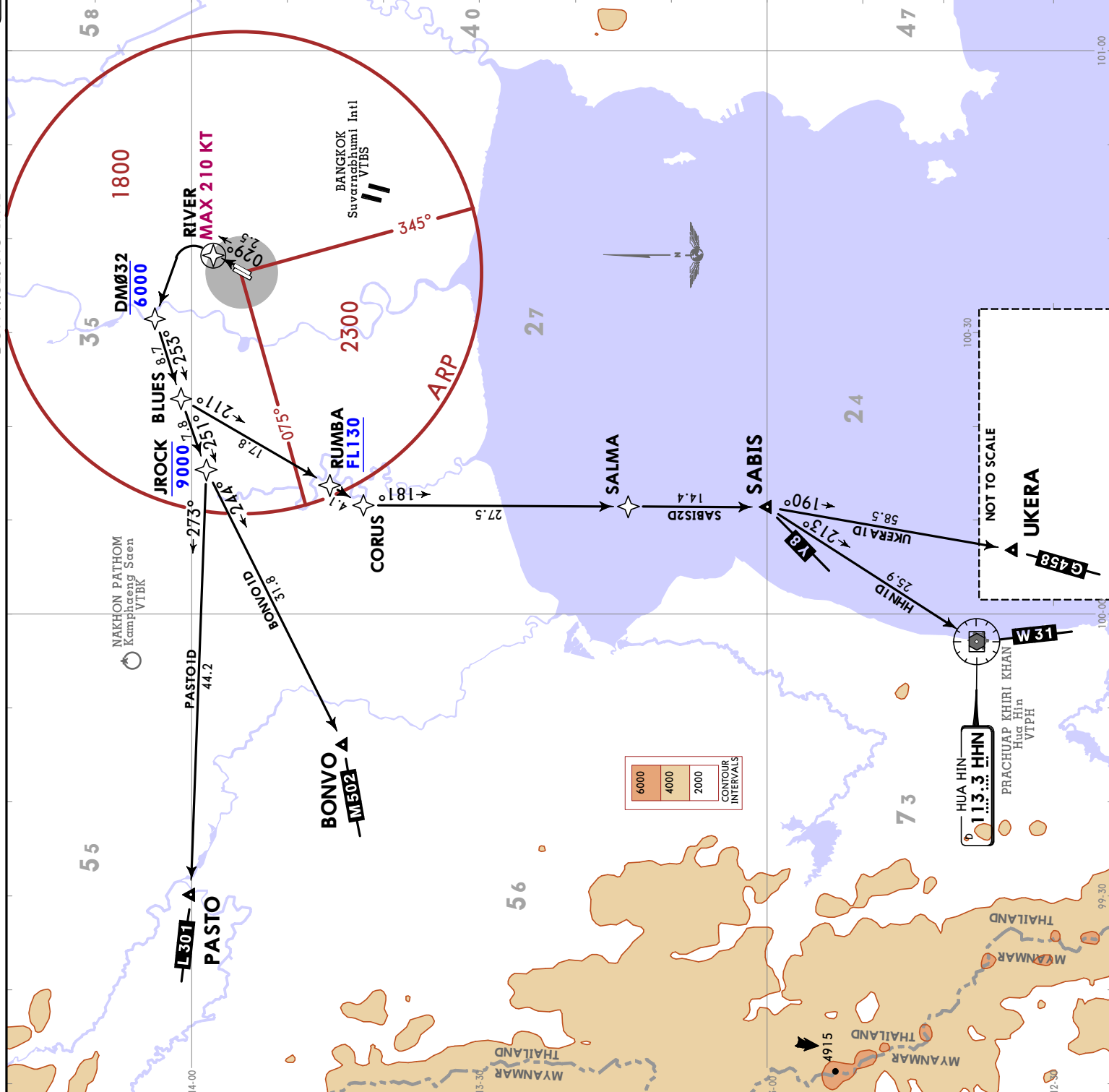
6000
4000
2000

CONTOUR INTERVALS

These SIDs require a minimum climb gradient of 425 per NM (7.0%) until passing 1500 for airspace restrictions only.

Gnd speed-KT	75	100	150	200	250	300
425 per NM	531	708	1063	1417	1771	2125

Apt Elev 9	Trans alt: 11000	<p>1. RNAV1 required. 2. GNSS or DME/DME/IRU required. 3. RADAR required.</p> <p>4. For non-RNAV equipped aircraft, pilot shall inform ATC in order to get RADAR guidance. 5. Pilot should plan for possible climb as depicted on SID, actual climb clearance will be given by ATC. 6. If unable to comply with flight restrictions, advise ATC when aircraft commences to pushback or taxi to the holding point for departure. 7. Initial climb clearance 6000 or as directed by ATC.</p>																					
		<p>BONVO1D [BONV1D] HHN1D [HHN1D] PASTO1D [PAST1D] SABIS2D [SABI2D] UKERA1D [UKER1D]</p> <p>RWY 03R RNAV DEPARTURES SPEED: MAX 250 KT AT OR BELOW 10000 UNLESS OTHERWISE AUTHORIZED BY ATC</p>																					
		<p>COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST 1. Set the aircraft transponder to mode A/C code 7600. 2. Comply with the last acknowledged clearance up to the next reporting point in the SID, then climb to the flight planned cruising level in accordance with the published all speed and altitude restrictions of the relevant SID procedure. Thereafter comply with the flight planned routing and level. 3. When a departing aircraft is being RADAR vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure, the pilot shall MAINTAIN the last assigned heading, speed and level, or minimum flight altitude if higher. After a period of two minutes, the flight shall rejoin in the most direct manner possible to its ATS route or the flight plan route no later than the next significant point. Thereafter comply with the flight planned routing and level.</p>																					
		<p>These SIDs require minimum climb gradients of BONVO1D, PASTO1D: 255 per NM (4.2%) until passing RIVER. HHN1D, SABIS2D, UKERA1D: 352 per NM (5.8%) until FL130 for airspace restrictions only.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Grnd speed-KT</td> <td>75</td> <td>100</td> <td>150</td> <td>200</td> <td>250</td> <td>300</td> </tr> <tr> <td>255 per NM</td> <td>319</td> <td>425</td> <td>638</td> <td>850</td> <td>1063</td> <td>1275</td> </tr> <tr> <td>352 per NM</td> <td>440</td> <td>587</td> <td>880</td> <td>1173</td> <td>1467</td> <td>1760</td> </tr> </table>	Grnd speed-KT	75	100	150	200	250	300	255 per NM	319	425	638	850	1063	1275	352 per NM	440	587	880	1173	1467	1760
Grnd speed-KT	75	100	150	200	250	300																	
255 per NM	319	425	638	850	1063	1275																	
352 per NM	440	587	880	1173	1467	1760																	



Apt Elev 9
 Trans alt: 11000

1. RNAV1 required. 2. GNSS or DME/DME/IRU required. 3. RADAR required.
 4. For non-RNAV equipped aircraft, pilot shall inform ATC in order to get RADAR guidance. 5. Pilot should plan for possible climb as depicted on SID, actual climb clearance will be given by ATC. 6. If unable to comply with flight restrictions, advise ATC when aircraft commences to pushback or taxi to the holding point for departure. 7. No turn before DER. 8. Initial climb clearance 8000 or as directed by ATC.

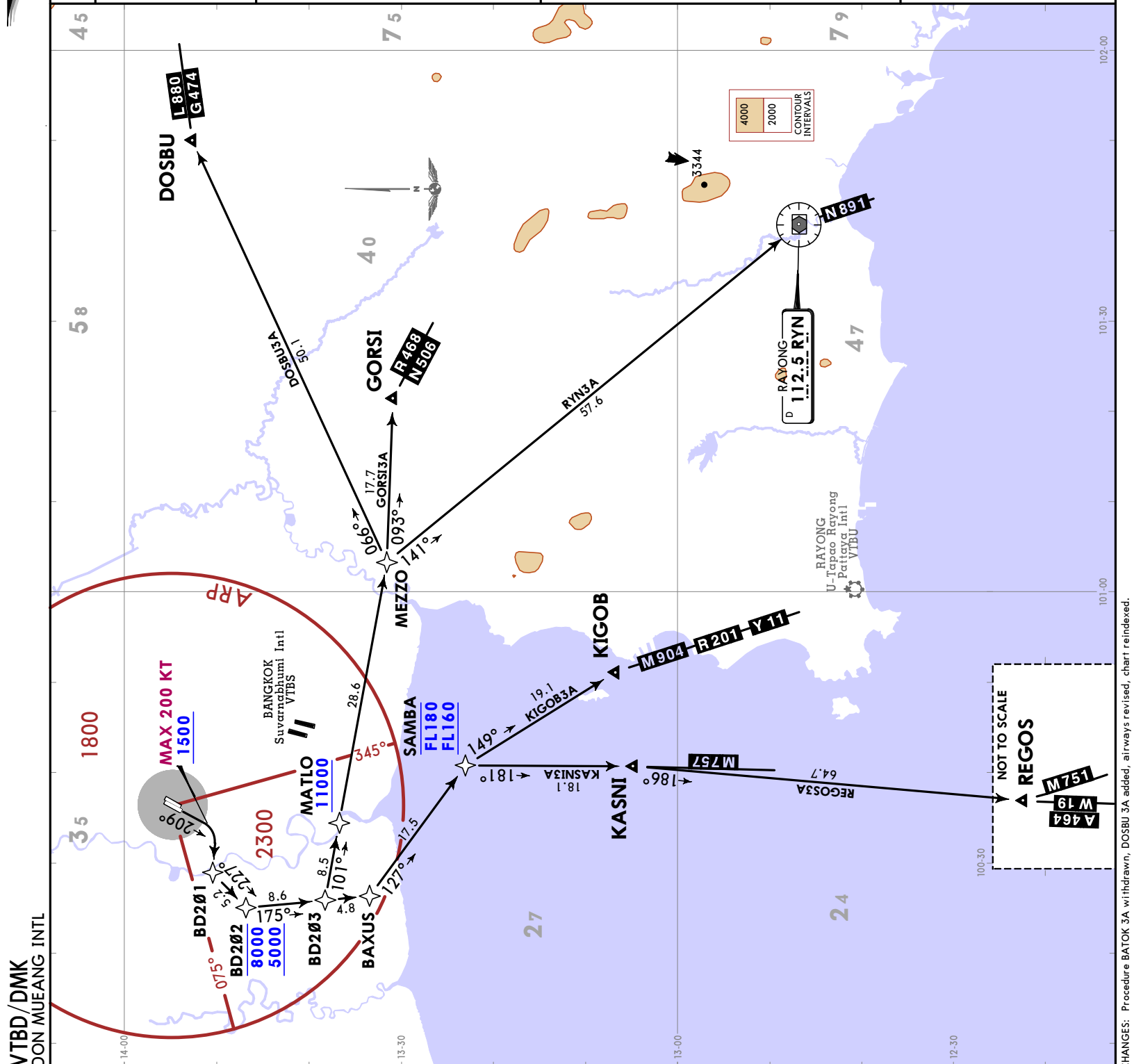
DOSBU3A [DOSB3A]
GORSI3A [GORS3A]
KASNI3A [KASN3A]
KIGOB3A [KIGO3A]
REGOS3A [REGO3A]
RYN3A [RYN3A]

RWY 21R RNAV DEPARTURES
SPEED: MAX 250 KT AT OR BELOW
10000 UNLESS OTHERWISE
AUTHORIZED BY ATC

- COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST
 LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST
1. Set the aircraft transponder to mode A/C code 7600.
 2. Comply with the last acknowledged clearance up to the next reporting point in the SID, then climb to the flight planned cruising level in accordance with the published all speed and altitude restrictions of the relevant SID procedure. Thereafter comply with the flight planned routing and level.
 3. When a departing aircraft is being RADAR vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure, the pilot shall MAINTAIN the last assigned heading, speed and level, or minimum flight altitude if higher. After a period of two minutes, the flight shall rejoin in the most direct manner possible to rejoin the SID procedure appropriate to its ATS route or the flight plan route no later than the next significant point. Thereafter comply with the flight planned routing and level.
- LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST

These SIDs require a minimum climb gradient of 450 per NM (7.4%) until passing 1500 for airspace restrictions only.

Grnd speed-KT	75	100	150	200	250	300
450 per NM	563	750	1125	1500	1875	2250



Apt Elev 9
Trans alt: 11000

1. RNAV1 required. 2. GNSS or DME/DME/IRU required. 3. RADAR required.
4. For non-RNAV equipped aircraft, pilot shall inform ATC in order to get RADAR guidance. 5. Pilot should plan for possible climb as depicted on SID, actual climb clearance will be given by ATC. 6. If unable to comply with flight restrictions, advise ATC when aircraft commences to pushback or taxi to the holding point for departure. 7. Initial climb clearance 6000 or as directed by ATC.

DOSBU1B [DOSB1B]
GORSI1B [GORS1B]
KASNI1B [KASN1B]
KIGOB1B [KIGO1B]
REGOS1B [REGO1B]
RYN1B [RYN1B]

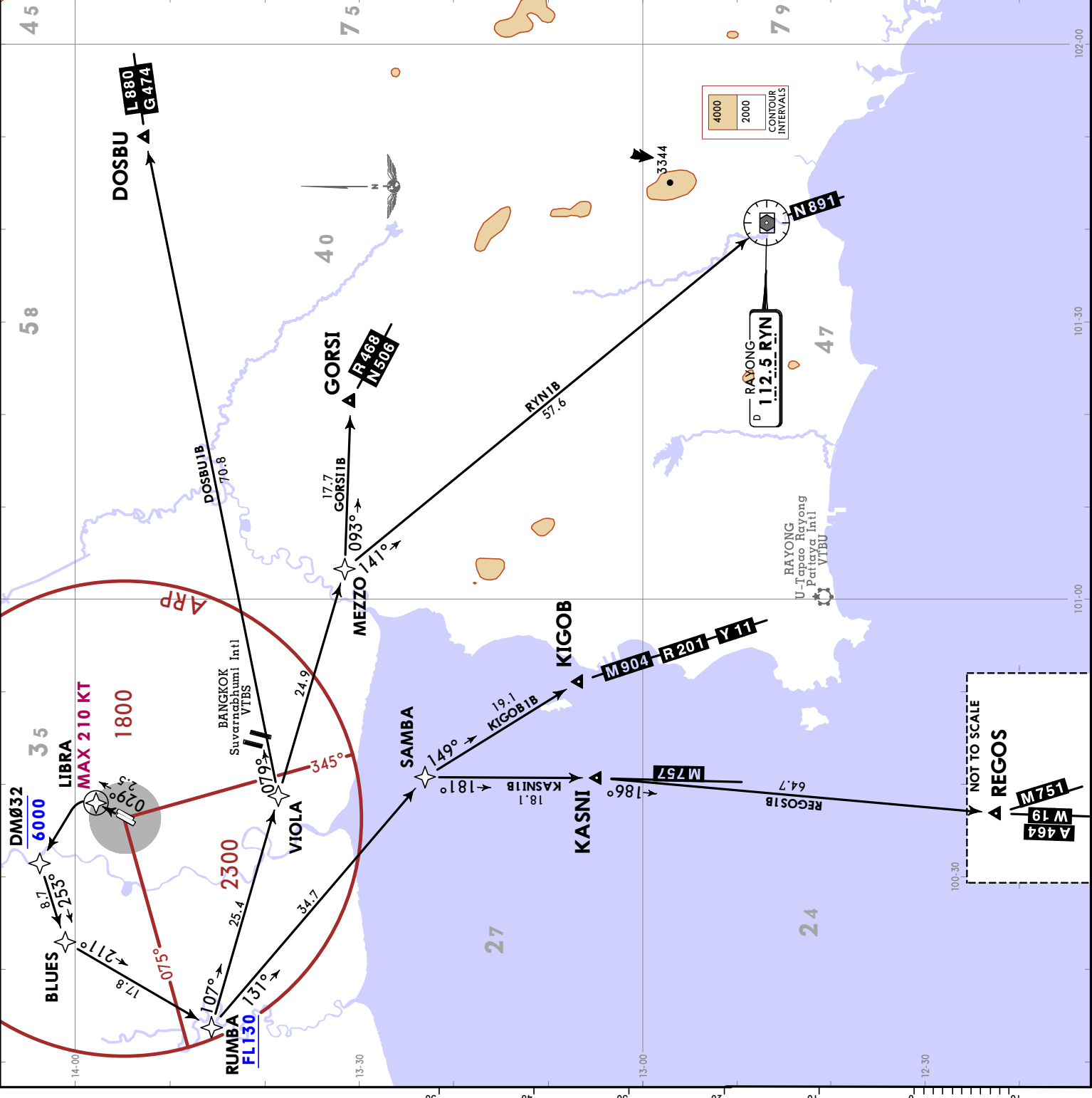
RWY 03L RNAV DEPARTURES
SPEED: MAX 250 KT AT OR BELOW
10000 UNLESS OTHERWISE
AUTHORIZED BY ATC

COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST
1. Set the aircraft transponder to mode A/C code 7600.
2. Comply with the last acknowledged clearance up to the next reporting point in the SID, then climb to the flight planned cruising level in accordance with the published all speed and altitude restrictions of the relevant SID procedure. Thereafter comply with the flight planned routing and level.
3. When a departing aircraft is being RADAR vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure, the pilot shall MAINTAIN the last assigned heading, speed and level, or minimum flight altitude if higher. After a period of two minutes, the flight shall rejoin in the most direct manner possible to rejoin the SID procedure appropriate to its ATS route or the flight plan route no later than the next significant point. Thereafter comply with the flight planned routing and level.

LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST

These SIDs require a minimum climb gradient of 352 per NM (5.8%) until FL130 for airspace restrictions only.

Gnd speed-KT	75	100	150	200	250	300
352 per NM	440	587	880	1173	1467	1760



Apt Elev 9
 Trans alt: 11000

1. RNAV1 required. 2. GNSS or DME/DME/IRU required. 3. RADAR required.
 4. For non-RNAV equipped aircraft, pilot shall inform ATC in order to get RADAR guidance. 5. Pilot should plan for possible climb as depicted on SID, actual climb clearance will be given by ATC. 6. If unable to comply with flight restrictions, advise ATC when aircraft commences to pushback or taxi to the holding point for departure. 7. No turn before DER.
 8. Initial climb clearance 8000 or as directed by ATC.

DOSBU3C [DOSB3C]
GORSI3C [GORS3C]
KASNI3C [KASN3C]
KIGOB3C [KIGO3C]
REGOS3C [REGO3C]
RYN3C [RYN3C]

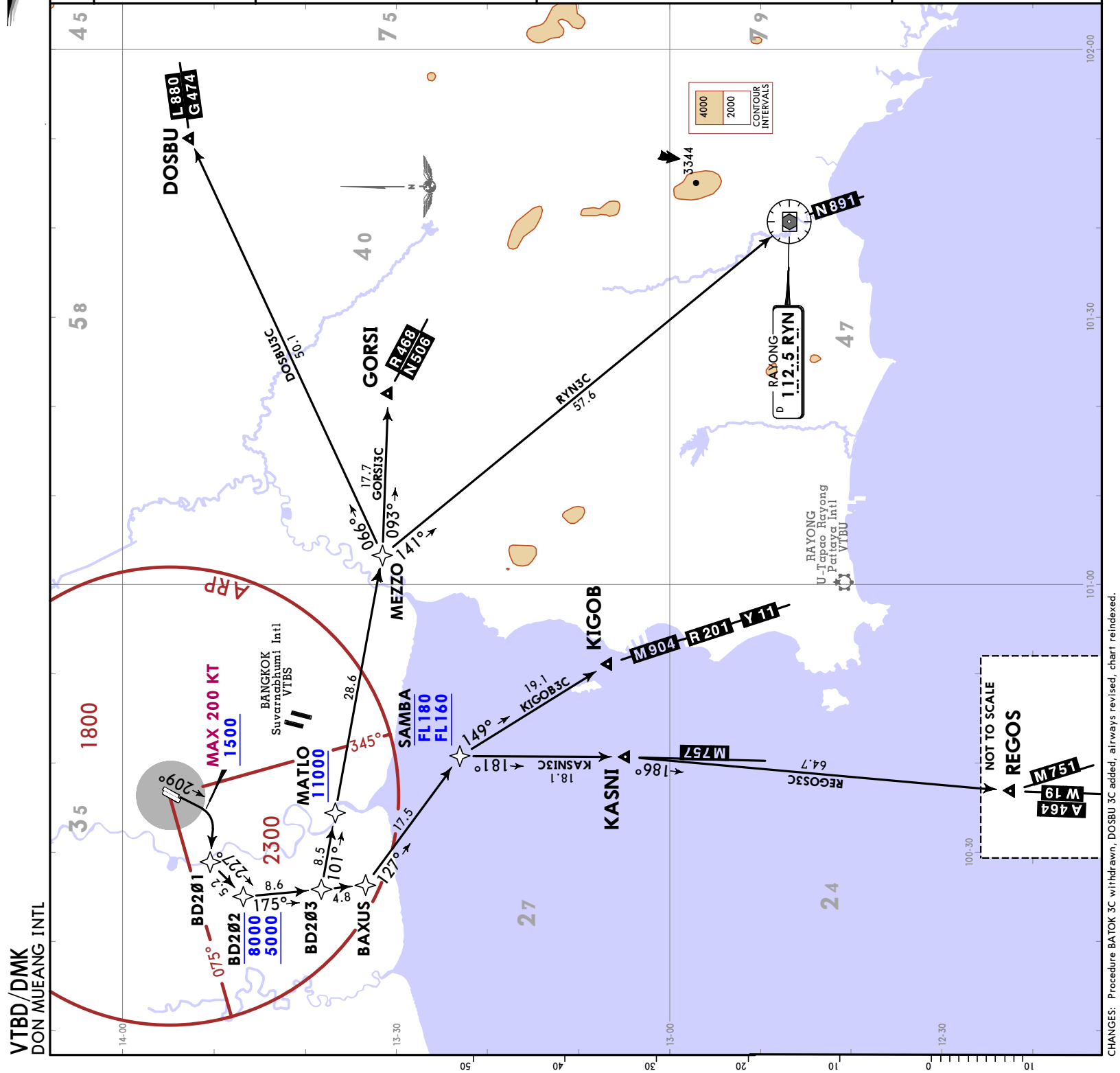
RWY 21L RNAV DEPARTURES
SPEED: MAX 250 KT AT OR BELOW
10000 UNLESS OTHERWISE AUTHORIZED BY ATC

COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST
 1. Set the aircraft transponder to mode A/C code 7600.
 2. Comply with the last acknowledged clearance up to the next reporting point in the SID, then climb to the flight planned cruising level in accordance with the published all speed and altitude restrictions of the relevant SID procedure. Thereafter comply with the flight planned routing and level.
 3. When a departing aircraft is being RADAR vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure, the pilot shall MAINTAIN the last assigned heading, speed and level, or minimum flight altitude if higher. After a period of two minutes, the flight shall rejoin in the most direct manner possible to rejoin the SID procedure appropriate to its ATS route or the flight plan route no later than the next significant point. Thereafter comply with the flight planned routing and level.

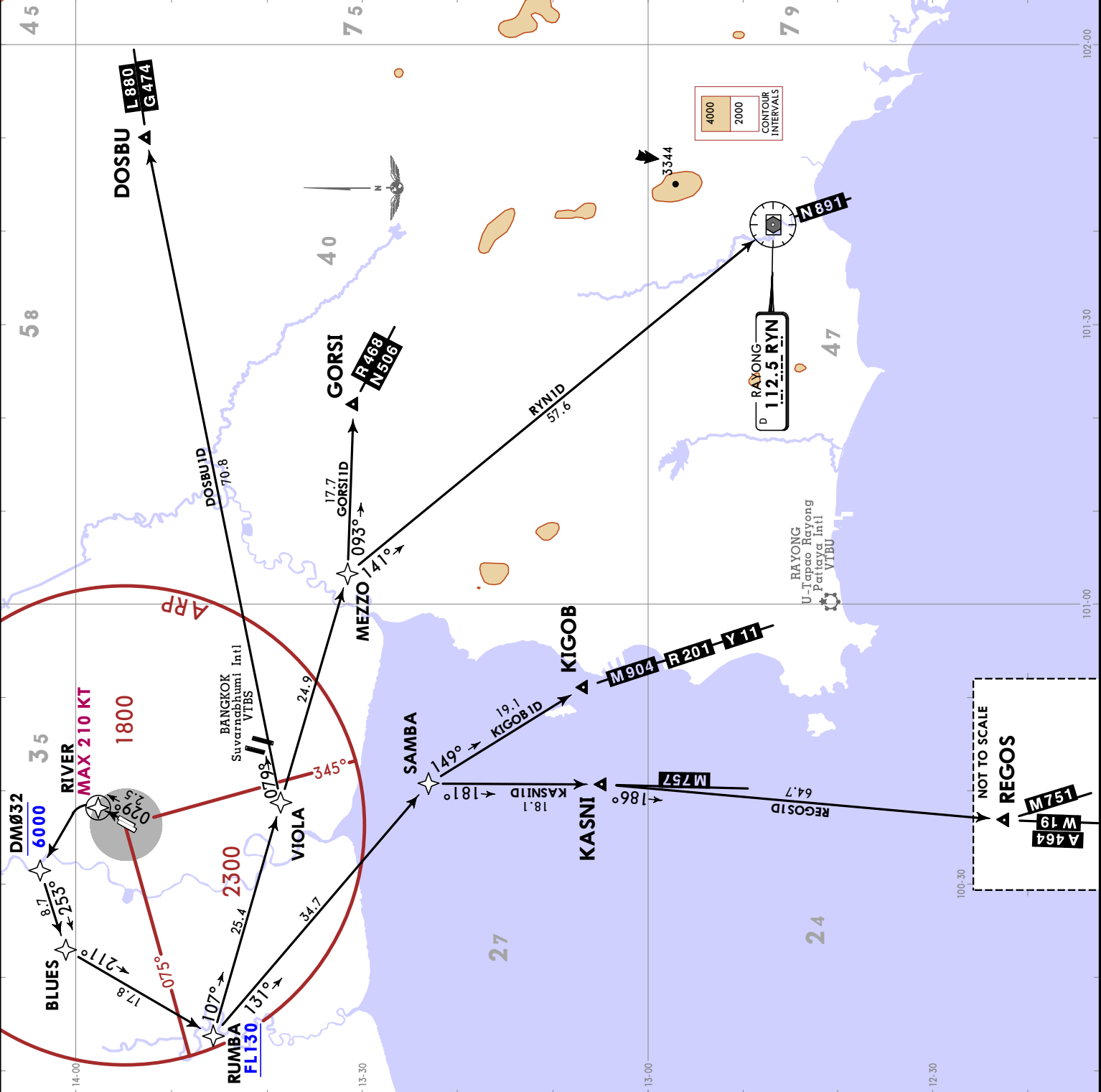
▼ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST
 ▼ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST

These SIDs require a minimum climb gradient of 425 per NM (7.0%) until passing 1500 for airspace restrictions only.

Grnd speed-KT	75	100	150	200	250	300
425 per NM	531	708	1063	1417	1771	2125



Apt Elev 9	Trans alt: 11000
<p>1. RNAV1 required. 2. GNSS or DME/DME/IRU required. 3. RADAR required. 4. For non-RNAV equipped aircraft, pilot shall inform ATC in order to get RADAR guidance. 5. Pilot should plan for possible climb as depicted on SID, actual climb clearance will be given by ATC. 6. If unable to comply with flight restrictions, advise ATC when aircraft commences to pushback or taxi to the holding point for departure. 7. Initial climb clearance 6000 or as directed by ATC.</p>	
<p>DOSBU1D [DOSB1D] GORS11D [GORS1D] KASNI1D [KASN1D] KIGOB1D [KIGO1D] REGOS1D [REGO1D] RYN1D [RYN1D]</p> <p>RWY 03R RNAV DEPARTURES SPEED: MAX 250 KT AT OR BELOW 10000 UNLESS OTHERWISE AUTHORIZED BY ATC</p>	
<p>LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST 1. Set the aircraft transponder to mode A/C code 7600. 2. Comply with the last acknowledged clearance up to the next reporting point in the SID, then climb to the flight planned cruising level in accordance with the published all speed and altitude restrictions of the relevant SID procedure. Thereafter comply with the flight planned routing and level. 3. When a departing aircraft is being RADAR vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure, the pilot shall MAINTAIN the last assigned heading, speed and level, or minimum flight altitude if higher. After a period of two minutes, the flight shall rejoin in the most direct manner possible to rejoin the SID procedure appropriate to its ATS route or the flight plan route no later than the next significant point. Thereafter comply with the flight planned routing and level. LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST</p>	



These SIDs require a minimum climb gradient of 352 per NM (5.8%) until FL130 for airspace restrictions only.

Gnd speed-KT	75	100	150	200	250	300
352 per NM	440	587	880	1173	1467	1760

Apt Elev 9
 Trans alt: 11000

1. RNAV1 required. 2. GNSS or DME/DME/IRU required. 3. RADAR required.
 4. For non-RNAV equipped aircraft, pilot shall inform ATC in order to get RADAR guidance. 5. Pilot should plan for possible climb as depicted on SID, actual climb clearance will be given by ATC. 6. If unable to comply with flight restrictions, advise ATC when aircraft commences to pushback or taxi to the holding point for departure. 7. No turn before DER.
 8. Initial climb clearance 8000 or as directed by ATC.

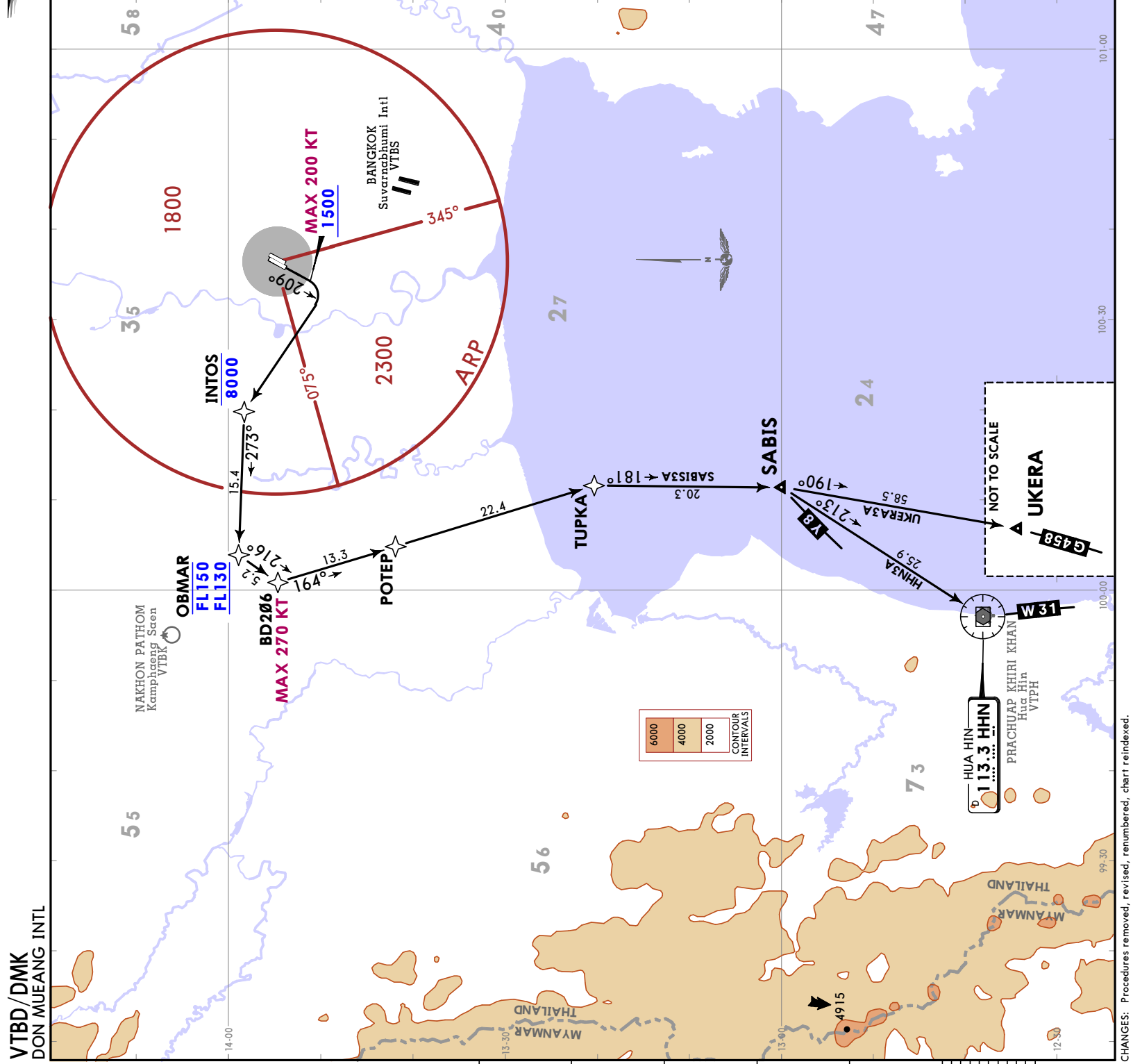
**HHN3A [HHN3A]
 SABIS3A [SABIS3A]
 UKERA3A [UKER3A]**

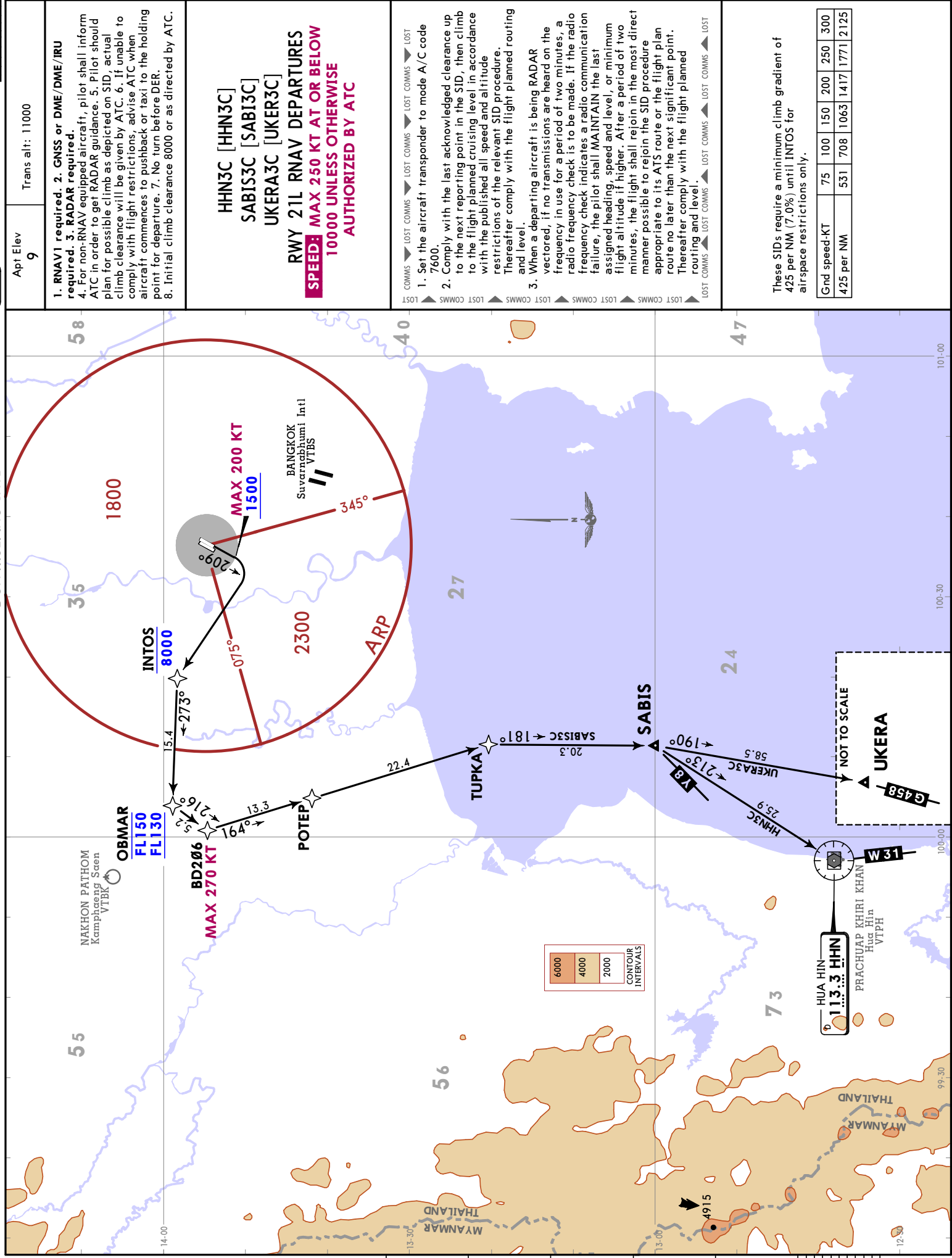
RWY 21R RNAV DEPARTURES
SPEED: MAX 250 KT AT OR BELOW
10000 UNLESS OTHERWISE AUTHORIZED BY ATC

COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST
 1. Set the aircraft transponder to mode A/C code 7600.
 2. Comply with the last acknowledged clearance up to the next reporting point in the SID, then climb to the flight planned cruising level in accordance with the published all speed and altitude restrictions of the relevant SID procedure. Thereafter comply with the flight planned routing and level.
 3. When a departing aircraft is being RADAR vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure, the pilot shall MAINTAIN the last assigned heading, speed and level, or minimum flight altitude if higher. After a period of two minutes, the flight shall rejoin in the most direct manner possible to rejoin the SID procedure appropriate to its ATS route or the flight plan route no later than the next significant point. Thereafter comply with the flight planned routing and level.

These SIDs require a minimum climb gradient of 450 per NM (7.4%) until INTOS for airspace restrictions only.

Gnd speed-KT	75	100	150	200	250	300
450 per NM	563	750	1125	1500	1875	2250





Apt Elev 9
Trans alt: 11000

1. RNAV1 required. 2. GNSS or DME/DME/IRU required. 3. RADAR required.
4. For non-RNAV equipped aircraft, pilot shall inform ATC in order to get RADAR guidance. 5. Pilot should plan for possible climb as depicted on SID, actual climb clearance will be given by ATC. 6. If unable to comply with flight restrictions, advise ATC when aircraft commences to pushback or taxi to the holding point for departure. 7. No turn before DER. 8. Initial climb clearance 8000 or as directed by ATC.

HHN3C [HHN3C]
SABIS3C [SABIS3C]
UKERA3C [UKER3C]
RWY 21L RNAV DEPARTURES
SPEED: MAX 250 KT AT OR BELOW
10000 UNLESS OTHERWISE AUTHORIZED BY ATC

COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST
1. Set the aircraft transponder to mode A/C code 7600.
2. Comply with the last acknowledged clearance up to the next reporting point in the SID, then climb to the flight planned cruising level in accordance with the published all speed and altitude restrictions of the relevant SID procedure. Thereafter comply with the flight planned routing and level.
3. When a departing aircraft is being RADAR vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure, the pilot shall MAINTAIN the last assigned heading, speed and level, or minimum flight altitude if higher. After a period of two minutes, the flight shall rejoin in the most direct manner possible to its ATS route or the flight plan appropriate to its ATS route or the flight plan route no later than the next significant point. Thereafter comply with the flight planned routing and level.

These SIDs require a minimum climb gradient of 425 per NM (7.0%) until INTOS for airspace restrictions only.

Ground speed-KT	75	100	150	200	250	300
425 per NM	531	708	1063	1417	1771	2125

JEPPesenBANGKOK, THAILAND
RNAV SID
 30 NOV 18 (10-3D) Eff 6 Dec

Apt Elev 9
 Trans alt: 11000

1. RNAV1 required. 2. GNSS or DME/DME/IRU required. 3. RADAR required.
 4. For non-RNAV equipped aircraft, pilot shall inform ATC in order to get RADAR guidance. 5. Pilot should plan for possible climb as depicted on SID. actual climb clearance will be given by ATC. 6. If unable to comply with flight restrictions, advise ATC when aircraft commences to pushback or taxi to the holding point for departure. 7. ROBKA1B, UPKUP1B: Initial climb clearance 5000 or as directed by ATC. TARED1B: Initial climb clearance 6000 or as directed by ATC.

ROBKA 1B [ROBK 1B]
TARED 1B [TARE 1B]
UPKUP 1B [UPKU 1B]

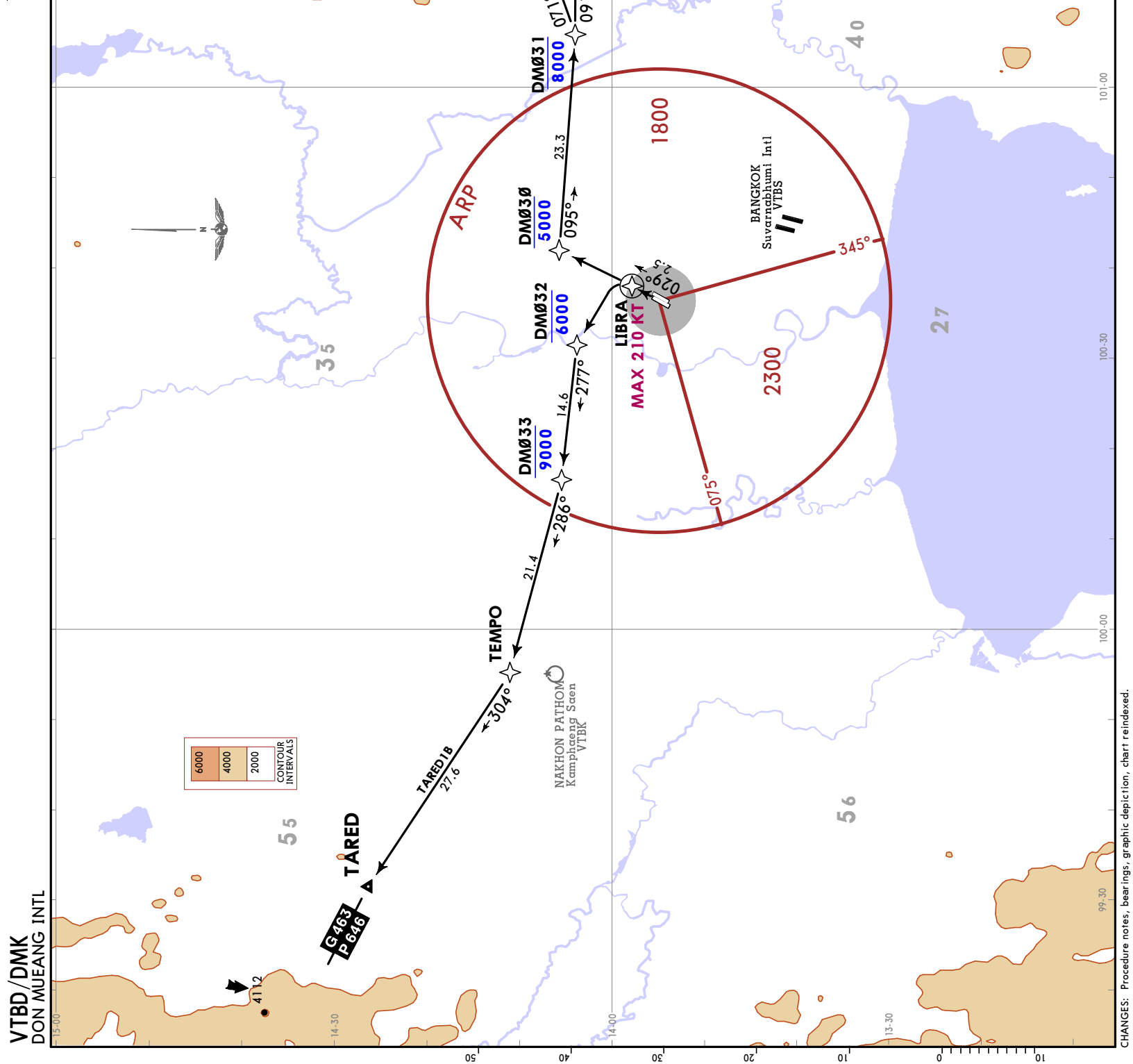
RWY 03L RNAV DEPARTURES
SPEED: MAX 250 KT AT OR BELOW
10000 UNLESS OTHERWISE AUTHORIZED BY ATC

These SIDs require a minimum climb gradient of 255 per NM (4.2%) until passing LIBRA.

Gnd speed-KT	75	100	150	200	250	300
255 per NM	319	425	638	850	1063	1275

COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST
 ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST

- Set the aircraft transponder to mode A/C code 7600.
- Comply with the last acknowledged clearance up to the next reporting point in the SID, then climb to the flight planned cruising level in accordance with the published all speed and altitude restrictions of the relevant SID procedure. Thereafter comply with the flight planned routing and level.
- When a departing aircraft is being RADAR vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure, the pilot shall MAINTAIN the last assigned heading, speed and level, or minimum flight altitude if higher. After a period of two minutes, the flight shall rejoin in the most direct manner possible to its ATS route or the flight plan route no later than the next significant point. Thereafter comply with the flight planned routing and level.



VTBD/DMK DON MUEANG INTL

JEYPESEN
BANGKOK, THAILAND
RNAV SID

VTBD/DMK
DON MUANG INTL

30 NOV 18 (10-30) Eff 6 Dec

Apt Elev 9
 Trans alt: 11000

1. RNAV1 required. 2. GNSS or DME/DME/IRU required. 3. RADAR required.
 4. For non-RNAV equipped aircraft, pilot shall inform ATC in order to get RADAR guidance. 5. Pilot should plan for possible climb as depicted on SID. actual climb clearance will be given by ATC. 6. If unable to comply with flight restrictions, advise ATC when aircraft commences to pushback or taxi to the holding point for departure. 7. ROBKA1D, UPKUP1D: Initial climb clearance 5000 or as directed by ATC. TARED1D: Initial climb clearance 6000 or as directed by ATC.

ROBKA1D [ROBK1D]
TARED1D [TARE1D]
UPKUP1D [UPKU1D]

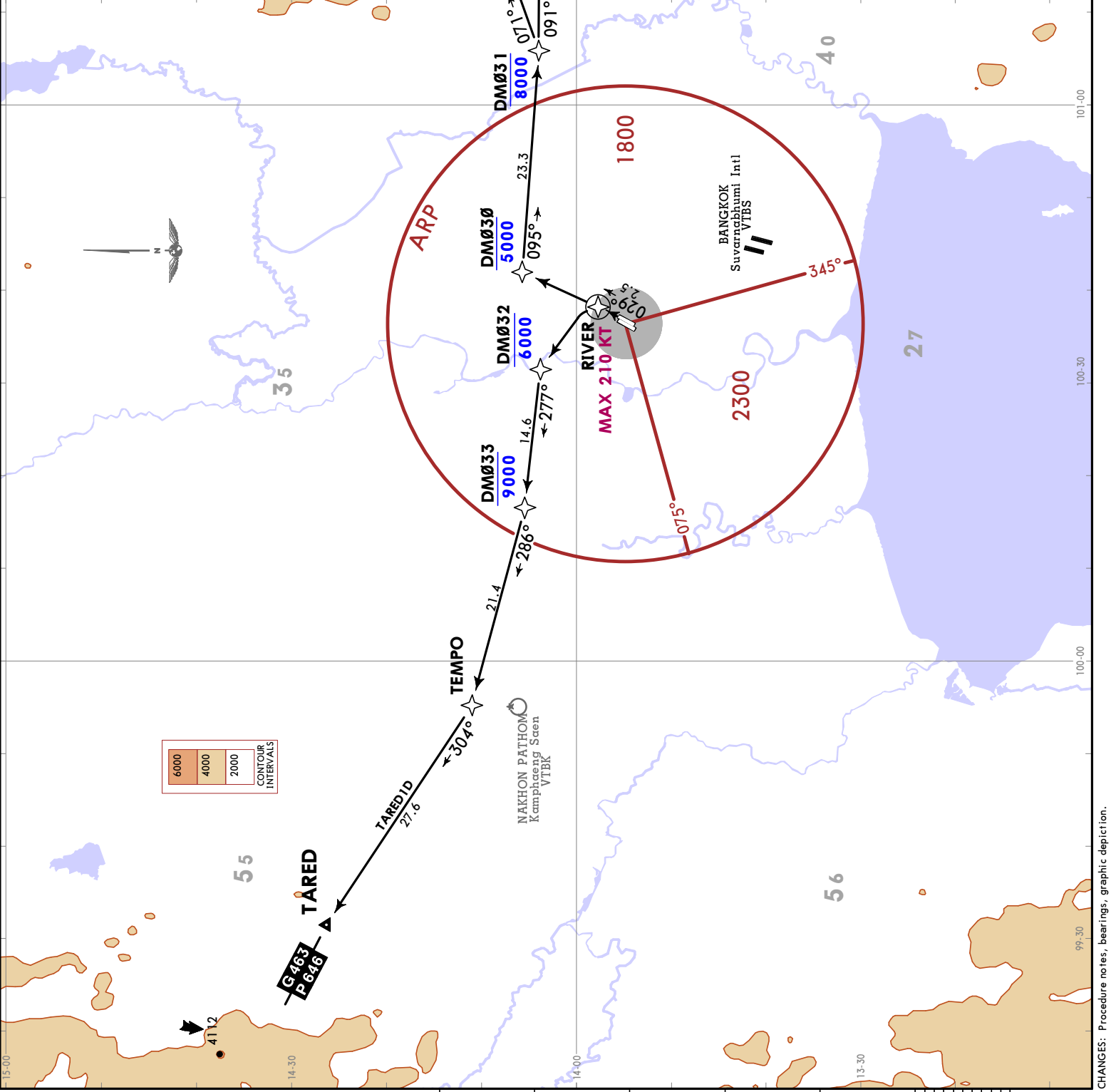
RWY 03R RNAV DEPARTURES
SPEED: MAX 250 KT AT OR BELOW
10000 UNLESS OTHERWISE AUTHORIZED BY ATC

58
ROBKA
 19.9
ROBK1D
 071°
 091°
UPKUP1D
 20.5
UPKUP

TARED1D: This SID requires a minimum climb gradient of 255 per NM (4.2%) until passing RIVER.

End speed-KT	75	100	150	200	250	300
255 per NM	319	425	638	850	1063	1275

COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST
 1. Set the aircraft transponder to mode A/C code 7600.
 2. Comply with the last acknowledged clearance up to the next reporting point in the SID, then climb to the flight planned cruising level in accordance with the published all speed and altitude restrictions of the relevant SID procedure. Thereafter comply with the flight planned routing and level.
 3. When a departing aircraft is being RADAR vectored, if no transmissions are heard on the frequency in use for a period of two minutes, a radio frequency check is to be made. If the radio frequency check indicates a radio communication failure, the pilot shall MAINTAIN the last assigned heading, speed and level, or minimum flight altitude if higher. After a period of two minutes, the flight shall rejoin in the most direct manner possible to its ATS route or the flight plan route no later than the next significant point. Thereafter comply with the flight planned routing and level.



VTBD/DMK

Apt Elev 9'
N13 54.9 E100 36.3



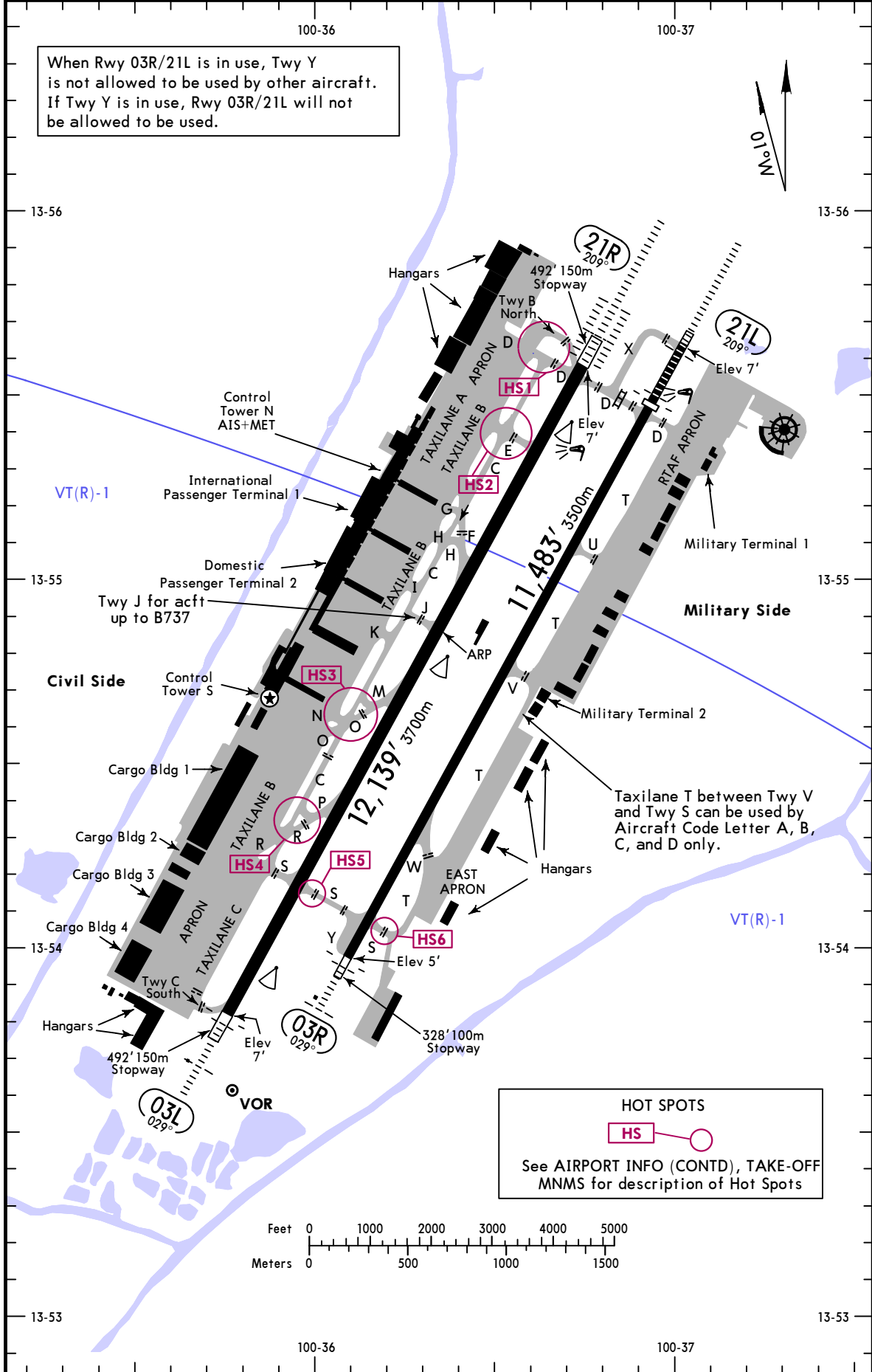
23 JUN 23 (10-9)


BANGKOK, THAILAND

DON MUEANG INTL

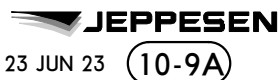
D-ATIS Departure 118.55	DON MUEANG Clearance 127.7	Ground 121.9 122.5	Tower 118.1
--------------------------------------	--------------------------------------	------------------------------	-----------------------

When Rwy 03R/21L is in use, Twy Y is not allowed to be used by other aircraft. If Twy Y is in use, Rwy 03R/21L will not be allowed to be used.



HOT SPOTS

 See AIRPORT INFO (CONTD), TAKE-OFF MNMS for description of Hot Spots

VTBD/DMK



BANGKOK, THAILAND
DON MUEANG INTL

23 JUN 23 (10-9A)

GENERAL

Low-level wind shear alert system.

The use of Rwy 03R/21L at Don Mueang International Airport is normally restricted to military traffic. But they may be made available to civil traffic.

No straight in approaches are permitted without prior approval from Don Mueang Tower.

PILOT PROCEDURE TO ENHANCE RUNWAY CAPACITY

Departing Aircraft:

1. Commensurate with safety and standard operating procedure, on receipt of line up clearance, pilots should ensure that they are able to taxi into the correct hold and line up position on the runway as soon as the preceding aircraft has commenced its take-off roll.
2. Cockpit checks should be completed before line up; any further checks requiring completion while on the runway shall be kept to a minimum. Pilots shall ensure that they are able to commence the take-off roll immediately after a take-off clearance is issued.
3. Pilots unable to comply with these procedures shall inform ATC prior to passing the runway holding position.
4. Departures shall normally be cleared in the order in which they are ready for take-off, except that deviations may be made from this order of priority to facilitate the maximum number of departures with the least average delay.

Arriving Aircraft:

Pilots are reminded that rapid exit from the landing runway enables ATC to apply minimum spacing on Final Approach that will achieve maximum runway utilization as well as minimize the occurrence of go-arounds.

ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS			WIDTH
		LANDING BEYOND		TAKE-OFF	
		Threshold	Glide Slope		
03R	HIRL (60m) HIALS PAPI (angle 3.0°)				148'
21L	HIRL (60m) HIALS PAPI (angle 3.0°)	①	9285' 2830m		45m
① LDA: 10,335' 3150m					
03L	HIRL (60m) CL (30m) HIALS PAPI (angle 3.0°) RVR		11,091' 3381m		197'
21R	HIRL (60m) CL (30m) HIALS-II TDZ PAPI (angle 3.0°) RVR		11,046' 3367m		60m

HOT SPOTS



For information only, not to be construed as ATC instructions.

- HS1** Aircraft taxiing to runway 21R on taxiway B or taxiway C which are instructed to turn right onto taxiway D and to hold short of runway 21R. Use caution when making the right turn onto taxiway D and watch for the holding line surface painted and hold short of runway 21R. Do not cross the holding line surface painted for runway 21R without ATC authorization (including taxiway B north).
- HS2** Aircraft taxiing to runway 21R on taxiway C which are instructed to turn right onto taxiway E and to hold short of runway 21R. Use caution when making the right turn onto taxiway E and watch for the holding line surface painted and hold short of runway 21R. Do not cross the holding line surface painted for runway 21R without ATC authorization.
- HS3** Due to several intersections around this area which connect to rapid exit taxiways, aircraft taxiing from taxiway B and taxiway O to join taxiway C can do mistake entering runway 21R-03L while on taxiway O. Use caution when taxiing on taxiway O and approaching the intersection of taxiway C and do not cross the hold marking for runway 21R-03L without ATC authorization.
- HS4** Due to several intersections around this area which connect to rapid exit taxiways, aircraft taxiing from taxiway B and taxiway R to join taxiway C can do mistake entering runway 21R-03L while on taxiway R. Use caution when taxiing on taxiway R and approaching the intersection of taxiway C and do not cross the hold marking for runway 21R-03L without ATC authorization.
- HS5** After vacated runway 21L by right join taxiway S. Use caution when taxiing on taxiway S and watch for the holding line surface painted and hold short of runway 21R. Do not cross the holding line surface painted for runway 21R without ATC authorization.
- HS6** Aircraft taxiing to runway 03R on taxiway T which are instructed to turn right onto taxiway S and to hold short of runway 03R. Use caution when making the right turn onto taxiway S and watch for the holding line surface painted and hold short of runway 03R. Do not cross the holding line surface painted for runway 03R without ATC authorization.

Std

TAKE-OFF

RL & CL & relevant RVR	RL & CL	RL & RCLM	RL or CL	RL or RCLM	Adequate Vis Ref	
		DAY	NIGHT	DAY	DAY	NIGHT
TDZ R150m Mid R150m Rollout R150m	R200m	R300m		R400m	R/V500m	NA

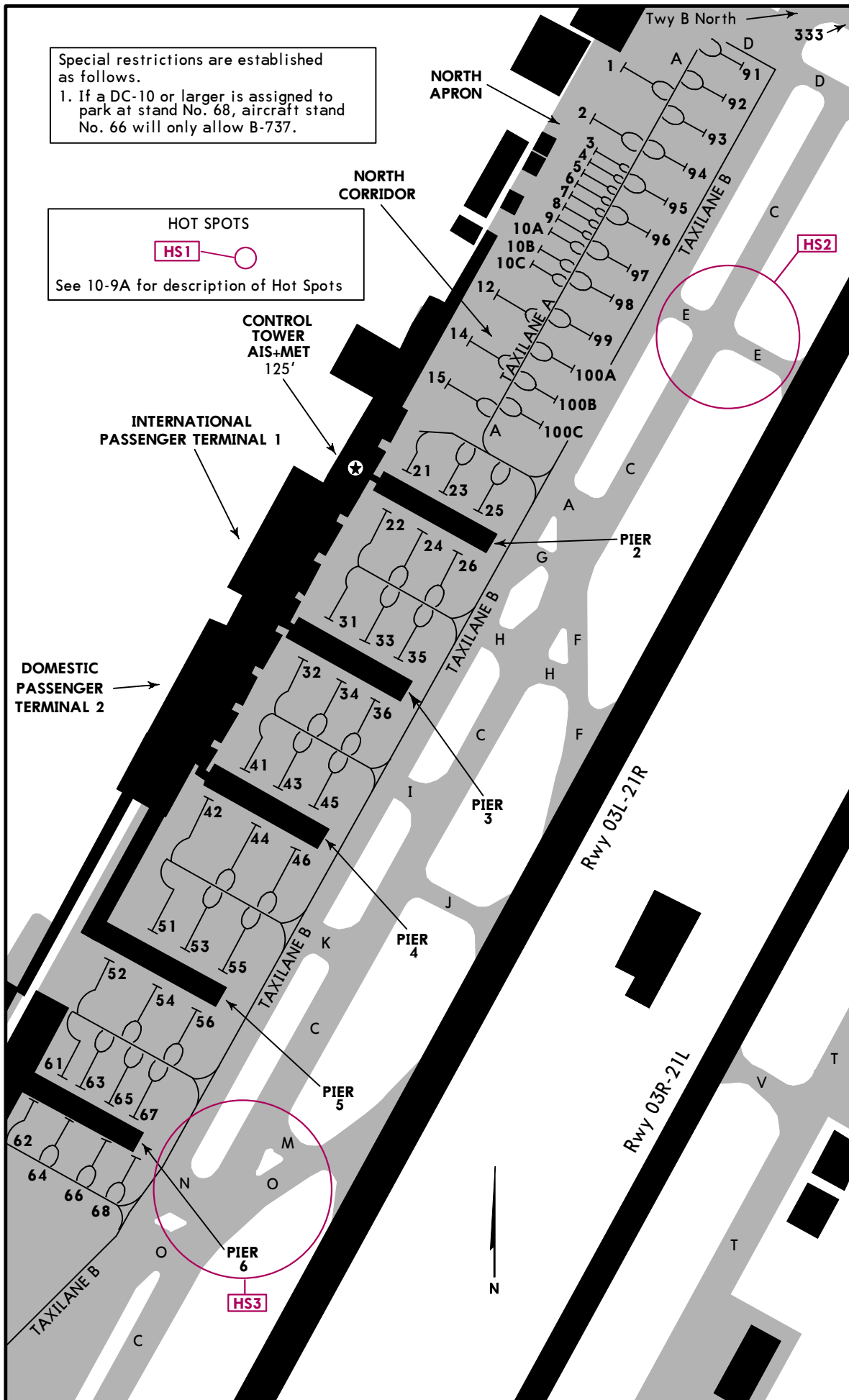
VTBD/DMK

JEPPESEN

BANGKOK, THAILAND

22 DEC 23 **10-9B**

DON MUEANG INTL



CHANGES: Taxiway A depiction.

© JEPPESEN, 1998, 2023. ALL RIGHTS RESERVED.

VTBD/DMK



BANGKOK, THAILAND

22 DEC 23 10-9C

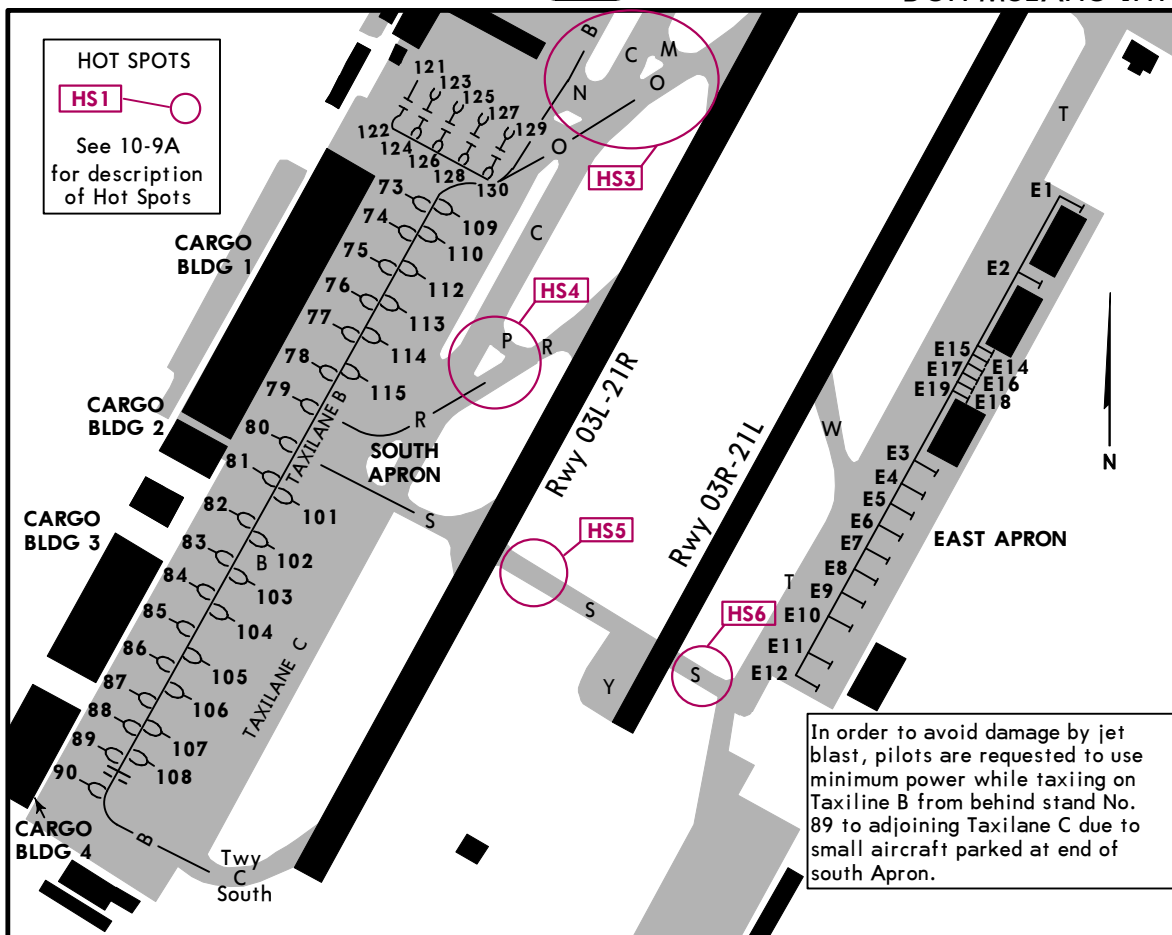
DON MUEANG INTL

PARKING STAND COORDINATES		
STAND No.	COORDINATES	FOR AIRCRAFT UP TO
NORTH APRON		
1, 2	N13 55.6 E100 36.4	B747-400
3 thru 9	N13 55.6 E100 36.4	Wingspan 49' (15m)
10A, 10B, 10C	N13 55.5 E100 36.4	Wingspan 79' (24m)
91	N13 55.6 E100 36.6	B767
92	N13 55.6 E100 36.5	B767
93	N13 55.5 E100 36.5	B767
94 thru 96	N13 55.5 E100 36.5	B767
97, 98	N13 55.4 E100 36.5	A300
99	N13 55.4 E100 36.4	A300
NORTH CORRIDOR		
12, 14, 15	N13 55.4 E100 36.3	B747-400/B777-300/A340-600
100A	N13 55.4 E100 36.4	A300
100B, 100C	N13 55.3 E100 36.4	A300
PIER 2		
21	N13 55.3 E100 36.3	B777-200
22	N13 55.2 E100 36.2	B747-400
23	N13 55.3 E100 36.3	B777-200
24	N13 55.2 E100 36.3	B747-400
25	N13 55.2 E100 36.3	B777-200
26	N13 55.2 E100 36.3	B747-400
PIER 3		
31	N13 55.1 E100 36.2	B777-200
32	N13 55.1 E100 36.2	B747-400
33	N13 55.1 E100 36.2	B777-200
34	N13 55.1 E100 36.2	B747-400
35	N13 55.1 E100 36.3	B777-200
36	N13 55.1 E100 36.2	B747-400
PIER 4		
41	N13 55.0 E100 36.1	B777-200
42	N13 55.0 E100 36.1	B747-400/B777-300/A340-600
43	N13 55.0 E100 36.1	B777-200
44	N13 54.9 E100 36.1	B747-400/B777-300/A340-600
45	N13 55.0 E100 36.2	B777-200
46	N13 54.9 E100 36.2	B747-400/B777-300/A340-600
PIER 5		
51	N13 54.9 E100 36.0	A320/A330/B777-200/B747
52	N13 54.8 E100 36.0	A320/A330/B767-300/B777-200/B747
53, 55	N13 54.8 E100 36.1	A320/A330/B767-300/B777-200/B747
54	N13 54.8 E100 36.1	A320/A330/B767/B777-200
56	N13 54.8 E100 36.1	A320/A330/B767/B777-200/B747
PIER 6		
61	N13 54.7 E100 36.0	A300
62	N13 54.7 E100 35.9	A300
63 thru 65	N13 54.7 E100 36.0	A300
66, 67	N13 54.7 E100 36.0	B737-400
68	N13 54.7 E100 36.0	B747-400/B777-300
Isolated Parking		
333	N13 55.7 E100 36.7	

VTBD/DMK

JEPPESEN
14 MAY 21 **10-9D** Eff 20 May

BANGKOK, THAILAND
DON MUEANG INTL



PARKING BAY COORDINATES

BAY No.	COORDINATES	CAPACITY	BAY No.	COORDINATES
SOUTH APRON			EAST APRON	
73	N13 54.5 E100 35.9	B744/B773/A346	E1	N13 54.6 E100 36.6
74, 75	N13 54.5 E100 35.8	B744/B773/A346	E2	N13 54.5 E100 36.5
76, 77, 78	N13 54.4 E100 35.8	B744/B773/A346	E3, E4, E5	N13 54.2 E100 36.4
79, 80	N13 54.3 E100 35.7	B744/B773/A346	E6	N13 54.1 E100 36.4
81, 82, 83	N13 54.2 E100 35.7	B744/B773/A346	E7 thru E9	N13 54.1 E100 36.3
84, 85, 86	N13 54.1 E100 35.6	B744/B773/A346	E10, E11, E12	N13 53.0 E100 36.3
87, 88, 89	N13 54.0 E100 35.6	B744/B773/A346	E14, E15	N13 54.4 E100 36.5
90	N13 53.9 E100 35.5	B744/B773/A346	E16, E17, E18	N13 54.3 E100 36.5
101	N13 54.2 E100 35.8	B747-400	E19	N13 54.3 E100 36.4
102, 103	N13 54.1 E100 35.8	B747-400		
104	N13 54.1 E100 35.7	B747-400		
105, 106, 107	N13 54.0 E100 35.7	B747-400		
108	N13 53.9 E100 35.7	B747-400		
109	N13 54.5 E100 35.0	B772/A333/A346		
110	N13 54.4 E100 35.0	B772/A333/A346		
112, 113	N13 54.4 E100 35.9	B772/A333/A346		
114	N13 54.3 E100 35.9	B772/A333/A346		
115	N13 54.3 E100 35.9	MD-11		
121 thru 130	N13 54.6 E100 35.9	B737-400		

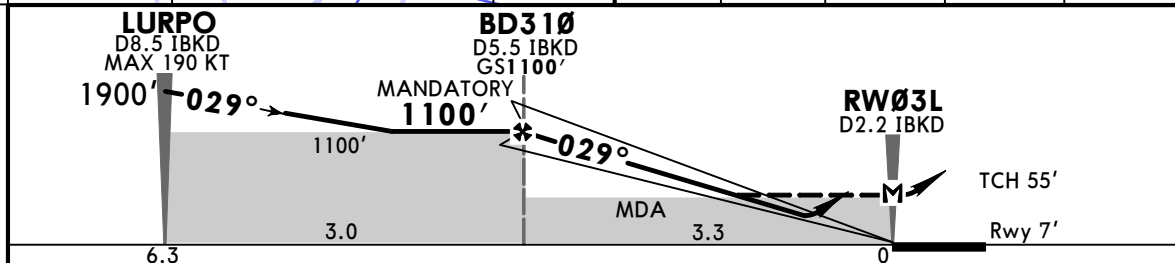
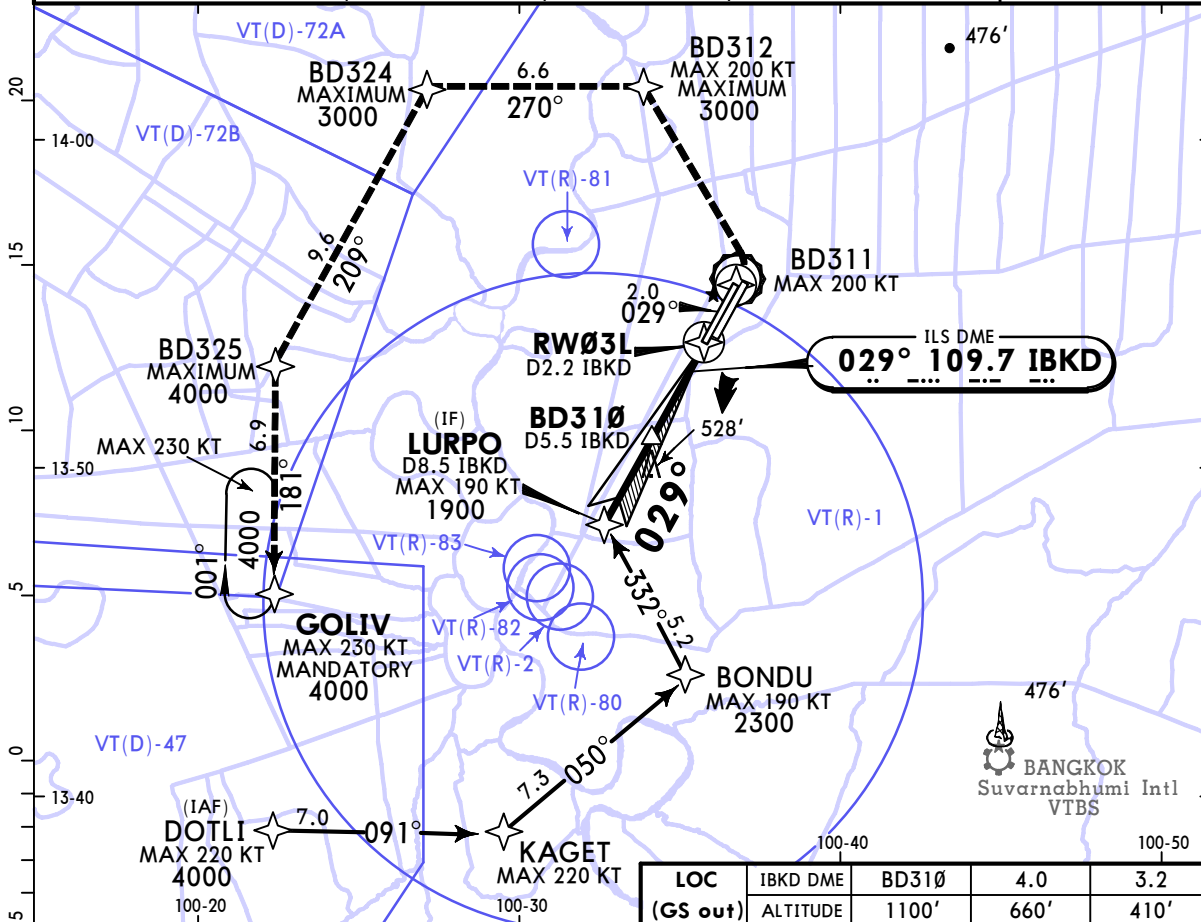
CHANGES: Hot spots added.

VTBD/DMK
DON MUEANG INTL

JEPPESEN
12 MAY 23
Eff 18 May **(11-1)**

BANGKOK, THAILAND
ILS or LOC Z Rwy 03L

D-ATIS	DON MUEANG Arrival (R)	DON MUEANG Approach (R)				DON MUEANG Tower	Ground	
126.4	133.0	119.1	119.4	120.3	118.1	121.9	122.5	
LOC IBKD 109.7	Final Apch Crs 029°	BD310 MANDATORY 1100' (1093')		ILS DA(H) 220' (213')	Apt Elev 9' Rwy 7'	<p>MSA ARP</p>		
<p>MISSED APCH: Climb and maintain 3000'. Track 029° to BD311, then turn LEFT direct to BD312, then to BD324. At BD324 proceed to BD325 climbing up to 4000', then to GOLIV and hold or as directed by ATC. No turn before MAP (LOC only). Speed restricted to MAX 200 KT until BD312.</p>								
<p>Alt Set: hPa Rwy Elev: 0 hPa Trans level: FL130 Trans alt: 11000'</p>								
<p>RNAV1 required 1. GNSS or DME/DME/IRU required. 2. Radar required. 3. DME required.</p>								



Gnd speed-Kts	70	90	100	120	140	160		3000' ↑ 029° track BD311
GS	3.00°	372	478	531	637	743		

PANS OPS	Std ILS STRAIGHT-IN LANDING		LOC (GS out) CDFA		CIRCLE-TO-LAND	
	DA(H) 220' (213')		DA/MDA(H) 410' (403')		Max Kts MDA(H)	
	ALS out		ALS out		100	800' (791') V1500m
	A	R800m	R1200m	R1500m	135	800' (791') V1600m
B				180	800' (791') V2400m	
C				205	1100' (1091') V3600m	
D						

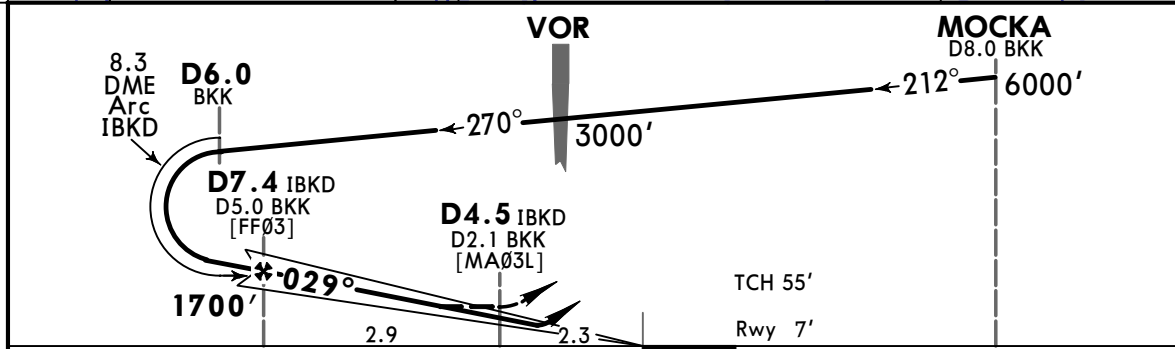
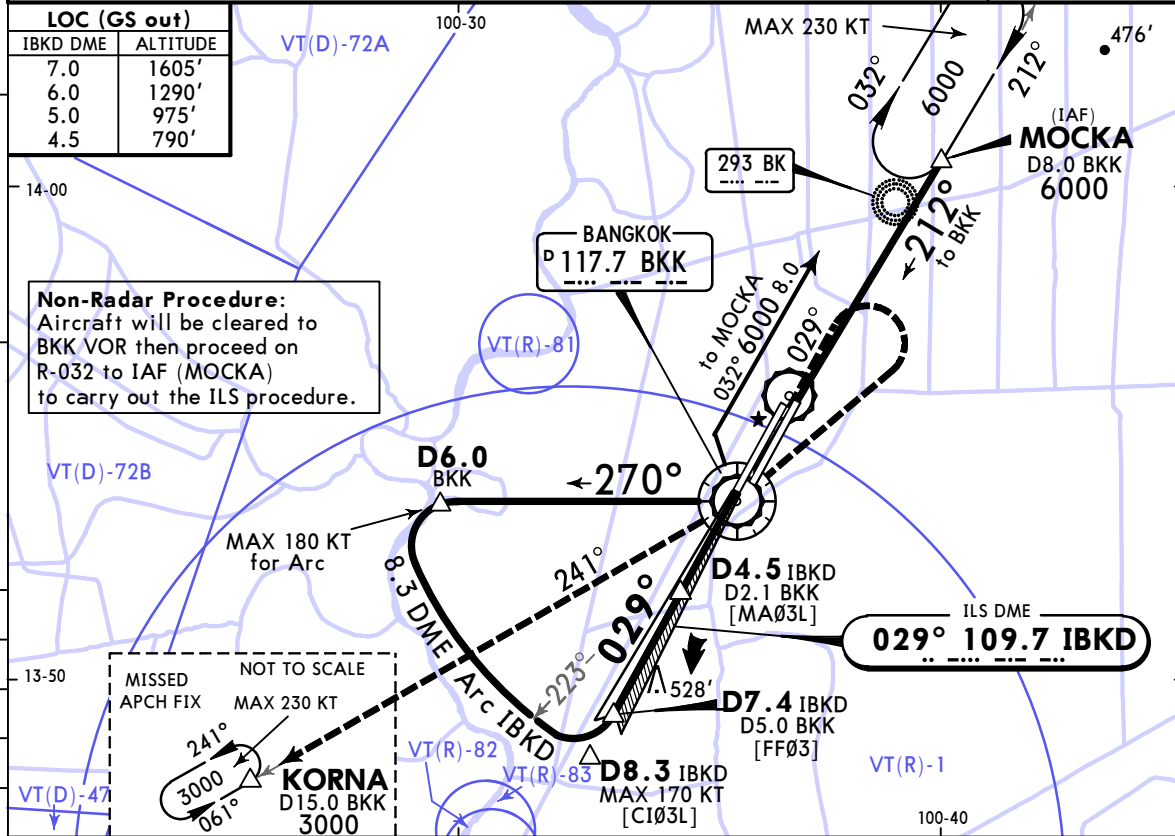
CHANGES: Approach frequency, altitudes. © JEPPESEN, 2021, 2023. ALL RIGHTS RESERVED.

VTBD/DMK
DON MUEANG INTL

JEPPESEN
12 MAY 23
Eff 18 May (11-2)

BANGKOK, THAILAND
ILS or LOC Y Rwy 03L

D-ATIS	DON MUEANG Arrival (R)	DON MUEANG Approach (R)			DON MUEANG Tower	Ground
126.4	133.0	119.1	119.4	120.3	118.1	121.9 122.5
LOC IBKD 109.7	Final Apch Crs 029°	D7.4 IBKD 1700' (1693')	ILS DA(H) 220' (213')	Apt Elev 9' Rwy 7'		
MISSED APCH: Climb on track 029° direct to IBKD LOC, then climb outbound on BKK VOR R-029 to 1500', then turn RIGHT to BKK VOR and continue climb on BKK VOR R-241 to D15.0 BKK at 3000' and hold or as directed by ATC. No turn before MAP (LOC only).						MSA BKK VOR
Alt Set: hPa Rwy Elev: 0 hPa Trans level: FL130 Trans alt: 11000'						
1. VOR, DME required. 2. This procedure does not include an intermediate segment.						



Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI PAPI ↑ on 029° IBKD 109.7
GS	3.00°	372	478	531	637	743	
MAP at D4.5 IBKD							
FAF to MAP	2.9	2:29	1:56	1:44	1:27	1:15	

PANS OPS	Std ILS STRAIGHT-IN LANDING		LOC (GS out) CDFA		CIRCLE-TO-LAND	
	DA(H) 220' (213')		DA/MDA(H) 790' (783')		Max Kts	MDA(H)
	ALS out		ALS out			800' (791') V1500m
	A	R800m	R1200m	R1500m	100	800' (791') V1600m
	B				135	800' (791') V2400m
C			R2400m	180	800' (791') V3600m	
D				205	1100' (1091') V3600m	

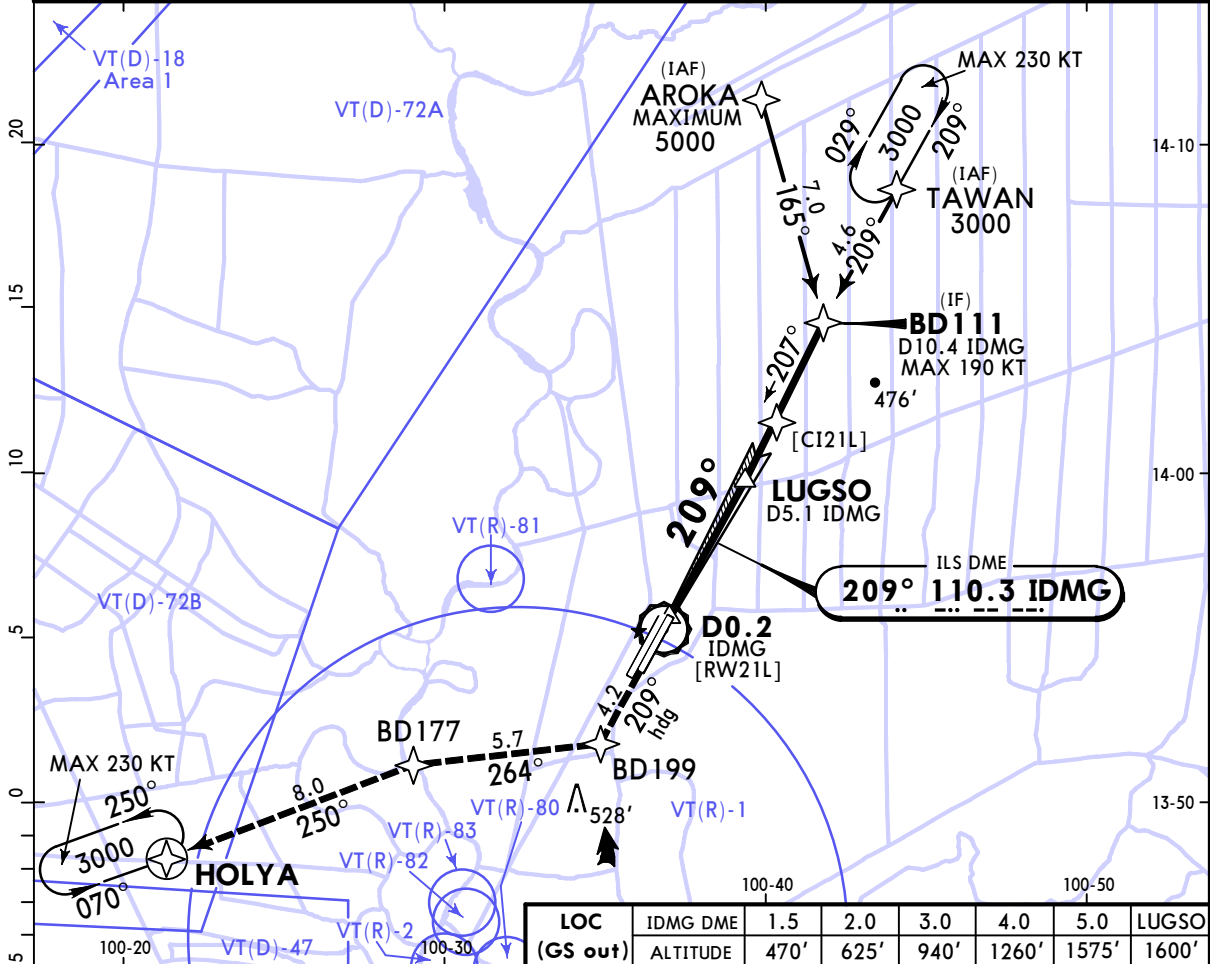
1 VNAV DA(H) in lieu of MDA(H) depends on operator policy.

VTBD/DMK
DON MUEANG INTL

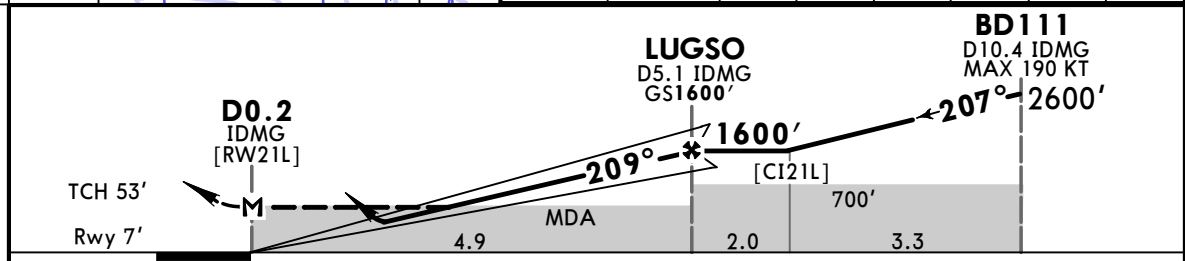
JEPPESEN
12 MAY 23
Eff 18 May (11-3)

BANGKOK, THAILAND
ILS or LOC Z Rwy 21L

D-ATIS	DON MUEANG Arrival (R)	DON MUEANG Approach (R)				DON MUEANG Tower	Ground
126.4	133.0	119.1	119.4	120.3	118.1	121.9	122.5
LOC IDMG 110.3	Final Apch Crs 209°	LUGSO 1600' (1593')	ILS DA(H) 220' (213')	Apt Elev 9' Rwy 7'			
MISSED APCH: Climb on track 209° to BD199, then turn RIGHT to BD177, then proceed to HOLYA at 3000' and hold or as directed by ATC. No turn before MAP (LOC only).							
RNAV1 required Alt Set: hPa Rwy Elev: 0 hPa Trans level: FL130 Trans alt: 11000'							MSA ARP
1. GNSS or DME/DME/IRU required. 2. RADAR required. 3. DME required.							



LOC (GS out)	IDMG DME	1.5	2.0	3.0	4.0	5.0	LUGSO
	ALTITUDE	470'	625'	940'	1260'	1575'	1600'



Gnd speed-Kts	70	90	100	120	140	160		HIALS-II	3000	209°	BD199
GS	3.00°	372	478	531	637	743	849	PAPI	↑	hdg	
MAP at D0.2 IDMG											

A	ILS STRAIGHT-IN LANDING		LOC (GS out) CDFA		CIRCLE-TO-LAND	
	DA(H) 220' (213')	ALS out	2 DA/MDA(H) 470' (463')	ALS out	Max Kts	MDA(H)
B	1 R550m	R1200m	R1500m	R1500m	100	800' (791') V1500m
C				R2200m	135	800' (791') V1600m
D					180	800' (791') V2400m
					205	1100' (1091') V3600m

1 R750m when a Flight Director or Autopilot or HUD to DA is not used.
2 VNAV DA(H) in lieu of MDA(H) depends on operator policy.

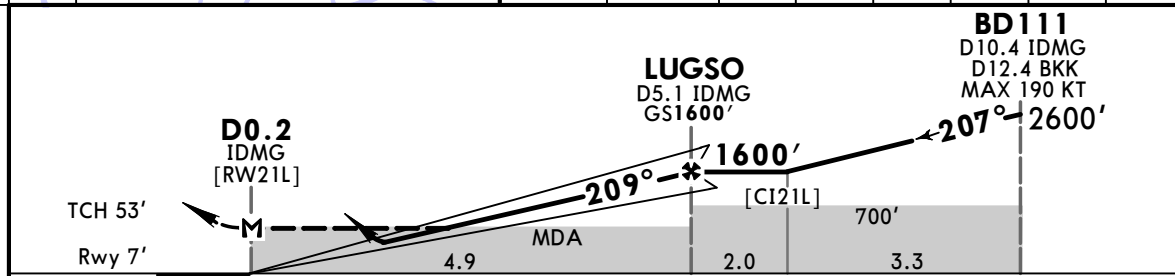
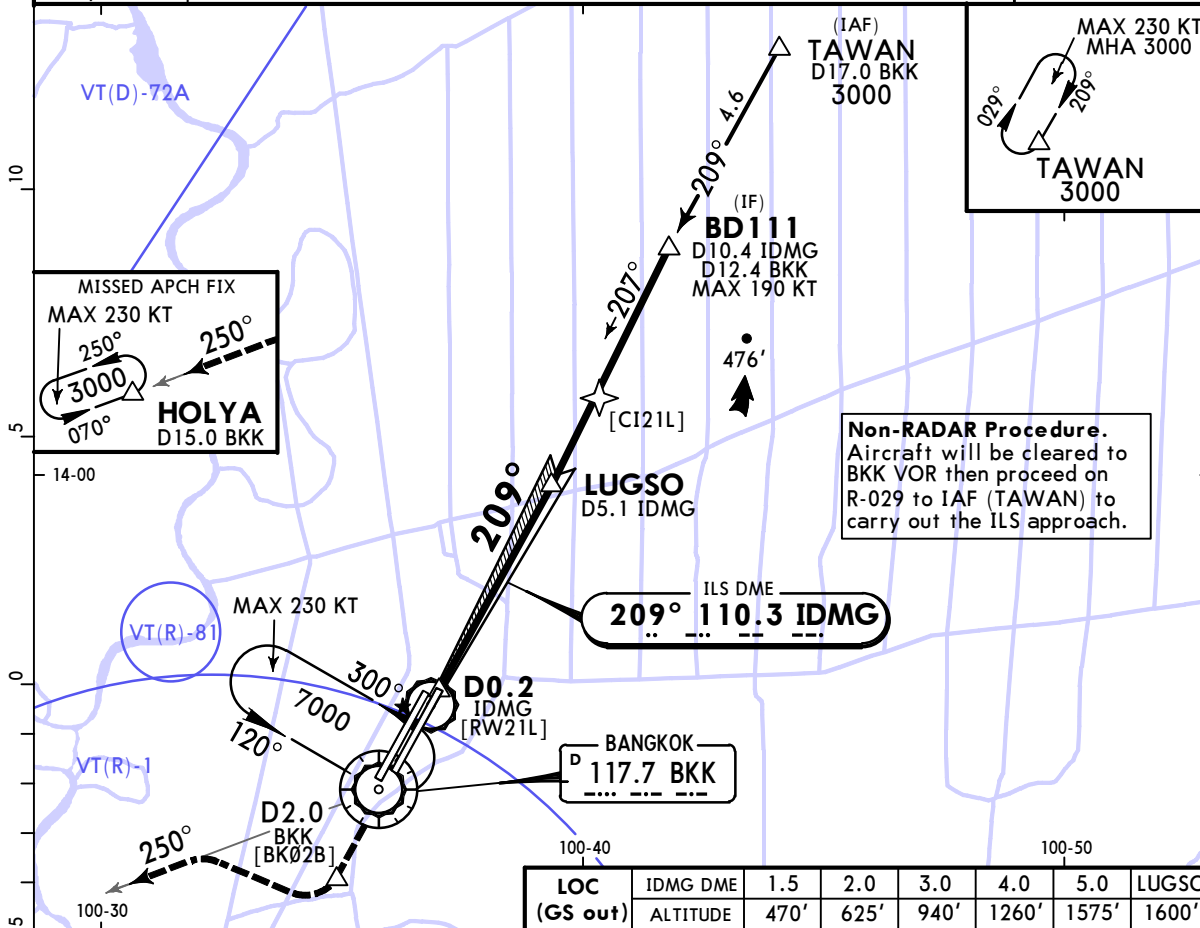
CHANGES: Approach frequency.

VTBD/DMK
DON MUEANG INTL

JEPPESEN
12 MAY 23
Eff 18 May **11-4**

BANGKOK, THAILAND
ILS or LOC Y Rwy 21L

BRIEFING STRIP™	D-ATIS	DON MUEANG Arrival (R)	DON MUEANG Approach (R)				DON MUEANG Tower	Ground
	126.4	133.0	119.1	119.4	120.3	118.1	121.9 122.5	
	LOC IDMG 110.3	Final Apch Crs 209°	LUGSO 1600' (1593')	ILS DA(H) 220' (213')	Apt Elev 9' Rwy 7'			
MISSED APCH: Climb runway heading until D2.0 BKK VOR, then turn RIGHT to intercept outbound BKK VOR R-250, then proceed to HOLYA at 3000' and hold or as directed by ATC. No turn before MAP (LOC only).								
Alt Set: hPa		Rwy Elev: 0 hPa	Trans level: FL130		Trans alt: 11000'			
VOR, DME required.							MSA BKK VOR	



Gnd speed-Kts	70	90	100	120	140	160	HIALS-II 	3000 on ↑ Rwy hdg	D2.0 BKK
GS	3.00°	372	478	531	637	849			
MAP at D0.2 IDMG									

PANS OPS	Std ILS STRAIGHT-IN LANDING				CIRCLE-TO-LAND			
	ILS		LOC (GS out)		CIRCLING		CIRCLING	
DA(H) 220' (213')		CDFA DA/MDA(H) 470' (463')		Max Kts		MDA(H)		
ALS out		ALS out		100	800'	(791')	V1500m	
A	R550m	R1200m	R1500m	135	800'	(791')	V1600m	
B				180	800'	(791')	V2400m	
C				205	1100'	(1091')	V3600m	
D								

1 R750m when a Flight Director or Autopilot or HUD to DA is not used.
 2 VNAV DA(H) in lieu of MDA(H) depends on operator policy.

CHANGES: Approach frequency.

VTBD/DMK
DON MUEANG INTL

JEPPESEN
12 MAY 23 (11-5) Eff 18 May

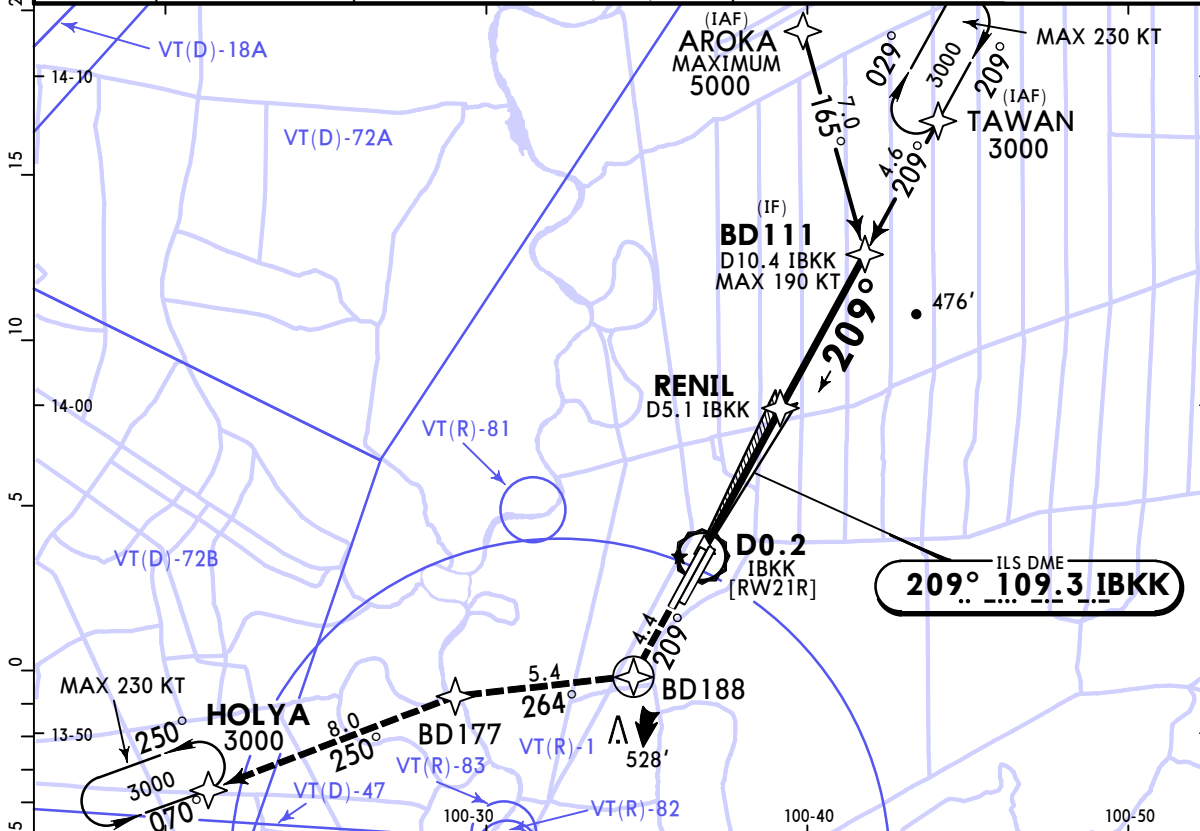
BANGKOK, THAILAND
ILS or LOC Z Rwy 21R

D-ATIS	DON MUEANG Arrival (R)	DON MUEANG Approach (R)				DON MUEANG Tower	Ground
126.4	133.0	119.1	119.4	120.3	118.1	121.9	122.5
		122.35	124.35	125.2	133.4		

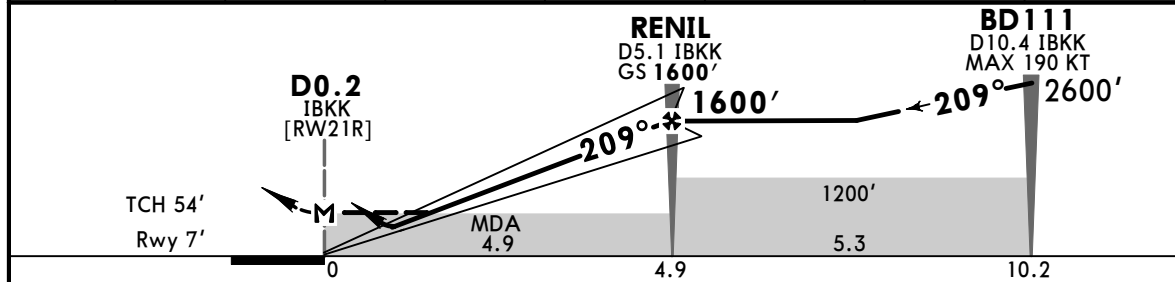
BRIEFING STRIP™

LOC IBKK 109.3	Final Apch Crs 209°	RENIL 1600' (1593')	ILS DA(H) 220' (213')	Apt Elev 9' Rwy 7'	<p>MSA ARP</p>
MISSED APCH: Climb on track 209° to BD188, then turn RIGHT to BD177, then proceed to HOLYA at 3000', and hold or as directed by ATC. No turn before MAP (for LOC only).					

RNAV1 required Alt Set: hPa Rwy Elev: 0 hPa Trans level: FL130
1. DME required. 2. Radar required. 3. GNSS or DME/DME/IRU required.



LOC (GS out)	IBKK DME	1.5	2.0	3.0	4.0	5.0	RENIL
	ALTITUDE	470'	625'	940'	1260'	1575'	1600'



Gnd speed-Kts	70	90	100	120	140	160	
GS	3.00°	372	478	531	637	849	

PANS OPS	Std ILS STRAIGHT-IN LANDING				LOC (GS out) CDFA		CIRCLE-TO-LAND	
	DA(H) 220' (213')			DA/MDA(H) 470' (463')				
	TDZ or CL out		ALS out	ALS out		Max Kts	MDA(H)	
	A				R1500m	100	800' (791') V1500m	
	B	R550m	R550m	R1200m	R1500m	135	800' (791') V1600m	
C					180	800' (791') V2400m		
D					205	1100' (1091') V3600m		

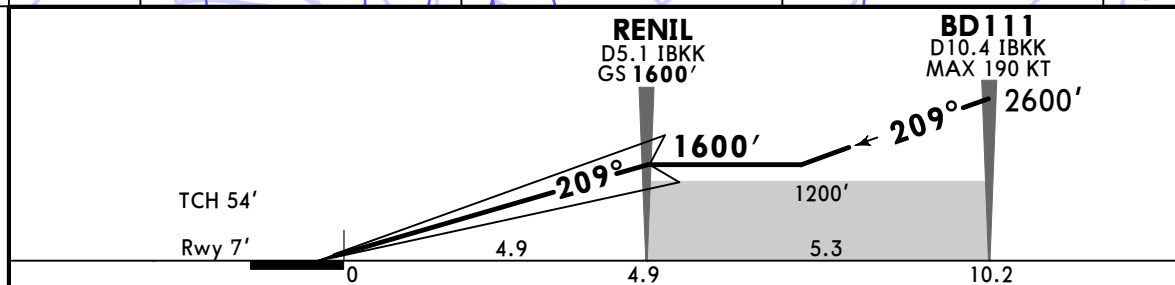
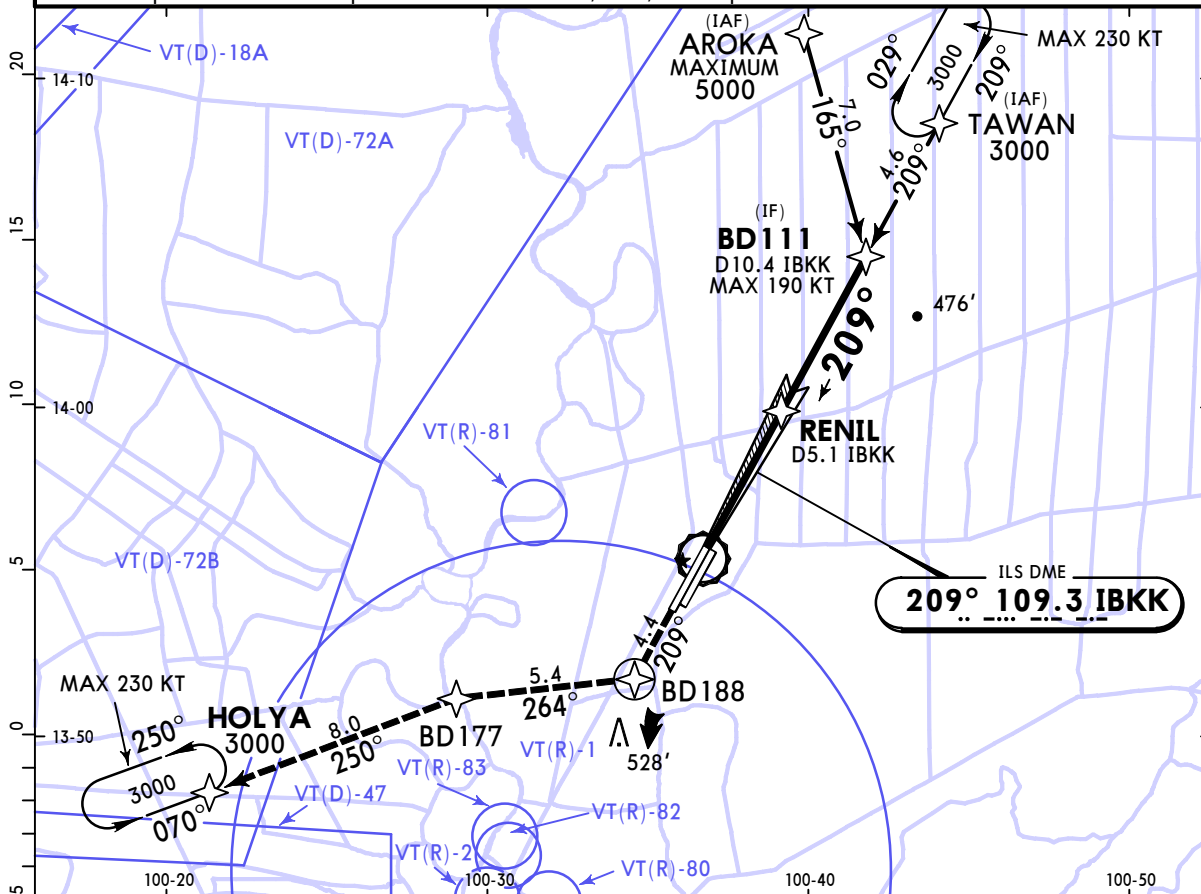
1 R750m when a Flight Director or Autopilot or HUD to DA is not used.
2 VNAV DA(H) in lieu of MDA(H) depends on operator policy.

VTBD/DMK
DON MUEANG INTL

JEPPESEN
12 MAY 23 **(11-5A)** Eff 18 May

BANGKOK, THAILAND
ILS Z Rwy 21R CAT II

D-ATIS 126.4	DON MUEANG Arrival (R) 133.0	DON MUEANG Approach (R) 119.1 119.4 120.3 122.35 124.35 125.2 133.4			DON MUEANG Tower 118.1	Ground 121.9 122.5
LOC IBKK 109.3	Final Apch Crs 209°	RENIL 1600' (1593')	CAT II ILS DA(H) Refer to Minimums		Apt Elev 9' Rwy 7'	1800 075° 2300 345° MSA ARP
MISSED APCH: Climb on track 209° to BD188, then turn RIGHT to BD177, then proceed to HOLYA at 3000', and hold or as directed by ATC.						
RNAV1 required	Alt Set: hPa	Rwy Elev: 0 hPa	Trans level: FL130	Trans alt: 11000'		
1. DME required. 2. Radar required. 3. GNSS or DME/DME/IRU required.						



Std STRAIGHT-IN LANDING CAT II ILS						
CAT A,B: RA 113' DA(H) 120' (113')			CAT C,D: RA 150' DA(H) 150' (143')			
R300m			R450m			

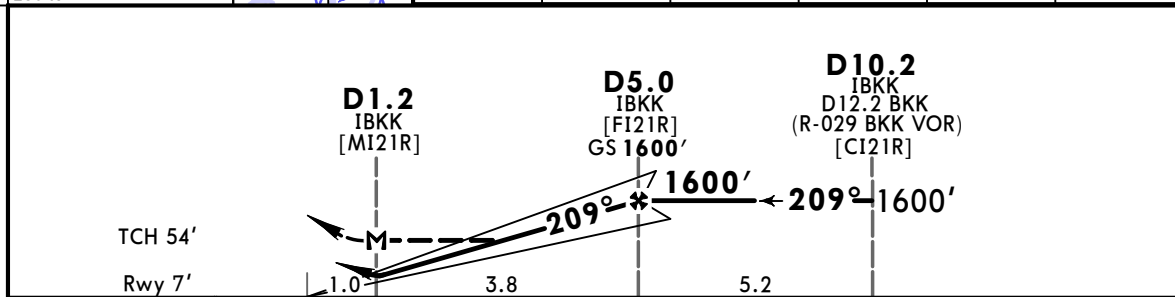
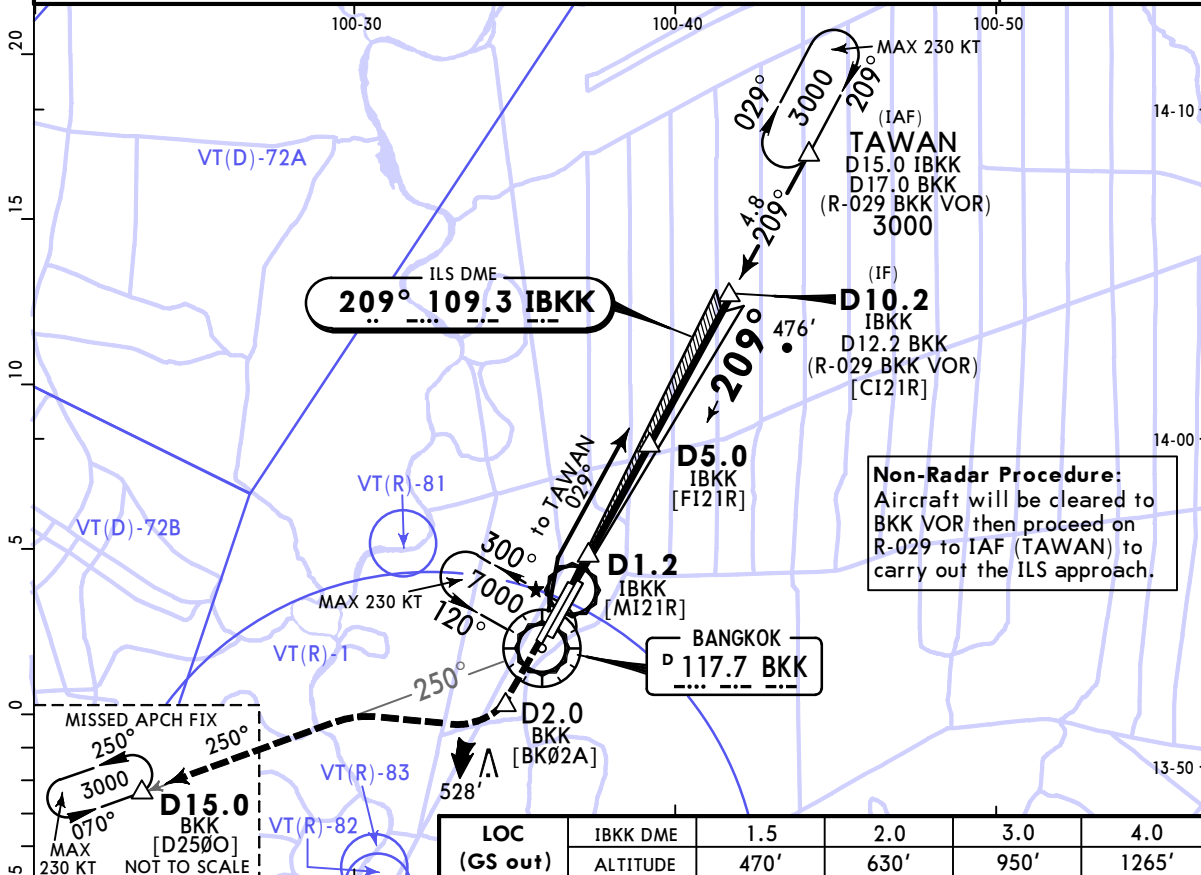
CHANGES: Approach frequency.

VTBD/DMK
DON MUEANG INTL

JEPPESEN
12 MAY 23
Eff 18 May **11-6**

BANGKOK, THAILAND
ILS or LOC Y Rwy 21R

BRIEFING STRIP™	D-ATIS	DON MUEANG Arrival (R)	DON MUEANG Approach (R)				DON MUEANG Tower	Ground
	126.4	133.0	119.1	119.4	120.3	118.1	121.9 122.5	
			122.35	124.35	125.2	133.4		
	LOC IBKK 109.3	Final Apch Crs 209°	D5.0 IBKK 1600' (1593')	ILS DA(H) 220' (213')	Apt Elev 9' Rwy 7'			
MISSED APCH: Climb on runway heading until D2.0 BKK VOR outbound, then turn RIGHT continue climb outbound on R-250 BKK VOR to 3000' and hold at D15.0 BKK VOR or as directed by ATC.								
Alt Set: hPa Rwy Elev: 0 hPa Trans level: FL130 Trans alt: 11000' VOR, DME required.								



Gnd speed-Kts	70	90	100	120	140	160		3000' on Rwy hdg D2.0 BKK	
GS	3.00°	372	478	531	637	743			849
MAP at D1.2 IBKK									
FAF to MAP	3.8	3:15	2:32	2:17	1:54	1:38	1:26		

PANS OPS	Std ILS STRAIGHT-IN LANDING				LOC (GS out) CDFA		CIRCLE-TO-LAND	
	DA(H) 220' (213')	TDZ or CL out	ALS out	DA(MDA(H)) 470' (463')	ALS out	Max Kts	MDA(H)	
A					R1500m	100	800' (791') V1500m	
B	R550m	1 R550m	R1200m	R1500m		135	800' (791') V1600m	
C					R2200m	180	1100' (1091') V2400m	
D						205	1100' (1091') V3600m	

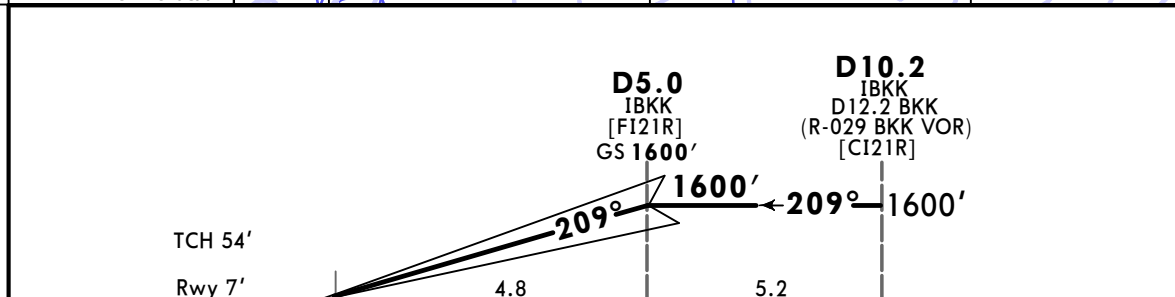
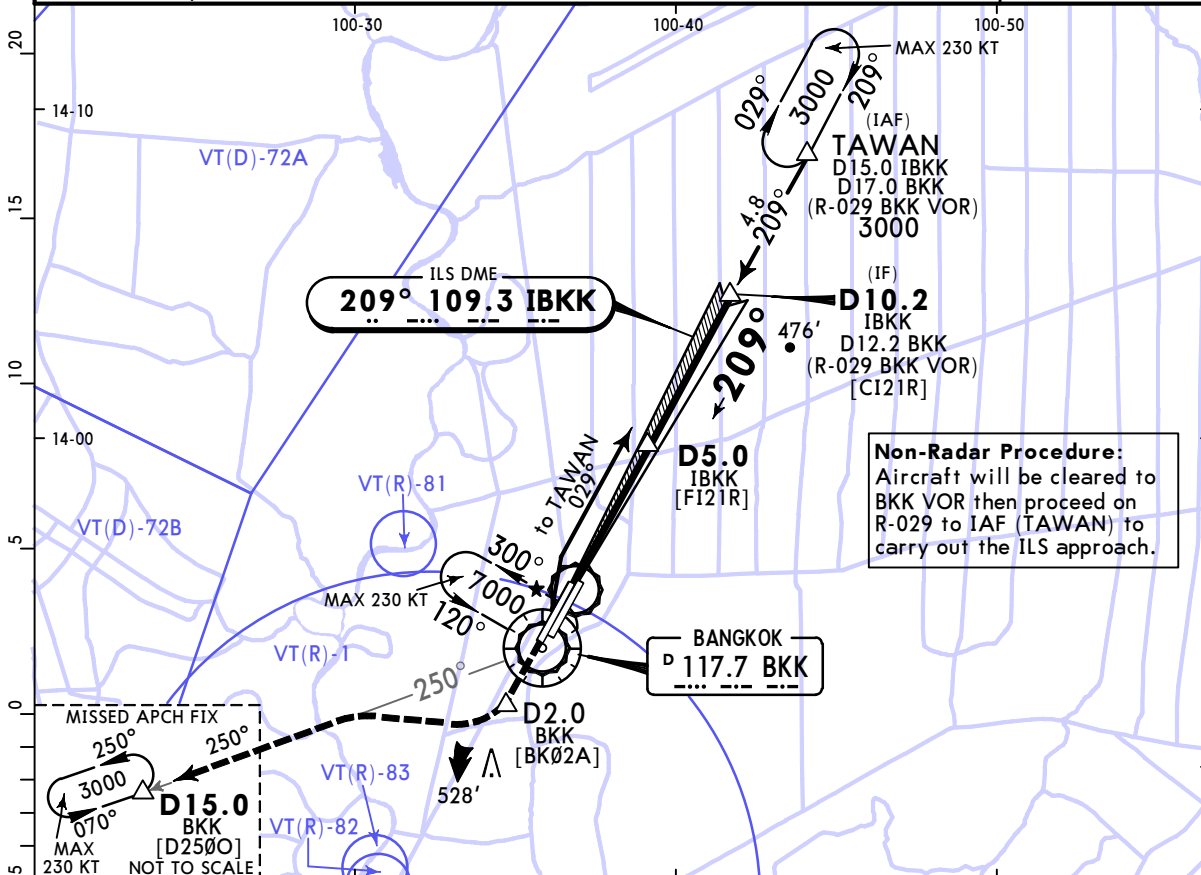
1 R750m when a Flight Director or Autopilot or HUD to DA is not used.
2 VNAV DA(H) in lieu of MDA(H) depends on operator policy.

VTBD/DMK
DON MUEANG INTL

JEPPESEN
12 MAY 23
Eff 18 May **11-6A**

BANGKOK, THAILAND
ILS Y Rwy 21R CAT II

D-ATIS	DON MUEANG Arrival (R)	DON MUEANG Approach (R)				DON MUEANG Tower	Ground
126.4	133.0	119.1	119.4	120.3	118.1	121.9	122.5
122.35	124.35	125.2	133.4				
LOC IBKK 109.3	Final Apch Crs 209°	D5.0 IBKK 1600' (1593')	CAT II ILS DA(H) Refer to Minimums		Apt Elev 9' Rwy 7'		
MISSED APCH: Climb on runway heading until D2.0 BKK VOR outbound, then turn RIGHT continue climb outbound on R-250 BKK VOR to 3000' and hold at D15.0 BKK VOR or as directed by ATC.							
Alt Set: hPa		Rwy Elev: 0 hPa		Trans level: FL130		Trans alt: 11000'	
VOR, DME required.							MSA BKK VOR



Gnd speed-Kts	70	90	100	120	140	160		3000 on ↑ hdg	Rwy hdg	D2.0 BKK
Gs	3.00°	372	478	531	637	743				

PANS OPS	Std		STRAIGHT-IN LANDING		CAT II ILS	
	CAT A,B: RA 113' DA(H) 120' (113')			CAT C,D: RA 150' DA(H) 150' (143')		
	R300m			R450m		

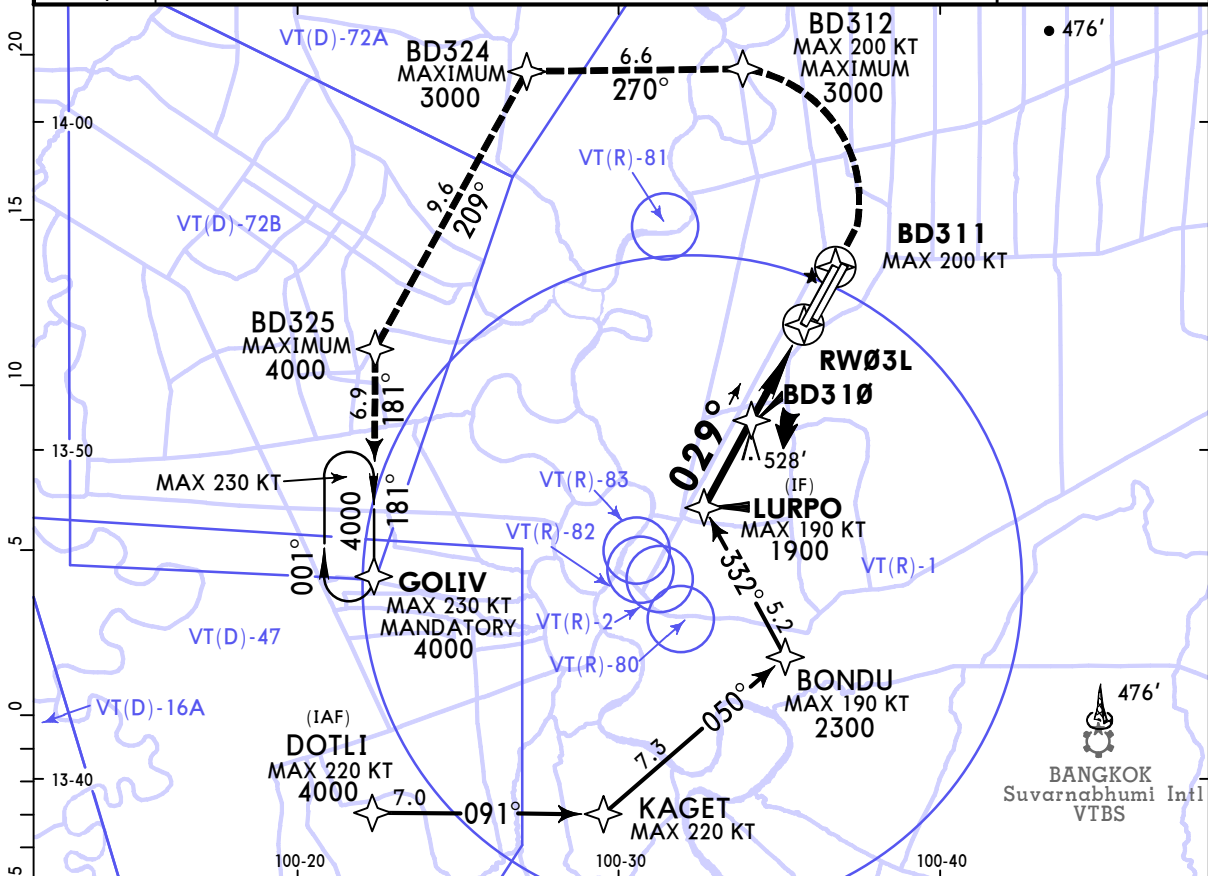
CHANGES: Approach frequency.

VTBD/DMK
DON MUEANG INTL

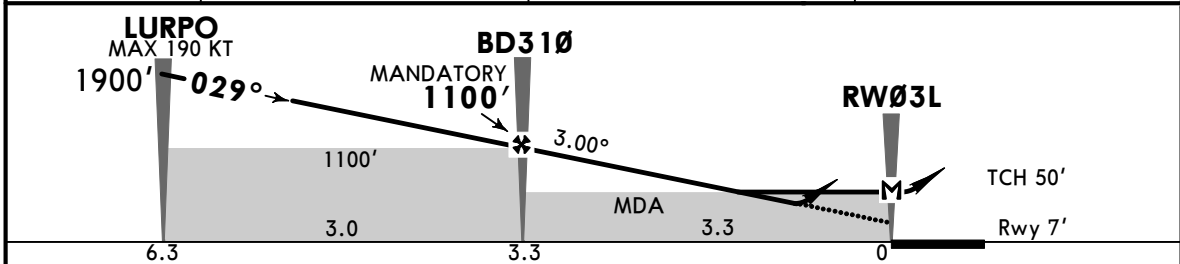
JEPPESEN
12 MAY 23 (12-1) Eff 18 May

BANGKOK, THAILAND
RNP Rwy 03L

D-ATIS	DON MUEANG Arrival (R)	DON MUEANG Approach (R)			DON MUEANG Tower	Ground
126.4	133.0	119.1	119.4	120.3	118.1	121.9 122.5
RNAV	Final Apch Crs 029°	BD310 MANDATORY 1100' (1093')	RNAV/VNAV DA(H) 490' (483')	Apt Elev 9'	Rwy 7'	
MISSED APCH: Climb and maintain 3000'. Track 029° to BD311, then turn LEFT direct to BD312, then to BD324. At BD324 proceed to BD325 climbing up to 4000', then to GOLIV and hold or as directed by ATC. No turn before MAP. Speed restricted to MAX 200 KT until BD312.						
Alt Set: hPa		Rwy Elev: 0 hPa	Trans level: FL130		Trans alt: 11000'	
RNP Apch	Baro-VNAV not authorized below 15°C.					MSA ARP



DIST to RW03L	BD310	2.0	1.7
ALTITUDE	1100'	690'	590'



Gnd speed-Kts	70	90	100	120	140	160	
Glide Path Angle 3.00°	372	478	531	637	743	849	

PANS OPS	STRAIGHT-IN LANDING				CIRCLE-TO-LAND	
	LNAV/VNAV		LNAV CDFA		Max Kts	MDA(H)
	DA(H) 490' (483')		DA/MDA(H) 590' (583')			
	ALS out		ALS out		100	800' (791') V1500m
	A	R1500m		R1500m		135
B	R1500m		R1500m		180	800' (791') V2400m
C	R1800m	R2300m	R2300m	R2400m	205	1100' (1091') V3600m
D	R1800m	R2300m	R2300m	R2400m		

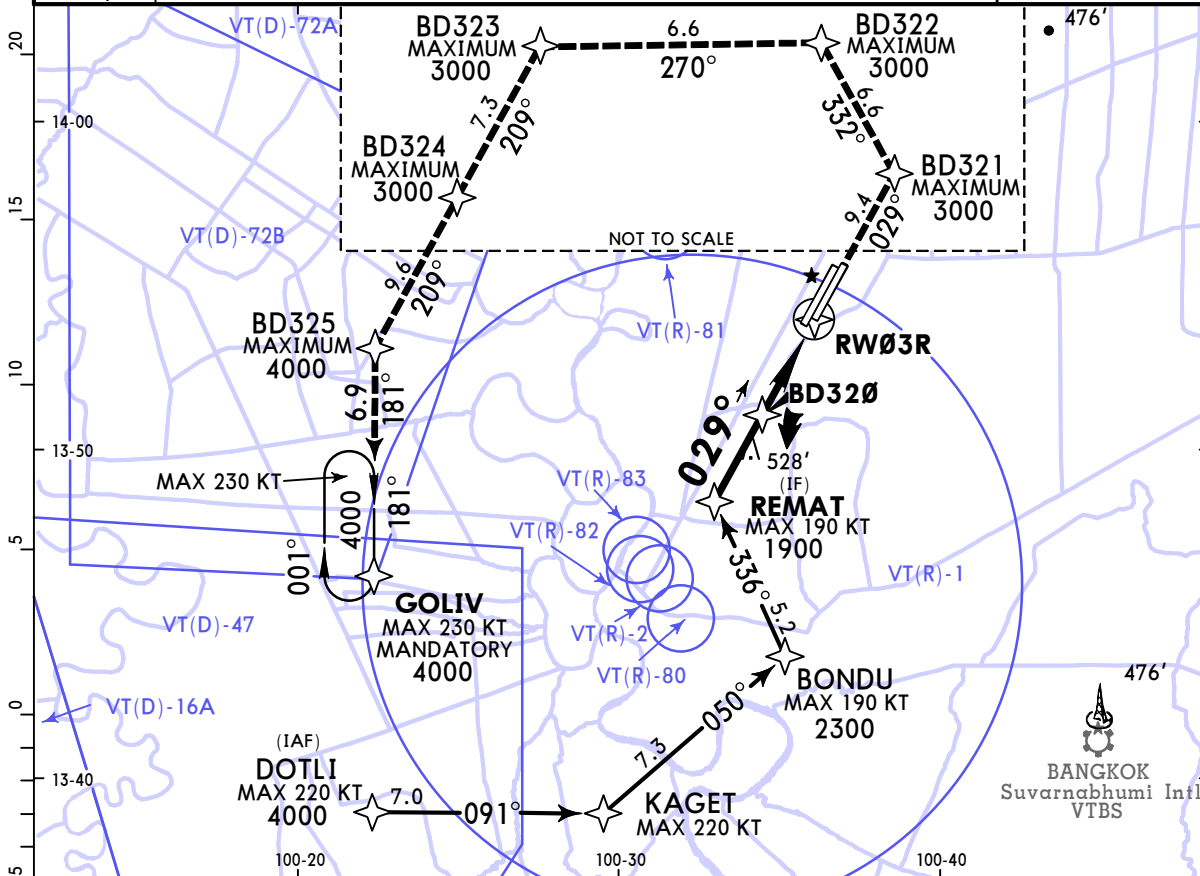
CHANGES: Approach frequency, altitudes. © JEPPESEN, 2021, 2023. ALL RIGHTS RESERVED.

VTBD/DMK
DON MUEANG INTL

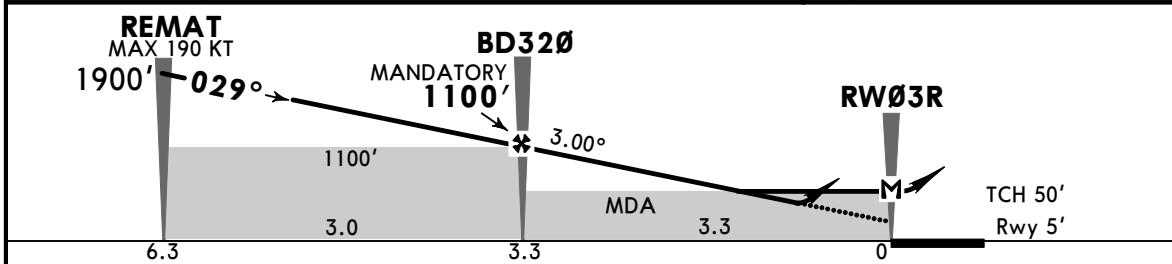
JEPPESSEN
12 MAY 23 **(12-2)** Eff 18 May

BANGKOK, THAILAND
RNP Rwy 03R

D-ATIS	DON MUEANG Arrival (R)	DON MUEANG Approach (R)			DON MUEANG Tower	Ground
126.4	133.0	119.1	119.4	120.3	118.1	121.9 122.5
122.35	124.35	125.2	133.4			
RNAV	Final Apch Crs 029°	BD320 MANDATORY 1100' (1095')	RNAV/VNAV DA(H) 490' (485')	Apt Elev 9'	Rwy 5'	
MISSED APCH: Climb and maintain 3000'. Track 029° to BD321, then to BD322, then to BD323, then to BD324. At BD324 proceed to BD325 climbing up to 4000', then to GOLIV and hold or as directed by ATC. No turn before MAP.						
Alt Set: hPa		Rwy Elev: 0 hPa		Trans level: FL130		Trans alt: 11000'
RNP Apch		Baro-VNAV not authorized below 15°C.				



DIST to RW03R	BD320	2.0	1.4
ALTITUDE	1100'	685'	500'



Gnd speed-Kts	70	90	100	120	140	160	
Glide Path Angle 3.00°	372	478	531	637	743	849	
MAP at RW03R							

PANS OPS	Std STRAIGHT-IN LANDING				CIRCLE-TO-LAND	
	RNAV/VNAV		RNAV CDFA		Max Kts	MDA(H)
	DA(H) 490' (485')		DA/MDA(H) 500' (495')			
	ALS out		ALS out		100	800' (791') V1500m
	A	R1500m		R1500m		135
B	R1500m		R1500m		180	800' (791') V2400m
C	R2100m	R2300m	R2100m	R2300m	205	1100' (1091') V3600m
D	R2100m	R2300m	R2100m	R2300m		

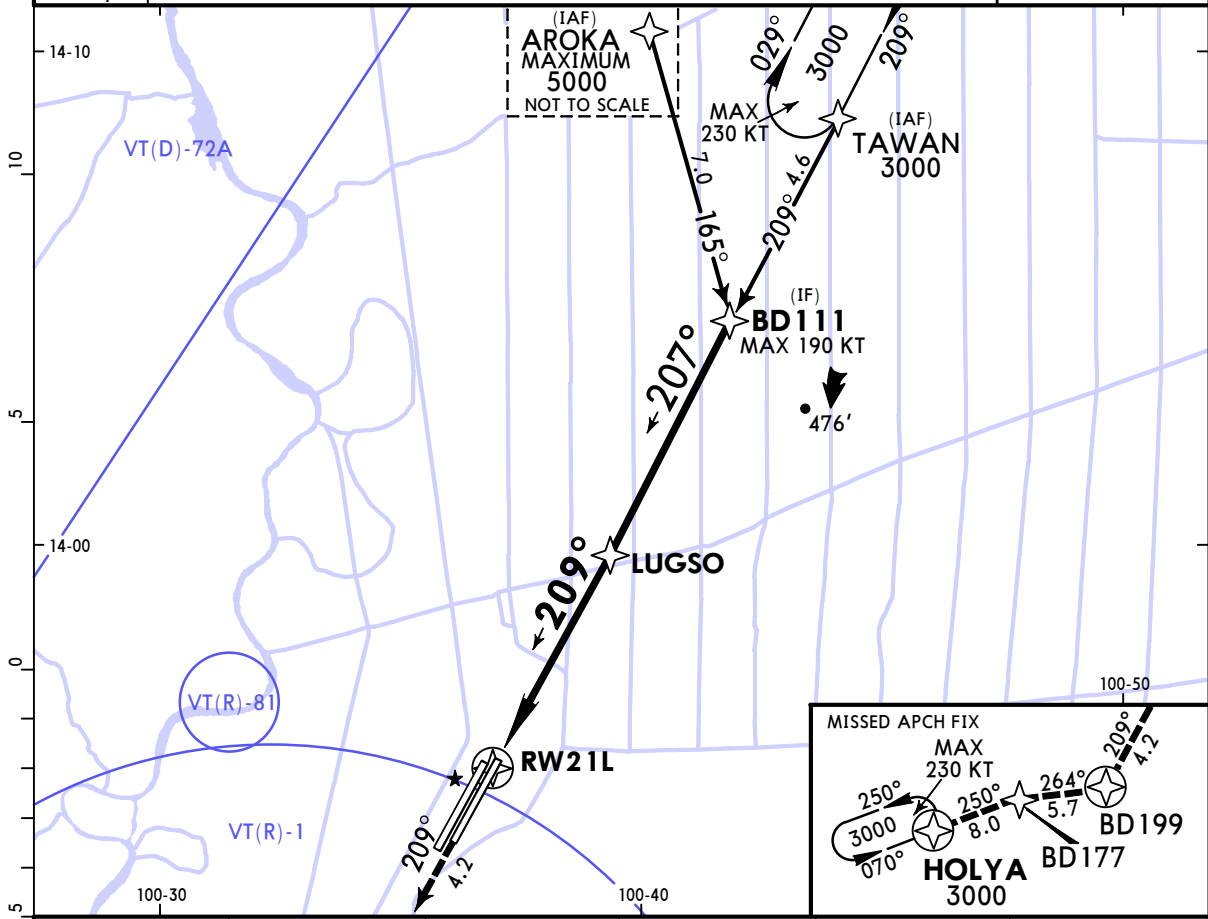
CHANGES: Approach frequency, altitudes. © JEPPESSEN, 2021, 2023. ALL RIGHTS RESERVED.

VTBD/DMK
DON MUEANG INTL

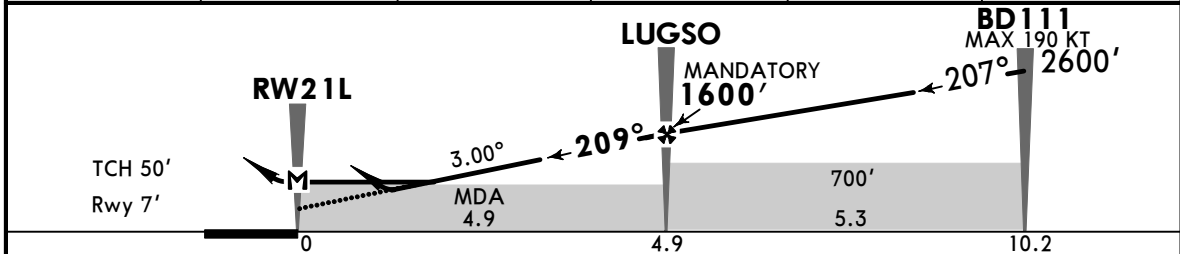
JEPPESEN
12 MAY 23 **(12-3) Eff 18 May**

BANGKOK, THAILAND
RNP Rwy 21L

D-ATIS	DON MUEANG Arrival (R)	DON MUEANG Approach (R)			DON MUEANG Tower	Ground	
126.4	133.0	119.1	119.4	120.3	118.1	121.9 122.5	
122.35	124.35	125.2	133.4				
RNAV	Final Apch Crs 209°	LUGSO MANDATORY 1600' (1593')	RNAV/VNAV DA(H) 350' (343')	Apt Elev 9' Rwy 7'			
MISSED APCH: Climb on track 209° to BD199, then turn RIGHT to BD177, then proceed to HOLYA at 3000', and hold or as directed by ATC. No turn before MAP.							
Alt Set: hPa Rwy Elev: 0 hPa Trans level: FL130 Trans alt: 11000' RNP Apch Baro-VNAV not authorized below 15°C.							



DIST to THR	1.3	2.0	3.0	4.0	LUGSO
ALTITUDE	470'	690'	1005'	1320'	1600'



Gnd speed-Kts	70	90	100	120	140	160	HIALS-II PAPI PAPI	3000' on 209°	BD199
Glide Path Angle	3.00°	372	478	531	637	743			
MAP at RW21L									

	STRAIGHT-IN LANDING		CIRCLE-TO-LAND	
	LNNAV/VNAV DA(H) 350' (343')	LNNAV CDFA DA/MDA(H) 470' (463')	LNNAV ALS out	LNNAV ALS out
A	R900m	R1500m	R1500m	Max Kts MDA(H) V
B			R1500m	100 800' (791') V1500m
C			R2200m	135 800' (791') V1600m
D			R1600m	180 800' (791') V2400m
				205 1100' (1091') V3600m

LNNAV VNAV DA(H) in lieu of MDA(H) depends on operator policy.

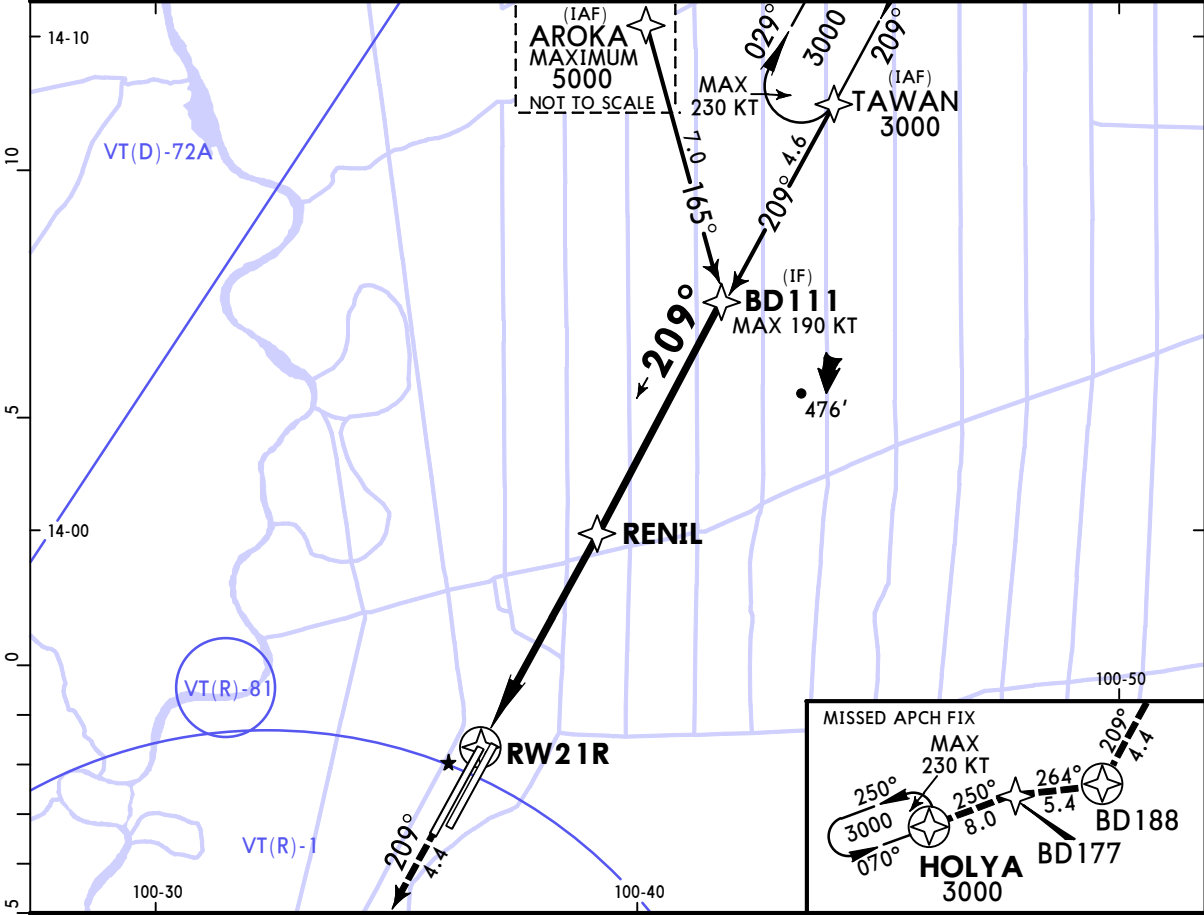
CHANGES: Approach frequency.

VTBD/DMK
DON MUEANG INTL

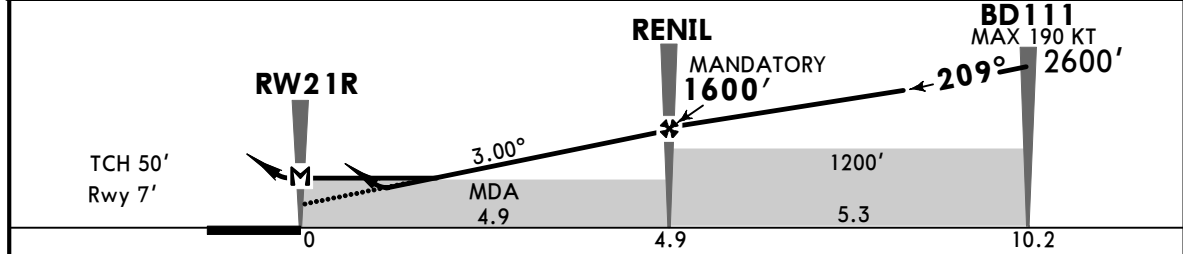
JEPPESEN
12 MAY 23 **(12-4)** Eff 18 May

BANGKOK, THAILAND
RNP Rwy 21R

BRIEFING STRIP™	D-ATIS	DON MUEANG Arrival (R)	DON MUEANG Approach (R)			DON MUEANG Tower	Ground
	126.4	133.0	119.1	119.4	120.3	118.1	121.9 122.5
	RNAV	Final Apch Crs 209°	RENIL MANDATORY 1600' (1593')	LNAV/VNAV DA(H) 370' (363')	Apt Elev 9' Rwy 7'		
MISSED APCH: Climb on track 209° to BD188, then turn RIGHT to BD177, then proceed to HOLYA at 3000', and hold or as directed by ATC. No turn before MAP.							
Alt Set: hPa		Rwy Elev: 0 hPa	Trans level: FL130		Trans alt: 11000'		
RNP Apch		Baro-VNAV not authorized below 15°C.					



DIST to THR	1.5	2.0	3.0	4.0	RENIL
ALTITUDE	530'	690'	1005'	1320'	1600'



Gnd speed-Kts	70	90	100	120	140	160		3000' ↑ on 209° BD188
Glide Path Angle	3.00°	372	478	531	637	743		

PANS OPS	Std				STRAIGHT-IN LANDING		CIRCLE-TO-LAND	
	LNAV/VNAV		LNAV CDFA		LNAV CDFA			
	DA(H) 370' (363')		DA/MDA(H) 530' (523')		DA/MDA(H) 530' (523')			
	ALS out		ALS out		ALS out			
	A	R1000m	R1500m		R1500m		Max Kts	MDA(H)
B	R1500m		R1500m		100	800' (791') V1500m		
C	R1700m		R1700m		135	800' (791') V1600m		
D	R1700m		R2400m		180	800' (791') V2400m		
						205	1100' (1091') V3600m	

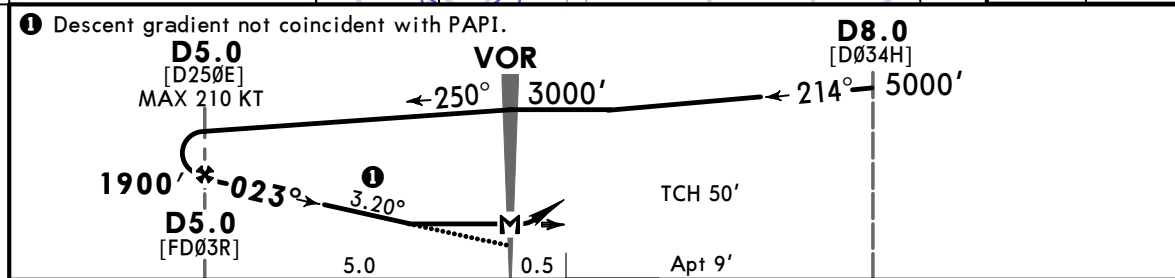
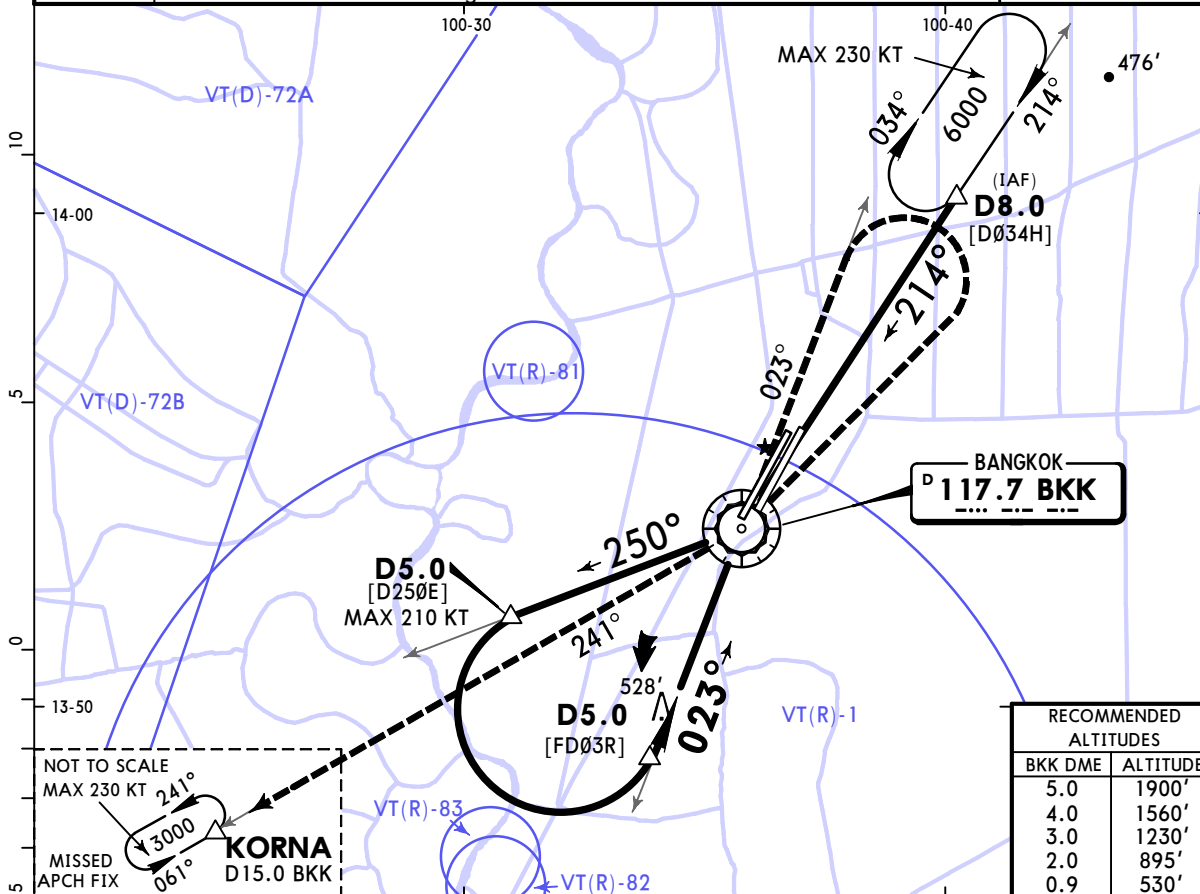
CHANGES: Approach frequency. © JEPPESEN, 2016, 2023. ALL RIGHTS RESERVED.

VTBD/DMK
DON MUEANG INTL

JEPESEN
9 JUN 23 **13-1** Eff 15 Jun

BANGKOK, THAILAND
VOR Rwy 03R

D-ATIS	DON MUEANG Arrival (R)	DON MUEANG Approach (R)				DON MUEANG Tower	Ground
126.4	133.0	119.1	119.4	120.3	118.1	121.9	122.5
VOR BKK 117.7	Final Apch Crs 023°	D5.0 1900' (1891')	DA/MDA(H) 790' (781')		Apt Elev 9'		
MISSED APCH: At VOR, climb outbound on R-023 BKK VOR until 1500', then turn RIGHT to BKK VOR and continue climb on R-241 BKK VOR to D15.0 BKK VOR at 3000' and hold or as directed by ATC. No turn before MAP.							
Alt Set: hPa		Rwy Elev: 0 hPa		Trans level: FL130		Trans alt: 11000'	
1. DME required. 2. No intermediate segment.							MSA BKK VOR



Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI PAPI 1500' on BKK R-023
Descent Angle 3.20°	396	510	566	679	793	906	
MAP at VOR							
FAF to MAP	5.0	4:17	3:20	3:00	2:30	2:09	

PANS OPS	Std STRAIGHT-IN LANDING		CIRCLE-TO-LAND	
	CDFA			
	DA/MDA(H) 790' (781')			
	ALS out		Max Kts.	MDA(H)
	A	R1500m	100	800' (791') V1500m
B		135	800' (791') V1600m	
C		180	800' (791') V2400m	
D	R3400m	R3600m	205	1100' (1091') V3600m

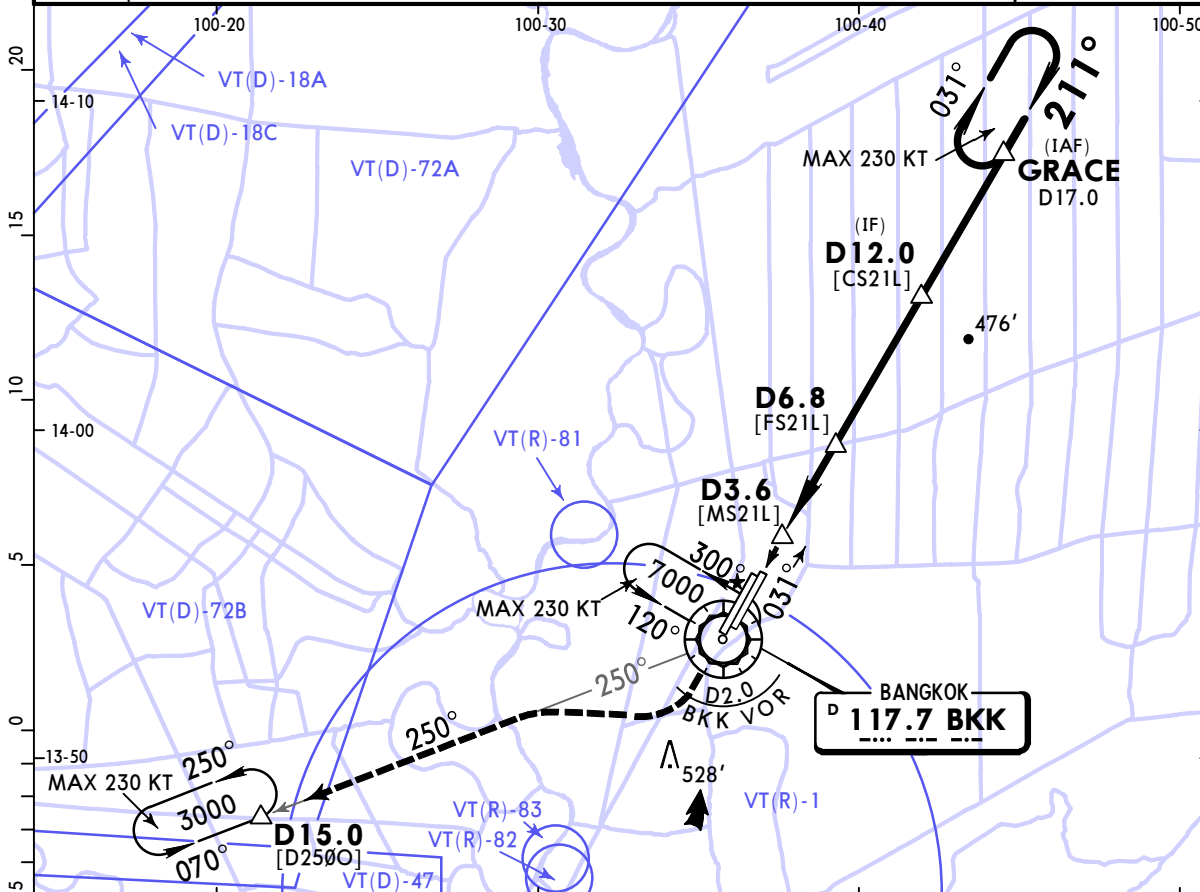
① VNAV DA(H) in lieu of MDA(H) depends on operator policy.

VTBD/DMK
DON MUEANG INTL

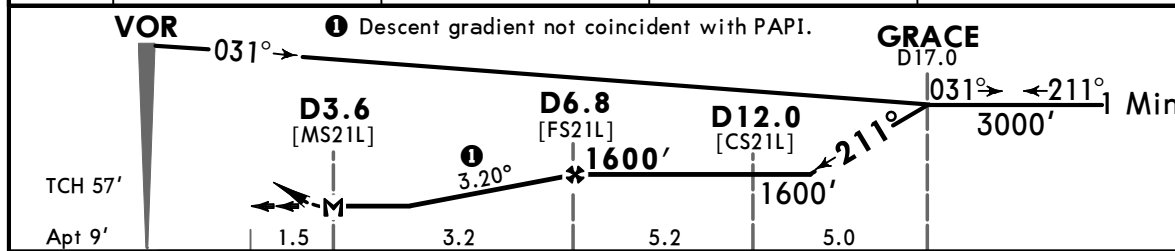
JEPPESSEN
9 JUN 23 **(13-2)** Eff 15 Jun

BANGKOK, THAILAND
VOR Rwy 21L

D-ATIS	DON MUEANG Arrival (R)	DON MUEANG Approach (R)				DON MUEANG Tower	Ground
126.4	133.0	119.1	119.4	120.3	118.1	121.9 122.5	
VOR BKK 117.7	Final Apch Crs 211°	D6.8 1600'(1591')	DA/MDA(H) 520' (511')		Apt Elev 9'		
MISSED APCH: Climb straight ahead to BKK VOR until D2.0 BKK VOR outbound, then turn RIGHT continue climb outbound on R-250 BKK VOR to 3000' and hold at D15.0 BKK VOR or as directed by ATC. No turn before MAP.							
Alt Set: hPa		Rwy Elev: 0 hPa	Trans level: FL130		Trans alt: 11000'		
DME required.							MSA BKK VOR



BKK DME	3.6	4.0	5.0	6.0
ALTITUDE	520'	700'	1040'	1370'



Gnd speed-Kts	70	90	100	120	140	160	HIALS-II PAPI PAPI ↑ → BKK 117.7
Descent Angle 3.20°	396	510	566	679	793	906	
MAP at D3.6							
FAF to MAP	3.2	2:45	2:08	1:55	1:36	1:22	

PANS OPS	Std STRAIGHT-IN LANDING		CIRCLE-TO-LAND		
	CDFA				
	DA/MDA(H) 520' (511')		ALS out		
	A	R1500m		Max Kts. 100	MDA(H) 800'(791') V1500m
	B			135	800'(791') V1600m
C	R1600m	R2400m	180	800'(791') V2400m	
D			205	1100'(1091') V3600m	

■ VNAV DA(H) in lieu of MDA(H) depends on operator policy.

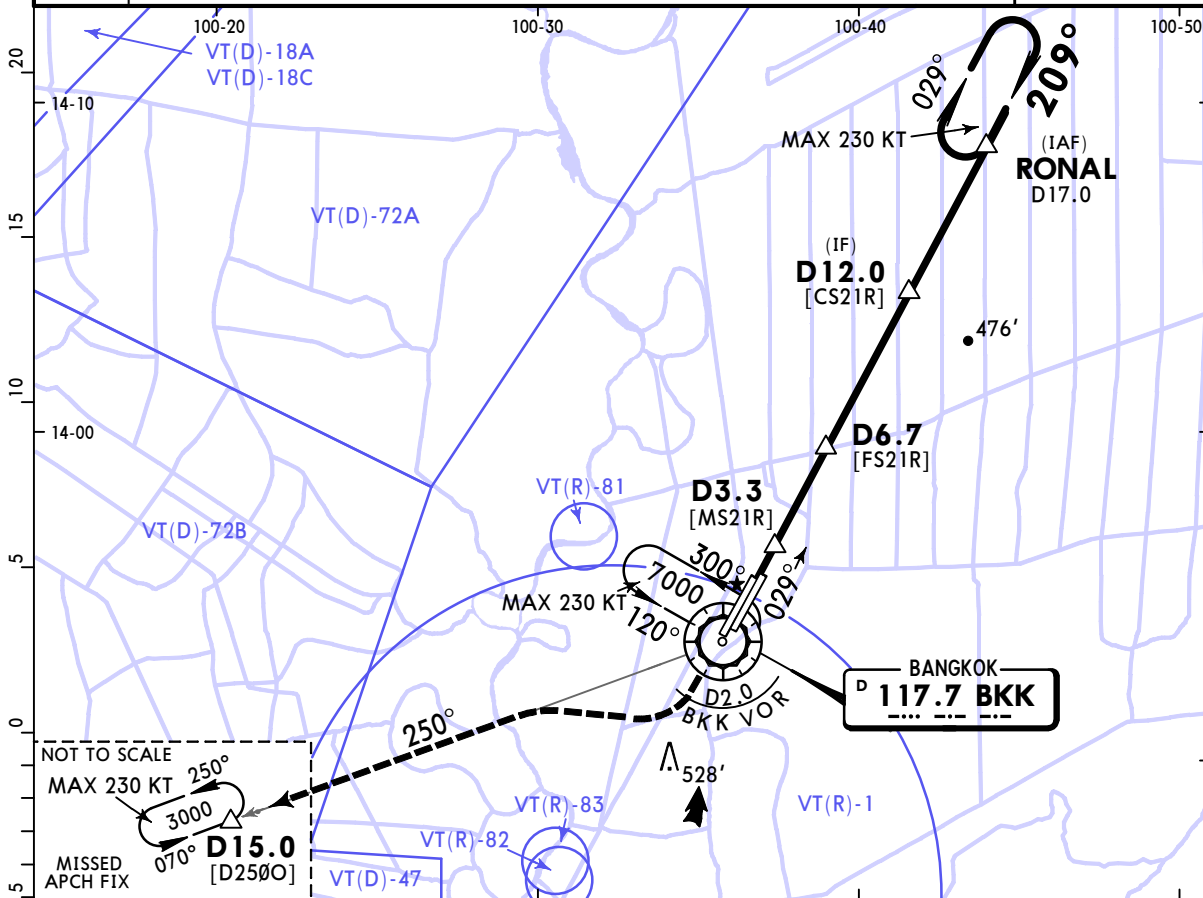
CHANGES: None.

VTBD/DMK
DON MUEANG INTL

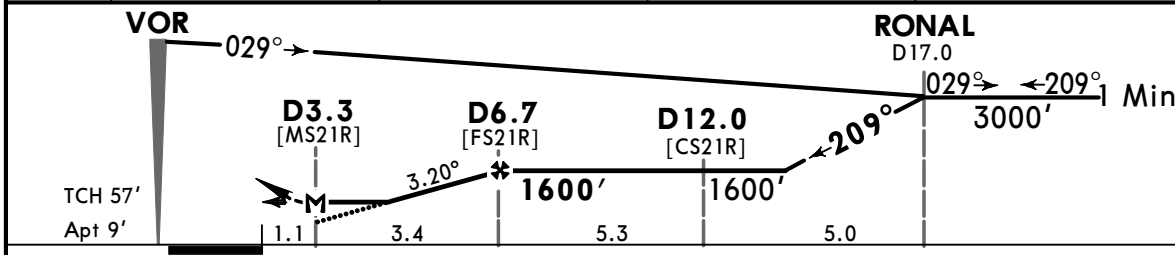
JEPPESSEN
12 MAY 23 **(13-3)** Eff 18 May

BANGKOK, THAILAND
VOR Rwy 21R

BRIEFING STRIP™	D-ATIS	DON MUEANG Arrival (R)	DON MUEANG Approach (R)				DON MUEANG Tower	Ground
	126.4	133.0	119.1	119.4	120.3	118.1	121.9 122.5	
	VOR BKK 117.7	Final Apch Crs 209°	D6.7 1600'(1591')	DA/MDA(H) 520'(511')		Apt Elev 9'		
	MISSED APCH: Climb STRAIGHT AHEAD to BKK VOR until D2.0 BKK VOR outbound, then turn RIGHT continue climb outbound on R-250 BKK VOR to 3000' and hold at D15.0 BKK VOR or as directed by ATC. No turn before MAP.							
	Alt Set: hPa		Rwy Elev: 0 hPa	Trans level: FL130		Trans alt: 11000'		MSA BKK VOR
DME required.								



BKK DME	3.3	4.0	5.0	6.0
ALTITUDE	520'	730'	1050'	1360'



Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI PAPI ↑ ↻ BKK 117.7
Descent Angle 3.20°	396	510	566	679	793	906	
MAP at D3.3							
FAF to MAP	3.4	2:55	2:16	2:02	1:42	1:27	

PANS OPS	Std	STRAIGHT-IN LANDING		CIRCLE-TO-LAND		
		CDFA				
		DA/MDA(H) 520'(511')				
		ALS out				Max Kts
	A	R1500m		100	800'(791')	V1500m
B	R1500m		135	800'(791')	V1600m	
C	R1600m	R2400m	180	800'(791')	V2400m	
D	R1600m	R2400m	205	1100'(1091')	V3600m	

CHANGES: Approach frequency. © JEPPESSEN, 1998, 2023. ALL RIGHTS RESERVED.

General Information

Location: HANGZHOU CHN
ICAO/IATA: ZSHC / HGH
Lat/Long: N30° 13.7', E120° 26.0'
Elevation: 22 ft

Airport Use: Public
Daylight Savings: Not Observed
UTC Conversion: -8:00 = UTC
Magnetic Variation: 6.0° W

Fuel Types: Jet
Repair Types: Minor Airframe, Minor Engine
Customs: Yes
Airport Type: IFR
Landing Fee: Yes
Control Tower: Yes
Jet Start Unit: No
LLWS Alert: No
Beacon: No

Sunrise: 2136 Z
Sunset: 1023 Z

Runway Information

Runway: 06
Length x Width: 11155 ft x 197 ft
Surface Type: concrete
TDZ-Elev: 22 ft
Lighting: Edge, ALS, Centerline, TDZ

Runway: 07
Length x Width: 11811 ft x 148 ft
Surface Type: concrete
TDZ-Elev: 22 ft
Lighting: Edge, ALS, Centerline

Runway: 24
Length x Width: 11155 ft x 197 ft
Surface Type: concrete
TDZ-Elev: 22 ft
Lighting: Edge, ALS, Centerline

Runway: 25

Length x Width: 11811 ft x 148 ft
Surface Type: concrete
TDZ-Elev: 22 ft
Lighting: Edge, ALS, Centerline

Communication Information

ATIS: 131.450
ATIS: 127.250
Hangzhou Tower: 118.300
Hangzhou Tower: 118.750 Secondary
Hangzhou Tower: 123.650
Hangzhou Ground: 121.650
Hangzhou Ramp/Taxi: 121.550 Secondary
Hangzhou Ramp/Taxi: 121.850
Hangzhou Clearance Delivery: 121.950
Hangzhou Approach: 120.400
Hangzhou Approach: 120.050
Hangzhou Approach: 119.425
Hangzhou Approach: 119.150 Secondary
Hangzhou Approach: 127.700
Hangzhou Approach: 126.050
Hangzhou Approach: 125.550
Hangzhou Approach: 125.275 Secondary
Hangzhou Approach: 124.650 Secondary

ZSHC/HGH
XIAOSHAN

JEPPESEN

HANGZHOU, PR OF CHINA

3 MAY 24

10-1P

Eff 15 May 1600Z

AIRPORT BRIEFING

1. GENERAL

1.1. ATIS

D-ATIS 127.25

1.2. WAKE TURBULENCE RE-CATEGORIZATION (RECAT-CN)

For Wake Turbulence Re-Categorization (RECAT-CN) Separation Standards see ATC pages.

1.3. NOISE ABATEMENT PROCEDURES

1.3.1. RUN-UP TESTS

Engine run-ups are subject to the clearance of HANGZHOU Ramp, and may only be carried out at designated location.

Engine idle test can be carried on stands 102 thru 105, 106, 108A, 203, 204, 381 thru 386, 500, apron 6, apron 7 and apron 9.

Fast engine run-ups can be carried out on stand 500, 363, TWY B (East of intersection of TWY B4 and B), TWY Z17 (between stands 913 and 914) and TWY Z19 (West of intersection of TWY D0 and Z19).

1.4. LOW VISIBILITY PROCEDURES (LVP)

1.4.1. GENERAL

ACFT should be authorized to operate LVP.

The following information should be obtained by ACFT:

- Meteorological forecast;
- LVP is implementing.

For LVP taxi routes refer to 10-9 charts.

1.4.2. PREPARATION

When RVR is 800m and forecast to descend or ceiling is 90m and forecast to descend.

When meteorological forecast RVR rise to 150m or above.

Preparation for LVP shall start-up under deterioration of weather conditions.

1.4.3. IMPLEMENTATION

Under the following circumstances, TWR declares start-up of LVP via D-ATIS, ATIS and VHF:

- RVR is greater or equal 150m and less than 600m, and ceiling is greater or equal 30m and less than 60m.

1.4.4. TERMINATION

Under the following circumstances, TWR declares termination of LVP via D-ATIS, ATIS and VHF:

- RVR rises to 600m, ceiling rises to 90m and forecast to clear-up or keep status for 20 minutes;
- RVR is less than 150m, or ceiling is less than 30m and weather condition is not expected to improve in the next hour.

1.5. RWY OPERATIONS

When changing RWY-in-use, if downwind speed is more than 3m/s (6 KT) and not exceeding 5m/s (10 KT), ATC may instruct downwind take-off or landing for a short time. Pilot shall inform ATC if unable.

ZSHC/HGH
XIAOSHAN

JEPPESEN

HANGZHOU, PR OF CHINA

3 MAY 24

10-1P1

Eff 15 May 1600Z

AIRPORT BRIEFING

1. GENERAL

1.6. TAXI PROCEDURES

For Tower Control area and Ramp Control area see 10-9 pages.

Repeat the taxiing instructions issued by GND Control, especially those containing boundary limitation. Make it clear when there is a doubt.

180° turnaround on TWY is forbidden for all ACFT.

180° turnaround on RWY is forbidden for all ACFT without ATC permission.

TWYs C7, C8, D (East of D4), D4 (South of D), D5, D6, J6 (between E4 and D7) and K wingspan restricted to less than 262'/80m.

TWYs B3, B6, B7, B11, D (West of D4), D3, E4, E5, E6, J, J0, J2 thru J5, J6 (East of D7), L, Z1, Z10, Z11 (between B and stand 214), Z13 (between B and Z1) and Z14, wingspan restricted to less than 213'/65m.

TWY Z13 (between Z1 and stand 217) wingspan restricted to less than 157'/48m.

TWYs B (between K and B11), B10, B20, D0, D7 (between stands 339 and 343), E7, E8, E9, H7, H9, Z7, Z8, Z11 (between stands 206 and 210), Z13 (between stands 217 and 218), Z17, Z19 and Z20 wingspan restricted to less than 118'/36m.

Contact HANGZHOU Operation Control on 130.65 to get towing service.

Contact HANGZHOU Ramp on 121.725 for Follow-me service.

1.7. PARKING INFORMATION

Stands 102 thru 106, 108A, 203, 204, 211 thru 218, 301 thru 343, 401 thru 432, 500, 512 thru 517, 520 thru 534, 601 thru 613, 630 thru 636, 640, 719 thru 721, 901 thru 904 and 929 thru 946 are push-back.

Stands 981 and 982 are push-in and push-back, nose to North.

Red/blue push-back procedures established for stands 102 thru 105, 108A, 215, 304 thru 315, 317, 318, 329, 330, 332 thru 337, 339 thru 342, 403 thru 405, 407, 409 thru 411, 415 thru 418, 419B, 420, 422, 429, 515, 516, 520 thru 526, 528 thru 534, 602 thru 613, 630 thru 633, 640, 720, 721, 901 thru 904, 930 thru 937 and 940 thru 946.

Red/blue push-back procedure used to command ground worker as follows:

- After receiving push-back clearance, pilot shall repeat and tell ground worker.
- Ground worker will then repeat and recognize. Before push-back, ground worker shall ensure push-back direction again.

Stands 211 thru 218, 301 thru 343 and 401 thru 418, 419B and 420 thru 432 equipped with visual docking guidance system.

The safety lines of stands 313, 322 and 325 are overlapping the safety lines of the adjacent stands. The overlapping lines are shown in a red stripe area. Aircrew shall ensure that no vehicles and people are in this area during ACFT maneuvering.

ACFT parking at boarding bridge stands shall turn off APU and use bridge power supply equipment (400 Hz) and special air conditioner.

ACFT can use APU in the following situation:

- Bridge equipment is unserviceable.
- ACFT needs APU to start up engine.
- During maintenance of APU.

In case of exceptional circumstance influencing the regularity and safety of operation, such as extreme weather, special plane support, and insufficient flight transition time, ACFT can also use APU.

1.8. OTHER INFORMATION

RNAV flight procedures are primary and conventional procedures are secondary procedures. If ACFT cannot fulfil requirements of RNAV procedures, pilot shall inform ATC at first contact.

Birds in vicinity of APT.

RWYs 07 and 24 Right-hand circuit.

ZSHC/HGH
XIAOSHAN

JEPPESEN

HANGZHOU, PR OF CHINA

15 MAR 24

10-1P2

Eff 20 Mar 1600Z

AIRPORT BRIEFING

2. ARRIVAL

2.1. CAT II OPERATIONS

RWY 06 approved for CAT II operations, special aircrew and ACFT certification required.

2.2. RWY OPERATIONS

ACFT shall fully vacate the RWY within 50 sec after touchdown (except for wet or contaminated RWY). If unable, inform ATC before LOC is established.

ACFT shall report to TWR Control "RWY vacated" and TWY used for vacating RWY.

ACFT shall vacate RWY 07 via TWY A5 and RWY 25 via TWY A4. ACFT shall inform TWR Control at initial contact if need to vacate RWY via other TWY.

3. DEPARTURE

3.1. DE-ICING

De-icing available at local stands or at stands 381 thru 386 with priority for stands 385 and 386, 618 thru 626, TWY C8 between TWY D and Z14 for severe icing conditions.

De-icing should be applied in advance.

Snow cleaning and de-icing service not available for A380.

3.2. START-UP, PUSH-BACK AND TAXI PROCEDURES

ACFT shall contact HANGZHOU Ramp for push-back and start-up clearance and conduct within 5 minutes. Otherwise, request new clearance.

Obtain delivery clearance through DCL (available 24h) and ATC clearance. No readback required when delivery clearance received through DCL.

Push-back of ACFT on its own power or by towing strictly forbidden without clearance from Ramp Control.

ACFT are forbidden to enter RWY via TWYs A3 thru A6 and C3 thru C6.

When taxiing to RWY holding position, nose of ACFT shall get close to RWY holding position marking without exceeding it when ACFT is waiting at the holding position. Pilot shall report to Tower when nose of ACFT exceeding holding position without instruction.

Ramp Control transfers departure ACFT to Tower Control at intersections of TWYs. Aircrew shall taxi following ATC instructions.

RWY 06: D3 and D5 are transfer points. D3 is for stands 719 thru 721 and 901 thru 928, D5 for others.

RWY 07: B1 and B3 are transfer points. B1 is for stands 102 thru 106 and 108A, B3 is for others.

RWY 24: JC and C7 are transfer points. C7 is for stands 601 thru 613, 616 thru 626, 630 thru 636 and 640, JC is for others.

RWY 25: B10 and JA are transfer points. B10 is for stands 500 thru 506, 512 thru 517 and 520 thru 534. JA is for others.

ZSHC/HGH
XIAOSHAN

JEPPESEN

HANGZHOU, PR OF CHINA

15 MAR 24

10-1P3

Eff 20 Mar 1600Z

AIRPORT BRIEFING

3. DEPARTURE

3.3. NOISE ABATEMENT PROCEDURES

With take-off performance permission, pilot shall take reduced-thrust flight as far as possible.

During reduced-thrust flight:

Take-off to 1480'/450m - Take-off flaps/slats;

- Climb at V_2+20 km/h (10 KT).

At 1480'/450m

- Adjust and keep engine climbing power and thrust;

- Take-off flaps/slats;

- Climb at V_2+20 km/h (10 KT).

At 2960'/900m

- Adjust to en-route climb speed and retract flaps and slats.

If noise abatement procedure is not implemented, report the reason to ATC before take-off.

3.4. RWY OPERATIONS

ACFT shall finish RWY alignment within 60 seconds from holding position (except for wet or contaminated RWY). If unable, inform TWR before entering RWY.

During initial contact after take-off, pilot shall report take-off RWY designation to ATC.

ZSHC/HGH
XIAOSHAN

23 DEC 22
Eff 28 Dec 1600Z (10-1R)



HANGZHOU, PR OF CHINA

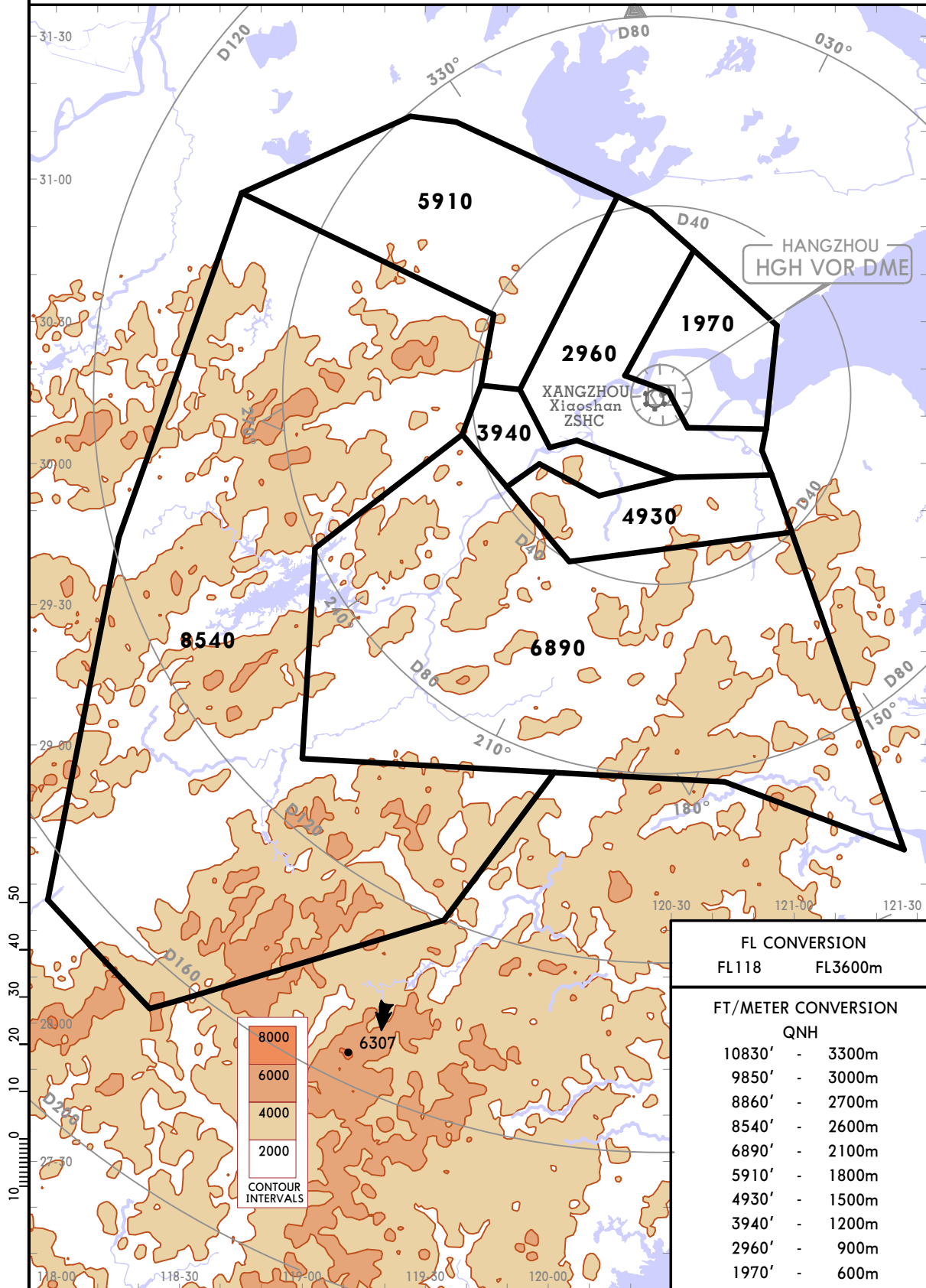
RADAR MINIMUM ALTITUDES

HANGZHOU Approach (R)						
*APP01	*APP02	APP03	*APP04	*APP05	*APP07	Apt Elev
120.05	125.55	126.05	120.4	119.425	127.7	22

Alt Set: hPa Trans level: FL118
Trans alt: 9850

10830 1031 hPa or above
8860 979 hPa or below

Chart only to be used for cross-checking of altitudes assigned while under RADAR control.



CHANGES: APP07.

© JEPPesen, 2020, 2022. ALL RIGHTS RESERVED.

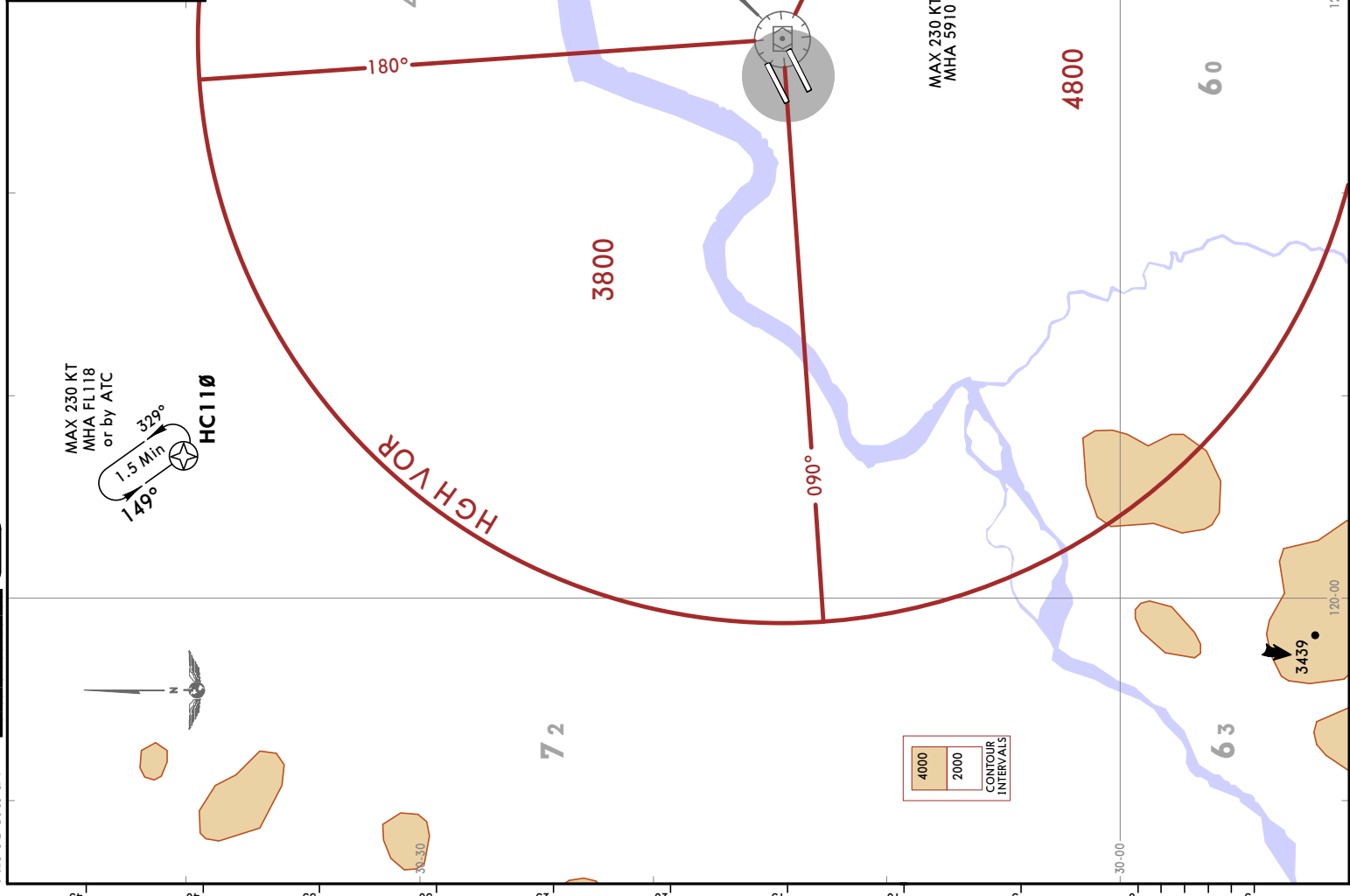
HANGZHOU, PR OF CHINA
RNAV STAR

D-ATIS 127.25	Alt Set: hPa RNP 1 GNSS	Trans level: FL118
Apt Elev 22	RNP 1 OR GNSS	
1. RADAR required for RNAV 1. 2. Join the HC110 holding pattern for RADAR vectoring.		

OKT 81A, SUP 81A
RNAV ARRIVALS
(RWYS 24, 25)

FL CONVERSION	
FL118	FL3600m
FT/METER CONVERSION	
QNH	
9850'	3000m
6890'	2100m
5910'	1800m
4930'	1500m
3940'	1200m
2960'	900m

LOST COMMS
Landing aircraft via RNAV procedures RWYS 24, 25 from OKTUG, SUPAR after flying to IAF via STAR fly to HC306 and join holding, descend to altitude, then join the relevant approach procedure.

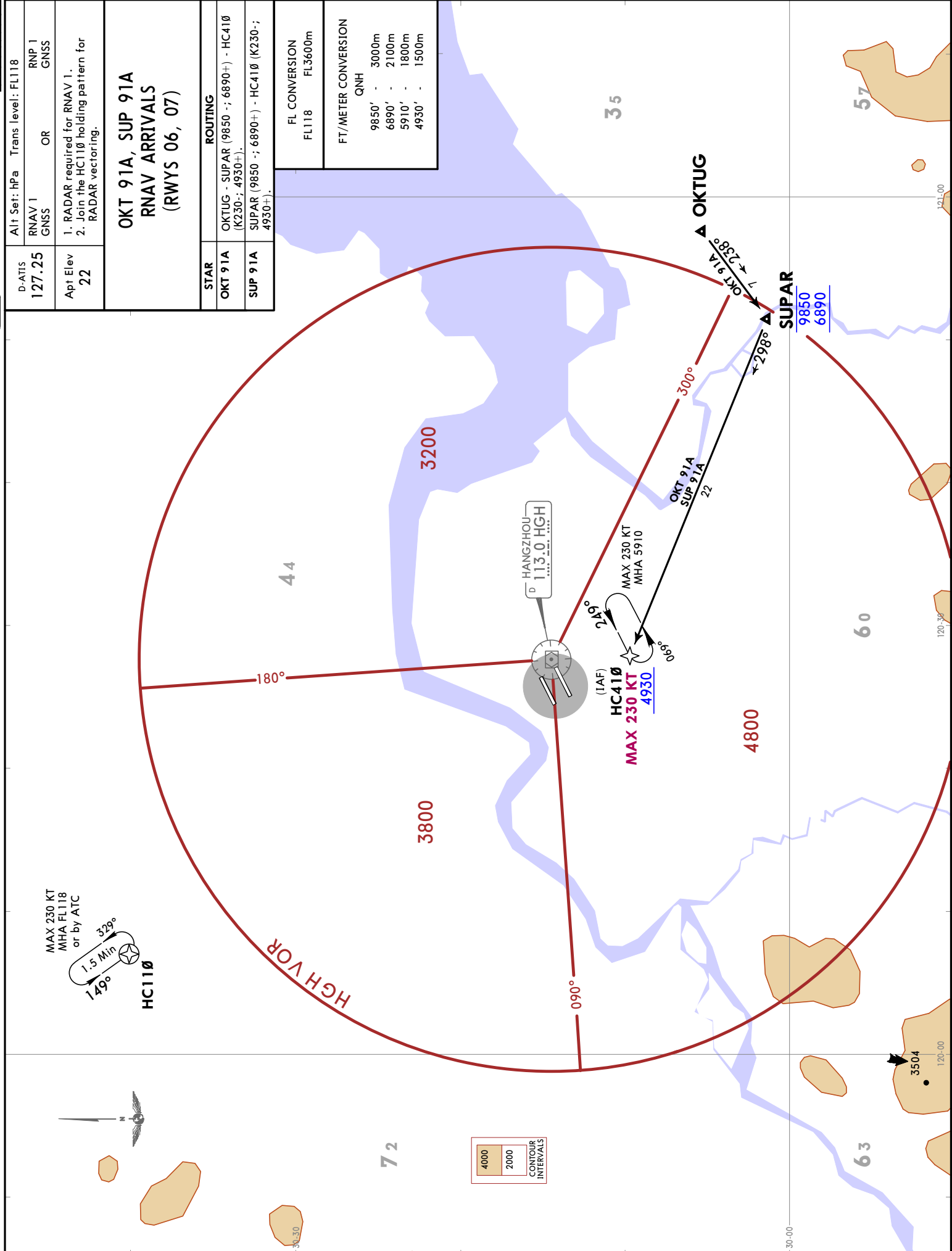


D-ATIS	Alt Set: hPa	Trans level: FL118	RNAV 1	RNP 1
127.25	RNAV 1	OR	GNS5	GNS5
Apt Elev	1. RADAR required for RNAV 1. 2. Join the HC110 holding pattern for RADAR vectoring.			
22				

OKT 91A, SUP 91A
RNAV ARRIVALS
(RWYS 06, 07)

STAR	ROUTING
OKT 91A	OKTUG - SUPAR (9850 - ; 6890+) - HC410 (K230-; 4930+).
SUP 91A	SUPAR (9850 - ; 6890+) - HC410 (K230-; 4930+).

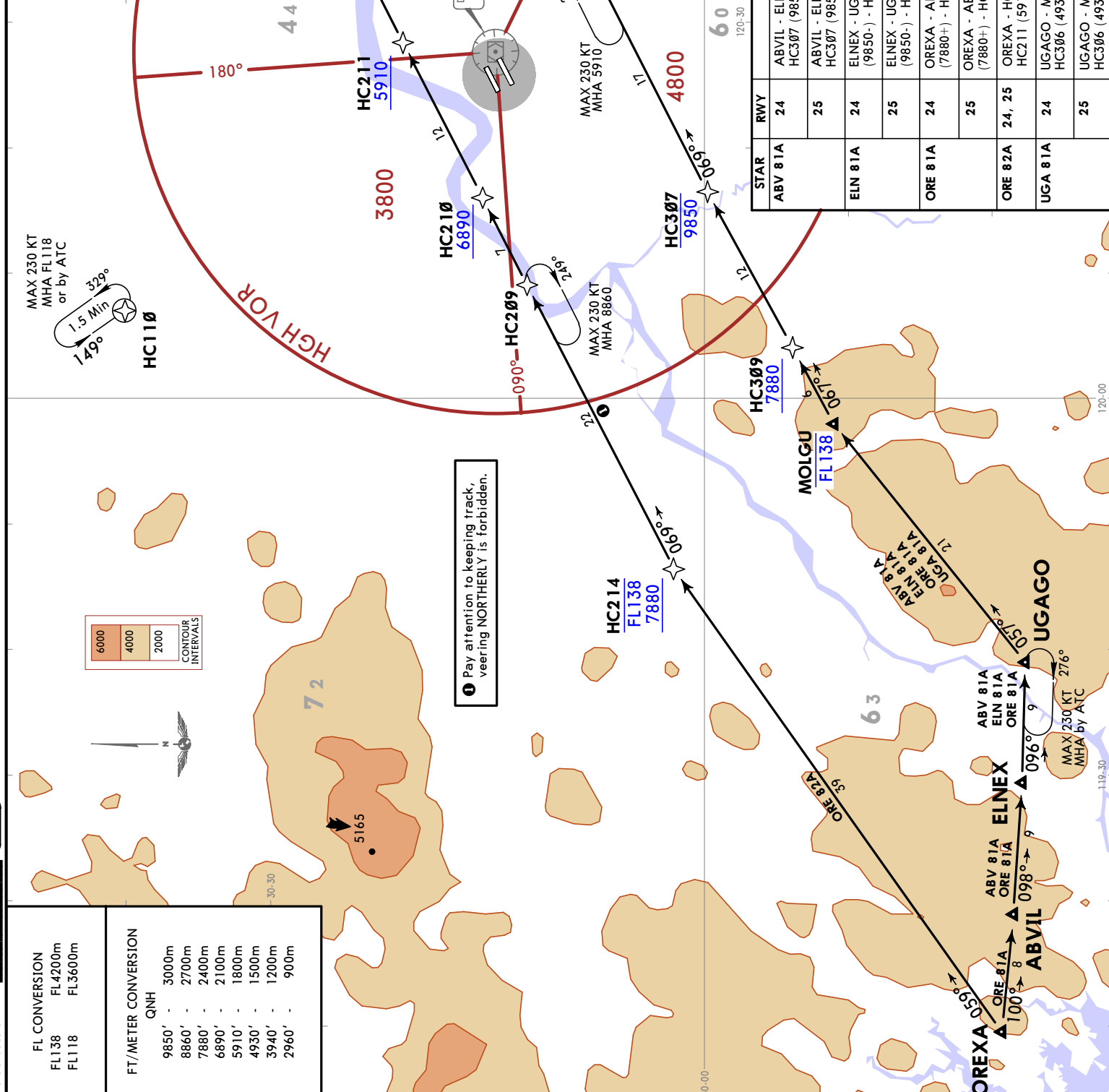
FL CONVERSION	
FL118	FL3600m
FT/METER CONVERSION	
QNH	
9850'	3000m
6890'	2100m
5910'	1800m
4930'	1500m



HANGZHOU, PR OF CHINA
RNAV STAR

D-ATIS 127.25	Alt Set: hPa Trans level: FL118
RNAV 1 GNSS	RNP 1 GNSS
OR	
Apt Elev 22	1. RADAR required for RNAV 1. 2. Join the HC110 holding pattern for RADAR vectoring.

ABV 81A, ELN 81A
ORE 81A, ORE 82A, UGA 81A
RNAV ARRIVALS
(RWYS 24, 25)



6000	4000	2000
CONTOUR INTERVALS		



FL CONVERSION	
FL138	FL4200m
FL118	FL3600m
FT/METER CONVERSION	
QNH	
9850'	3000m
8860'	2700m
7880'	2400m
6890'	2100m
5910'	1800m
4930'	1500m
3940'	1200m
2960'	900m

STAR	RWY	ROUTING
ABV 81A	24	ABVIL - ELNEX - UGAGO - MOLGU (FL138-) - HC309 (7880+) - HC307 (9850+) - HC306 (4930+) - HC305 (K230+; 3940+).
	25	ABVIL - ELNEX - UGAGO - MOLGU (FL138-) - HC309 (7880+) - HC307 (9850-) - HC306 (4930+) - HC305 (K230+; 2960+).
	24	ELNEX - UGAGO - MOLGU (FL138-) - HC309 (7880+) - HC307 (9850-) - HC306 (4930+) - HC305 (K230+; 3940+).
ELN 81A	24	ELNEX - UGAGO - MOLGU (FL138-) - HC309 (7880+) - HC307 (9850-) - HC306 (4930+) - HC305 (K230+; 2960+).
	25	ELNEX - UGAGO - MOLGU (FL138-) - HC309 (7880+) - HC307 (9850-) - HC306 (4930+) - HC305 (K230+; 2960+).
ORE 81A	24	OREXA - ABVIL - ELNEX - UGAGO - MOLGU (FL138-) - HC309 (7880+) - HC307 (9850+) - HC306 (4930+) - HC305 (K230+; 3940+).
	25	OREXA - ABVIL - ELNEX - UGAGO - MOLGU (FL138-) - HC309 (7880+) - HC307 (9850+) - HC306 (4930+) - HC305 (K230+; 3940+).
ORE 82A	24, 25	OREXA - HC214 (FL138-; 7880+) - HC209 - HC210 (6890+) - HC211 (5910+) - HC104 (K210+; 4930+).
	24	UGAGO - MOLGU (FL138-) - HC309 (7880+) - HC307 (9850+) - HC306 (4930+) - HC305 (K230+; 3940+).
UGA 81A	24	UGAGO - MOLGU (FL138-) - HC309 (7880+) - HC307 (9850+) - HC306 (4930+) - HC305 (K230+; 2960+).
	25	UGAGO - MOLGU (FL138-) - HC309 (7880+) - HC307 (9850+) - HC306 (4930+) - HC305 (K230+; 2960+).

ZSHC/HGH
XIAOSHAN

JEPPesen HANGZHOU, PR OF CHINA
10-2C Eff 4 Oct 1600Z
29 SEP 23

RNAV STAR

STAR	RWY	ROUTING
ELN 91A	06, 07	ELNEX - DUBGO (FL148-; 8860+) - HC214 (FL138-; 7880+) - HC207 (5910+) - HC208 (K210-; 5910+)
ELN 92A	07	ELNEX - DUBGO (FL148-; 8860+) - HC414 (7880+) - HC413 (6890+ or by ATC) - HC412 (K230-; 3940 or by ATC)
ORE 91A	06, 07	OREXA - HC214 (FL138-; 7880+) - HC207 (5910+) - HC208 (K210-; 5910+)
ORE 92A	07	OREXA - ABVIL - ELNEX - DUBGO (FL148-; 8860+) - HC414 (7880+) - HC413 (6890+ or by ATC) - HC412 (K230-; 3940 or by ATC)
UGA 91A	06, 07	UGAGO - TOL - DUBGO (FL148-; 8860+) - HC214 (FL138-; 7880+) - HC207 (5910+) - HC208 (K210-; 5910+)
UGA 92A	07	UGAGO - TOL - DUBGO (FL148-; 8860+) - HC414 (7880+) - HC413 (6890+ or by ATC) - HC412 (K230-; 3940 or by ATC)
UGA 93A By ATC	06, 07	UGAGO - TOL - HC408 (7880+) - HC407 (6890+ or by ATC) - HC405 (K210-; 3940+)

FL CONVERSION	
FL148	FL4500m
FL138	FL4200m
FL118	FL3600m

FT/METER CONVERSION	
8860'	2700m
7880'	2400m
6890'	2100m
5910'	1800m
3940'	1200m

HC110
NOT TO SCALE

MAX 230 KT
MHA FL118
or by ATC

1.5 Min
379°
149°

Alt Set: hPa Trans level: FL118
D-ATIS 127.25
RNP 1 OR RNP 1 GNSS
Apt Elev 22
1. RADAR required for RNAV 1.
2. Join the HC110 holding pattern for RADAR vectoring.

ELN 91A, ELN 92A
ORE 91A, ORE 92A
UGA 91A, UGA 92A, UGA 93A
RNAV ARRIVALS
(RWYS 06, 07)

30-30

3800 090° 3200 300°

HANGZHOU
P 113.0 HGH

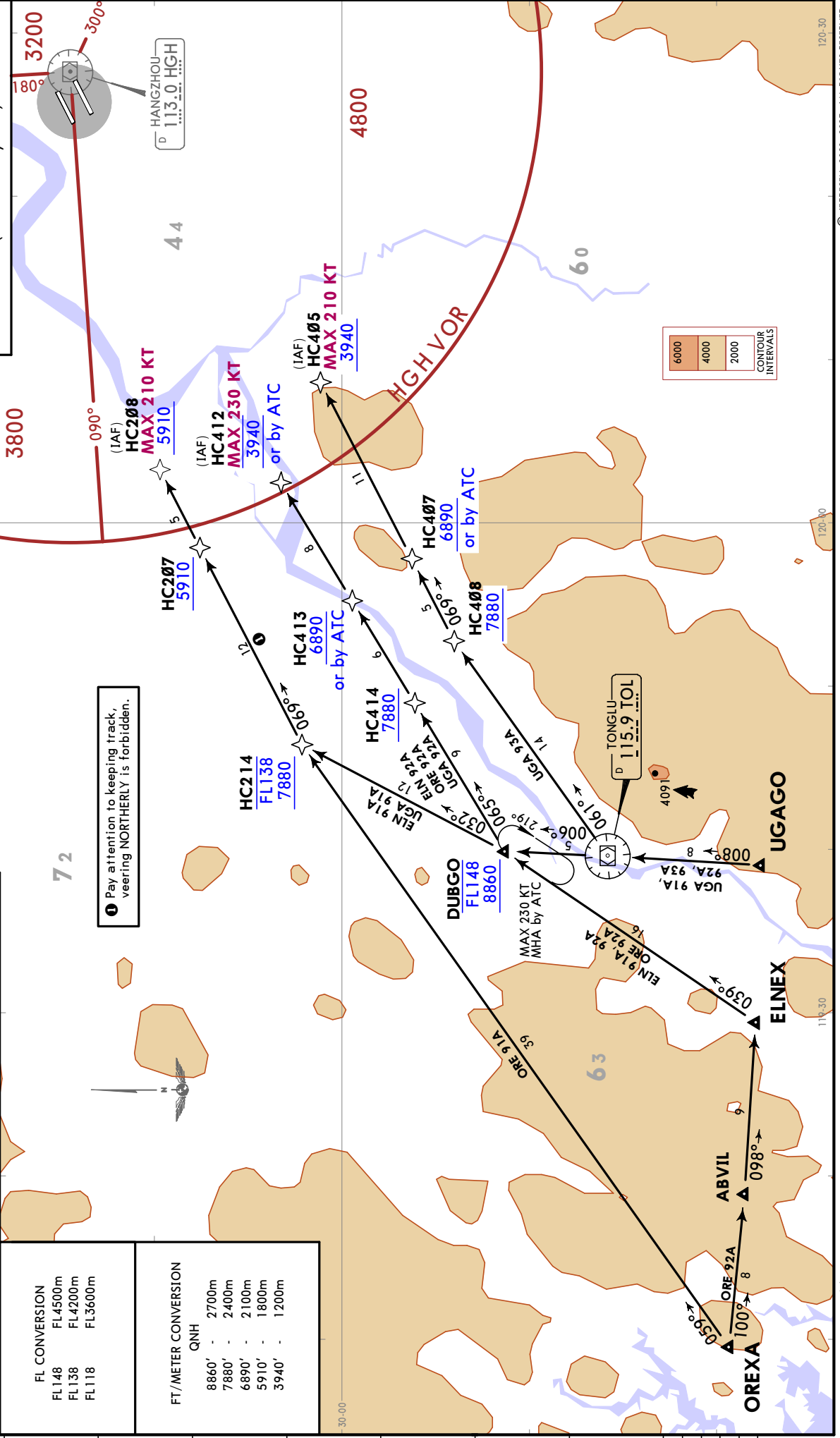
44

60

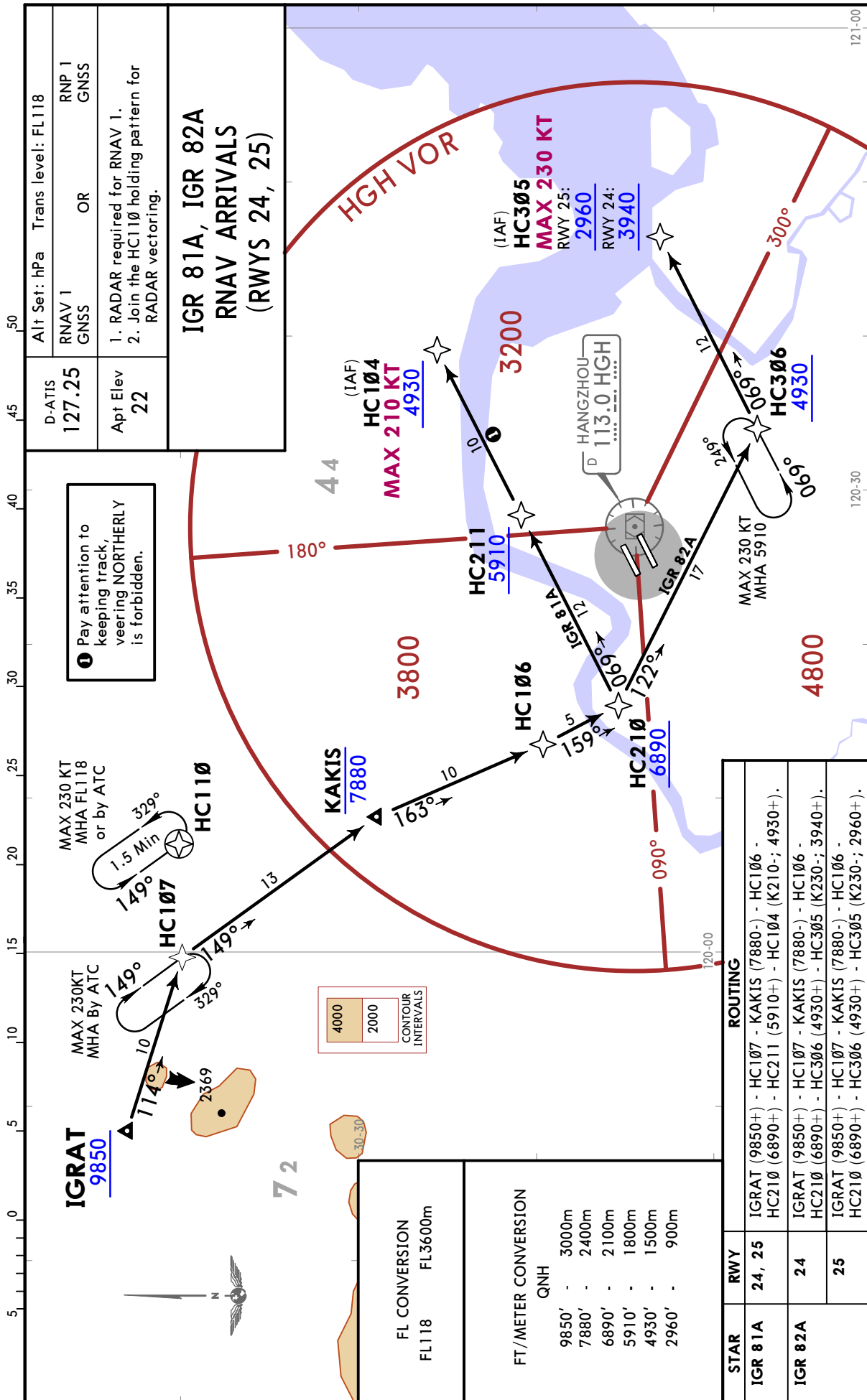
4800

HGH VOR

6000
4000
2000
CONTOUR INTERVALS



ZSHC/HGH
XIAOSHAN



D-ATIS 127.25	Alt Set: hPa RNAV 1 GNSS	Trans level: FL118	RNP 1 GNSS
Apt Elev 22	OR		
1. RADAR required for RNAV 1. 2. Join the HC110 holding pattern for RADAR vectoring.			

**IGR 81A, IGR 82A
RNAV ARRIVALS
(RWYS 24, 25)**

Pay attention to keeping track, veering NORTHERLY is forbidden.

4000
2000
CONTOUR INTERVALS

FL CONVERSION	
FL118	FL3600m
FT/METER CONVERSION	
QNH	
9850'	3000m
7880'	2400m
6890'	2100m
5910'	1800m
4930'	1500m
2960'	900m

STAR	RWY	ROUTING
IGR 81A	24, 25	IGRAT (9850+) - HC107 - KAKIS (7880-) - HC106 - HC210 (6890+) - HC211 (5910+) - HC104 (K210+; 4930+).
		IGRAT (9850+) - HC107 - KAKIS (7880-) - HC106 - HC210 (6890+) - HC306 (4930+) - HC305 (K230+; 3940+).
IGR 82A	25	IGRAT (9850+) - HC107 - KAKIS (7880-) - HC106 - HC210 (6890+) - HC306 (4930+) - HC305 (K230+; 3940+).
		IGRAT (9850+) - HC107 - KAKIS (7880-) - HC106 - HC210 (6890+) - HC306 (4930+) - HC305 (K230+; 2960+).

CHANGES: LOST COMMS withdrawn.

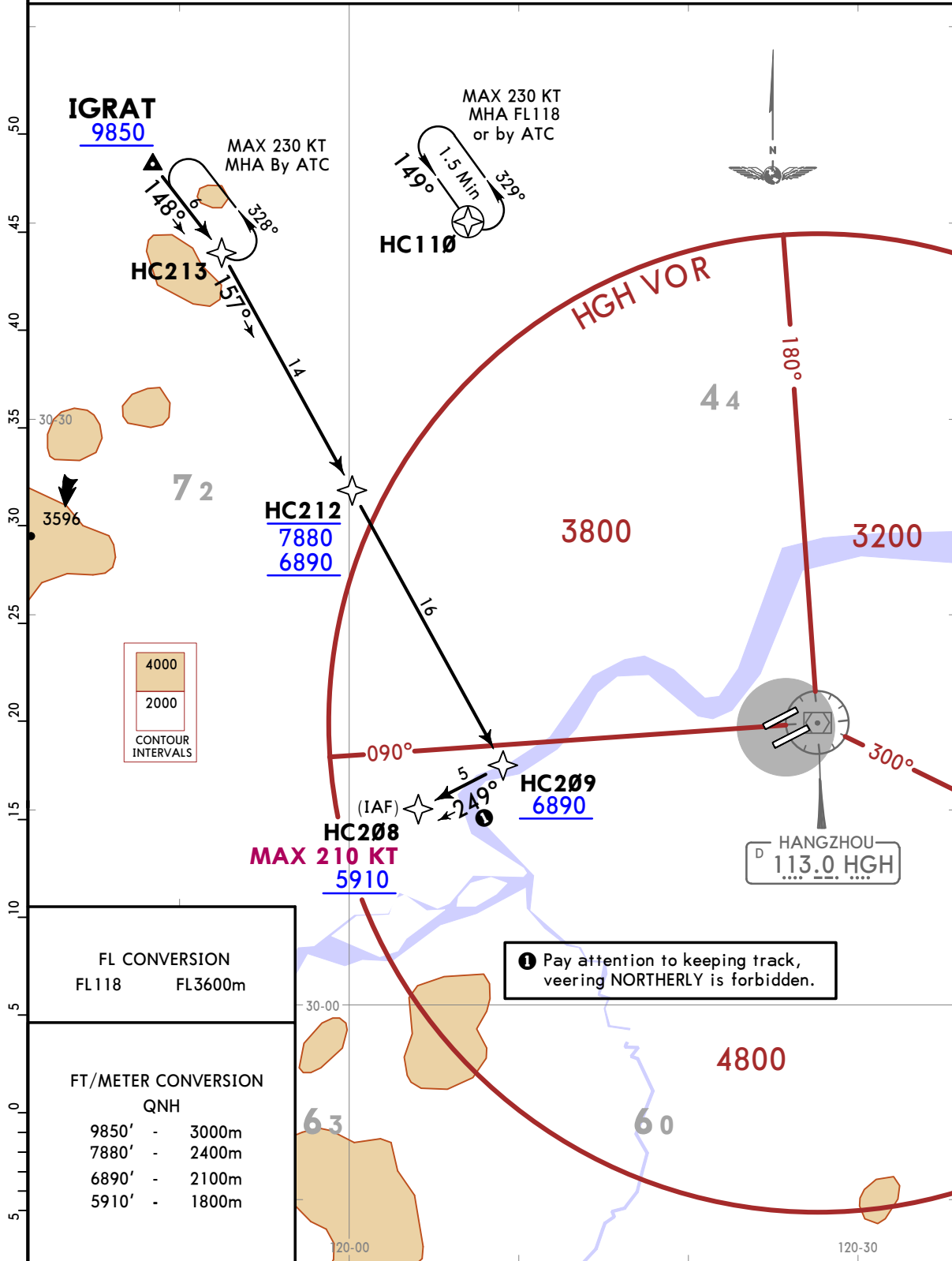
© JEPPesen, 2020, 2023. ALL RIGHTS RESERVED.

ZSHC/HGH
XIAOSHAN

JEPPESEN HANGZHOU, PR OF CHINA
29 SEP 23 **10-2E** Eff 4 Oct 1600Z **RNAV STAR**

D-ATIS 127.25	Apt Elev 22	Alt Set: hPa Trans level: FL118	
		RNAV 1 GNSS	RNP 1 GNSS
1. RADAR required for RNAV 1. 2. Join the HC110 holding pattern for RADAR vectoring.			

IGR 91A RNAV ARRIVAL
(RWYS 06, 07)



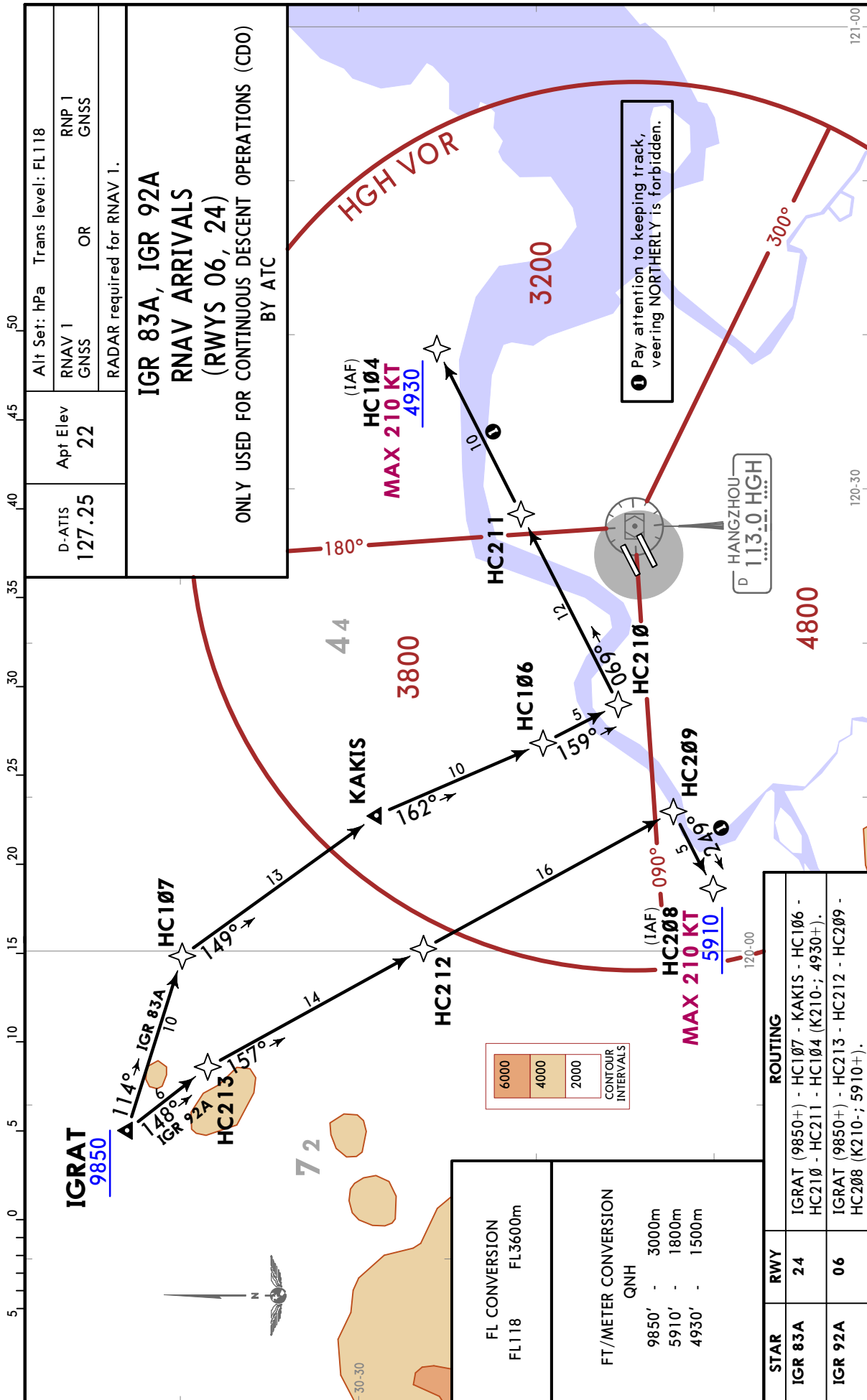
FL CONVERSION	
FL 118	FL 3600m
FT/METER CONVERSION	
QNH	
9850'	- 3000m
7880'	- 2400m
6890'	- 2100m
5910'	- 1800m

① Pay attention to keeping track, veering NORTHERLY is forbidden.

ROUTING
IGRAT (9850+) - HC213 - HC212 (7880-; 6890+) - HC209 (6890+) - HC208 (K210-; 5910+).

ZSHC/HGH
XIAOSHAN

JEPPesen HANGZHOU, PR OF CHINA
29 SEP 23 10-2F Eff 4 Oct 1600Z RNAV STAR



Alt Set: hPa Trans level: FL118
 RNP 1 OR RNP 1 GNSS
 RADAR required for RNAV 1.
**IGR 83A, IGR 92A
 RNAV ARRIVALS
 (RWYS 06, 24)**
 ONLY USED FOR CONTINUOUS DESCENT OPERATIONS (CDO)
 BY ATC

D-ATIS
127.25
 Apt Elev
22

FL CONVERSION FL118 FL3600m	
FT/METER CONVERSION QNH	
9850' -	3000m
5910' -	1800m
4930' -	1500m

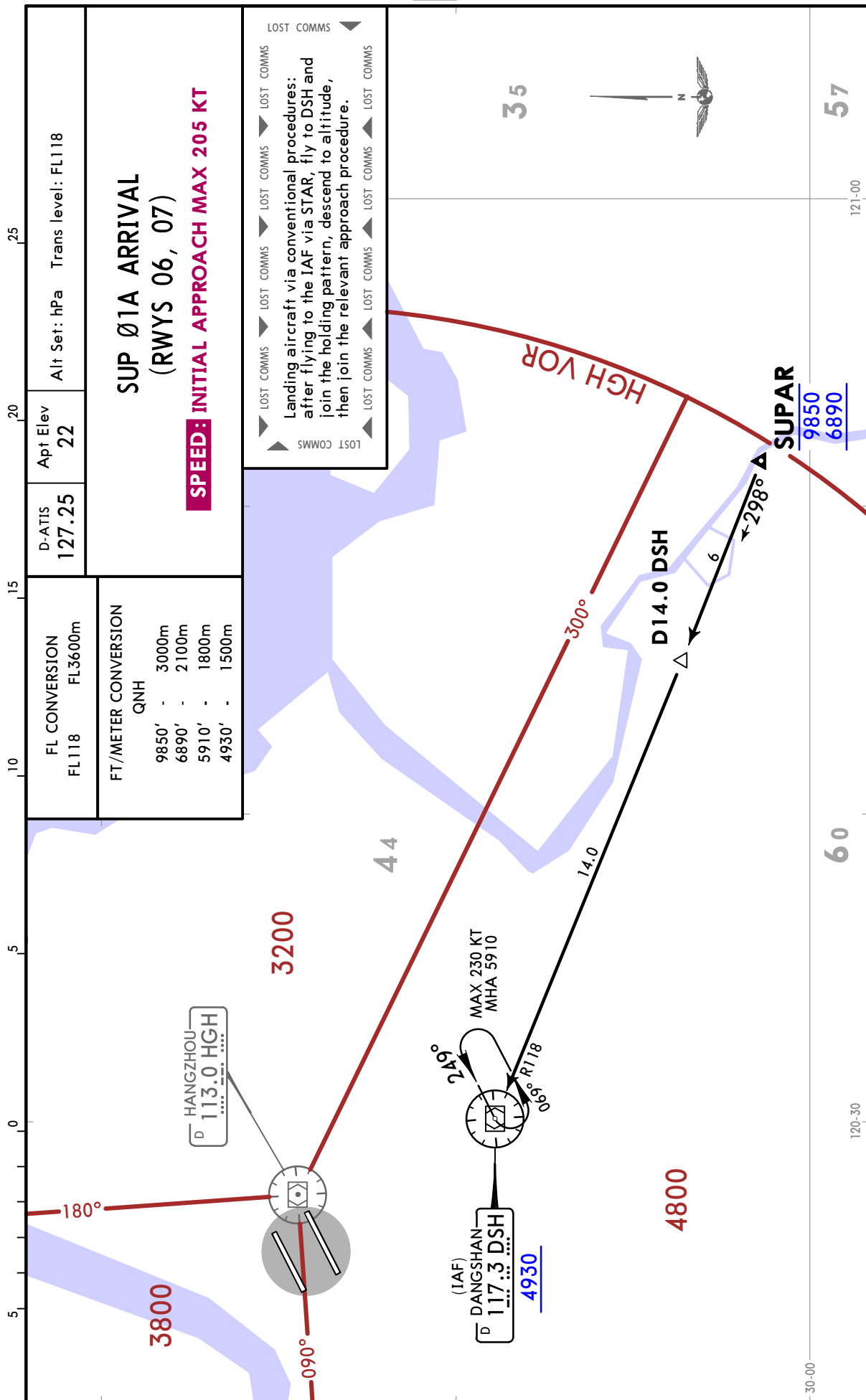
STAR	RWY	ROUTING
IGR 83A	24	IGRAT (9850+) - HC107 - KAKIS - HC106 - HC210 - HC211 - HC104 (K210-; 4930+).
IGR 92A	06	IGRAT (9850+) - HC213 - HC212 - HC209 - HC208 (K210-; 5910+).

CHANGES: LOST COMMS withdrawn.

© JEPPESEN, 2020, 2023. ALL RIGHTS RESERVED.

ZSHC/HGH
XIAOSHAN

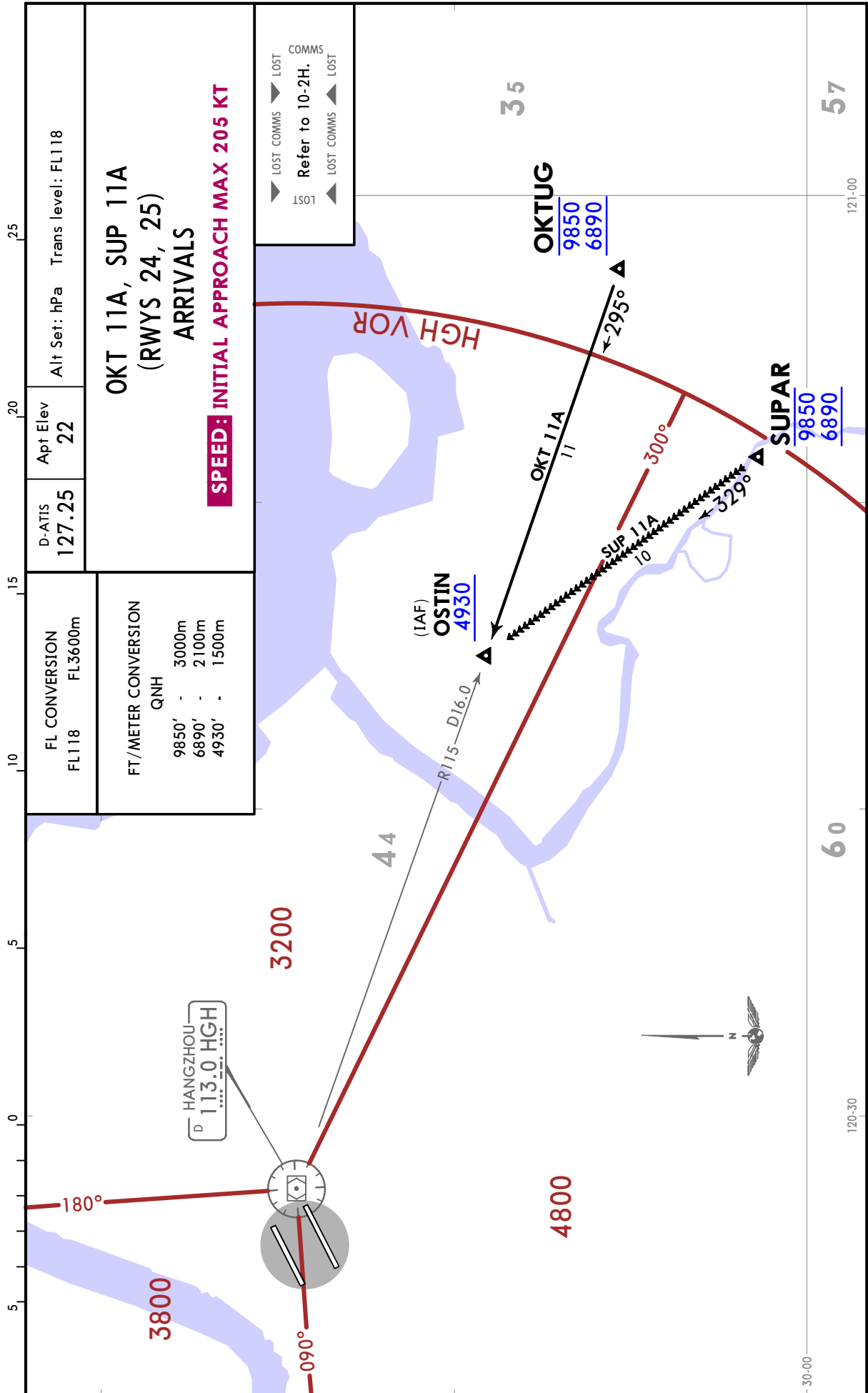
JEPPESSEN HANGZHOU, PR OF CHINA
29 SEP 23 10-2H Eff 4 Oct 1600Z STAR



CHANGES: LOST COMMS revised.

© JEPPESSEN, 2020, 2023. ALL RIGHTS RESERVED.

ZSHC/HGH XIAOSHAN



CHANGES: LOST COMMS note.

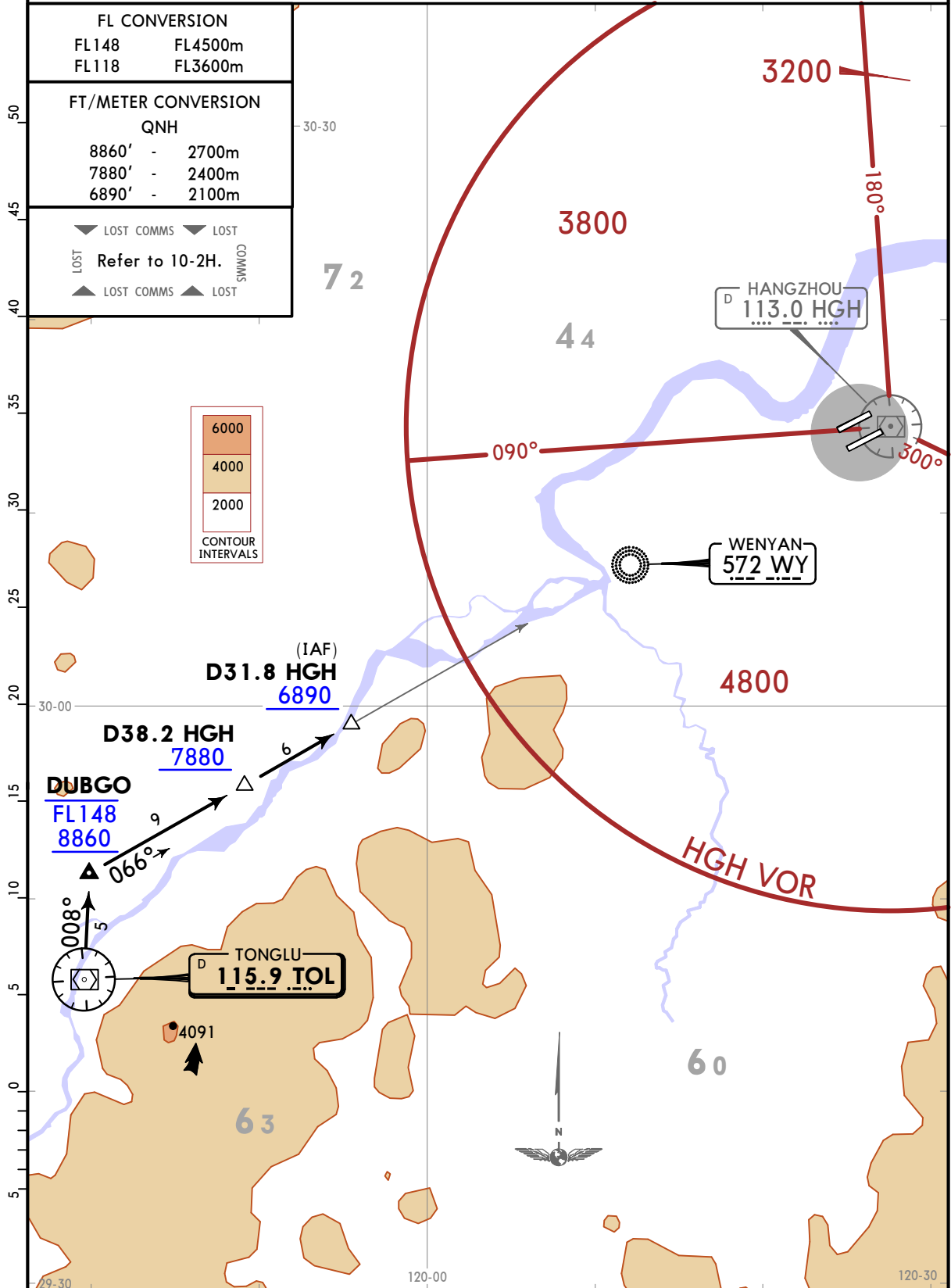
ZSHC/HGH
XIAOSHAN

JEPPESEN HANGZHOU, PR OF CHINA
29 SEP 23 (10-2K) Eff 4 Oct 1600Z STAR

D-ATIS 127.25	Apt Elev 22	Alt Set: hPa	Trans level: FL118
------------------	----------------	--------------	--------------------

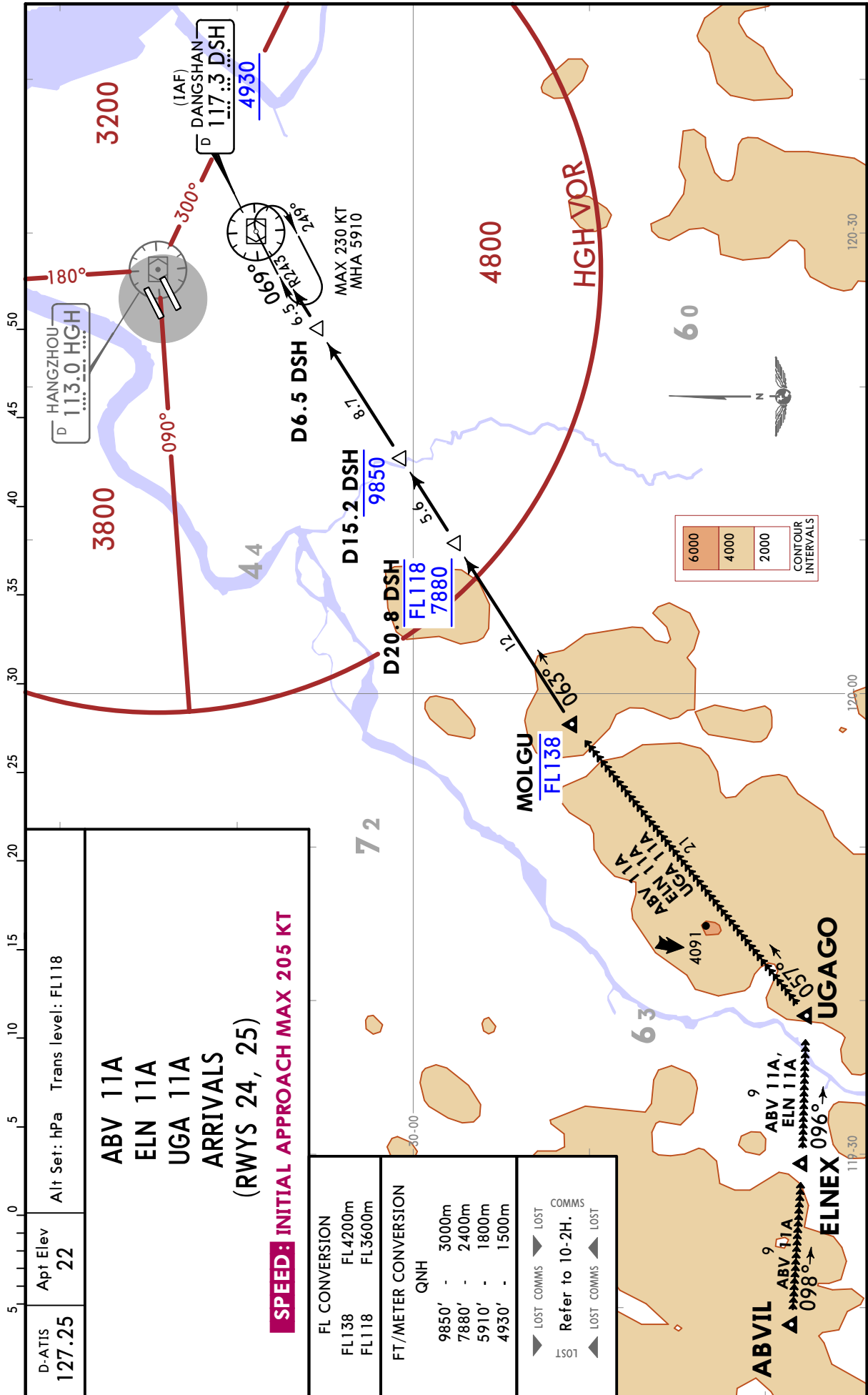
TOL Ø1A ARRIVAL
(RWYS 06, 07)

SPEED: INITIAL APPROACH MAX 205 KT



ZSHC/HGH
XIAOSHAN

JEPPesen HANGZHOU, PR OF CHINA
29 SEP 23 10-2L Eff 4 Oct 1600Z STAR



D-ATIS 127.25 Apt Elev 22 Alt Set: hPa Trans level: FL118

ABV 11A
ELN 11A
UGA 11A
ARRIVALS
(RWYS 24, 25)

SPEED: INITIAL APPROACH MAX 205 KT

FL CONVERSION	FL4200m	3000m
FL138	FL3600m	2400m
FL118		1800m
FT/METER CONVERSION		1500m
QNH		
	9850' -	3000m
	7880' -	2400m
	5910' -	1800m
	4930' -	1500m

LOST COMMS ▼ LOST COMMS
Refer to 10-2H.
LOST COMMS ▲ LOST COMMS

ZSHC/HGH
XIAOSHAN

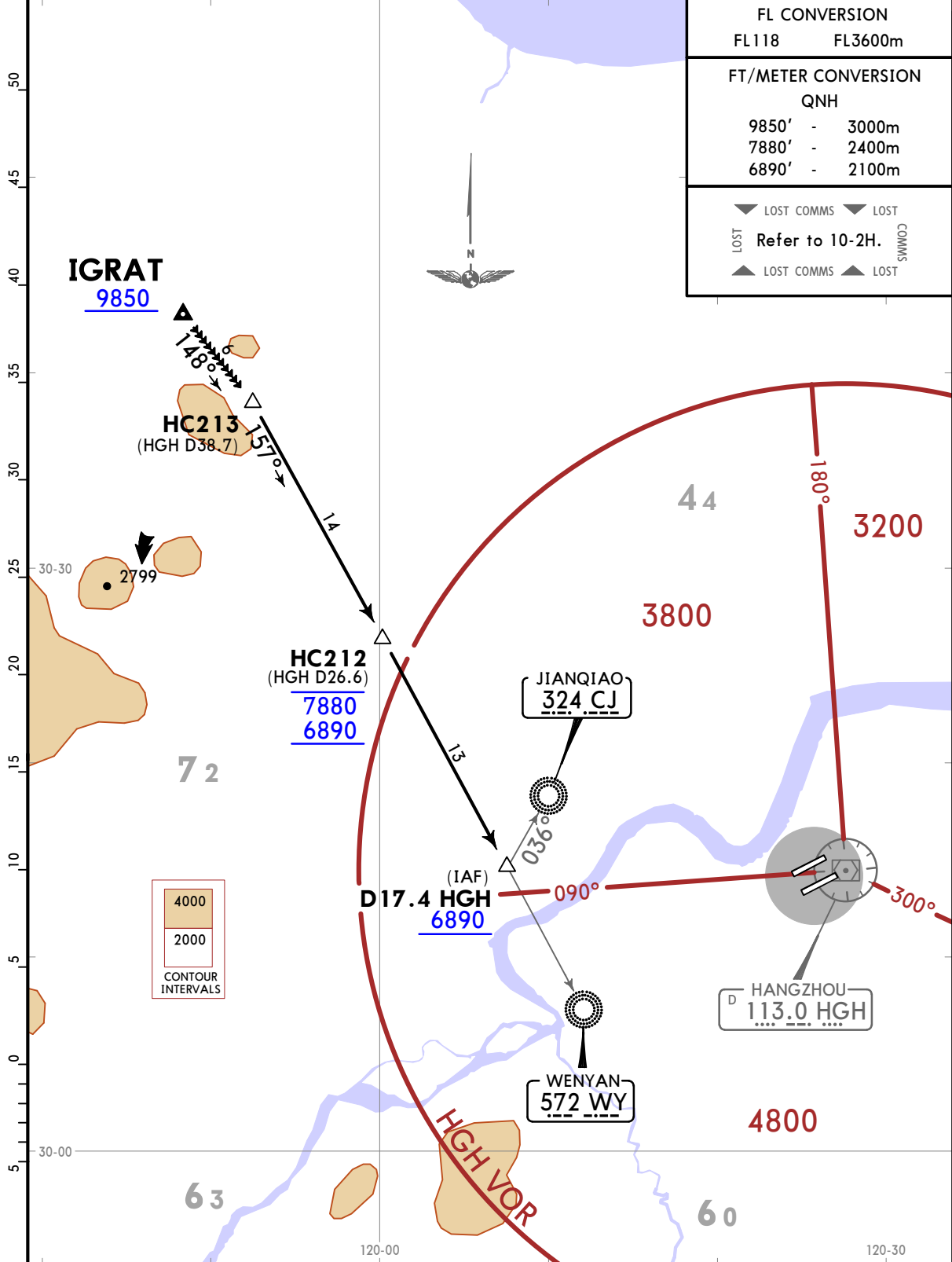
JEPPESEN HANGZHOU, PR OF CHINA
29 SEP 23 (10-2M) Eff 4 Oct 1600Z **STAR**

D-ATIS 127.25	Apt Elev 22	Alt Set: hPa	Trans level: FL118
------------------	----------------	--------------	--------------------

IGR Ø1A ARRIVAL
(RWY 06, 07)

SPEED: INITIAL APPROACH MAX 205 KT

FL CONVERSION	
FL 118	FL 3600m
FT/METER CONVERSION	
QNH	
9850'	- 3000m
7880'	- 2400m
6890'	- 2100m
▼ LOST COMMS	▼ LOST COMMS
▲ LOST COMMS	▲ LOST COMMS
Refer to 10-2H.	



CHANGES: LOST COMMS note, D17.4 HGH formation.

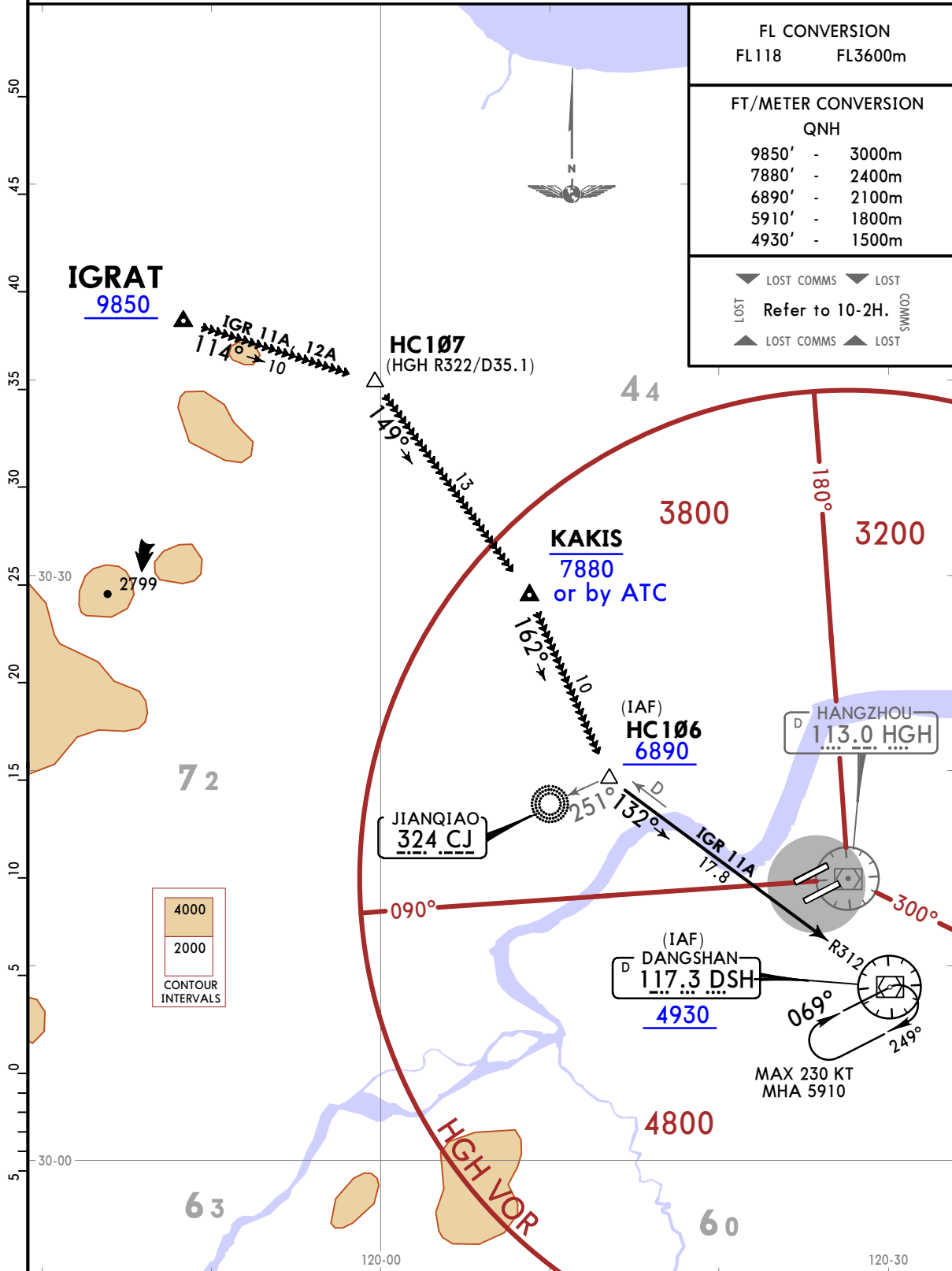
ZSHC/HGH
XIAOSHAN

JEPPESEN HANGZHOU, PR OF CHINA
29 SEP 23 (10-2N) Eff 4 Oct 1600Z STAR

D-ATIS 127.25	Apt Elev 22	Alt Set: hPa	Trans level: FL118
------------------	----------------	--------------	--------------------

IGR 11A, IGR 12A
(RWYS 24, 25)
ARRIVALS

SPEED: INITIAL APPROACH MAX 205 KT



CHANGES: LOST COMMS note.

© JEPPESEN, 2020, 2023. ALL RIGHTS RESERVED.

HANGZHOU, PR OF CHINA
RNAV SID

Trans alt: 9850
 10830 1031 hPa or above
 8860 979 hPa or below

Apt Elev
22

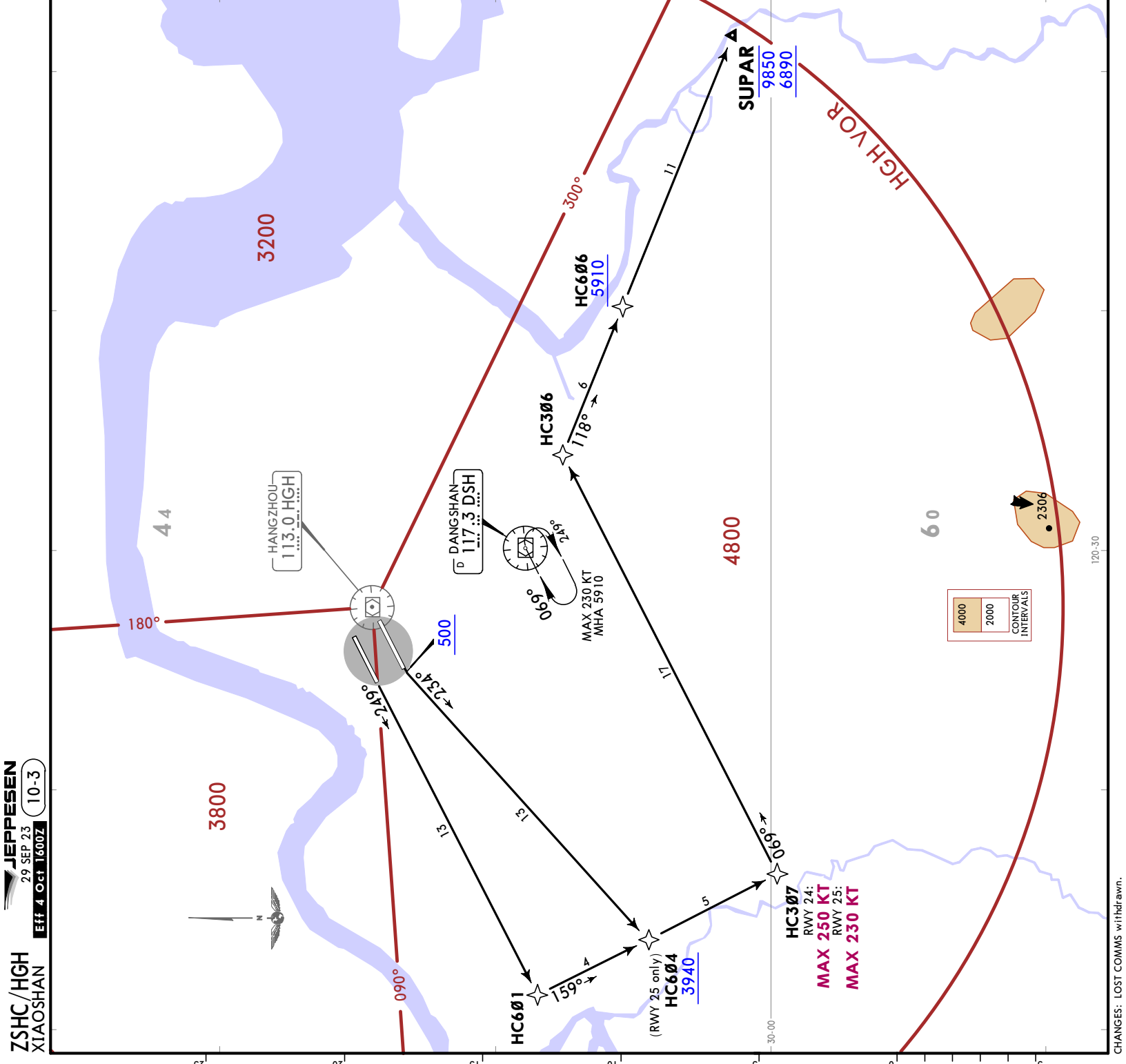
RNAV 1 OR RNP 1
 GNSS GNSS

1. RADAR required for RNAV 1.
 2. Turn before DER is prohibited.

SUP 81D
RNAV DEPARTURE
(RWYS 24, 25)

FT/METER CONVERSION	
QNH	
500'	- 150m
3940'	- 1200m
5910'	- 1800m
6890'	- 2100m
8860'	- 2700m
9850'	- 3000m
10830'	- 3300m

RWY	ROUTING
24	HC601 - HC307 (K250-) - HC306 - HC606 (5910+) - SUPAR (6890+; 9850-).
25	(500+) - HC604 (3940+) - HC307 (K230-) - HC306 - HC606 (5910+) - SUPAR (6890+; 9850-).



ZSHC/HGH
XIAOSHAN
Eff 4 Oct 1600Z
10-3

JEPPESEN
ZSHC/HGH
XIAOSHAN
HANGZHOU, PR OF CHINA
10-3A **Eff 4 Oct 1600Z** **RNAV SID**
 29 SEP 23

Trans alt: 9850
 10830 1031 hPa or above
 8860 979 hPa or below

Apt Elev
 22

RNAV 1
 GNSS

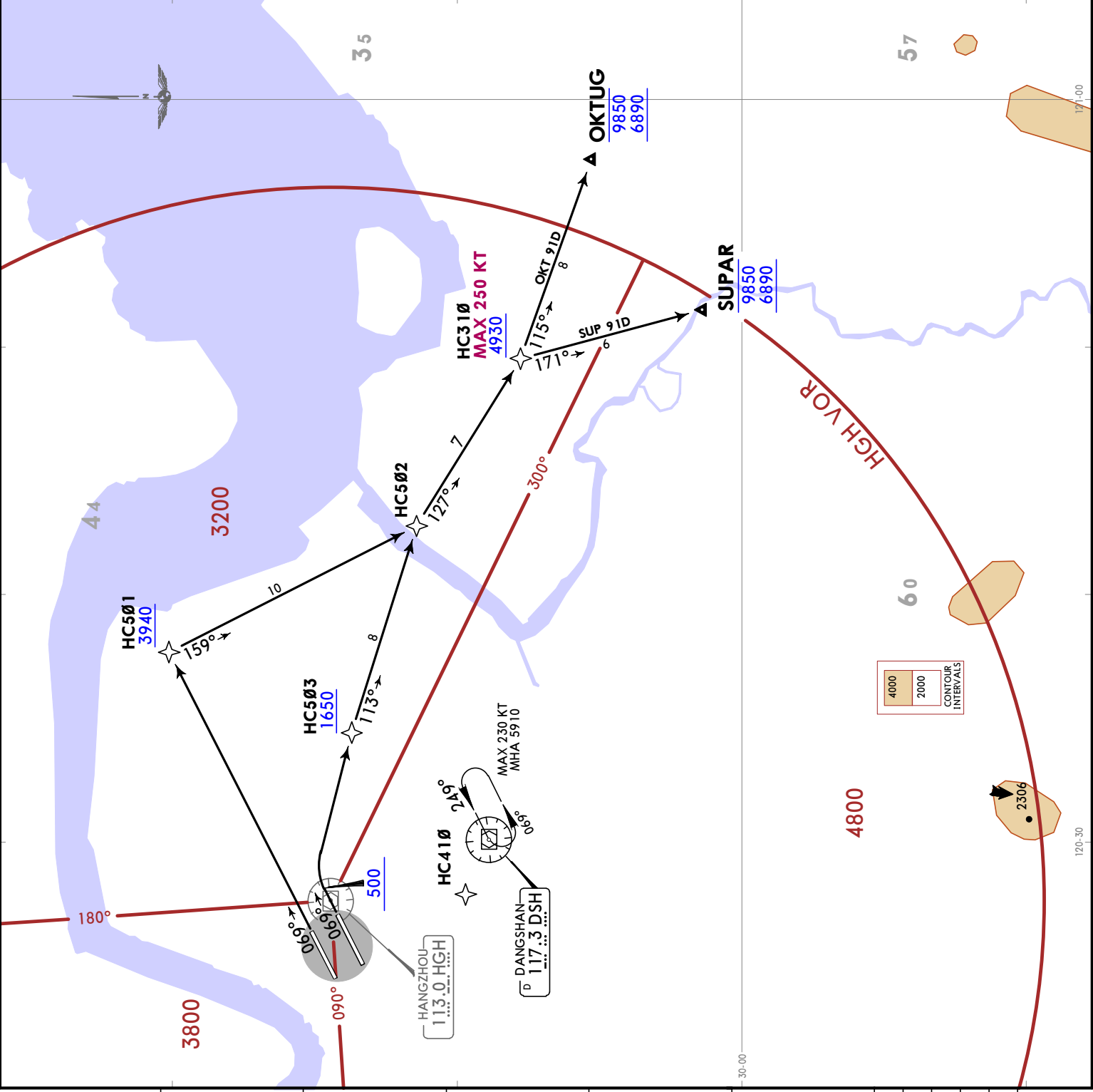
OR

RNP 1
 GNSS

1. RADAR required for RNAV 1.
 2. Turn before DER is prohibited.

OKT 91D
SUP 91D
RNAV DEPARTURES
(RWYS 06, 07)

FT/METER CONVERSION	
QNH	
500'	- 150m
1650'	- 500m
3940'	- 1200m
4930'	- 1500m
6890'	- 2100m
8860'	- 2700m
9850'	- 3000m
10830'	- 3300m



CONTOUR INTERVALS	
4000	
2000	

SID	RWY	ROUTING
OKT 91D	06	HC501 (3940+) - HC502 - HC310 (K250+; 4930+) - OKTUG (6890+; 9850-).
	07	(500+) - HC503 (1650+) - HC502 - HC310 (K250+; 4930+) - OKTUG (6890+; 9850-).
SUP 91D	06	HC501 (3940+) - HC502 - HC310 (K250+; 4930+) - SUPAR (6890+; 9850-).
	07	(500+) - HC503 (1650+) - HC502 - HC310 (K250+; 4930+) - SUPAR (6890+; 9850-).

HANGZHOU, PR OF CHINA
RNAV SID

Trans alt: 9850
10830 1031 hPa or above
8860 979 hPa or below

Apt Elev
22

RNAV 1
GNSS OR RNP 1
GNSS

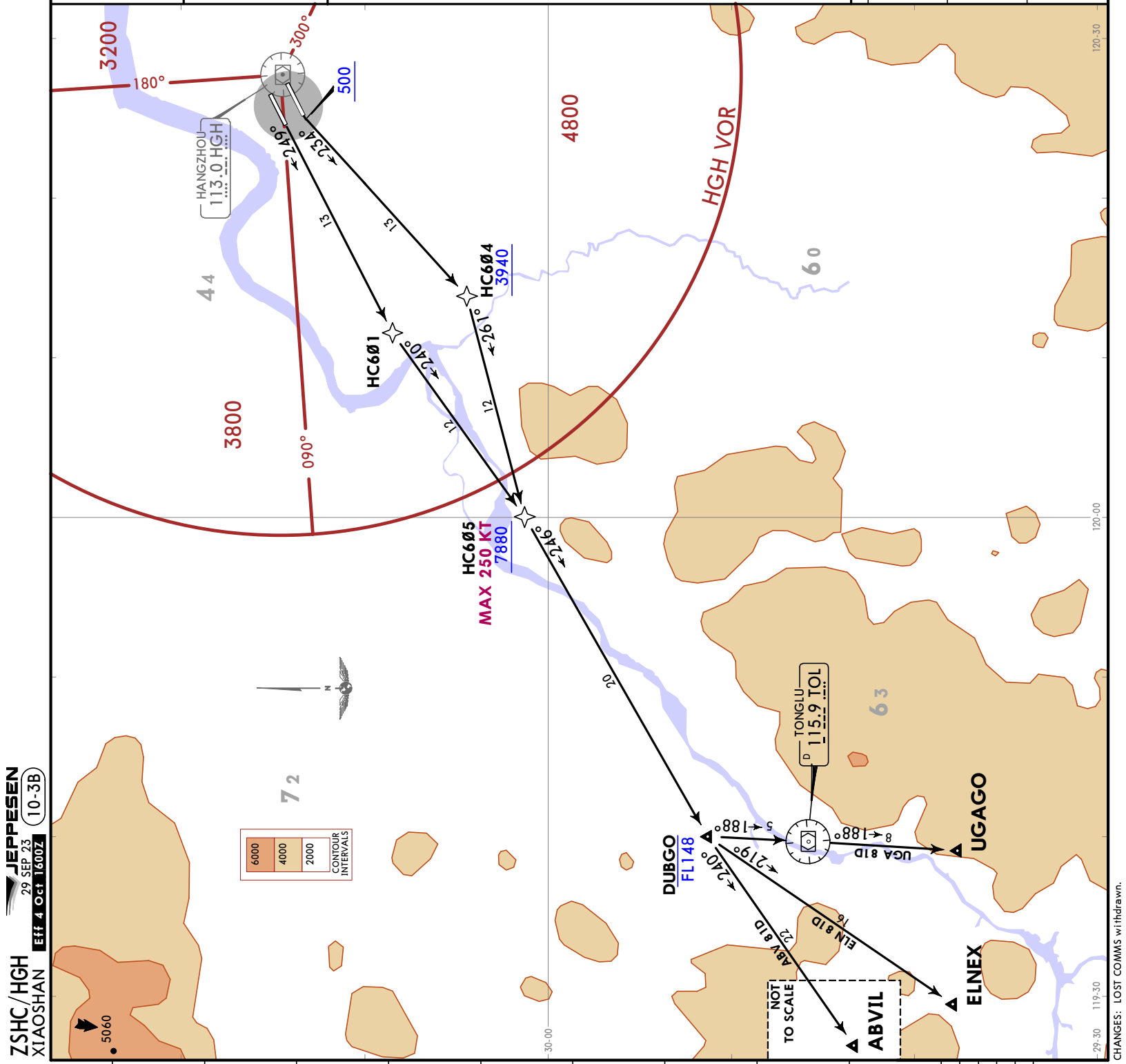
1. RADAR required for RNAV 1.
2. Turn before DER is prohibited.

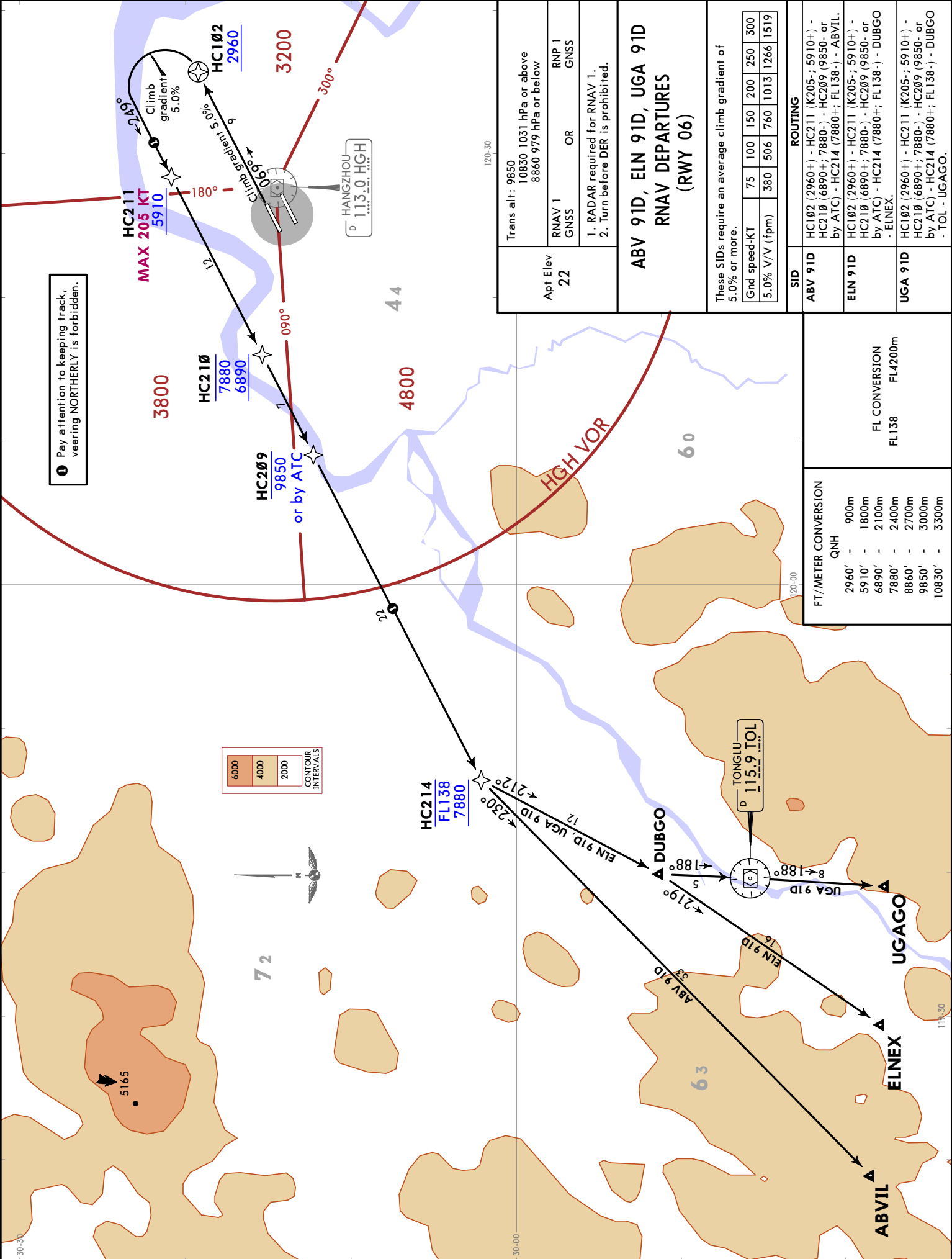
ABV 81D
ELN 81D
UGA 81D
RNAV DEPARTURES
(RWYS 24, 25)

FT./METER CONVERSION	
QNH	
500'	- 150m
3940'	- 1200m
7880'	- 2400m
8860'	- 2700m
9850'	- 3000m
10830'	- 3300m

FL CONVERSION	
FL 148	FL4500m

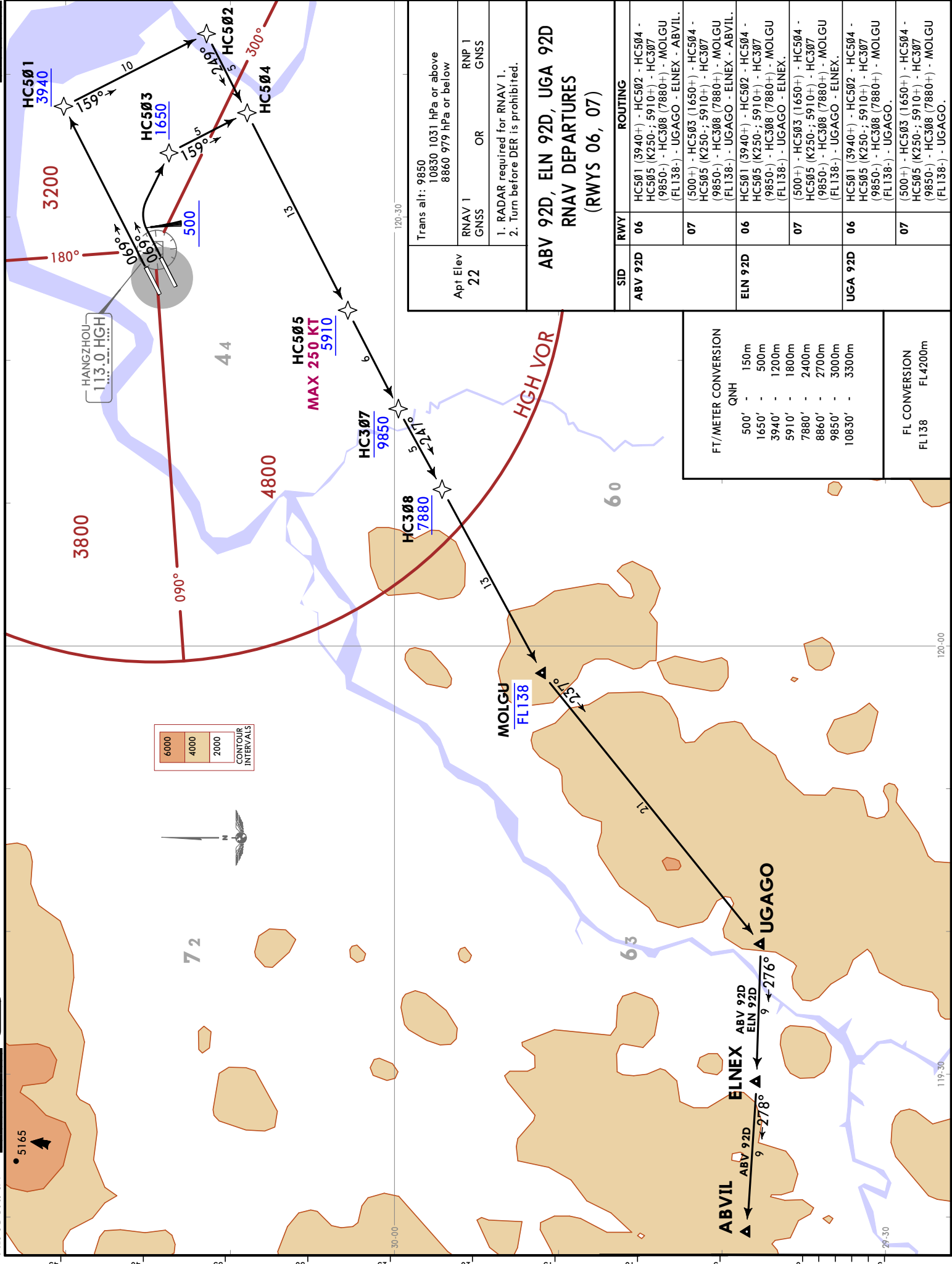
SID	RWY	ROUTING
ABV 81D	24	HC601 - HC605 (K250; 7880+) - DUBGO (FL148) - ABVIL.
	25	(500+) - HC604 (3940+) - HC605 (K250; 7880+) - DUBGO (FL148) - ABVIL.
ELN 81D	24	HC601 - HC605 (K250; 7880+) - DUBGO (FL148) - ELNEX.
	25	(500+) - HC604 (3940+) - HC605 (K250; 7880+) - DUBGO (FL148) - ELNEX.
UGA 81D	24	HC601 - HC605 (K250; 7880+) - DUBGO (FL148) - TOL - UGAGO.
	25	(500+) - HC604 (3940+) - HC605 (K250; 7880+) - DUBGO (FL148) - TOL - UGAGO.





HANGZHOU, PR OF CHINA
RNAV SID

ZSHC/HIGH
XIAOSHAN
JEPPesen
29 SEP 23
Eff 4 Oct 1600Z
10-3D



Apt Elev 22	Trans alt: 9850 10830 1031 hPa or above 8860 979 hPa or below	
	RNAV 1 GNSS	RNP 1 GNSS
1. RADAR required for RNAV 1. 2. Turn before DER is prohibited.		

ABV 92D, ELN 92D, UGA 92D
RNAV DEPARTURES
(RWYS 06, 07)

SID	RWY	ROUTING
ABV 92D	06	HC501 (3940+) - HC502 - HC504 - HC505 (K250+; 5910+) - HC307 (9850-) - HC308 (7880+) - MOLGU (FL138-) - UGAGO - ELNEX - ABVIL.
		(500+) - HC503 (1650+) - HC504 - HC505 (K250+; 5910+) - HC307 (9850-) - HC308 (7880+) - MOLGU (FL138-) - UGAGO - ELNEX.
		(500+) - HC503 (1650+) - HC504 - HC505 (K250+; 5910+) - HC307 (9850-) - HC308 (7880+) - MOLGU (FL138-) - UGAGO - ELNEX.
ELN 92D	06	HC501 (3940+) - HC502 - HC504 - HC505 (K250+; 5910+) - HC307 (9850-) - HC308 (7880+) - MOLGU (FL138-) - UGAGO - ELNEX.
		(500+) - HC503 (1650+) - HC504 - HC505 (K250+; 5910+) - HC307 (9850-) - HC308 (7880+) - MOLGU (FL138-) - UGAGO - ELNEX.
		(500+) - HC503 (1650+) - HC504 - HC505 (K250+; 5910+) - HC307 (9850-) - HC308 (7880+) - MOLGU (FL138-) - UGAGO - ELNEX.
UGA 92D	06	HC501 (3940+) - HC502 - HC504 - HC505 (K250+; 5910+) - HC307 (9850-) - HC308 (7880+) - MOLGU (FL138-) - UGAGO.
		(500+) - HC503 (1650+) - HC504 - HC505 (K250+; 5910+) - HC307 (9850-) - HC308 (7880+) - MOLGU (FL138-) - UGAGO.
		(500+) - HC503 (1650+) - HC504 - HC505 (K250+; 5910+) - HC307 (9850-) - HC308 (7880+) - MOLGU (FL138-) - UGAGO.

FT/METER CONVERSION	QNH
500'	150m
1650'	500m
3940'	1200m
5910'	1800m
7880'	2400m
8860'	2700m
9850'	3000m
10830'	3300m

FL CONVERSION	FL4200m
FL138	FL4200m

Trans alt: 9850
10830 1031 hPa or above
8860 979 hPa or below

Apt Elev
22

RNAV 1 OR RNP 1
GNSS GNSS

1. RADAR required for RNAV 1.
2. Turn before DER is prohibited.

NIV 81D
RNAV DEPARTURE
(RWYS 24, 25)

This SID requires average climb gradients of
RWY 24: 6.2% or more,
RWY 25: 5.0% or more,
when 6890 is required at HC602.

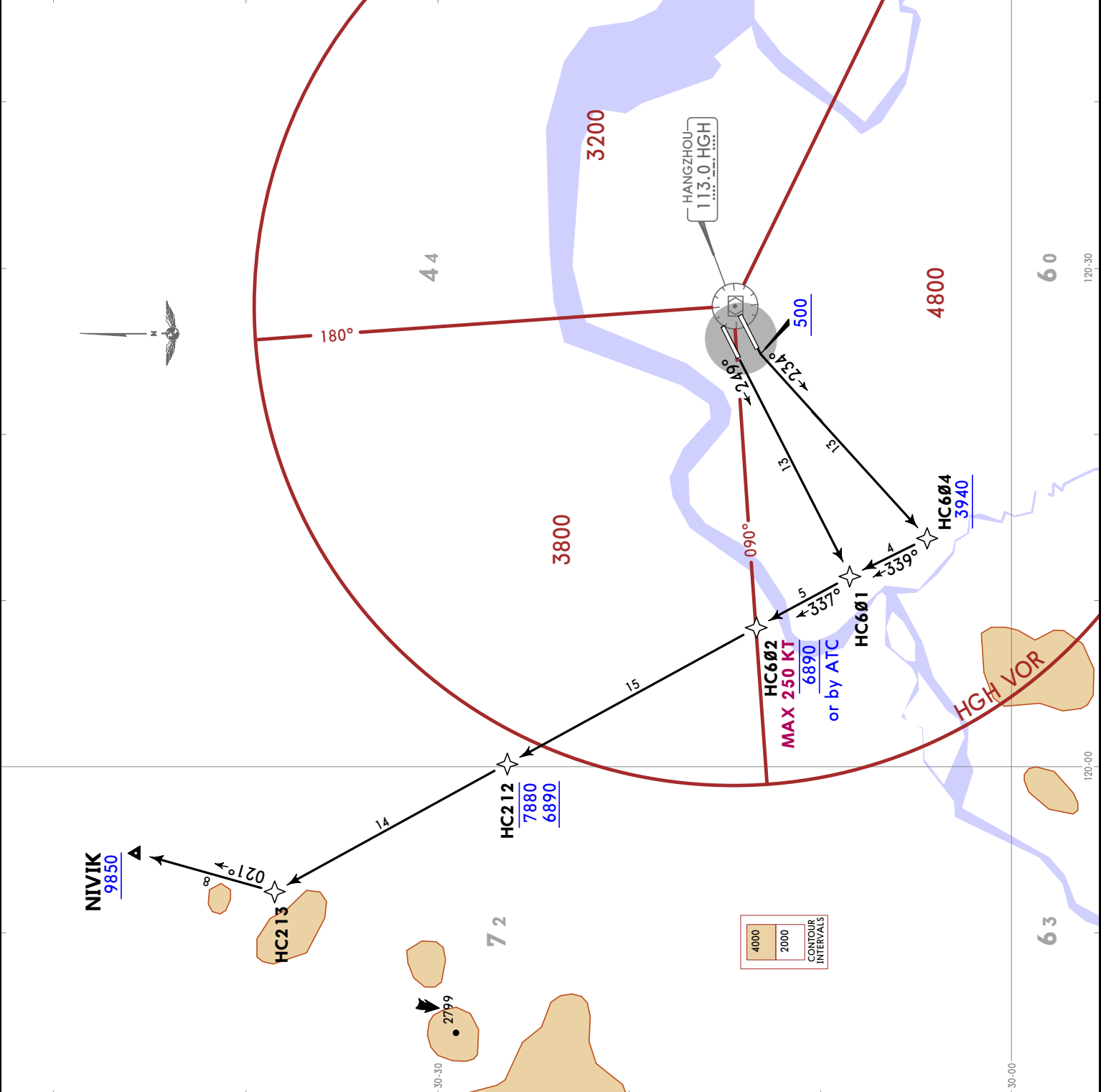
Gnd speed-KT	75	100	150	200	250	300
5.0% V/V (fpm)	380	506	760	1013	1266	1519
6.2% V/V (fpm)	471	628	942	1256	1570	1884

RWY	ROUTING
24	HC601 - HC602 (K250-; 6890 or by ATC) - HC212 (6890+; 7880-) - HC213 - NIVIK (9850+).
25	(500+) - HC604 (3940+) - HC601 - HC602 (K250-; 6890 or by ATC) - HC212 (6890+; 7880-) - HC213 - NIVIK (9850+).

FT/METER CONVERSION

QNH

500'	-	150m
3940'	-	1200m
6890'	-	2100m
7880'	-	2400m
8860'	-	2700m
9850'	-	3000m
10830'	-	3300m



HANGZHOU, PR OF CHINA
RNAV SID

Trans alt: 9850
 10830 1031 hPa or above
 8860 979 hPa or below

Apt Elev
22

RNAV 1
 GNSS OR RNP 1
 GNSS

RADAR required for RNAV 1.

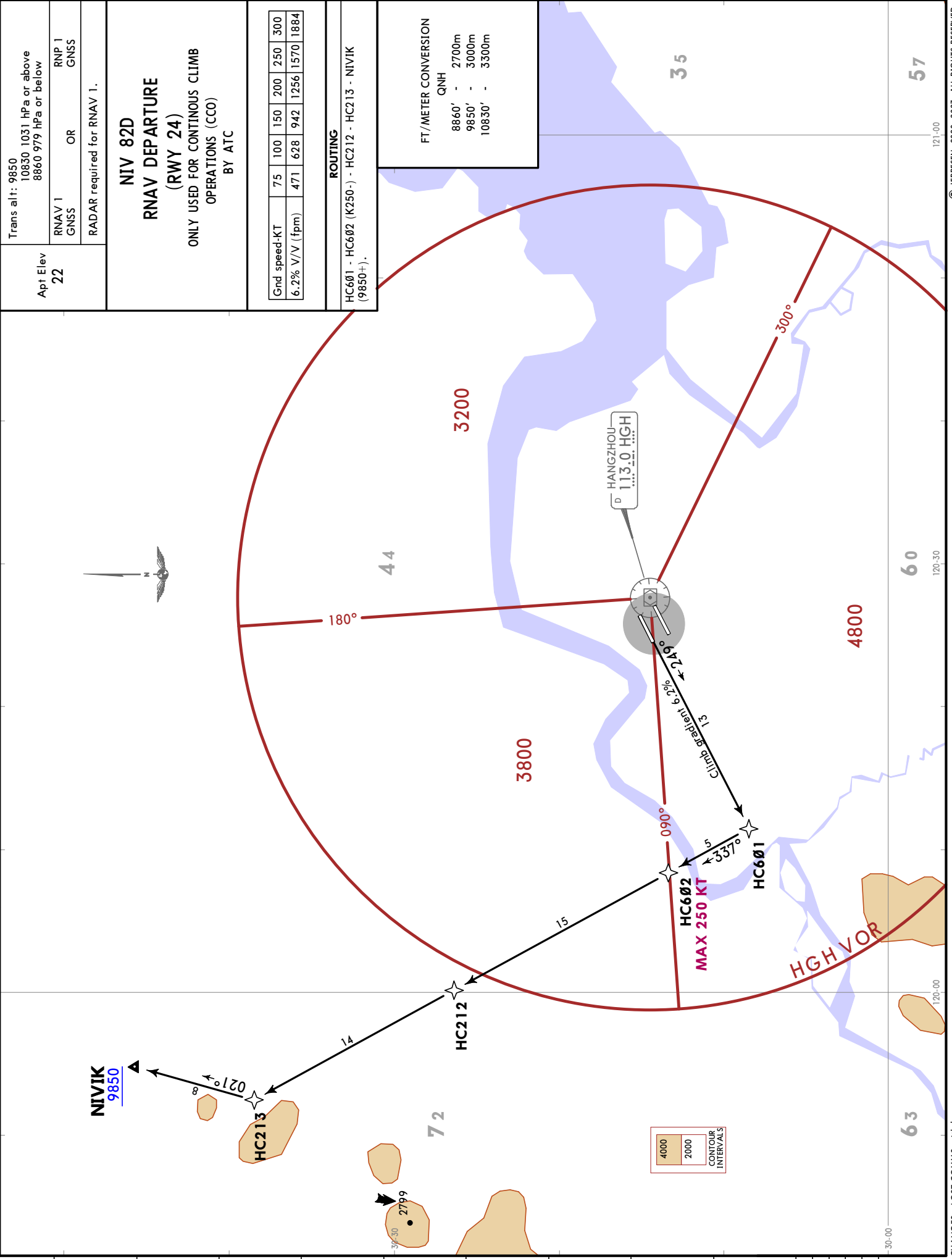
NIV 82D
RNAV DEPARTURE
(RWY 24)
 ONLY USED FOR CONTINUOUS CLIMB
 OPERATIONS (CCO)
 BY ATC

Grnd speed-KT	75	100	150	200	250	300
6.2% V/V (fpm)	471	628	942	1256	1570	1884

ROUTING
 HC601 - HC602 (K250-) - HC212 - HC213 - NIVIK
 (9850+).

FT./METER CONVERSION
 QNH
 8860' - 2700m
 9850' - 3000m
 10830' - 3300m

ZSHC/HGH
XIAOSHAN
Eff 4 Oct 1600Z
29 SEP 23
10-3F



Trans alt: 9850
10830 1031 hPa or above
8860 979 hPa or below

Apt Elev
22

RNAV 1
GNSS OR RNP 1
GNSS

1. RADAR required for RNAV 1.
2. Turn before DER is prohibited.

NIV 91D
RNAV DEPARTURE
(RWY 06)

This SID requires an average climb gradient of 5.0% or more.

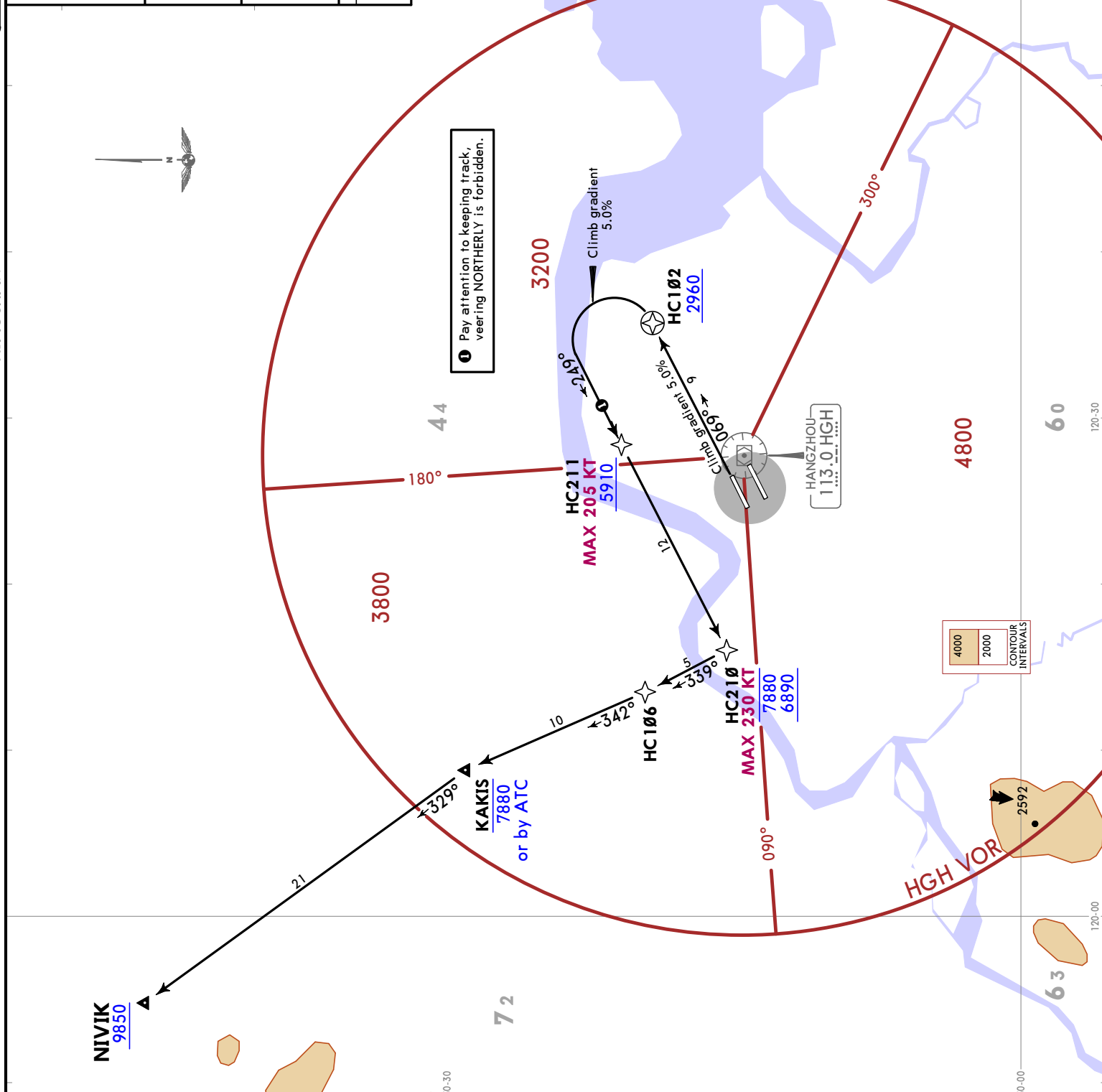
Gnd speed-KT	75	100	150	200	250	300
5.0% V/V (fpm)	380	506	760	1013	1266	1519

ROUTING

HC102 (2960+) - HC211 (K205+; 5910+) - HC210 (K230+; 7880+; 6890+) - HC106 - KAKIS (7880- or by ATC) - NIVIK (9850+).

FT./METER CONVERSION

QNH	2960'	-	900m
	5910'	-	1800m
	6890'	-	2100m
	7880'	-	2400m
	8860'	-	2700m
	9850'	-	3000m
	10830'	-	3300m



1 Pay attention to keeping track, veering NORTHERLY is forbidden.

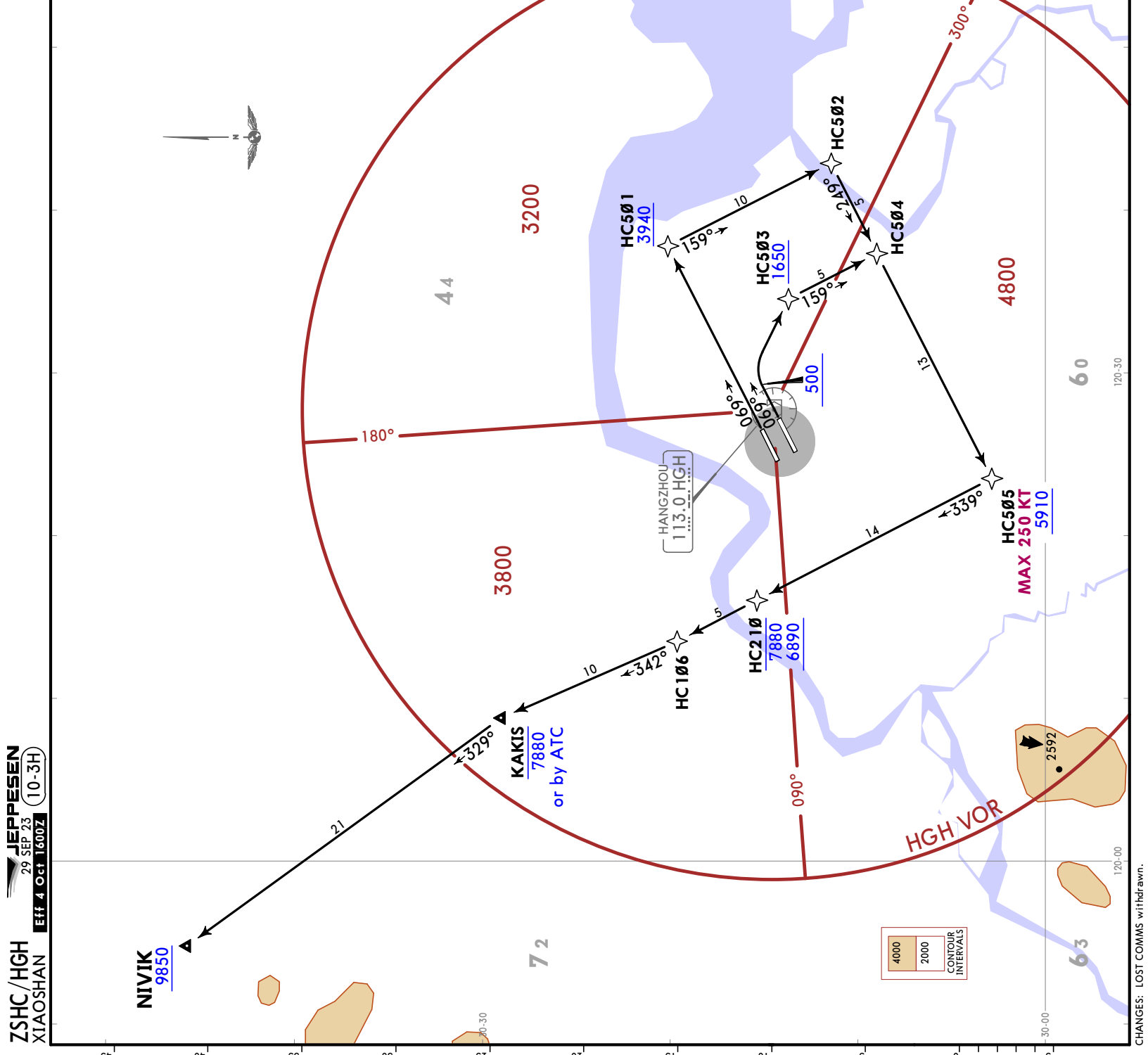
4000
2000
CONTOUR INTERVALS

HANGZHOU, PR OF CHINA
RNAV SID

Trans alt: 9850 10830 1031 hPa or above 8860 979 hPa or below	
Apt Elev 22	RNAV 1 OR RNP 1 GNSS GNSS
1. RADAR required for RNAV 1. 2. Turn before DER is prohibited.	

NIV 92D RNAV DEPARTURE (RWYS 06, 07)	
RWY	ROUTING
06	HC501 (3940+) - HC502 - HC504 - HC505 (K250+; 5910+) - HC210 (6890+; 7880-) - HC106 - KAKIS (7880- or by ATC) - NIVIK (9850+).
07	(500+ - HC503 (1650+) - HC504 - HC505 (K250+; 5910+) - HC210 (6890+; 7880-) - HC106 - KAKIS (7880- or by ATC) - NIVIK (9850+).

FT/METER CONVERSION	
QNH	
500'	- 150m
1650'	- 500m
3940'	- 1200m
5910'	- 1800m
6890'	- 2100m
7880'	- 2400m
8860'	- 2700m
9850'	- 3000m
10830'	- 3300m



ZSHC/HGH
XIAOSHAN
JEPPESSEN
 29 SEP 23
 Eff 4 Oct 1600Z (10-3H)

JEPPESEN
 29 SEP 23 (10-3J) Eff 4 Oct 1600Z
HANGZHOU, PR OF CHINA
RNAV SID

ZSHC/HGH
 XIAOSHAN

Trans alt: 9850
 10830 1031 hPa or above
 8860 979 hPa or below

Apt Elev
 22

RNAV 1
 GNSS

OR

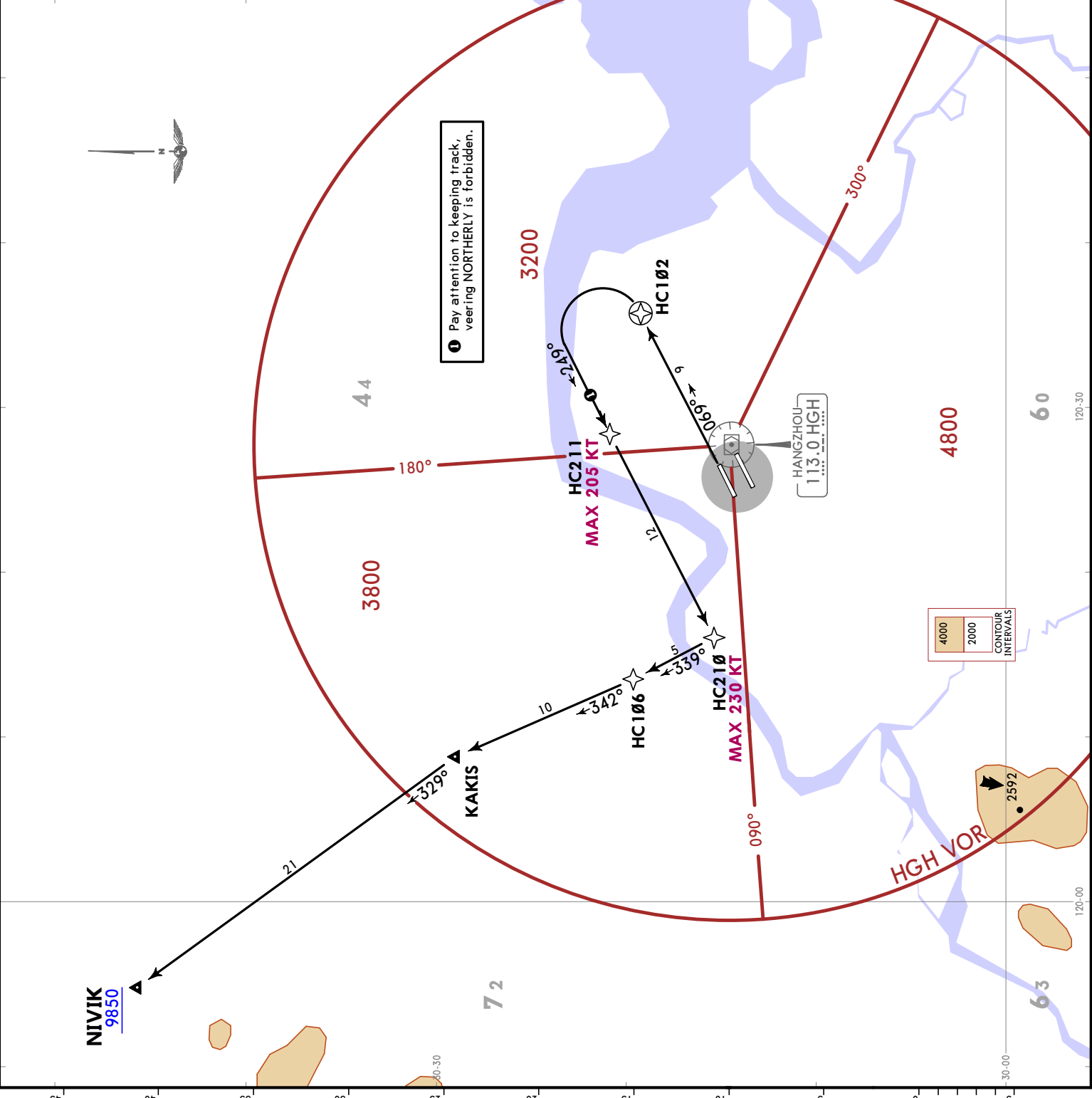
RNP 1
 GNSS

RADAR required for RNAV 1.

NIV 93D
RNAV DEPARTURE
(RWY 06)
 ONLY USED FOR CONTINUOUS CLIMB
 OPERATIONS (CCO)
 BY ATC

ROUTING
 HC102 - HC211 (K205-) - HC210 (K230-) - HC106 -
 KAKIS - NIVIK (9850+).

FT/METER CONVERSION
 QNH
 8860' - 2700m
 9850' - 3000m
 10830' - 3300m



HANGZHOU, PR OF CHINA

SID

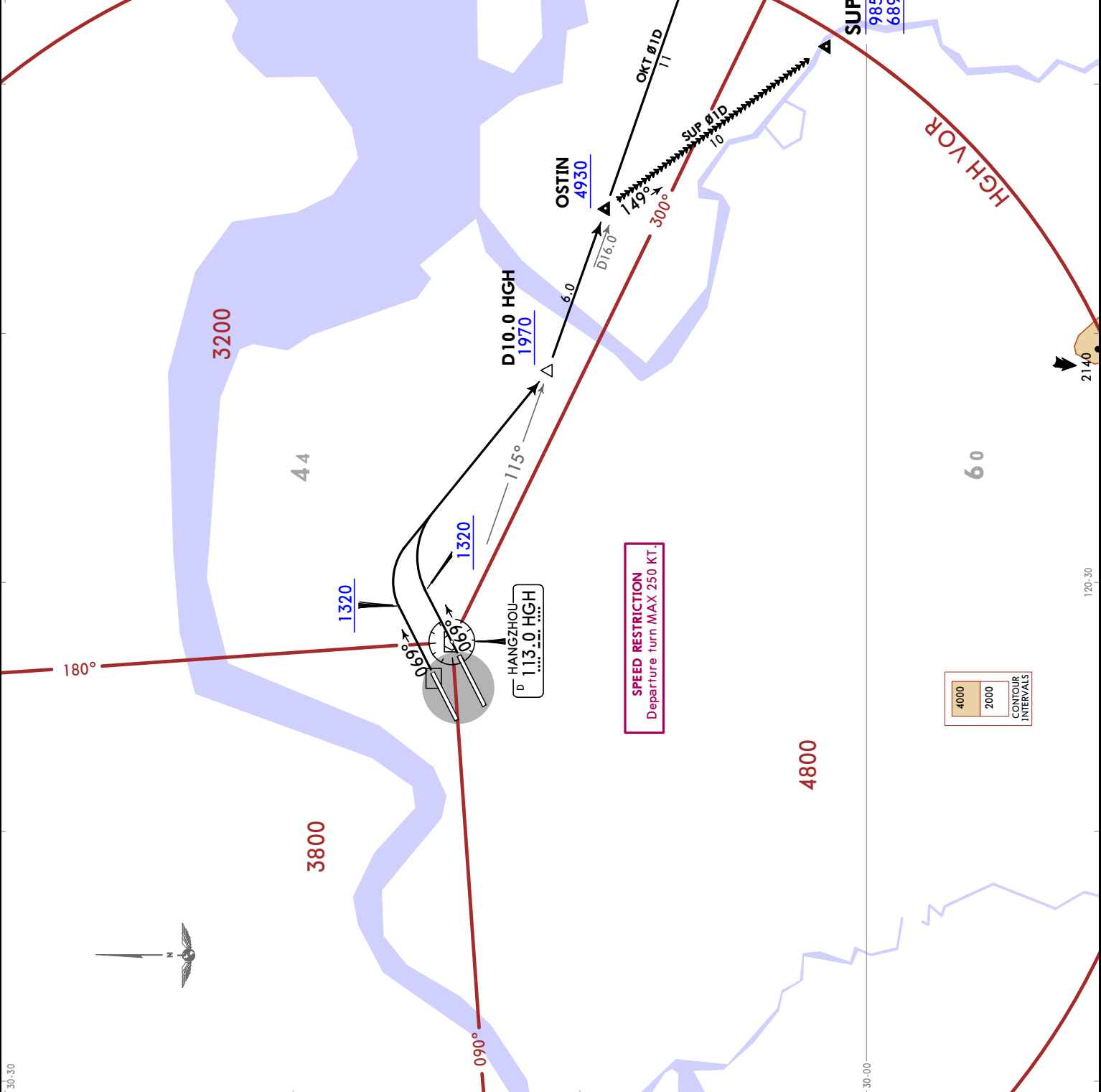
Apt Elev
22

Trans alt: 9850
10830 1031 hPa or above
8860 979 hPa or below

OKT Ø1D, SUP Ø1D
DEPARTURES
(RWYS 06, 07)

FT./METER CONVERSION
QNH

1320'	-	400m
1970'	-	600m
4930'	-	1500m
6890'	-	2100m
8860'	-	2700m
9850'	-	3000m
10830'	-	3300m



ZSHC/HGH
XIAOSHAN

29 SEP 23 (10-3L) Eff 4 Oct 1600Z

JEPPESEN HANGZHOU, PR OF CHINA

SID

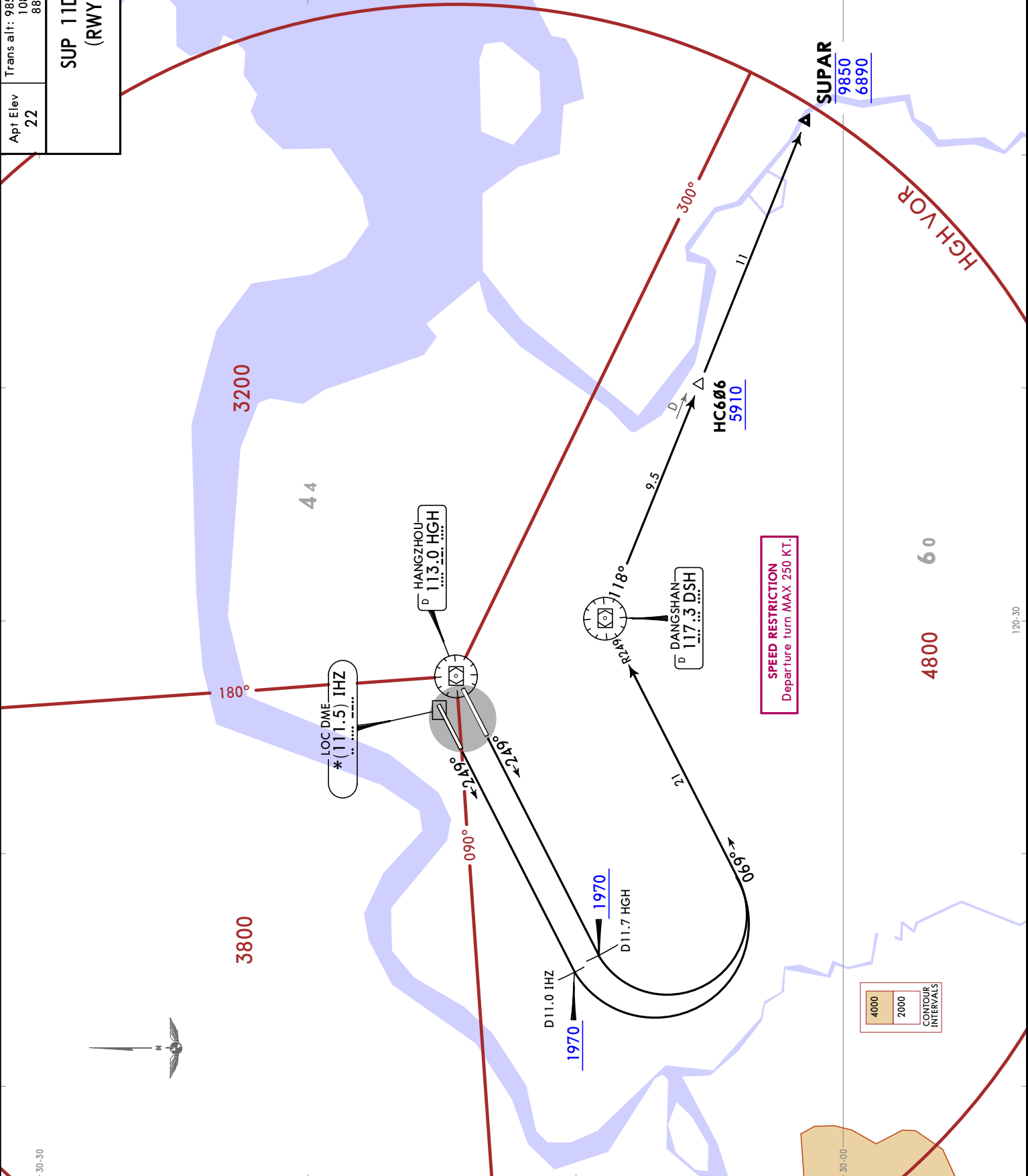
Apt Elev 22

Trans alt: 9850
10830 1031 hPa or above
8860 979 hPa or below

SUP 11D DEPARTURE
(RWYS 24, 25)

FT./METER CONVERSION

QNH	600m
1970'	- 600m
5910'	- 1800m
6890'	- 2100m
8860'	- 2700m
9850'	- 3000m
10830'	- 3300m



SPEED RESTRICTION
Departure turn MAX 250 KT.

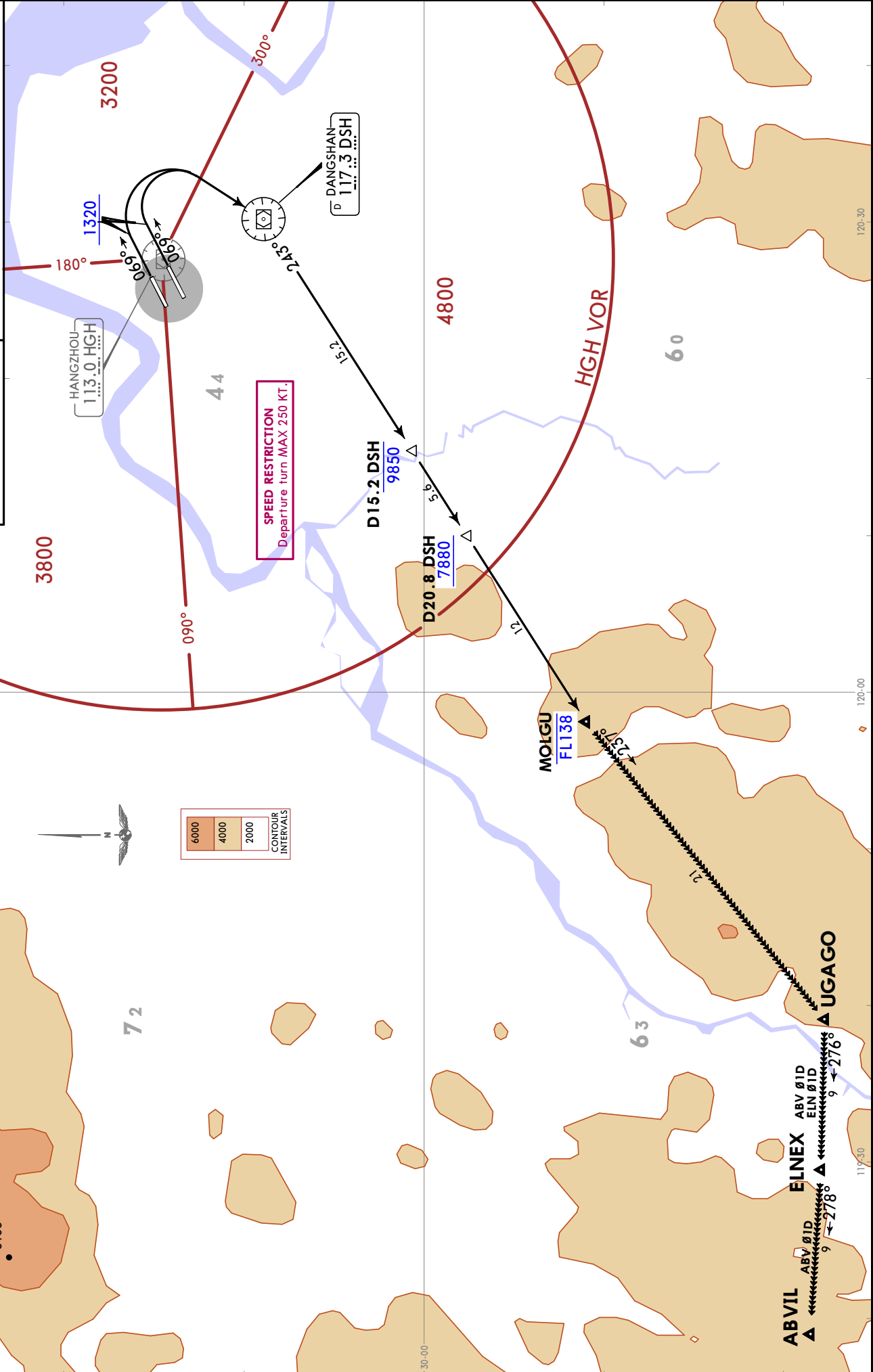
4000
2000
CONTOUR
INTERVALS



HANGZHOU, PR OF CHINA

SID

Trans alt: 9850 10830 1031 hPa or above 8860 979 hPa or below	
Apt Elev 22	
ABV Ø1D, ELN Ø1D, UGA Ø1D DEPARTURES (RWYS 06, 07)	
FT/METER CONVERSION QNH 1320' - 400m 7880' - 2400m 8860' - 2700m 9850' - 3000m 10830' - 3300m	
FL CONVERSION FL4200m FL138	



ZSHC/HGH
XIAOSHAN
JEPPesen
29 SEP 23
Eff 4 Oct 1600Z
(10-3M)

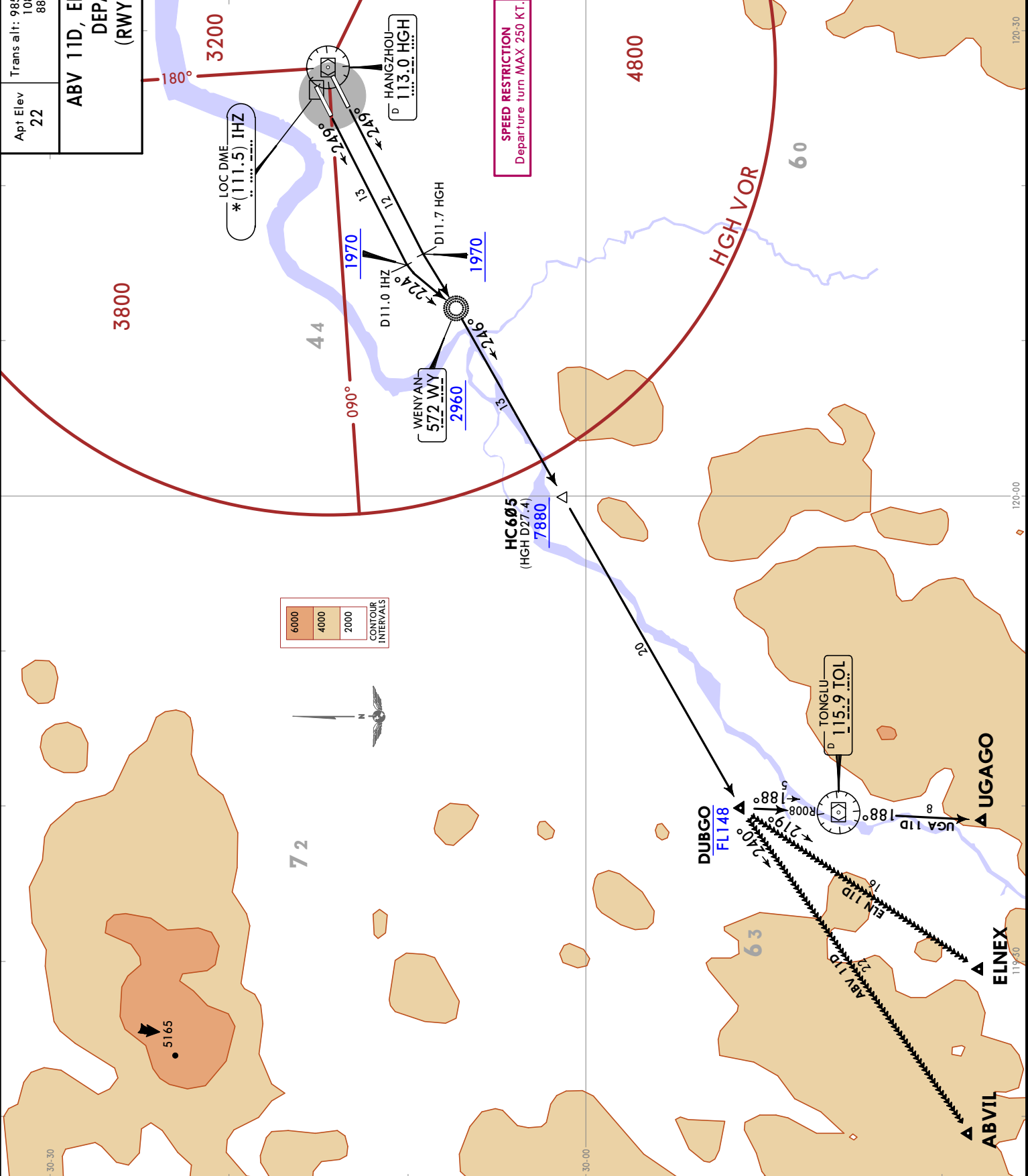
JEPPESEN HANGZHOU, PR OF CHINA
 29 SEP 23 (10-3N) Eff 4 Oct 1600Z **SID**

Apt Elev 22
 Trans alt: 9850
 10830 1031 hPa or above
 8860 979 hPa or below

ABV 11D, ELN 11D, UGA 11D
DEPARTURES
(RWYS 24, 25)

FT./METER CONVERSION	
QNH	
1970'	- 600m
2960'	- 900m
7880'	- 2400m
8860'	- 2700m
9850'	- 3000m
10830'	- 3300m

FL CONVERSION	
FL148	FL4500m



CONTOUR INTERVALS	
6000	
4000	
2000	

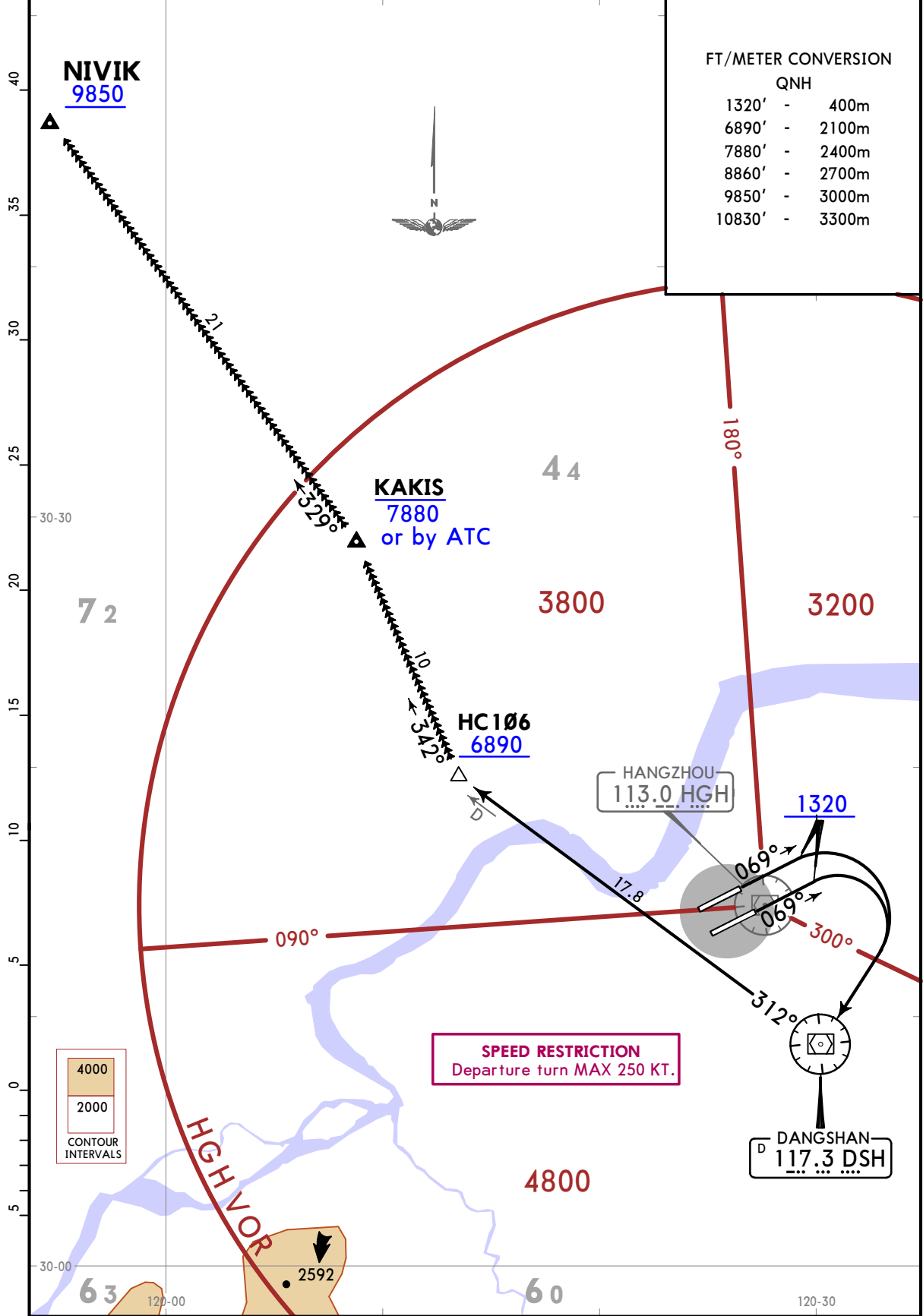


ZSHC/HGH
XIAOSHAN

JEPPESEN HANGZHOU, PR OF CHINA
29 SEP 23 10-3P Eff 4 Oct 1600Z SID

Apt Elev 22	Trans alt: 9850 10830 1031 hPa or above 8860 979 hPa or below
----------------	---

NIV Ø1D DEPARTURE (RWYS 06, 07)



CHANGES: LOST COMMS withdrawn.

© JEPPESEN, 2023. ALL RIGHTS RESERVED.

ZSHC/HGH
XIAOSHAN

JEPPESEN HANGZHOU, PR OF CHINA
29 SEP 23 (10-3Q) Eff 4 Oct 1600Z

SID

Apt Elev 22	Trans alt: 9850 10830 1031 hPa or above 8860 979 hPa or below
----------------	---

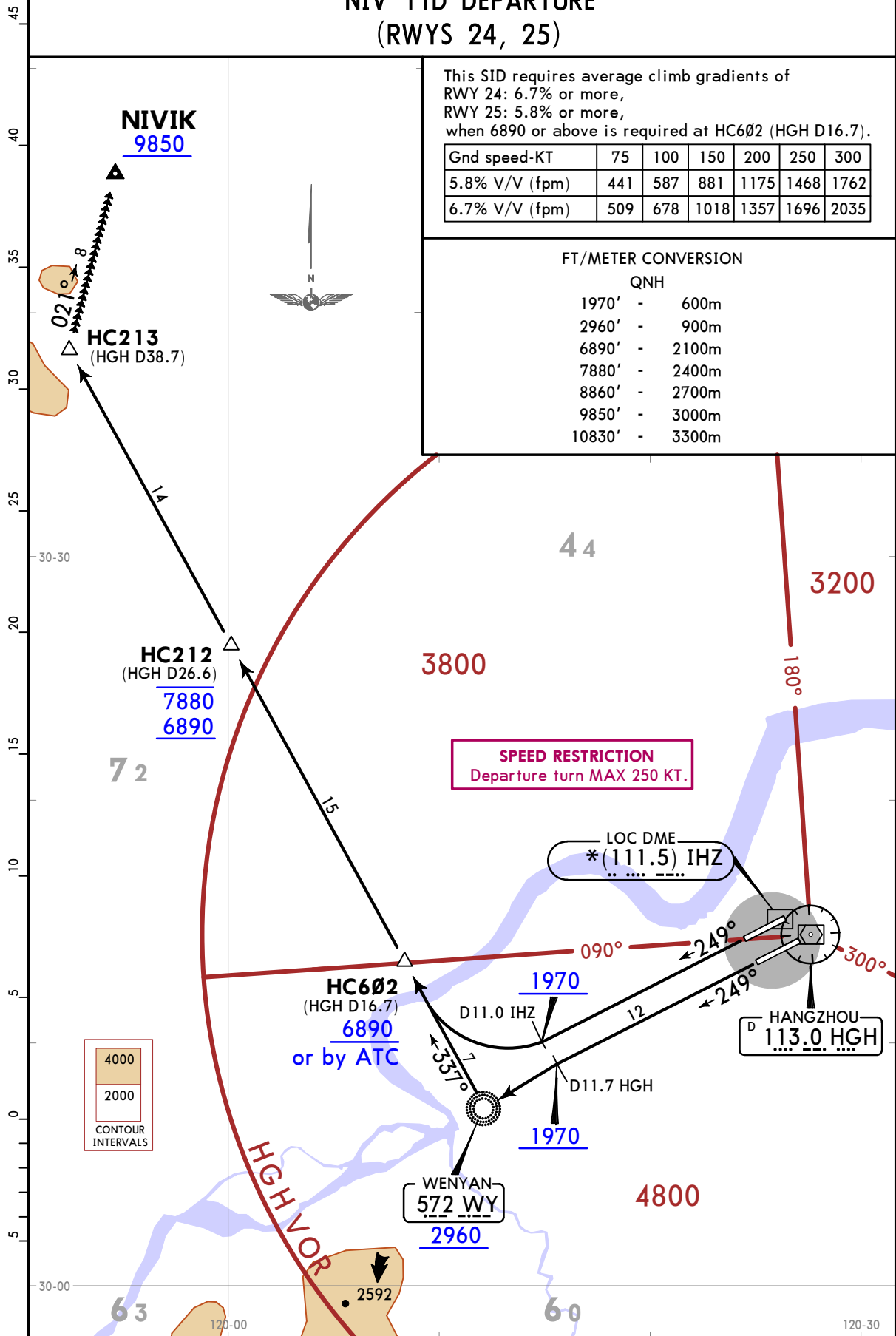
NIV 11D DEPARTURE
(RWYS 24, 25)

This SID requires average climb gradients of
RWY 24: 6.7% or more,
RWY 25: 5.8% or more,
when 6890 or above is required at HC602 (HGH D16.7).

Gnd speed-KT	75	100	150	200	250	300
5.8% V/V (fpm)	441	587	881	1175	1468	1762
6.7% V/V (fpm)	509	678	1018	1357	1696	2035

FT/METER CONVERSION

QNH	
1970'	600m
2960'	900m
6890'	2100m
7880'	2400m
8860'	2700m
9850'	3000m
10830'	3300m



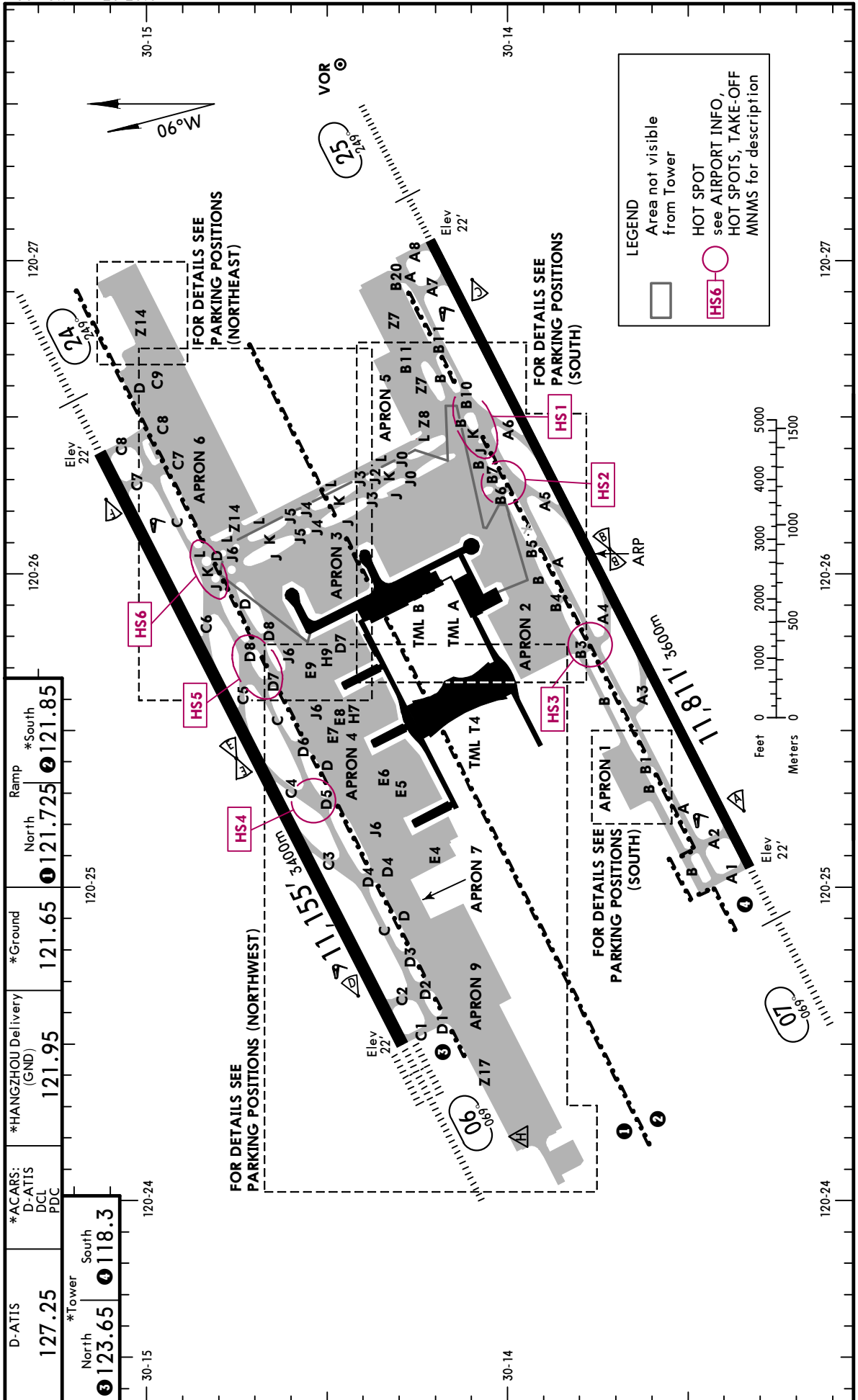
ZSHC/HGH

Apt Elev **22'**
N30 13.7 E120 26.0

JEPPesen HANGZHOU, PR OF CHINA

3 MAY 24 **(10-9)** Eff 15 May 1600Z

XIAOSHAN



D-ATIS	127.25	*Tower	North	123.65	South	118.3
*ACARS: D-ATIS DCL PDC						
*HANGZHOU Delivery (GND)	121.95	*Ground	North	121.725	*South	121.85
Ramp						

CHANGES: Apron, TWYs D4, E4 and J6.

© JEPPESEN, 2001, 2024. ALL RIGHTS RESERVED.

ZSHC/HGH

JEPPESEN HANGZHOU, PR OF CHINA

3 MAY 24 10-9A Eff 15 May 1600Z

XIAOSHAN

ADDITIONAL RUNWAY INFORMATION										
RWY							USABLE LENGTHS		WIDTH	
							LANDING BEYOND			
							Threshold	Glide Slope	TAKE-OFF	
06 ① 24	HIRL (60m)	CL (15m)	② HIALS-II	SFL	TDZ	③ ⑦ RVR		10,148' 3093m	⑧	197' 60m
	HIRL (60m)	CL (15m)	② HIALS	SFL	④ ⑦ RVR					
07 ① 25	HIRL (60m)	CL (15m)	② HIALS	SFL	⑤ ⑦ RVR			10,797' 3291m	⑧	148' 45m
	HIRL (60m)	CL (15m)	② HIALS	SFL	⑥ ⑦ RVR					

① Rwy grooved
 ② length 900m
 ③ HSTIL-C5 & C6
 ④ HSTIL-C4 & C3
 ⑤ HSTIL-A5 & A6
 ⑥ HSTIL-A4 & A3
 ⑦ PAPI-L (angle 3.0°)
 ⑧ TAKE-OFF RUN AVAILABLE (If pilot can not accept int take-off, inform ATC immediately.)

RWY 06:
 From rwy head 11,155' (3400m)
 twy C2 int 10,456' (3187m)

RWY 24:
 From rwy head 11,155' (3400m)
 twy C7 int 10,456' (3187m)

RWY 07:
 From rwy head 11,811' (3600m)
 twy A2 int 11,115' (3388m)

RWY 25:
 From rwy head 11,811' (3600m)
 twy A7 int 11,115' (3388m)

HOT SPOTS

- HS1** Aircraft shall hold short of TWYs J, K, B10 before enter TWY A. Aircraft are forbidden to enter TWY A without ATC clearance. Aircraft taxiing from TWY B10 to TWY A shall avoid entering TWY A6 by mistake.
- HS2** Aircraft shall hold short of TWYs B6 or B7 before enter TWY A. Aircraft are forbidden to enter TWY A without ATC clearance. Aircraft taxiing from TWYs B6 or B7 to TWY A shall avoid entering TWY A5 by mistake.
- HS3** Aircraft shall hold short of TWY B3 before enter TWY A. Aircraft are forbidden to enter TWY A without ATC clearance. Aircraft taxiing from TWY B3 to TWY A shall avoid entering TWY A4 by mistake.
- HS4** Aircraft shall hold short of TWY D5 before enter TWY C. Aircraft are forbidden to enter TWY C without ATC clearance. Aircraft taxiing from TWY D5 to TWY C shall avoid entering TWY C4 by mistake.
- HS5** Aircraft shall hold short of TWYs D8 or D7 before enter TWY C. Aircraft are forbidden to enter TWY C without ATC clearance. Aircraft taxiing from TWYs D7 or D8 to TWY C shall avoid entering TWY C5 by mistake.
- HS6** Aircraft shall hold short of TWYs J, K, L before enter TWY C. Aircraft are forbidden to enter TWY C without ATC clearance. Aircraft taxiing from TWYs J or K to TWY C shall avoid entering TWY C6 by mistake.

State		TAKE-OFF (with reliable alternate)					
		Rwy 06	Rwys 06/24	Rwys 07/25		All Rwys	
		LVP must be in force					
		HUD & RL & CL	RL & CL	HUD & RL & CL	RL & CL	RL & RCLM	NIL (DAY only)
2 TURB Eng or 3 & 4 Eng	A	R150m	R200m	R200m	R200m	R400m V800m	R500m V800m
	B						
	C						
	D						
Other 1 & 2 Eng		Minimums not established by CAAC				Ceiling 100m/V1600m	

ZSHC/HGH

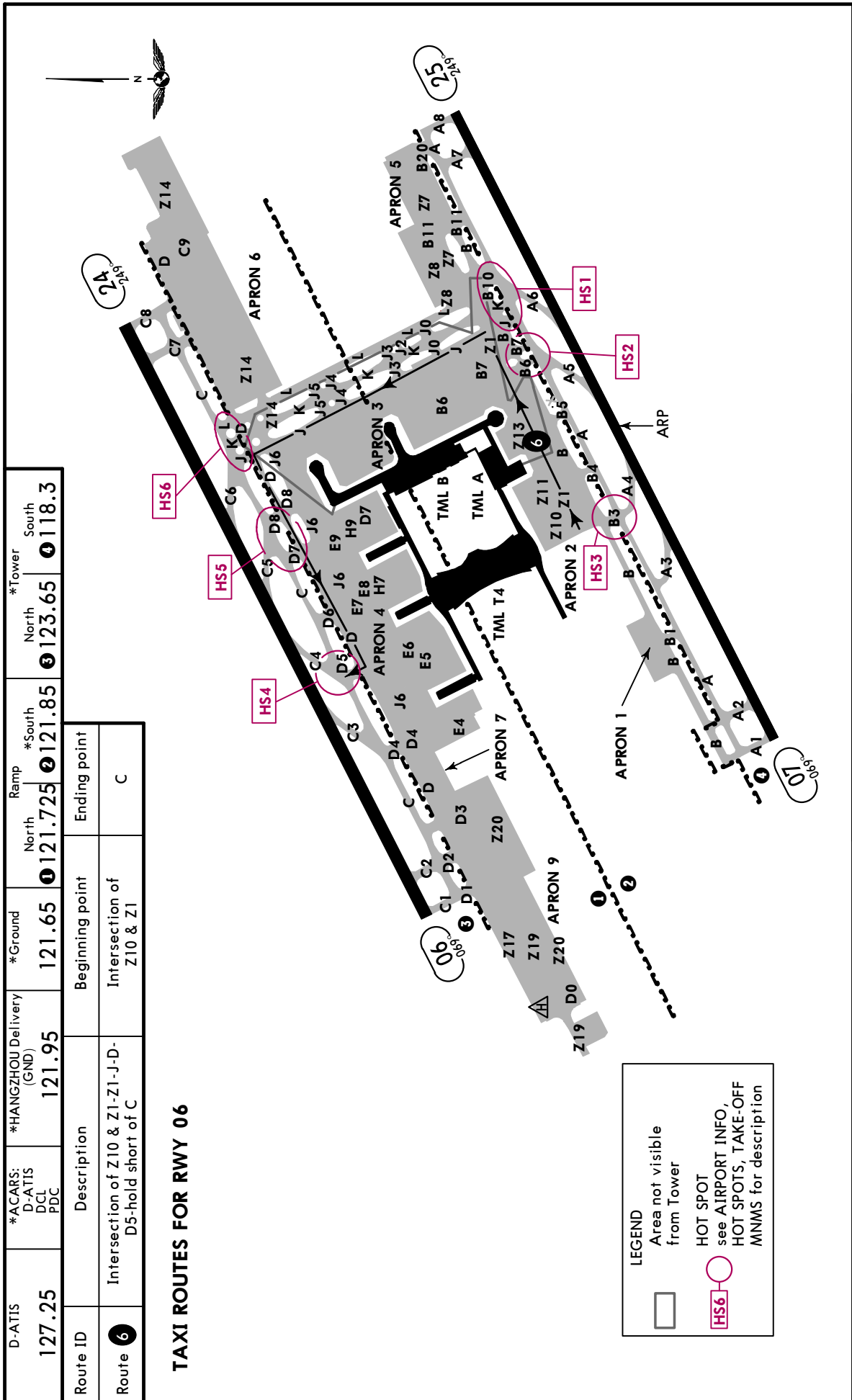
JEPPESEN HANGZHOU, PR OF CHINA

3 MAY 24

10-9B

Eff 15 May 1600Z

XIAOSHAN



D-ATIS 127.25	*ACARS: D-ATIS DCL PDC	*HANGZHOU Delivery (GND) 121.95	*Ground 121.65	North 121.725	*South 121.85	North 123.65	*Tower South 118.3
Route ID	Description		Beginning point	Ending point			
Route 6	Intersection of Z10 & Z1-Z1-J-D- D5-hold short of C		Intersection of Z10 & Z1	C			

TAXI ROUTES FOR RWY 06

CHANGES: Apron, TWYs D4, E4 and J6.

ZSHC/HGH

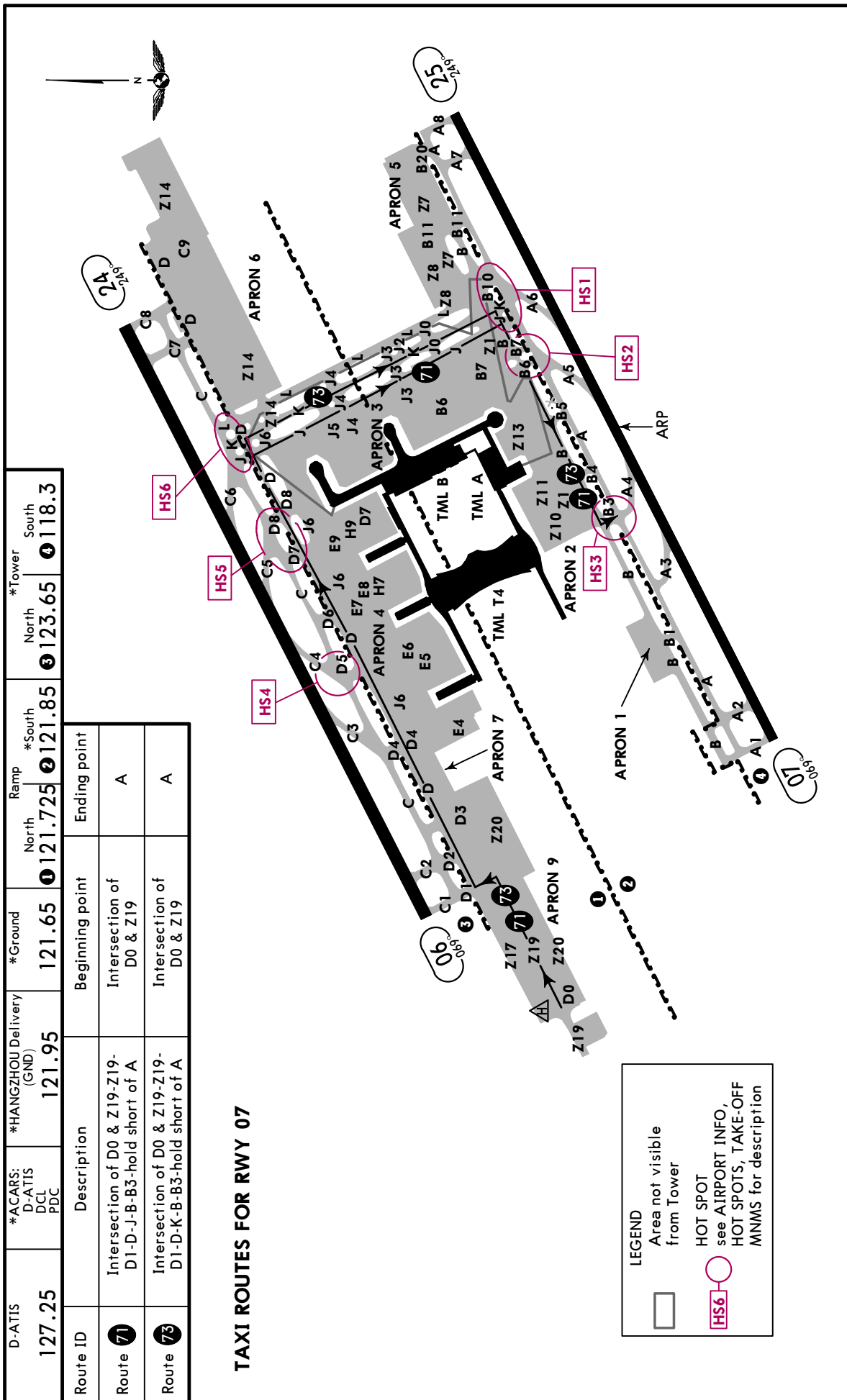
JEPPESEN HANGZHOU, PR OF CHINA

3 MAY 24

10-9C

Eff 15 May 1600Z

XIAOSHAN



D-ATIS 127.25	*ACARS: D-ATIS DCL PDC	*HANGZHOU Delivery (GND) 121.95	*Ground 121.65	Ramp North 121.725	*South 121.85	*Tower North 123.65	South 118.3
-------------------------	---------------------------------	--	--------------------------	---------------------------------	-------------------------	----------------------------------	-----------------------

Route ID	Description	Beginning point	Ending point
Route 71	Intersection of D0 & Z19-Z19-D1-D-J-B-B3-hold short of A	Intersection of D0 & Z19	A
Route 73	Intersection of D0 & Z19-Z19-D1-D-K-B-B3-hold short of A	Intersection of D0 & Z19	A

TAXI ROUTES FOR RWY 07

LEGEND

- Area not visible from Tower
- HOT SPOT see AIRPORT INFO, HOT SPOTS, TAKE-OFF MNMS for description

CHANGES: Apron, TWYs D4, E4 and J6.

© JEPPESEN, 2019, 2024. ALL RIGHTS RESERVED.

ZSHC/HGH

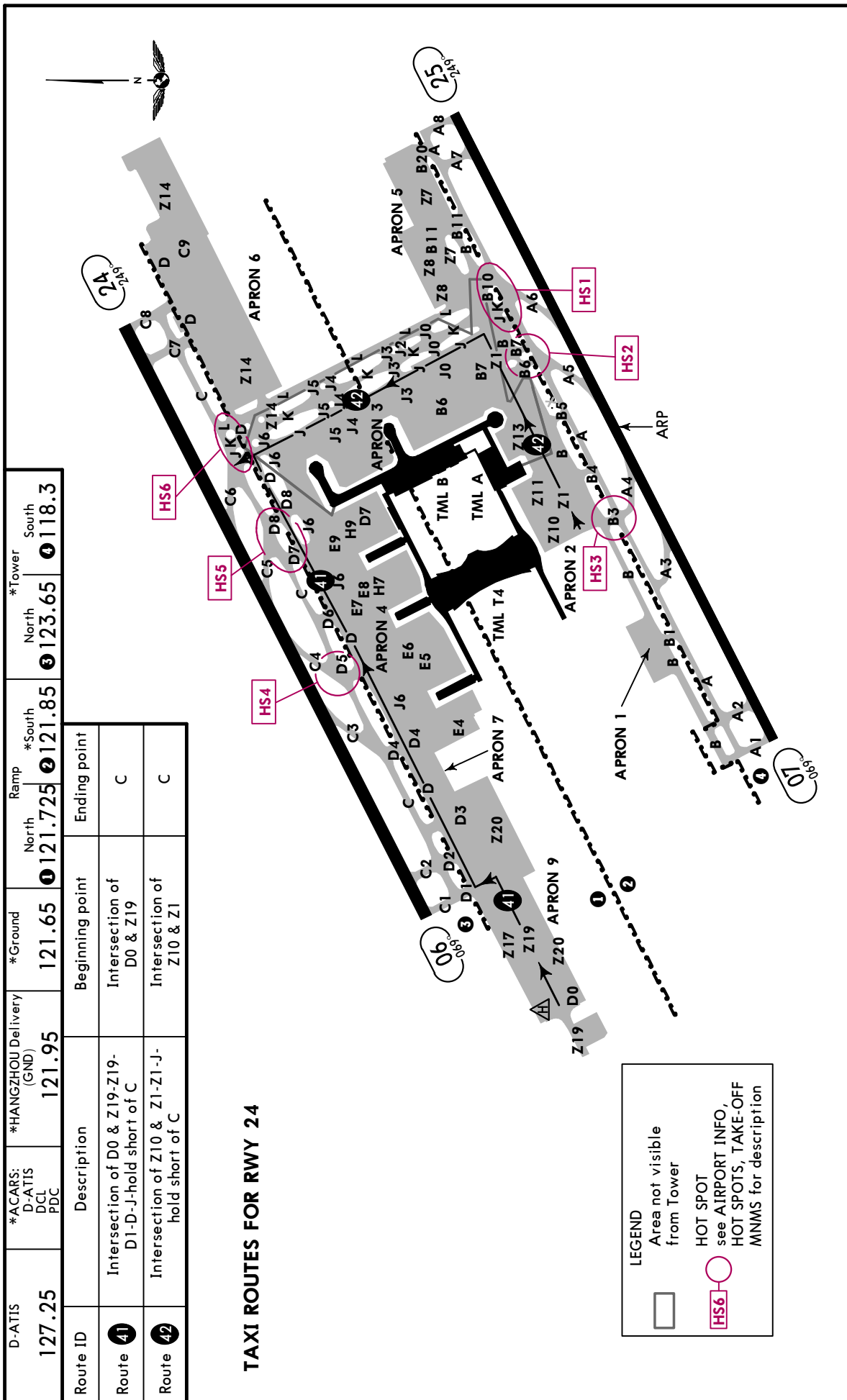
JEPPESEN HANGZHOU, PR OF CHINA

3 MAY 24

10-9D

Eff 15 May 1600Z

XIAOSHAN



ZSHC/HGH

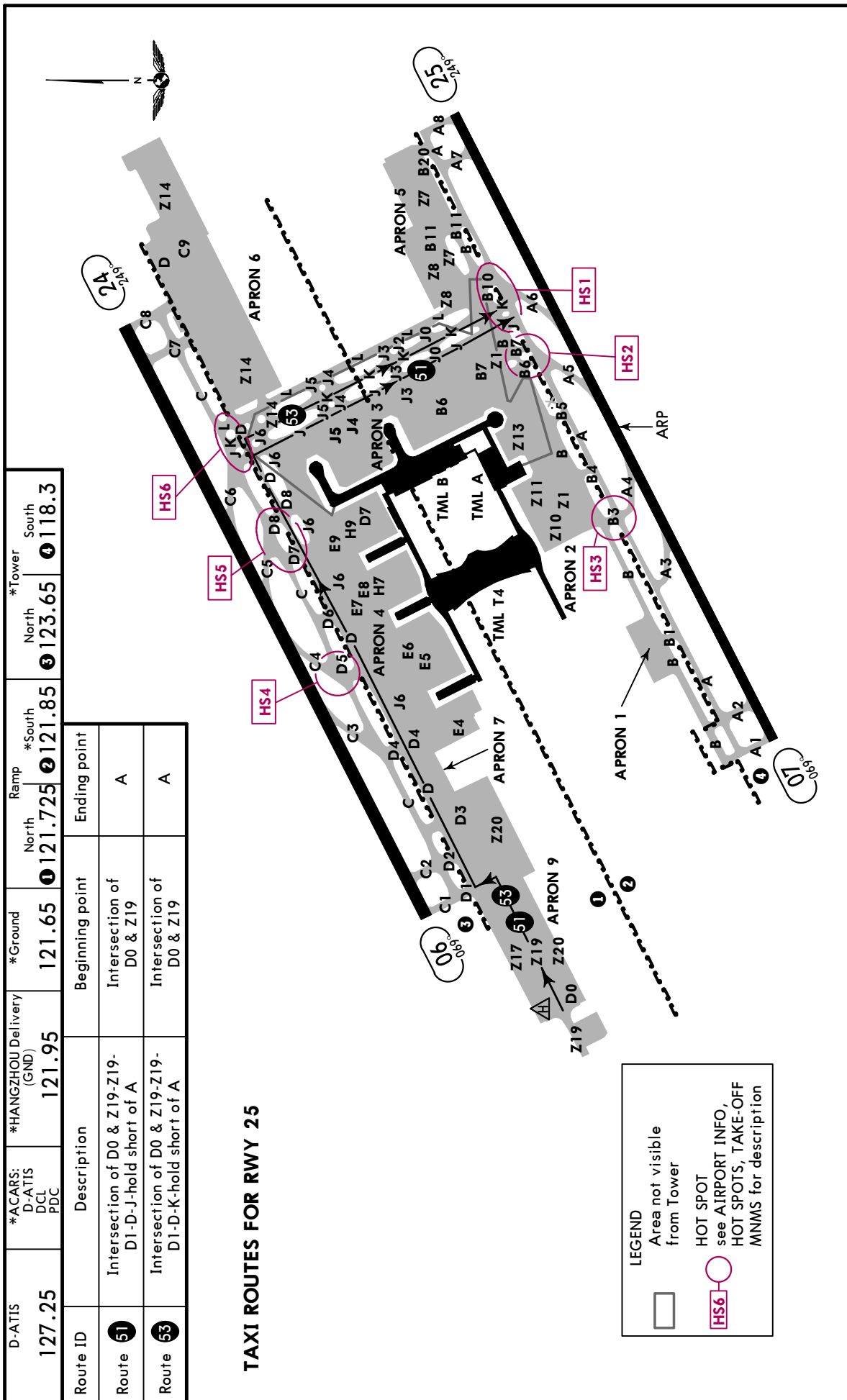
JEPPesen HANGZHOU, PR OF CHINA

3 MAY 24

10-9E

Eff 15 May 1600Z

XIAOSHAN



D-ATIS 127.25	*ACARS: D-ATIS DCL PDC	*HANGZHOU Delivery (GND) 121.95	*Ground 121.65	Ramp North 121.725	*South 121.85	*Tower North 123.65	South 118.3
-------------------------	---------------------------------	--	--------------------------	---------------------------------	-------------------------	----------------------------------	-----------------------

Route ID	Description	Beginning point	Ending point
Route 51	Intersection of D0 & Z19-Z19-D1-D-J-hold short of A	Intersection of D0 & Z19	A
Route 53	Intersection of D0 & Z19-Z19-D1-D-K-hold short of A	Intersection of D0 & Z19	A

TAXI ROUTES FOR RWY 25

CHANGES: Apron, TWYs D4, E4 and J6.

© JEPPESEN, 2019, 2024. ALL RIGHTS RESERVED.

ZSHC/HGH

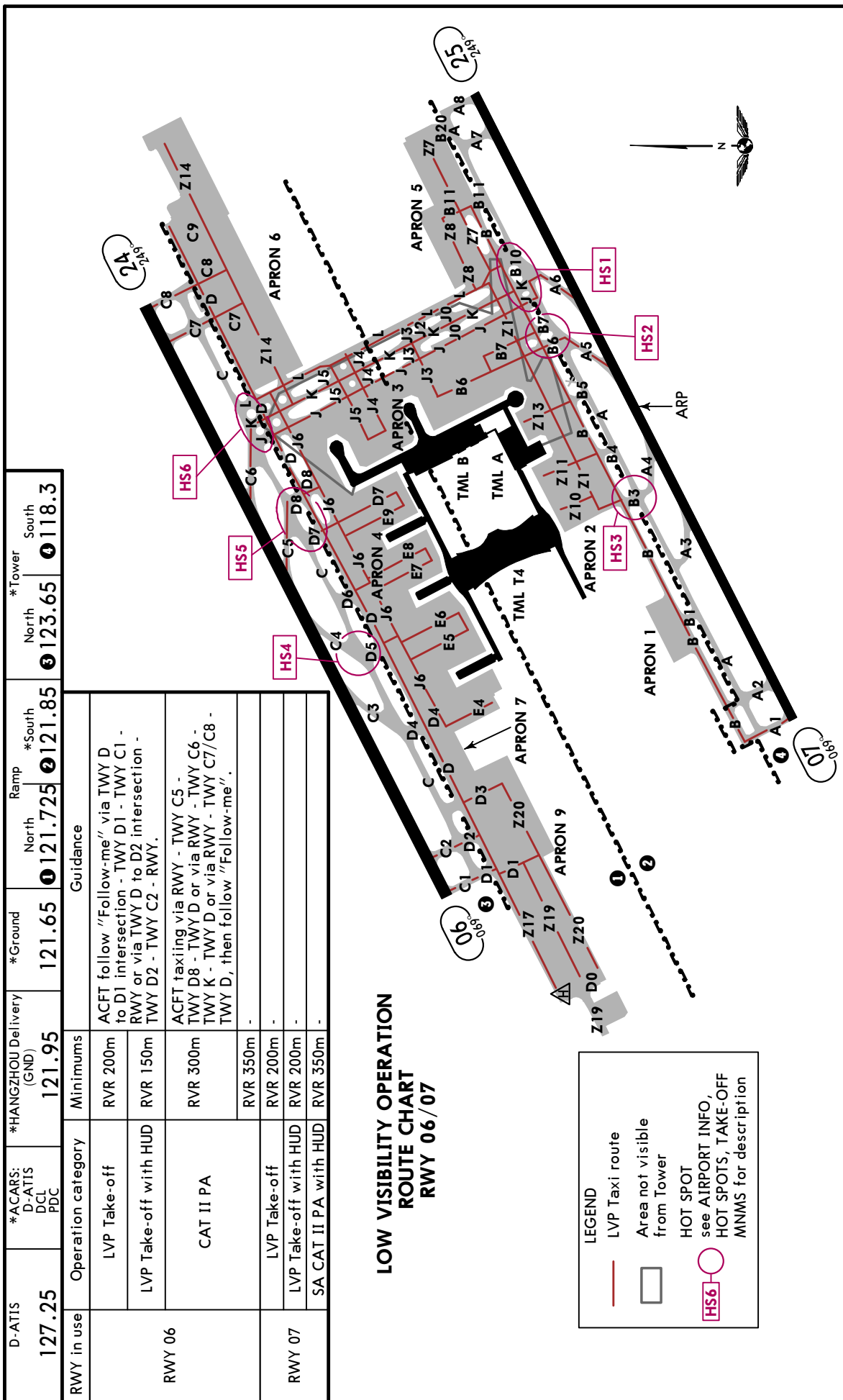
JEPPESSEN HANGZHOU, PR OF CHINA

3 MAY 24

10-9F

Eff 15 May 1600Z

XIAOSHAN



**LOW VISIBILITY OPERATION
ROUTE CHART
RWY 06/07**

LEGEND

- LVP Taxi route
- Area not visible from Tower
- HS6 HOT SPOT
see AIRPORT INFO,
HOT SPOTS, TAKE-OFF
MNMS for description

D-ATIS 127.25	*ACARS: D-ATIS DCL PDC	*HANGZHOU Delivery (GND) 121.95	*Ground 121.65	North 121.725	*South 121.85	North 123.65	South 118.3
RWY in use	Operation category	Minimums	Guidance				
RWY 06	LVP Take-off	RVR 200m	ACFT follow "Follow-me" via TWY D to D1 intersection - TWY D1 - TWY C1 - RWY or via TWY D to D2 intersection - TWY D2 - TWY C2 - RWY.				
	LVP Take-off with HUD	RVR 150m	ACFT taxiing via RWY - TWY C5 - TWY D8 - TWY D or via RWY - TWY C6 - TWY K - TWY D or via RWY - TWY C7/C8 - TWY D, then follow "Follow-me".				
RWY 07	LVP Take-off	RVR 300m					
	LVP Take-off with HUD	RVR 200m					
	SA CAT II PA with HUD	RVR 350m					

CHANGES: Apron, TWYs D4, E4 and J6, LVP route.

© JEPPESSEN, 2001, 2024. ALL RIGHTS RESERVED.

ZSHC/HGH

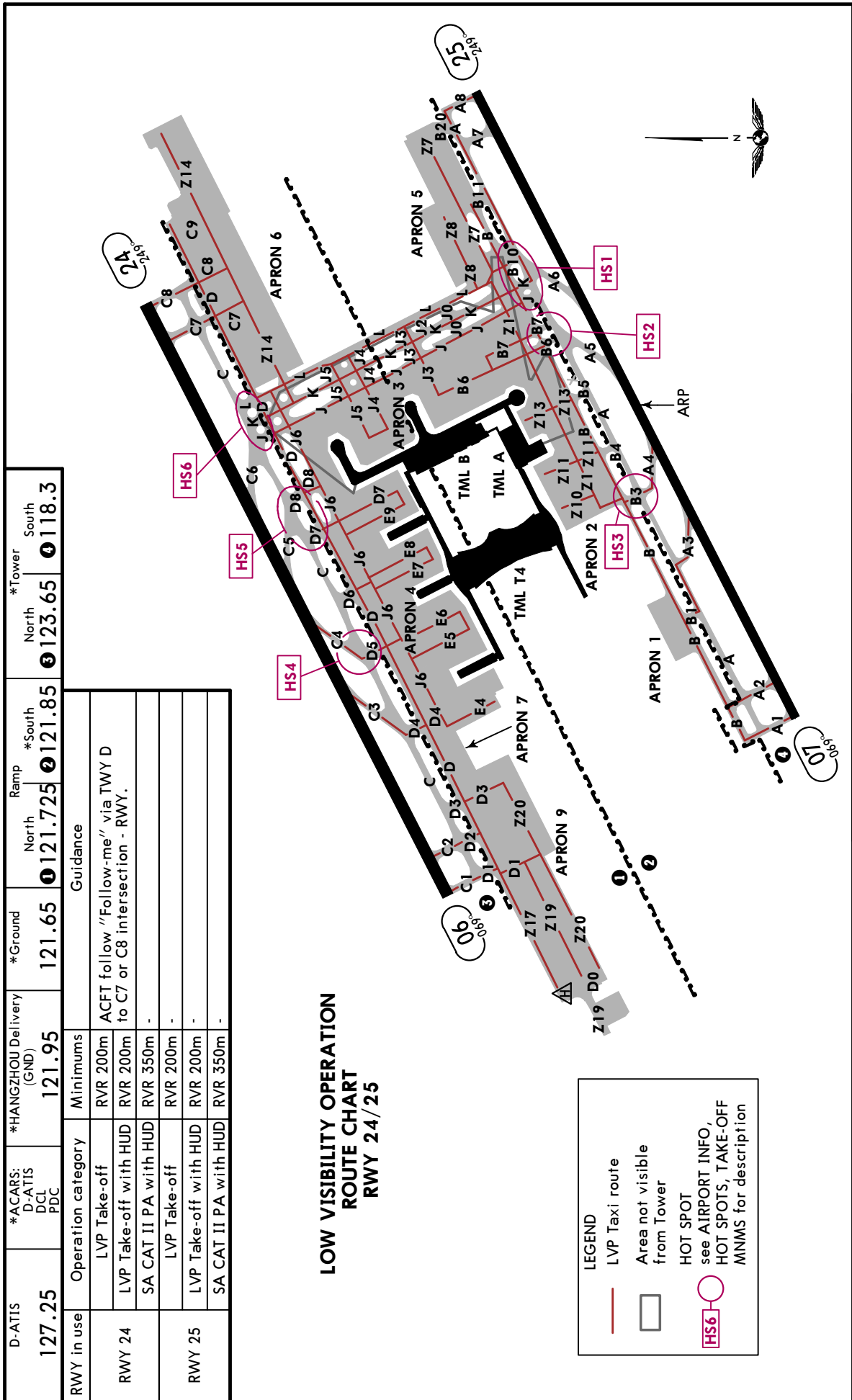
JEPPESEN HANGZHOU, PR OF CHINA

3 MAY 24

10-9G

Eff 15 May 1600Z

XIAOSHAN



D-ATIS	*ACARS: D-ATIS DCL PDC	*HANGZHOU Delivery (GND)	*Ground	North	Ramp	*South	*Tower	North	South
127.25		121.95	121.65	121.725	121.725	121.85	123.65	123.65	118.3
RWY in use	Operation category	Minimums	Guidance						
RWY 24	LVP Take-off	RVR 200m	ACFT follow "Follow-me" via TWY D to C7 or C8 intersection - RWY.						
	LVP Take-off with HUD	RVR 200m							
	SA CAT II PA with HUD	RVR 350m							
RWY 25	LVP Take-off	RVR 200m							
	LVP Take-off with HUD	RVR 200m							
	SA CAT II PA with HUD	RVR 350m							

LOW VISIBILITY OPERATION ROUTE CHART RWY 24/25

LEGEND

- LVP Taxi route
- Area not visible from Tower
- HOT SPOT see AIRPORT INFO, HOT SPOTS, TAKE-OFF MNMS for description

CHANGES: Apron, TWYs D4, E4 and J6, LVP route.

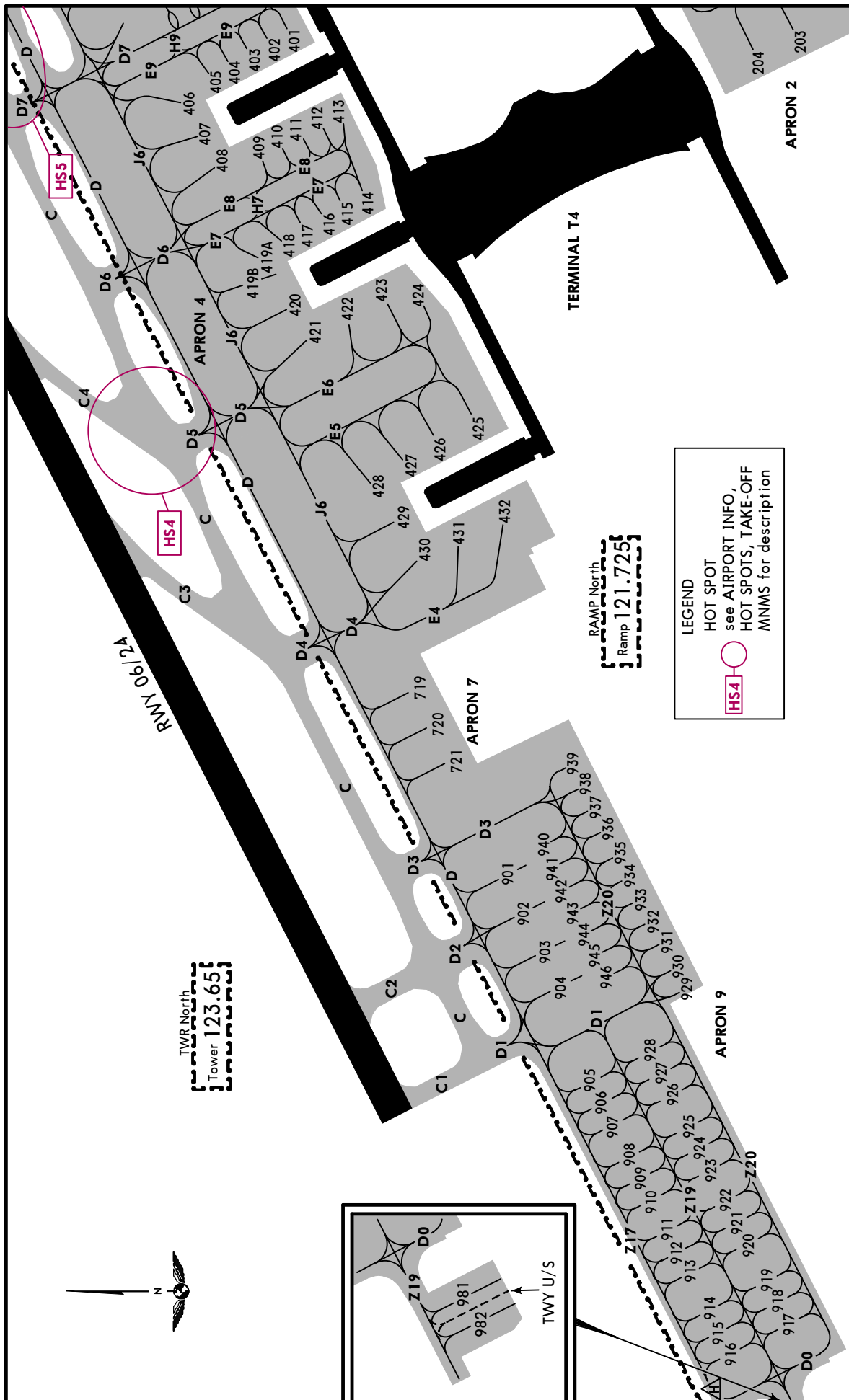
© JEPPESEN, 2001, 2024. ALL RIGHTS RESERVED.

ZSHC/HGH

JEPPesen HANGZHOU, PR OF CHINA

3 MAY 24 10-9H Eff 15 May 1600Z

XIAOSHAN

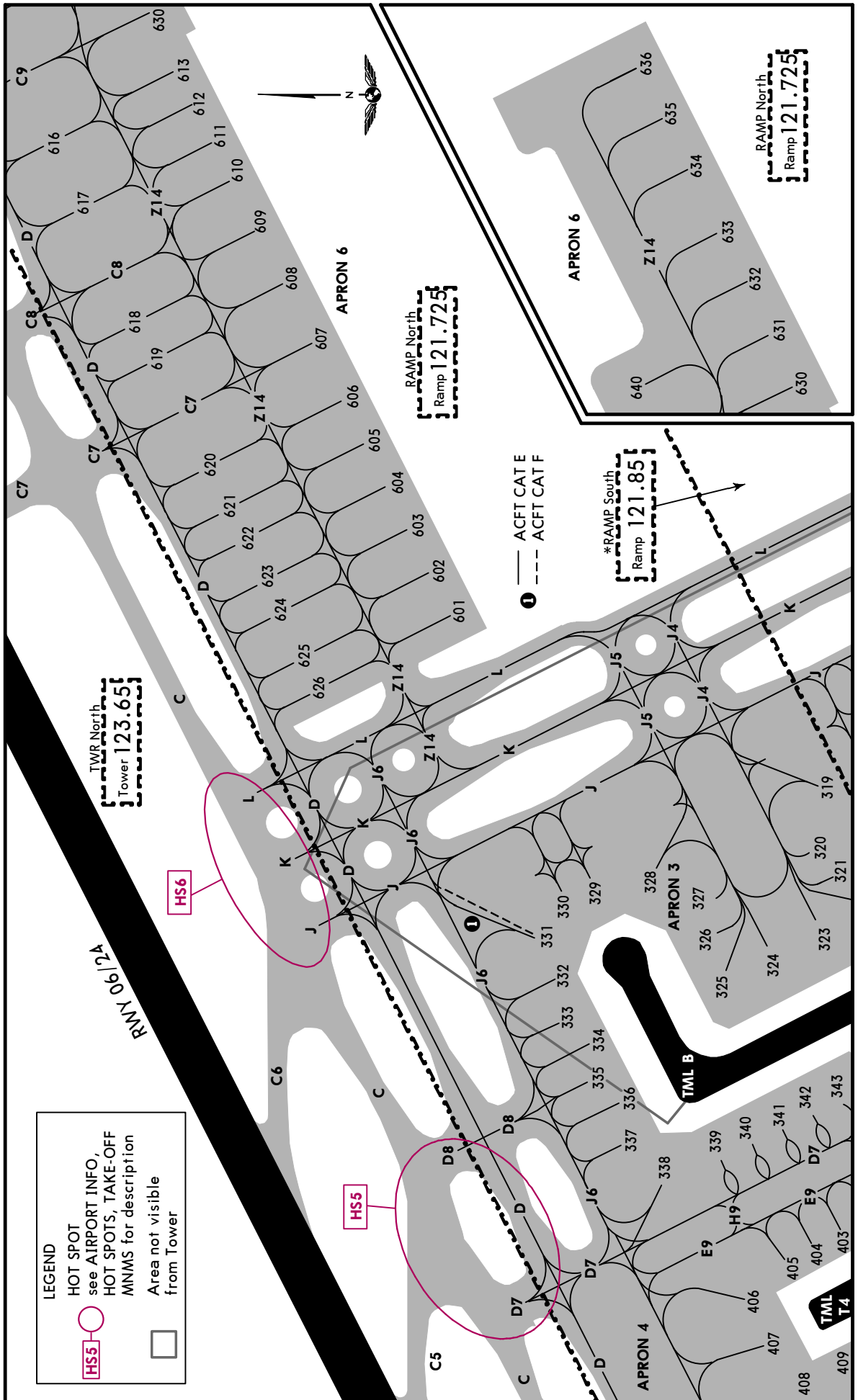


CHANGES: Apron, TWYs D4, E4 and J6.

© JEPPesen, 2015, 2024. ALL RIGHTS RESERVED

ZSHC/HGH

JEPPESEN HANGZHOU, PR OF CHINA
3 MAY 24 **(10-9J)** Eff 15 May 1600Z
XIAOSHAN

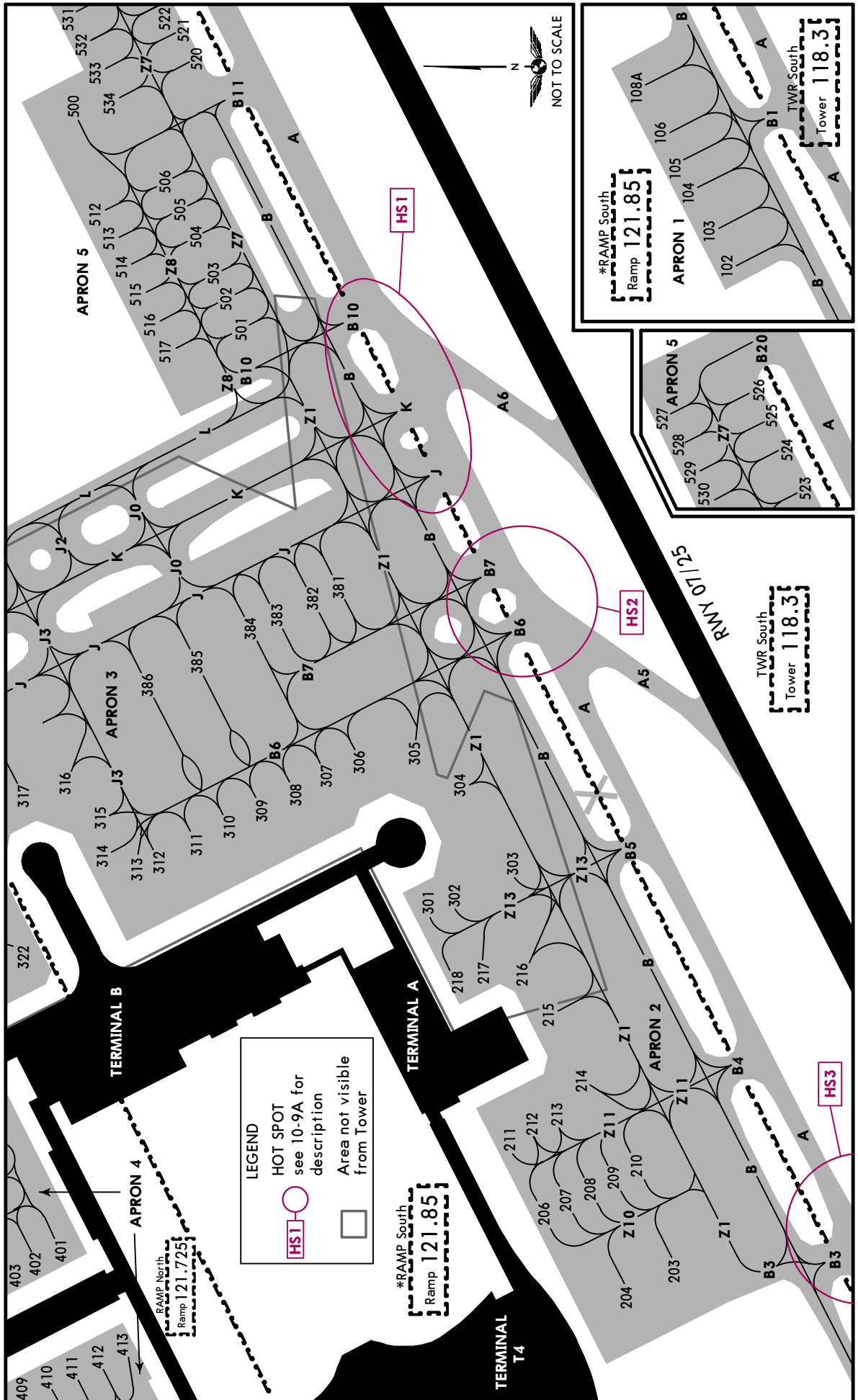


LEGEND

- HS5** - HOT SPOT
- see AIRPORT INFO, for description
- HS6** - HOT SPOT, TAKE-OFF
- MNMS for description
- Area not visible from Tower

ZSHC/HGH

JEPPESON HANGZHOU, PR OF CHINA
15 MAR 24 (10-9K) Eff 20 Mar 1600Z
XIAOSHAN



CHANGES: Stands 106A, 107 and 108 withdrawn.

© JEPPESON, 2004, 2024. ALL RIGHTS RESERVED.

ZSHC/HGH



EASA AIR OPS
HANGZHOU, PR OF CHINA
XIAOSHAN

STRAIGHT-IN RWY	A	B	C	D
06 CAT 2 RNAV ILS DME Z or CAT 2 ILS DME Y	122' (100') RA102' R300m	122' (100') RA102' R300m	122' (100') RA102' R300m	122' (100') RA102' ① R300m
② SA CAT 2 RNAV ILS DME Z or ② SA CAT 2 ILS DME Y	122' (100') RA102' ③ R350m	122' (100') RA102' ③ R350m	122' (100') RA102' ③ R350m	122' (100') RA102' ③ R350m
② SA CAT 1 RNAV ILS DME Z or ② SA CAT 1 ILS DME Y	172' (150') RA151' R450m	172' (150') RA151' R450m	172' (150') RA151' R450m	172' (150') RA151' R450m
RNAV ILS DME Z or ILS DME Y	222' (200') R550m V800m	222' (200') R550m V800m	222' (200') R550m V800m	222' (200') R550m V800m
TDZ or CL out ALS out	④ R550mV800m R/V1200m	④ R550mV800m R/V1200m	④ R550mV800m R/V1200m	④ R550mV800m R/V1200m
⑤ LOC	560' (538') R/V2400m	560' (538') R/V2400m	560' (538') R/V2600m	560' (538') R/V2800m
ALS out	R/V3200m	R/V3200m	R/V3200m	R/V3200m
07				
② SA CAT 2 RNAV ILS DME Z or ② SA CAT 2 ILS DME Y	122' (100') RA105' ③ R350m	122' (100') RA105' ③ R350m	122' (100') RA105' ③ R350m	122' (100') RA105' ③ R350m
② SA CAT 1 RNAV ILS DME Z or ② SA CAT 1 ILS DME Y	172' (150') RA155' R450m	172' (150') RA155' R450m	172' (150') RA155' R450m	172' (150') RA155' R450m
RNAV ILS DME Z or ILS DME Y	222' (200') ④ R550mV800m R/V1200m	222' (200') ④ R550mV800m R/V1200m	222' (200') ④ R550mV800m R/V1200m	222' (200') ④ R550mV800m R/V1200m
ALS out	⑤ LOC	⑤ LOC	⑤ LOC	⑤ LOC
	430' (408') R/V1600m	430' (408') R/V1600m	430' (408') R/V1800m	430' (408') R/V2000m
ALS out	R/V2400m	R/V2400m	R/V2400m	R/V2400m
⑤ VOR DME	500' (478') R/V2000m	500' (478') R/V2000m	500' (478') R/V2200m	500' (478') R/V2400m
ALS out	R/V2800m	R/V2800m	R/V2800m	R/V2800m
24				
② SA CAT 2 RNAV ILS DME Z or ② SA CAT 2 ILS DME Y	122' (100') RA102' ③ R350m	122' (100') RA102' ③ R350m	122' (100') RA102' ③ R350m	122' (100') RA102' ③ R350m
② SA CAT 1 RNAV ILS DME Z or ② SA CAT 1 ILS DME Y	172' (150') RA155' R450m	172' (150') RA155' R450m	172' (150') RA155' R450m	172' (150') RA155' R450m
RNAV ILS DME Z or ILS DME Y	222' (200') ④ R550mV800m R/V1200m	222' (200') ④ R550mV800m R/V1200m	222' (200') ④ R550mV800m R/V1200m	222' (200') ④ R550mV800m R/V1200m
ALS out	⑤ LOC	⑤ LOC	⑤ LOC	⑤ LOC
	500' (478') R/V2000m	500' (478') R/V2000m	500' (478') R/V2200m	500' (478') R/V2400m
ALS out	R/V2800m	R/V2800m	R/V2800m	R/V2800m

- ① Requires autoland or HUDLS, otherwise: R350m.
- ② HUD required.
- ③ CL out: R400m.
- ④ R750m when a Flight Director or Autopilot or HUDLS to DA is not used.
- ⑤ Continuous Descent Final Approach.

ZSHC/HGH



EASA AIR OPS
HANGZHOU, PR OF CHINA
XIAOSHAN

STRAIGHT-IN RWY	A	B	C	D
25				
① SA CAT 2 RNAV ILS DME Z or ① SA CAT 2 ILS DME Y	122' (100') RA105' ② R350m	122' (100') RA105' ② R350m	122' (100') RA105' ② R350m	122' (100') RA105' ② R350m
① SA CAT 1 RNAV ILS DME Z or ① SA CAT 1 ILS DME Y	172' (150') RA155' R450m	172' (150') RA155' R450m	172' (150') RA155' R450m	172' (150') RA155' R450m
RNAV ILS DME Z or ILS DME Y	222' (200') ③ R550m V800m	222' (200') ③ R550m V800m	222' (200') ③ R550m V800m	222' (200') ③ R550m V800m
ALS out	R/V1200m	R/V1200m	R/V1200m	R/V1200m
④ LOC	460' (438') R/V1800m	460' (438') R/V1800m	460' (438') R/V2000m	460' (438') R/V2200m
ALS out	R/V2600m	R/V2600m	R/V2600m	R/V2600m
④ VOR DME	500' (478') R/V2000m	500' (478') R/V2000m	500' (478') R/V2200m	500' (478') R/V2400m
ALS out	R/V2800m	R/V2800m	R/V2800m	R/V2800m

- ① HUD required.
- ② CL out: R400m.
- ③ R750m when a Flight Director or Autopilot or HUDLS to DA is not used.
- ④ Continuous Descent Final Approach.

CIRCLE-TO-LAND ⑤	100 KT	135 KT	180 KT	205 KT
	1420' (1398') V3200m	1420' (1398') V3600m	1510' (1488') V4800m	1510' (1488') V5000m

⑤ Not authorized North of runway

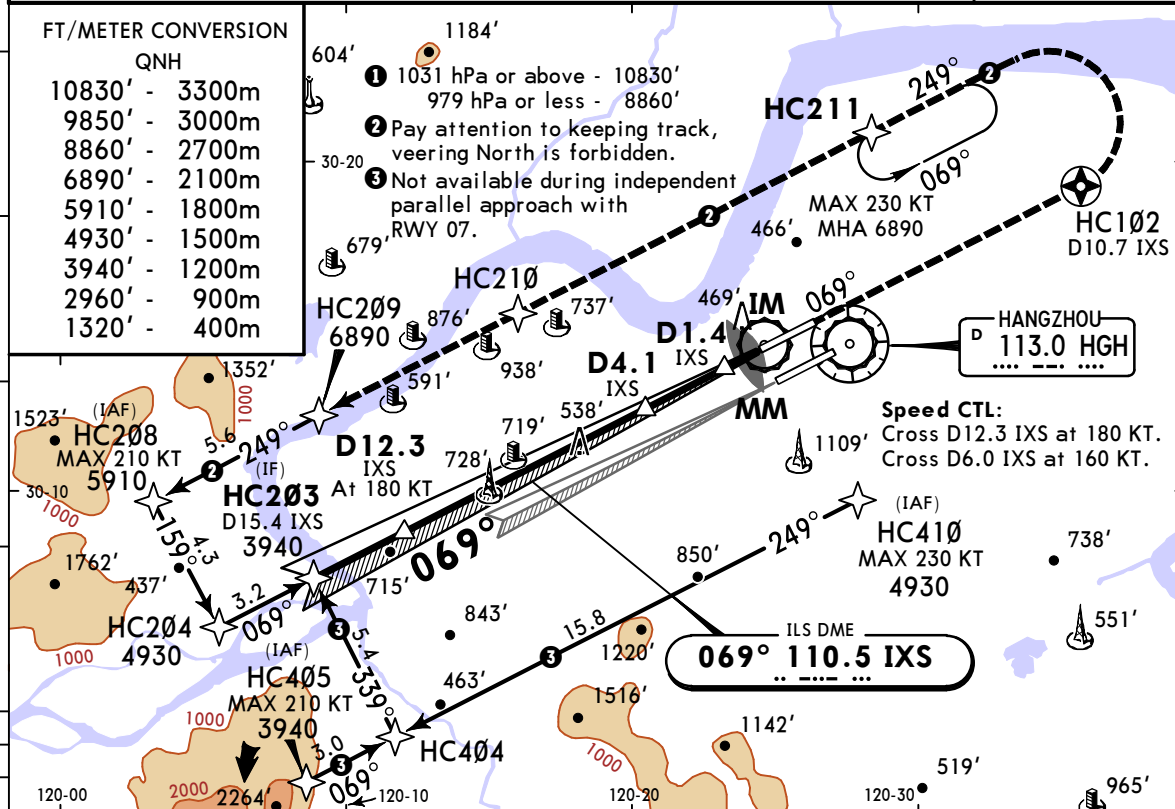
TAKE-OFF		(with reliable alternate)						
	A	Rwy 06	Rwys 06/24	Rwys 07/25		All Rwys		
		Low Visibility Procedures required.					RL & RCLM	NIL (DAY only)
		Approval for Low Visibility Take-off required						
		HUD & RL & CL	RL & CL	HUD & RL & CL	RL & CL			
2 TURB Eng or 3 & 4 Eng	B C D	R150m	R200m	R200m	R200m	R400m V800m	R500m V800m	
Other 1 & 2 Eng		Minimums not established by CAAC				Ceiling 100m/V1600m		

ZSHC/HGH
XIAOSHAN

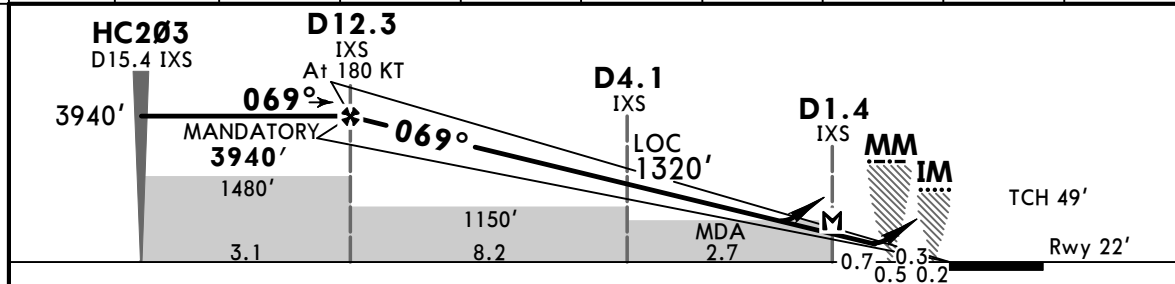
7 JUL 23
Eff 12 Jul 1600Z (11-1)

JEPPESSEN HANGZHOU, PR OF CHINA
RNAV ILS DME Z Rwy 06

D-ATIS 127.25	*APP01 120.05	APP02 125.55X	HANGZHOU Approach (R) APP03 126.05	*APP04 120.4	*APP05 119.425	APP07 127.7X	*HANGZHOU Tower North 123.65	*Ground 121.65
LOC IXS 110.5	Final Apch Crs 069°	D12.3 IXS MANDATORY 3940' (3918')		ILS DA(H) 222' (200')	Apt Elev 22' Rwy 22'			
MISSED APCH: Climb STRAIGHT AHEAD to HC102 at 2960' or above, turn LEFT (MAX 205 KT) to HC211 on 249° at 5910' or above to HC211 for approach or join holding and as directed. Missed approach requires a minimum climb gradient of 5.0%.								MSA GHG VOR
Alt Set: hPa		Rwy Elev: 1 hPa		Trans level: FL118		Trans alt: 9850' ①		



LOC (GS out)	IXS DME	12.0	10.0	8.0	6.0	5.0	4.0	3.0	2.0
	ALTITUDE	3840'	3200'	2570'	1930'	1620'	1300'	980'	660'



Gnd speed-Kts	70	90	100	120	140	160	HIALS-II PAPI 	HC102 ↑	
ILS GS or LOC Descent Angle	3.00°	372	478	531	637	743			849
MAP at D1.4 IXS									

PANS OPS	State ILS STRAIGHT-IN LANDING		LOC (GS out)		CIRCLE-TO-LAND	
	ILS		LOC (GS out)		Not authorized North of runway	
	DA(H) 222' (200')		CDFA MDA(H) 560' (538')			
	ALS out		ALS out		Max Kts MDA(H)	
A			V2400m	V3200m	100	1420' (1398') V3200m
B	R550m	V1200m	V2600m		135	1420' (1398') V3600m
C	V800m		V2800m		180	1510' (1488') V4800m
D					205	1510' (1488') V5000m

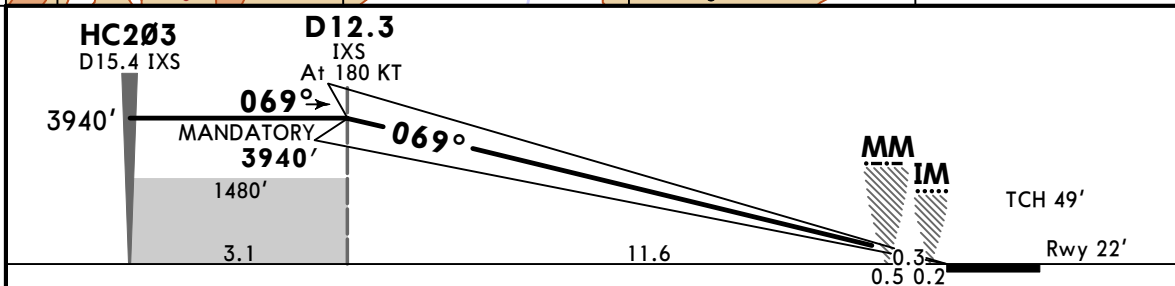
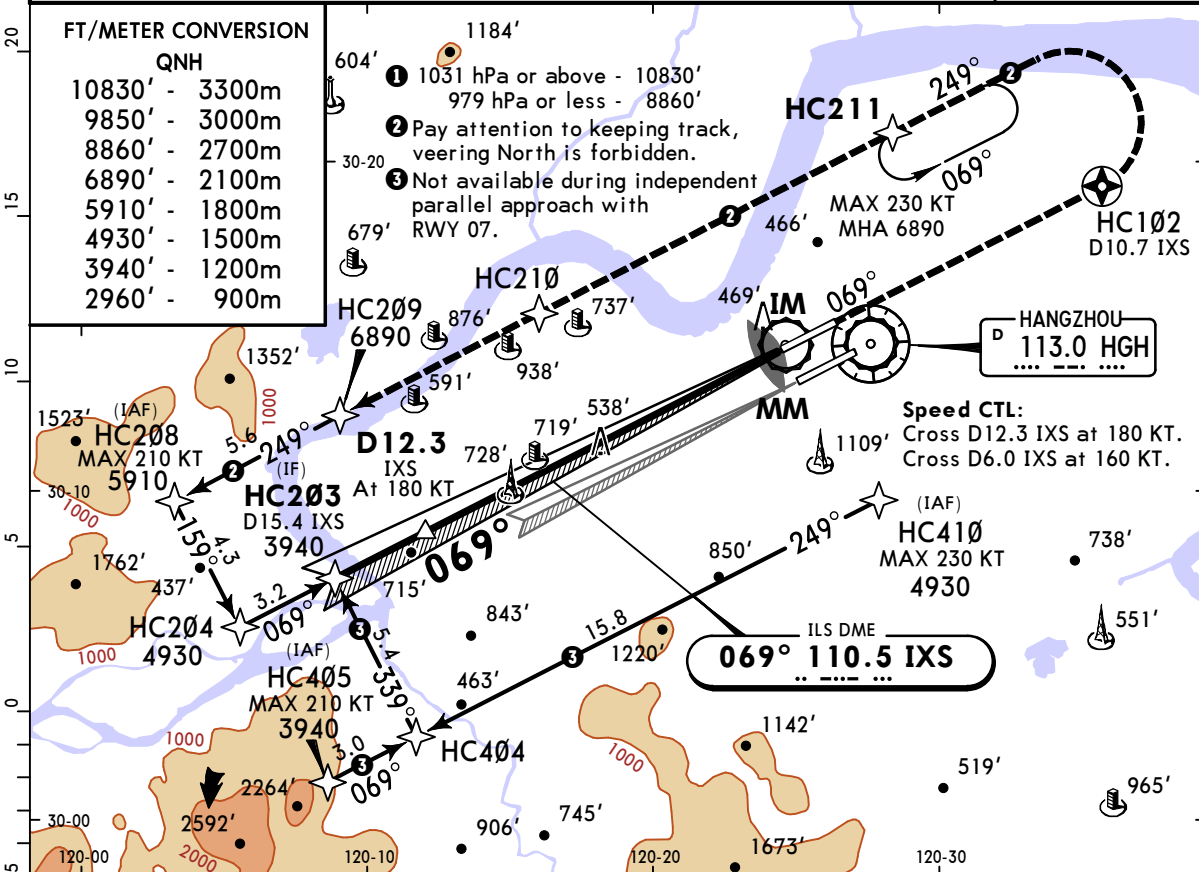
ZSHC/HGH
XIAOSHAN

7 JUL 23
Eff 12 Jul 1600Z

11-1A

JEPPESSEN HANGZHOU, PR OF CHINA
CAT II RNAV ILS DME Z Rwy 06

BRIEFING STRIP™	D-ATIS	*APP01	APP02	HANGZHOU Approach (R)			*HANGZHOU Tower North	*Ground
	127.25	120.05	125.55X	APP03	*APP04	*APP05	APP07	123.65
	LOC IXS 110.5	Final Apch Crs 069°		D12.3 IXS MANDATORY 3940' (3918')		CAT II ILS RA 102' DA(H) 122'(100')		Apt Elev 22' Rwy 22'
<p>MISSED APCH: Climb STRAIGHT AHEAD to HC102 at 2960' or above, turn LEFT (MAX 205 KT) to HC211 on 249° at 5910' or above to HC211 for approach or join holding and as directed. Missed apch requires a MIN climb gradient of 5.0%.</p>								<p>MSA GHG VOR</p>
Alt Set: hPa				Rwy Elev: 1 hPa		Trans level: FL118		
Special Aircrew & Acft Certification Required.								



Gnd speed-Kts	70	90	100	120	140	160	HIALS-II PAP:	HC102 ↑
Gs	3.00°	372	478	531	637	849		

State STRAIGHT-IN LANDING
CAT II ILS

RA 102'
DA(H) 122'(100')

R300m

① CAT D: R350m for manual operation below DH.

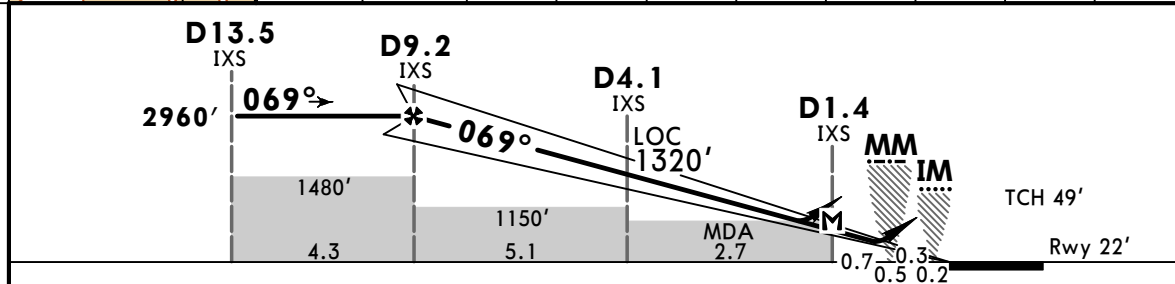
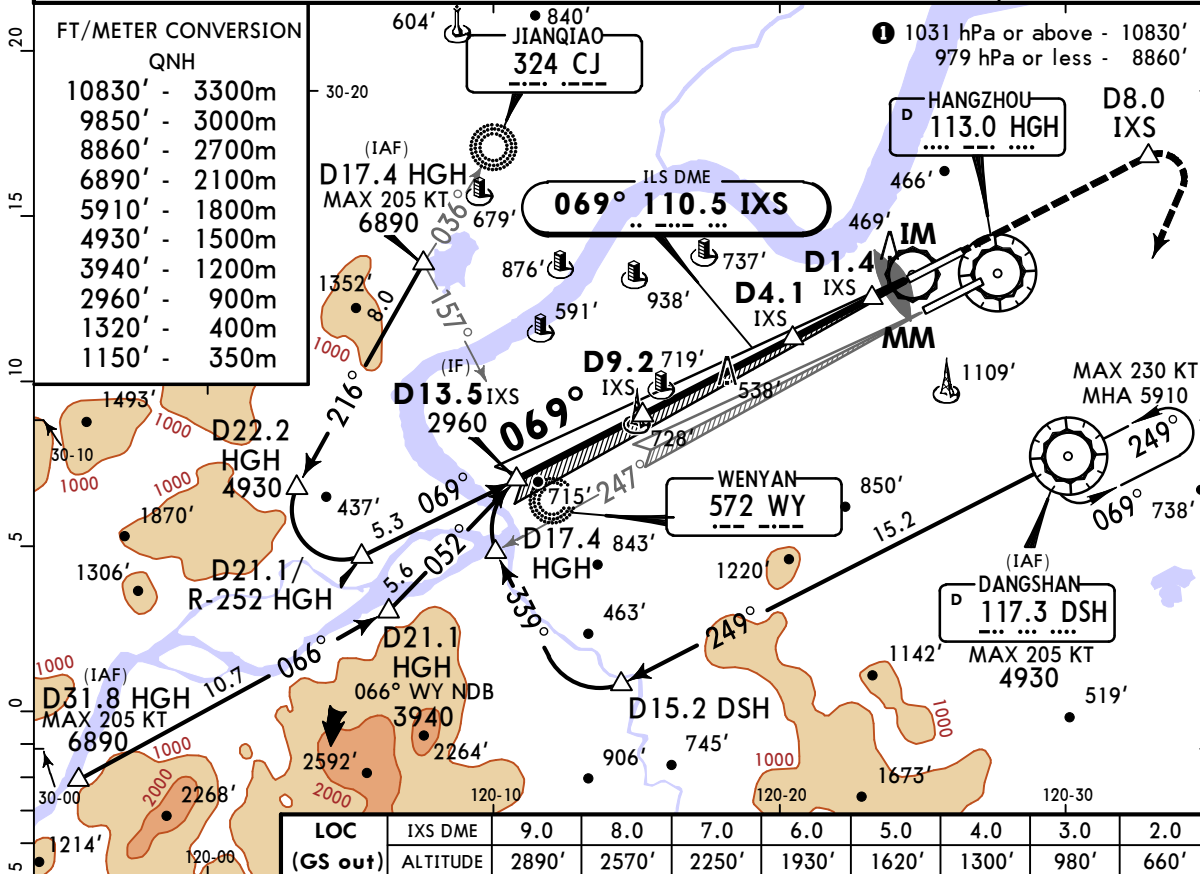
PANS OPS

ZSHC/HGH
XIAOSHAN

7 JUL 23
Eff 12 Jul 1600Z (11-2)

JEPPESSEN HANGZHOU, PR OF CHINA
ILS DME Y Rwy 06

D-ATIS 127.25	*APP01 120.05	APP02 125.55X	HANGZHOU Approach (R) APP03 126.05	*APP04 120.4	*APP05 119.425	APP07 127.7X	*HANGZHOU Tower North 123.65	*Ground 121.65
LOC IXS 110.5	Final Apch Crs 069°	D9.2 IXS 2960' (2938')		ILS DA(H) 222' (200')		Apt Elev 22' Rwy 22'		
MISSED APCH: Climb STRAIGHT AHEAD to D8.0 IXS at 1150' or above, turn RIGHT (MAX 205 KT) to DSH VOR at 4930' or above to DSH VOR for approach or join holding and as directed.								
Alt Set: hPa		Rwy Elev: 1 hPa		Trans level: FL118		Trans alt: 9850' ①		MSA GHG VOR



Gnd speed-Kts	70	90	100	120	140	160	HIALS-II PAPI 	D8.0 IXS ↑	
ILS GS or	3.00°	372	478	531	637	743			849
LOC Descent Angle									
MAP at D1.4 IXS									

PANS OPS	State		STRAIGHT-IN LANDING		CIRCLE-TO-LAND	
	ILS		LOC (GS out)		Not authorized North of runway	
	DA(H) 222' (200')		CDFA MDA(H) 560' (538')			
	ALS out		ALS out		Max Kts	
	A	R550m	V1200m	V2400m	V3200m	100
B					135	1420' (1398') V3600m
C	V800m		V2600m		180	1510' (1488') V4800m
D			V2800m		205	1510' (1488') V5000m

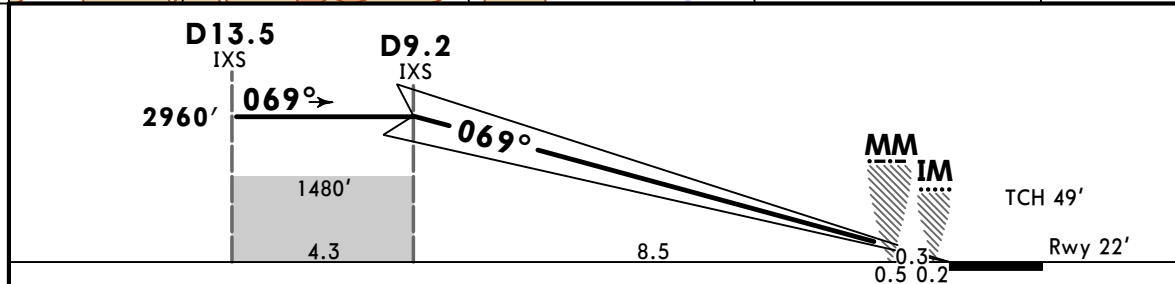
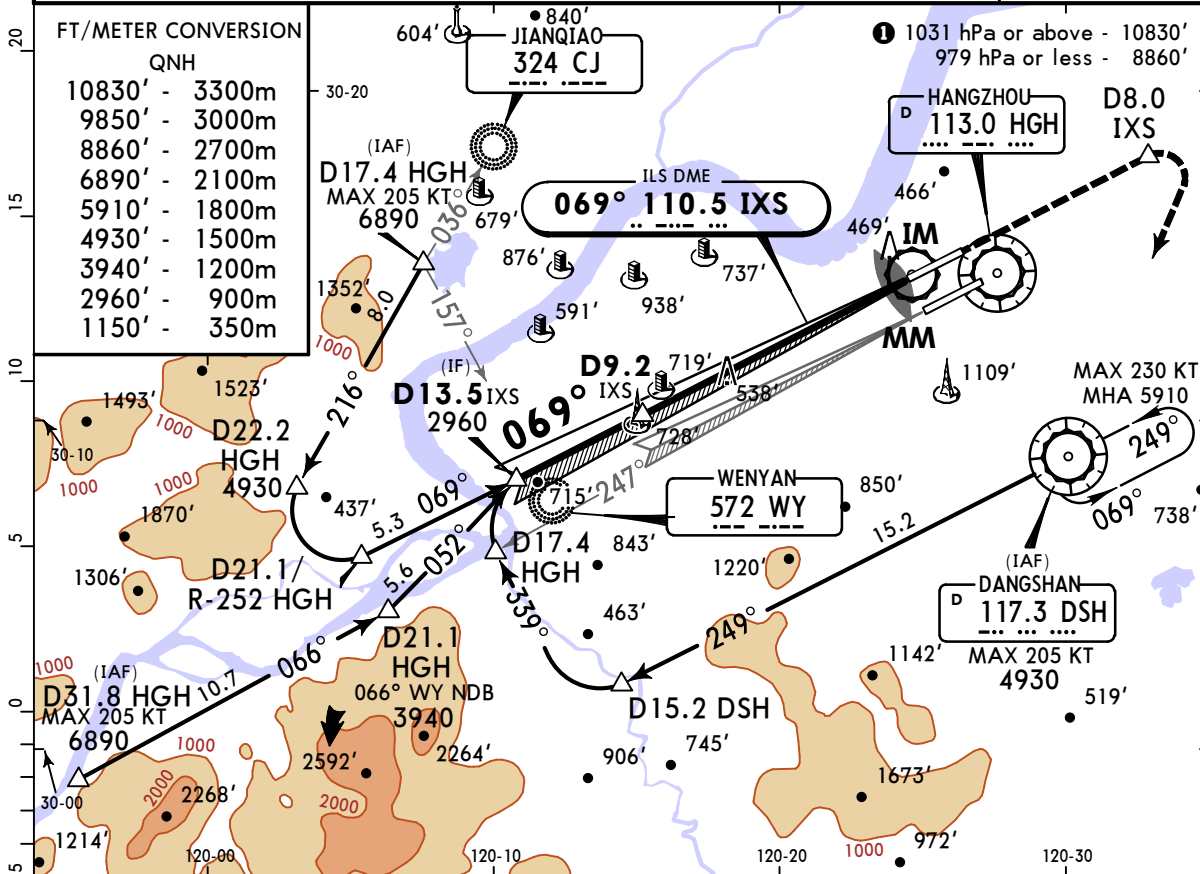
ZSHC/HGH
XIAOSHAN

7 JUL 23
Eff 12 Jul 1600Z

11-2A

JEPPESEN HANGZHOU, PR OF CHINA
CAT II ILS DME Y Rwy 06

D-ATIS 127.25	*APP01 120.05	APP02 125.55X	HANGZHOU Approach (R) APP03 126.05	*APP04 120.4	*APP05 119.425	APP07 127.7X	*HANGZHOU Tower North 123.65	*Ground 121.65
LOC IXS 110.5	Final Apch Crs 069°	D9.2 IXS 2960' (2938')		CAT II ILS RA 102' DA(H) 122'(100')		Apt Elev 22' Rwy 22'		
MISSED APCH: Climb STRAIGHT AHEAD to D8.0 IXS at 1150' or above, turn RIGHT (MAX 205 KT) to DSH VOR at 4930' or above to DSH VOR for approach or join holding and as directed.								
Alt Set: hPa		Rwy Elev: 1 hPa		Trans level: FL118		Trans alt: 9850' ①		MSA HGH VOR
Special Aircrew & Acft Certification Required.								



Gnd speed-Kts	70	90	100	120	140	160	HIALS-II PAPI	D8.0 IXS
Gs	3.00°	372	478	531	637	849		

State STRAIGHT-IN LANDING
CAT II ILS

RA 102'
DA(H) 122'(100')

R300m

① CAT D: R350m for manual operation below DH.

ZSHC/HGH

JEPPESSEN HANGZHOU, PR OF CHINA

SA CAT I & SA CAT II

RNAV ILS DME Z Rwy 06

XIAOSHAN

7 JUL 23

Eff 12 Jul 1600Z

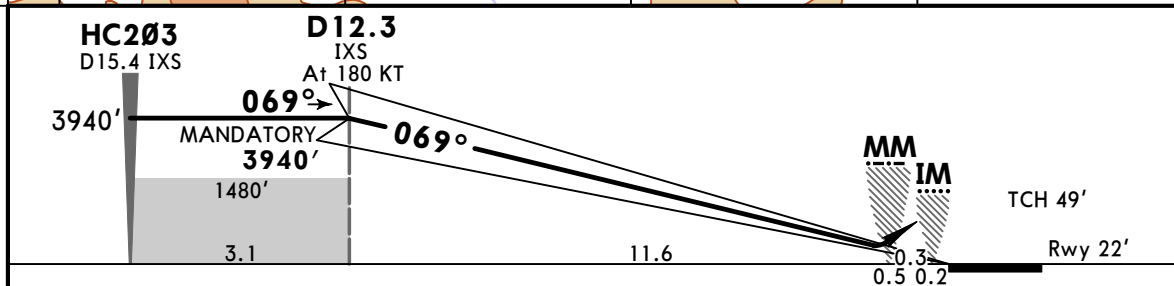
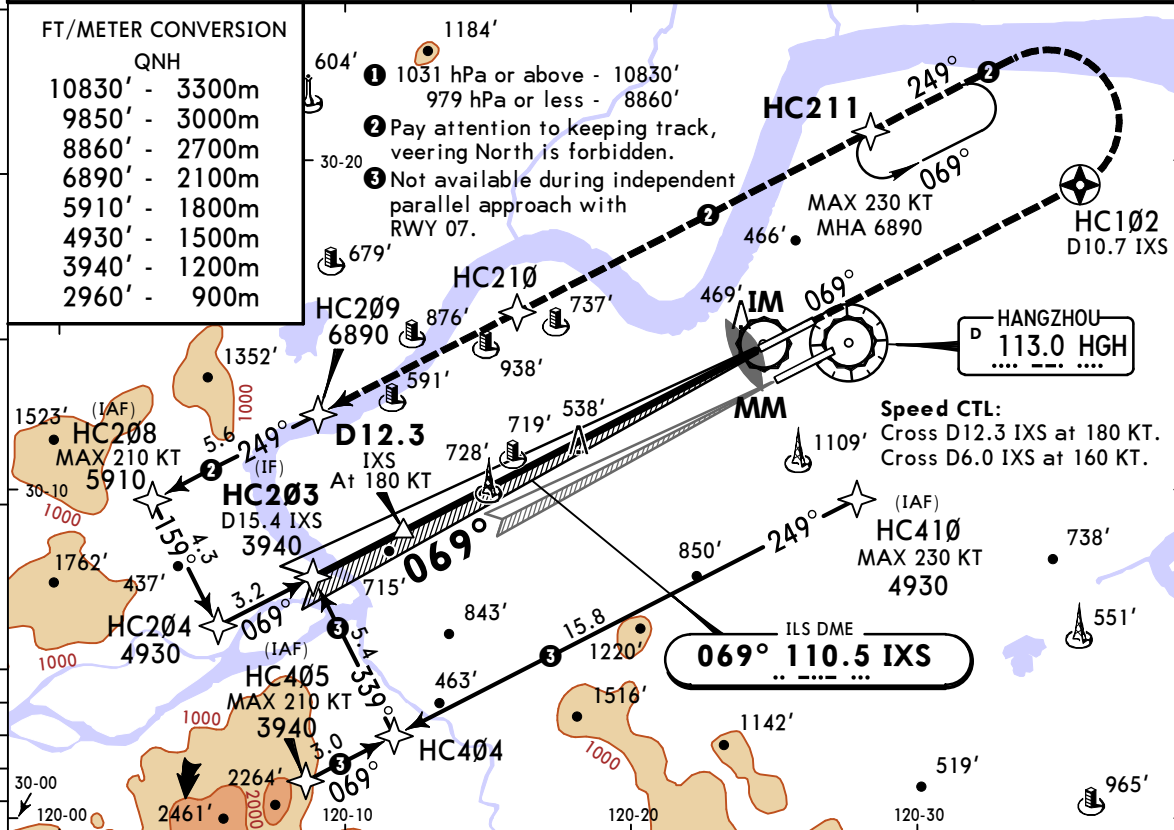
11-2B

D-ATIS	*APP01	APP02	HANGZHOU Approach (R)		*APP05	APP07	*HANGZHOU Tower North	*Ground
127.25	120.05	125.55X	APP03	APP04	119.425	127.7X	123.65	121.65
LOC IXS	Final Apch Crs	D12.3 IXS MANDATORY		SA CAT I & SA CAT II ILS Refer to Minimums		Apt Elev 22'	Rwy 22'	
110.5	069°	3940' (3918')						

MISSED APCH: Climb STRAIGHT AHEAD to HC102 at 2960' or above, turn LEFT (MAX 205 KT) to HC211 on 249° at 5910' or above to HC211 for approach or join holding and as directed. Missed apch requires a MIN climb gradient of 5.0%.

Alt Set: hPa Rwy Elev: 1 hPa Trans level: FL118 Trans alt: 9850' ②

Special Aircrew & Acft Certification Required.



Gnd speed-Kts	70	90	100	120	140	160	HIALS-II PAP	HC102 ↑
Gs	3.00°	372	478	531	637	743		

State	STRAIGHT-IN LANDING	
SA CAT II ILS	SA CAT I ILS	
RA 102' DA(H) 122' (100')	RA 151' DA(H) 172' (150')	
R350m	R450m	

ZSHC/HGH

JEPPESSEN HANGZHOU, PR OF CHINA

SA CAT I & SA CAT II

ILS DME Y Rwy 06

XIAOSHAN

7 JUL 23

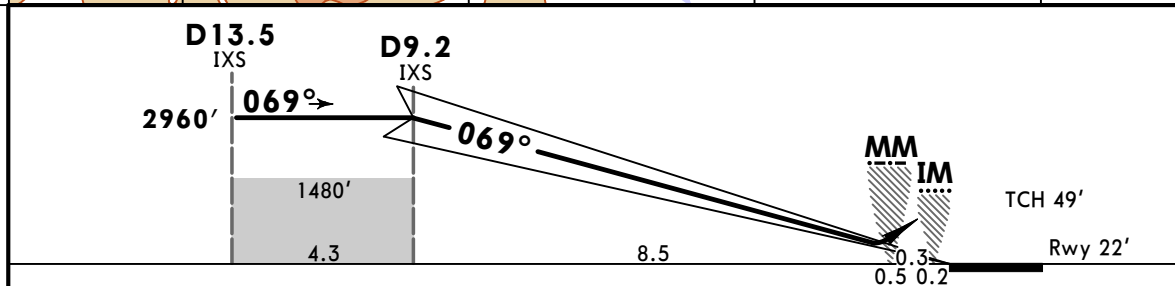
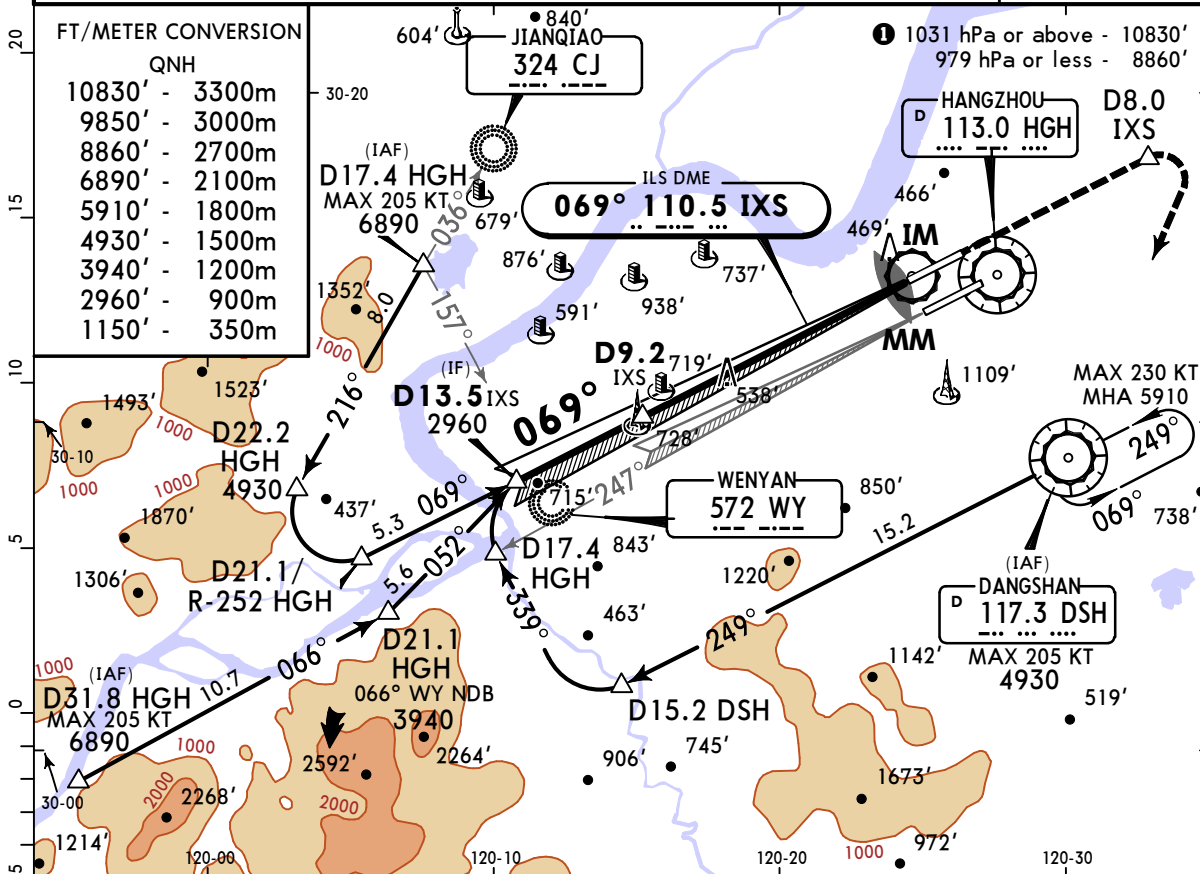
Eff 12 Jul 1600Z

11-2C

D-ATIS	*APP01	APP02	HANGZHOU Approach (R) APP03	*APP04	*APP05	APP07	*HANGZHOU Tower North	*Ground
127.25	120.05	125.55X	126.05	120.4	119.425	127.7X	123.65	121.65
LOC IXS	Final Apch Crs	D9.2 IXS		SA CAT I & SA CAT II ILS Refer to Minimums		Apt Elev 22'		
110.5	069°	2960' (2938')		Rwy 22'				
<p>MISSED APCH: Climb STRAIGHT AHEAD to D8.0 IXS at 1150' or above, turn RIGHT (MAX 205 KT) to DSH VOR at 4930' or above to DSH VOR for approach or join holding and as directed.</p>								
Alt Set: hPa			Rwy Elev: 1 hPa		Trans level: FL118		Trans alt: 9850' 1	
Special Aircrew & Aclt Certification Required.								

FT/METER CONVERSION

FT	METER
10830'	3300m
9850'	3000m
8860'	2700m
6890'	2100m
5910'	1800m
4930'	1500m
3940'	1200m
2960'	900m
1150'	350m



Gnd speed-Kts	70	90	100	120	140	160	
GS	3.00°	372	478	531	637	849	

PANS OPS	State	STRAIGHT-IN LANDING	
	SA CAT II ILS 1	RA 102'	SA CAT I ILS 1
	DA(H) 122' (100')	R350m	RA 151'
			DA(H) 172' (150')
			R450m
1 HUD required.			

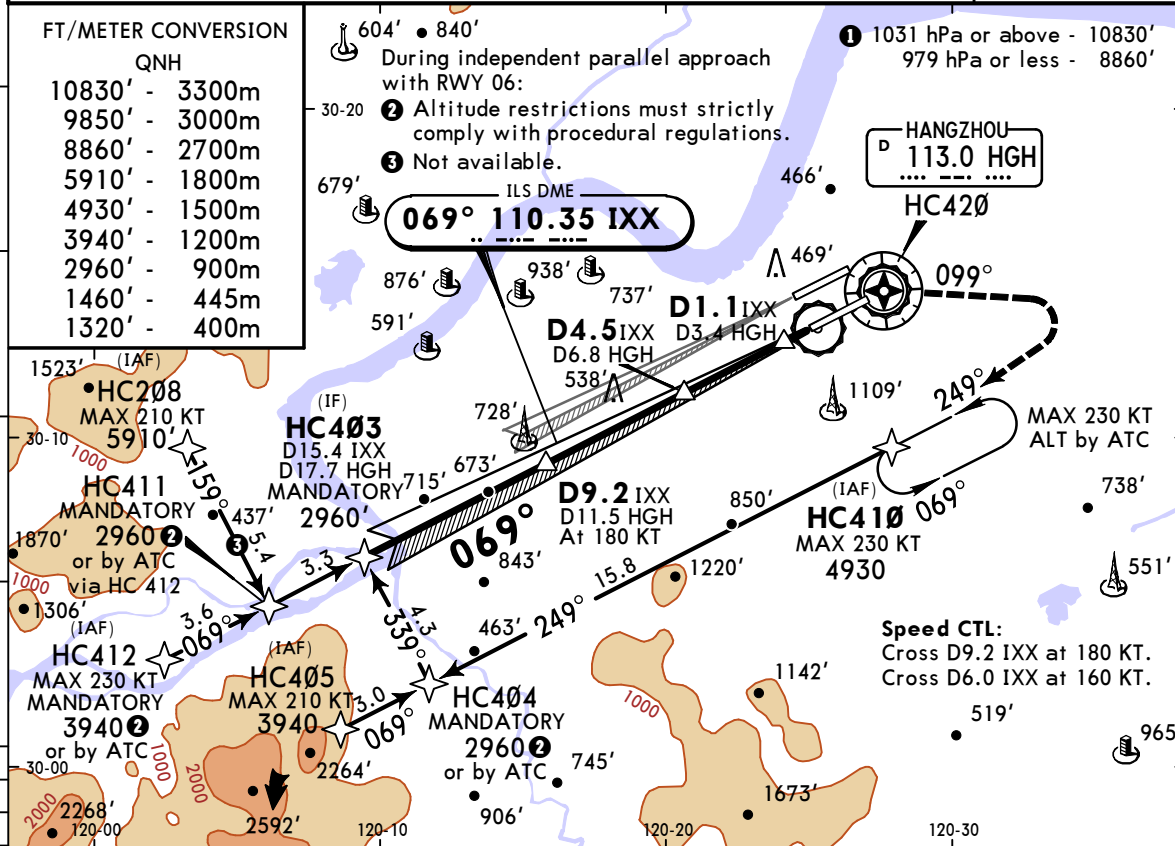
CHANGES: Procedure, new AOM concept.

ZSHC/HGH
XIAOSHAN

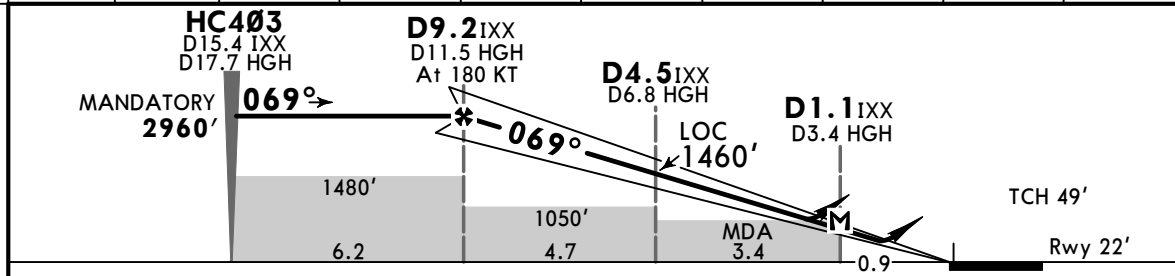
7 JUL 23
Eff 12 Jul 1600Z (11-3)

JEPPESSEN HANGZHOU, PR OF CHINA
RNAV ILS DME Z Rwy 07

D-ATIS 127.25	*APP01 120.05	APP02 125.55X	HANGZHOU Approach (R) APP03 126.05	*APP04 120.4	*APP05 119.425	APP07 127.7X	*HANGZHOU Tower South 118.3	*Ground 121.65
LOC IXX 110.35	Final Apch Crs 069°	D9.2 IXX MANDATORY 2960' (2938')	ILS DA(H) 222' (200')	Apt Elev 22' Rwy 22'				
MISSED APCH: Climb STRAIGHT AHEAD to HC420, turn RIGHT (MAX 210 KT) climb on 099° to 1320', then turn RIGHT (MAX 210 KT) to HC410 at 4930' or above to HC410 for approach or join holding and as directed.								
Alt Set: hPa		Rwy Elev: 1 hPa	Trans level: FL118		Trans alt: 9850' ①		MSA HGH VOR	



LOC	IXX DME	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
(GS out)	ALTITUDE	2890'	2570'	2250'	1930'	1620'	1300'	980'	660'



Gnd speed-Kts	70	90	100	120	140	160	
ILS GS or	3.00°						
LOC Descent Angle	372	478	531	637	743	849	
MAP at D1.1 IXX/D3.4 HGH							

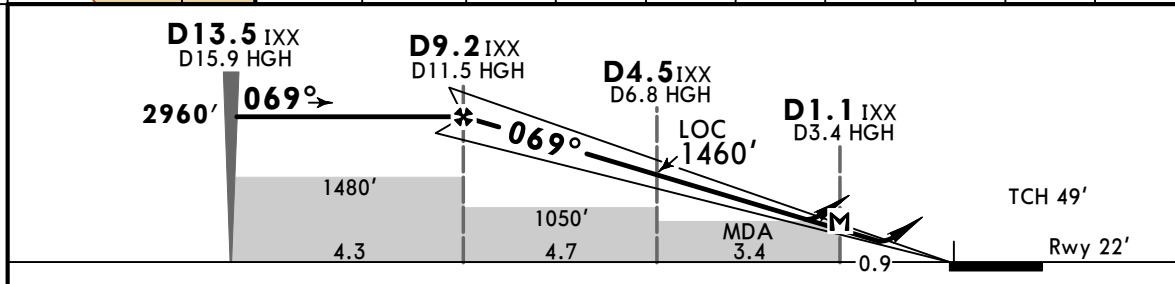
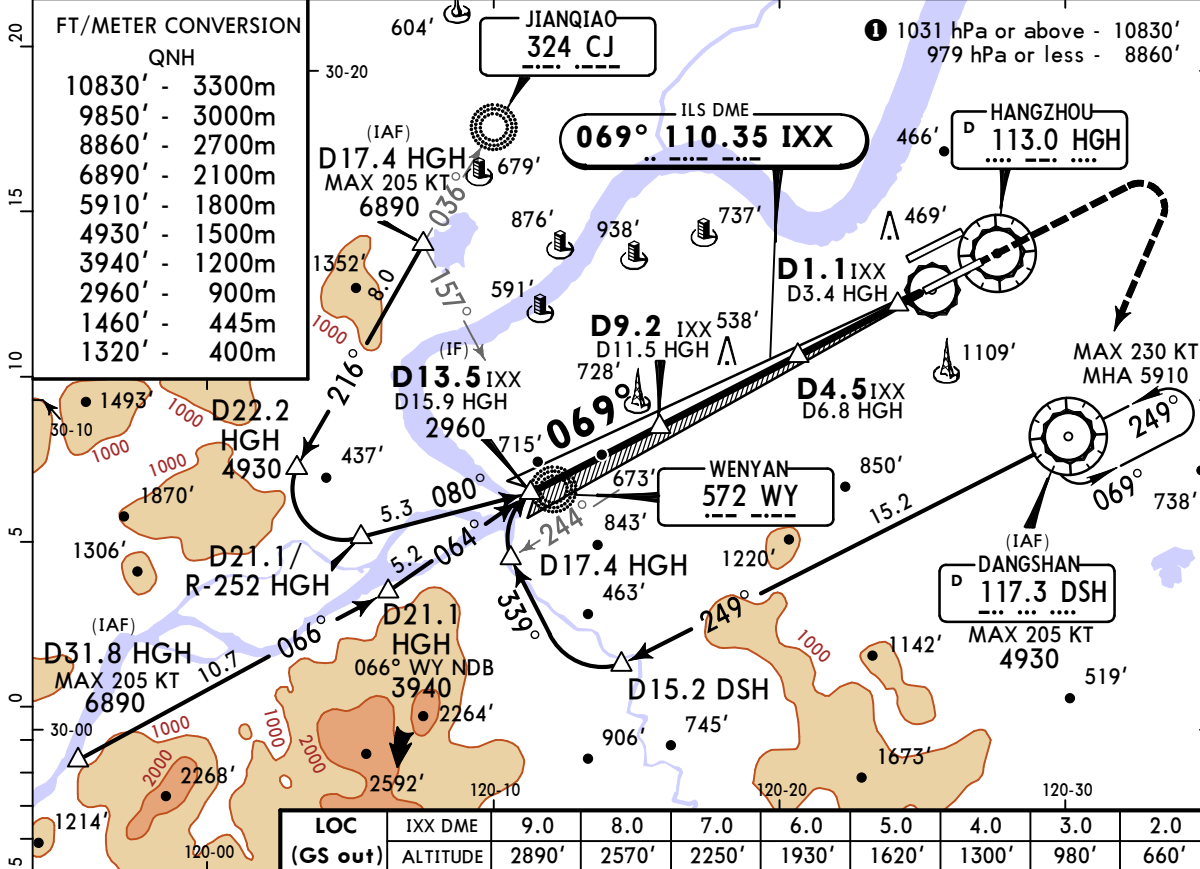
PANS OPS	STRAIGHT-IN LANDING				CIRCLE-TO-LAND	
	ILS		LOC (GS out)		Not authorized North of runway	
	DA(H) 222' (200')		CDFA MDA(H) 430' (408')			
	ALS out		ALS out		Max Kts	MDA(H)
A			V1600m	100	1420' (1398') V3200m	
B	R550m	V1200m		135	1420' (1398') V3600m	
C	V800m		V1800m	180	1510' (1488') V4800m	
D			V2000m	205	1510' (1488') V5000m	

ZSHC/HGH
XIAOSHAN

7 JUL 23
Eff 12 Jul 1600Z (11-4)

JEPPesen HANGZHOU, PR OF CHINA
ILS DME Y Rwy 07

D-ATIS	*APP01	APP02	HANGZHOU Approach (R)				*HANGZHOU Tower	*Ground
127.25	120.05	125.55X	APP03	*APP04	*APP05	APP07	South	
LOC	Final		D9.2 IXX	ILS	Apt Elev 22'		3800 3200	
IXX	Apch Crs		2960' (2938')	DA(H)	Rwy 22'		090° 300°	
110.35	069°			222' (200')			4800	
MISSED APCH: Climb STRAIGHT AHEAD to 1320', turn RIGHT (MAX 205 KT) to DSH VOR at 4930' or above to DSH VOR for approach or join holding and as directed.								MSA HGH VOR
Alt Set: hPa		Rwy Elev: 1 hPa		Trans level: FL118		Trans alt: 9850' ①		



Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI 1320'
ILS GS or	3.00°	372	478	531	637	743	
LOC Descent Angle							
MAP at D1.1 IXX/D3.4 GHG							

PANS OPS	State STRAIGHT-IN LANDING				CIRCLE-TO-LAND	
	ILS		LOC (GS out)		Not authorized North of runway	
	DA(H) 222' (200')		CDFA MDA(H) 430' (408')			
	ALS out		ALS out		Max Kts. MDA(H)	
	A		V1600m		100	1420' (1398') V3200m
B	R550m	V1200m		135	1420' (1398') V3600m	
C	V800m		V1800m		180	1510' (1488') V4800m
D			V2000m		205	1510' (1488') V5000m

ZSHC/HGH

JEPPESSEN HANGZHOU, PR OF CHINA

SA CAT I & SA CAT II

RNAV ILS DME Z Rwy 07

XIAOSHAN

7 JUL 23

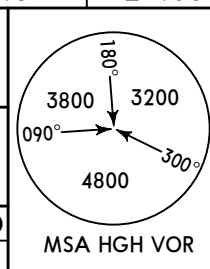
Eff 12 Jul 1600Z

(11-4A)

D-ATIS	*APP01	APP02	HANGZHOU Approach (R) APP03	*APP04	*APP05	APP07	*HANGZHOU Tower South	*Ground
127.25	120.05	125.55X	126.05	120.4	119.425	127.7X	118.3	121.65

BRIEFING STRIP

LOC IXX	Final Apch Crs	D9.2 IXX MANDATORY	SA CAT I & SA CAT II ILS Refer to Minimums	Apt Elev 22'
110.35	069°	2960' (2938')		Rwy 22'



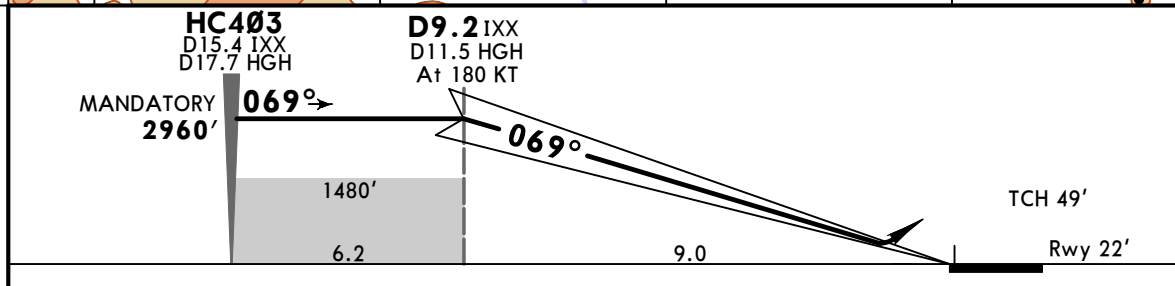
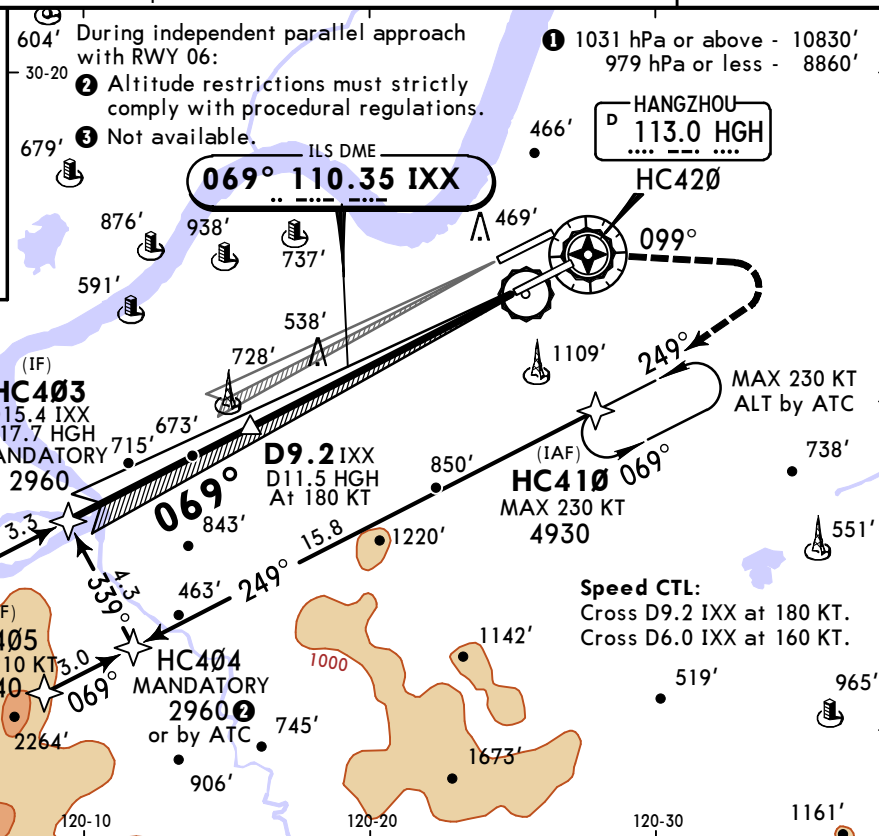
MISSED APCH: Climb STRAIGHT AHEAD to HC420, turn RIGHT (MAX 210 KT) climb on 099° to 1320', then turn RIGHT (MAX 210 KT) to HC410 at 4930' or above to HC410 for approach or join holding and as directed.

Alt Set: hPa Rwy Elev: 1 hPa Trans level: FL118 Trans alt: 9850' **1**

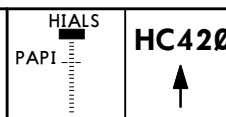
Special Aircrew & Acft Certification Required.

FT/METER CONVERSION
QNH

10830'	-	3300m
9850'	-	3000m
8860'	-	2700m
5910'	-	1800m
4930'	-	1500m
3940'	-	1200m
2960'	-	900m
1320'	-	400m



Gnd speed-Kts	70	90	100	120	140	160
Gs	3.00°	372	478	531	637	849



State	SA CAT II ILS 1	STRAIGHT-IN LANDING	SA CAT I ILS 1
	RA 105' DA(H) 122' (100')		RA 155' DA(H) 172' (150')
	R350m		R450m

1 HUD required.

ZSHC/HGH

JEPPESEN HANGZHOU, PR OF CHINA

SA CAT I & SA CAT II

ILS DME Y Rwy 07

XIAOSHAN

7 JUL 23

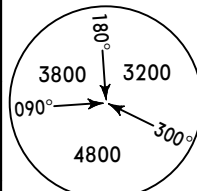
Eff 12 Jul 1600Z

11-4B

D-ATIS	*APP01	APP02	HANGZHOU Approach (R)			APP07	*HANGZHOU Tower South	*Ground
127.25	120.05	125.55X	APP03 126.05	*APP04 120.4	*APP05 119.425	127.7X	118.3	121.65

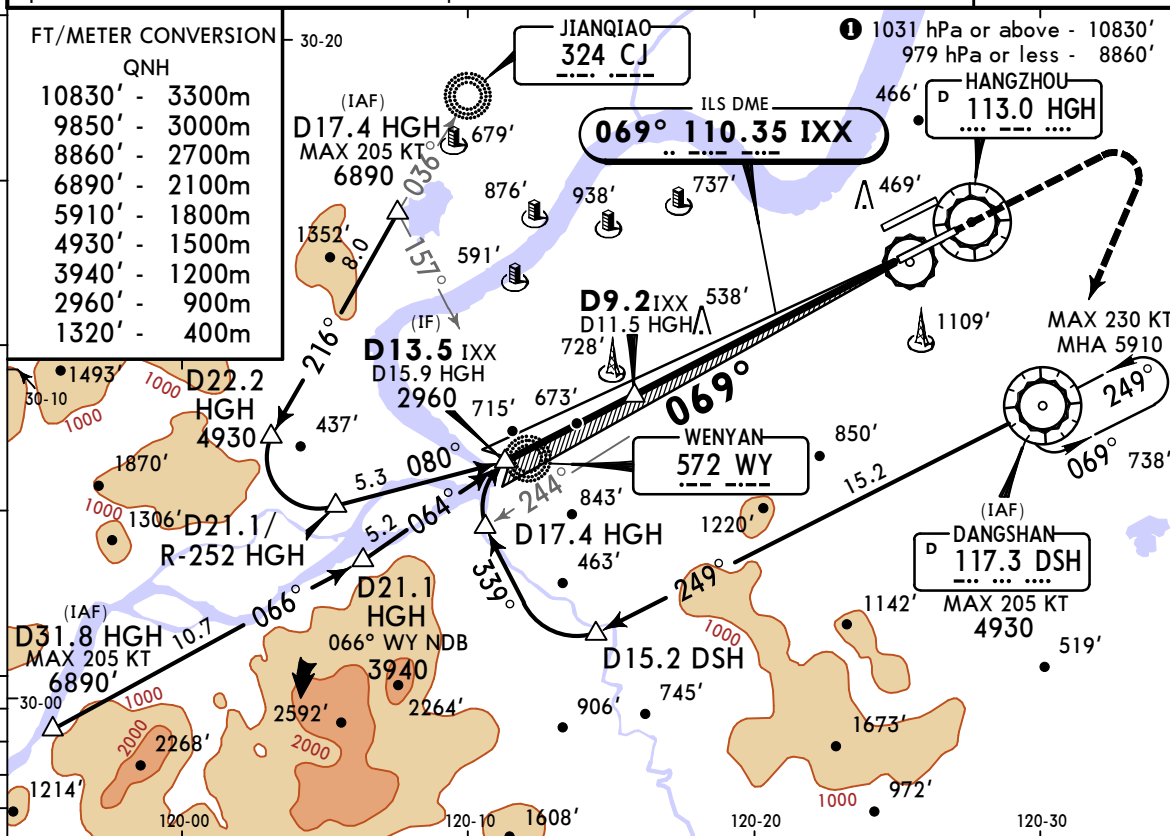
BRIEFING STRIP

LOC IXX 110.35	Final Apch Crs 069°	D9.2 IXX 2960' (2938')	SA CAT I & SA CAT II ILS Refer to Minimums	Apt Elev 22' Rwy 22'
-----------------------------	----------------------------------	----------------------------------	---	-------------------------



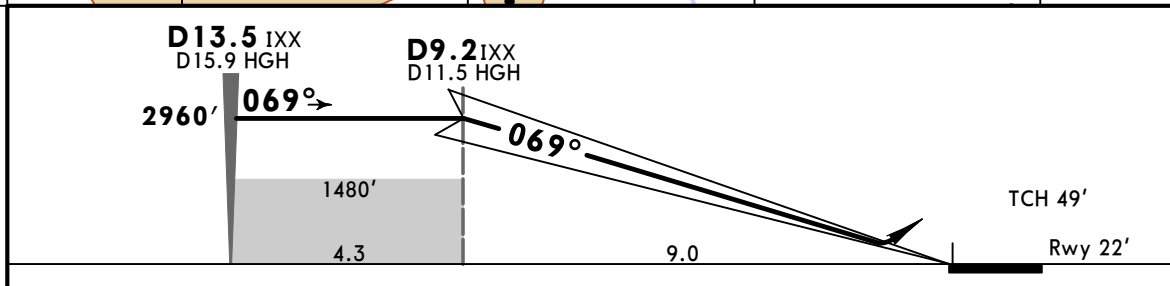
MISSED APCH: Climb STRAIGHT AHEAD to 1320', turn RIGHT (MAX 205 KT) to DSH VOR at 4930' or above to DSH VOR for approach or join holding and as directed.

Alt Set: hPa Rwy Elev: 1 hPa Trans level: FL118 Trans alt: 9850' **1**
Special Aircrew & Acft Certification Required.



FT/METER CONVERSION

FT	METER
10830'	3300m
9850'	3000m
8860'	2700m
6890'	2100m
5910'	1800m
4930'	1500m
3940'	1200m
2960'	900m
1320'	400m



Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI 1320'
GS	3.00°	372	478	531	637	743	

State	STRAIGHT-IN LANDING	
SA CAT II ILS	SA CAT I ILS	
RA 105' DA(H) 122' (100')	RA 155' DA(H) 172' (150')	
R350m	R450m	

ZSHC/HGH
XIAOSHAN

7 JUL 23
Eff 12 Jul 1600Z (11-5)

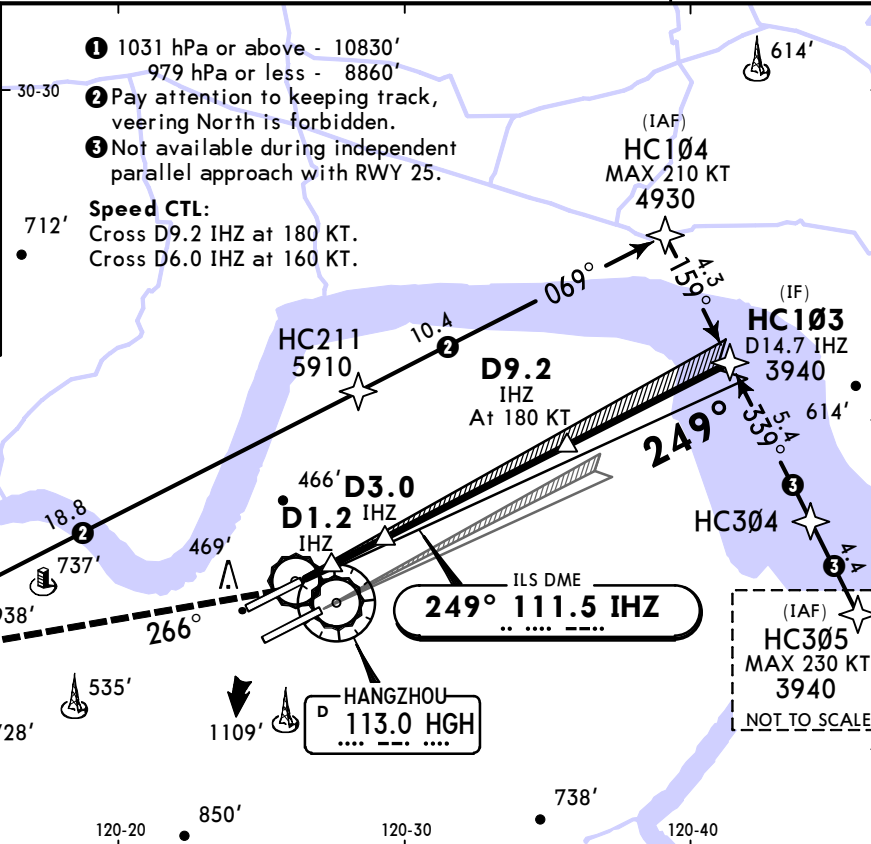
JEPPESSEN HANGZHOU, PR OF CHINA
RNAV ILS DME Z Rwy 24

D-ATIS	*APP01	APP02	HANGZHOU Approach (R)			*HANGZHOU Tower North	*Ground	
127.25	120.05	125.55X	APP03	*APP04	*APP05	APP07	123.65	121.65
LOC IHZ	Final Apch Crs	D9.2 IHZ MANDATORY		ILS DA(H)	Apt Elev 22'			
111.5	249°	2960' (2938')		222' (200')	Rwy 22'			
MISSED APCH: Climb STRAIGHT AHEAD to 660', turn RIGHT (MAX 210 KT) on 266° to HC209 at 3940' or above to HC209, join holding and climb to 5910' for approach and as directed.								
Alt Set: hPa		Rwy Elev: 1 hPa		Trans level: FL118		Trans alt: 9850' ①		MSA HGH VOR

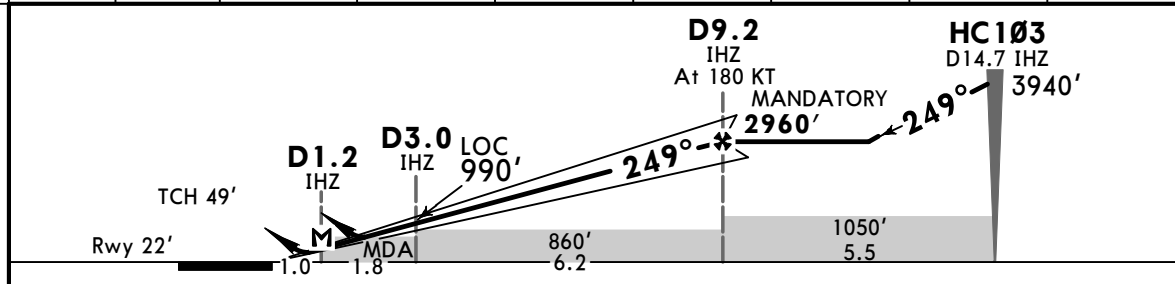
FT/METER CONVERSION

QNH

10830'	-	3300m
9850'	-	3000m
8860'	-	2700m
5910'	-	1800m
4930'	-	1500m
3940'	-	1200m
2960'	-	900m
990'	-	300m
660'	-	200m



LOC (GS out)	IHZ DME	2.0	3.0	4.0	5.0	6.0	7.0	8.0
	ALTITUDE	660'	990'	1300'	1620'	1930'	2250'	2570'



Gnd speed-Kts	70	90	100	120	140	160	HIALS	660'	266°	210 KT	HC209
ILS GS or LOC Descent Angle	3.00°	372	478	531	637	743	PAPI	↑	RT	MAX	
MAP at D1.2 IHZ											

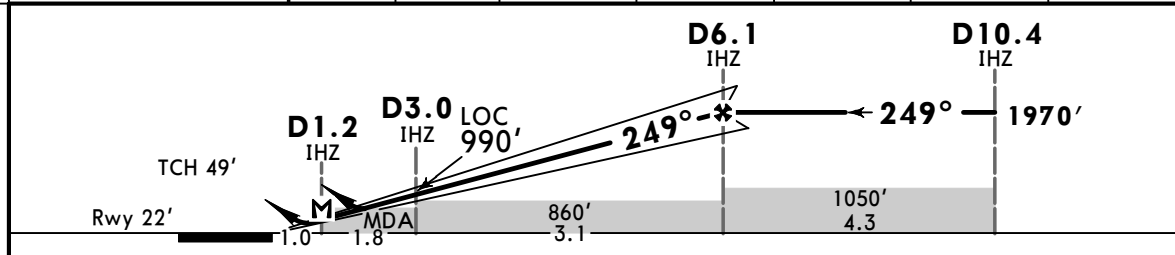
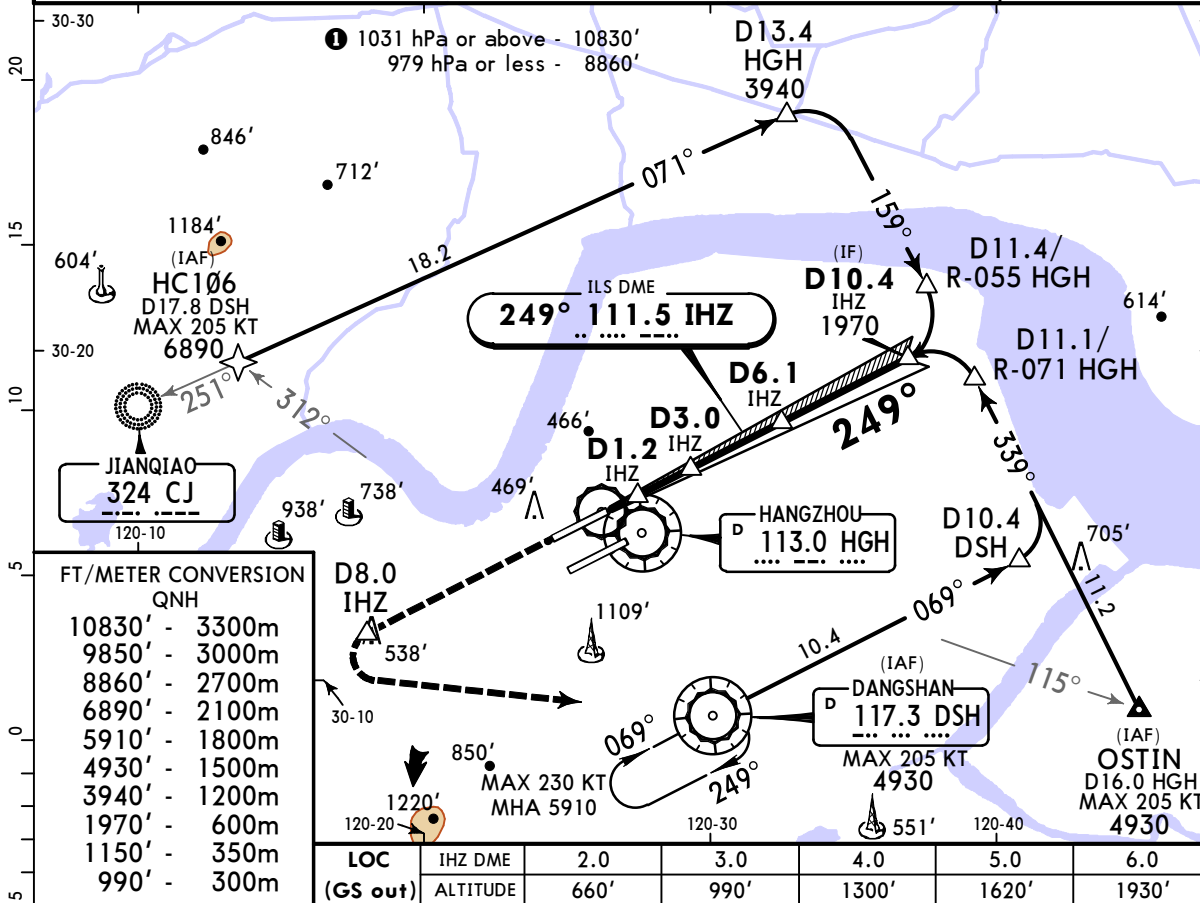
PANS OPS	State				STRAIGHT-IN LANDING		CIRCLE-TO-LAND	
	ILS		LOC (GS out)		Not authorized North of runway			
	DA(H) 222' (200')		CDFA MDA(H) 500' (478')					
	ALS out		ALS out		Max Kts		MDA(H)	
	A		V2000m		100	1420' (1398')	V3200m	
B	R550m	V1200m		135	1420' (1398')	V3600m		
C	V800m		V2200m		180	1510' (1488')	V4800m	
D			V2400m		205	1510' (1488')	V5000m	

ZSHC/HGH
XIAOSHAN

7 JUL 23
Eff 12 Jul 1600Z (11-6)

JEPPESSEN HANGZHOU, PR OF CHINA
ILS DME Y Rwy 24

BRIEFING STRIP™	D-ATIS	*APP01	APP02	HANGZHOU Approach (R)			*HANGZHOU Tower North	*Ground
	127.25	120.05	125.55X	APP03	*APP04	*APP05	APP07	123.65
	LOC IHZ	Final Apch Crs		D6.1 IHZ		ILS DA(H)	Apt Elev 22'	
	111.5	249°		1970' (1948')		222' (200')	Rwy 22'	
<p>MISSED APCH: Climb STRAIGHT AHEAD to D8.0 IHZ at 1150' or above, turn LEFT (MAX 205 KT) to DSH VOR at 4930' or above for approach or join holding and as directed.</p>								MSA GHG VOR
Alt Set: hPa		Rwy Elev: 1 hPa		Trans level: FL118		Trans alt: 9850' ①		



Gnd speed-Kts	70	90	100	120	140	160		
ILS GS or LOC Descent Angle	3.00°	372	478	531	637	743		849
MAP at D1.2 IHZ								

PANS OPS	State STRAIGHT-IN LANDING				CIRCLE-TO-LAND	
	ILS		LOC (GS out)		Not authorized North of runway	
	DA(H) 222' (200')		CDFA MDA(H) 500' (478')			
	ALS out		ALS out		Max Kts	MDA(H)
	A		V2000m		100	1420' (1398') V3200m
B	R550m	V1200m		135	1420' (1398') V3600m	
C	V800m		V2800m	180	1510' (1488') V4800m	
D		V2400m		205	1510' (1488') V5000m	

ZSHC/HGH

JEPPESSEN HANGZHOU, PR OF CHINA

SA CAT I & SA CAT II

RNAV ILS DME Z Rwy 24

XIAOSHAN

7 JUL 23
Eff 12 Jul 1600Z

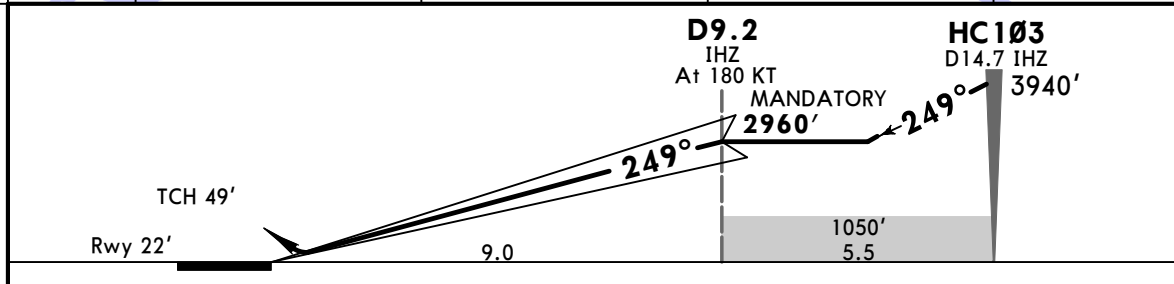
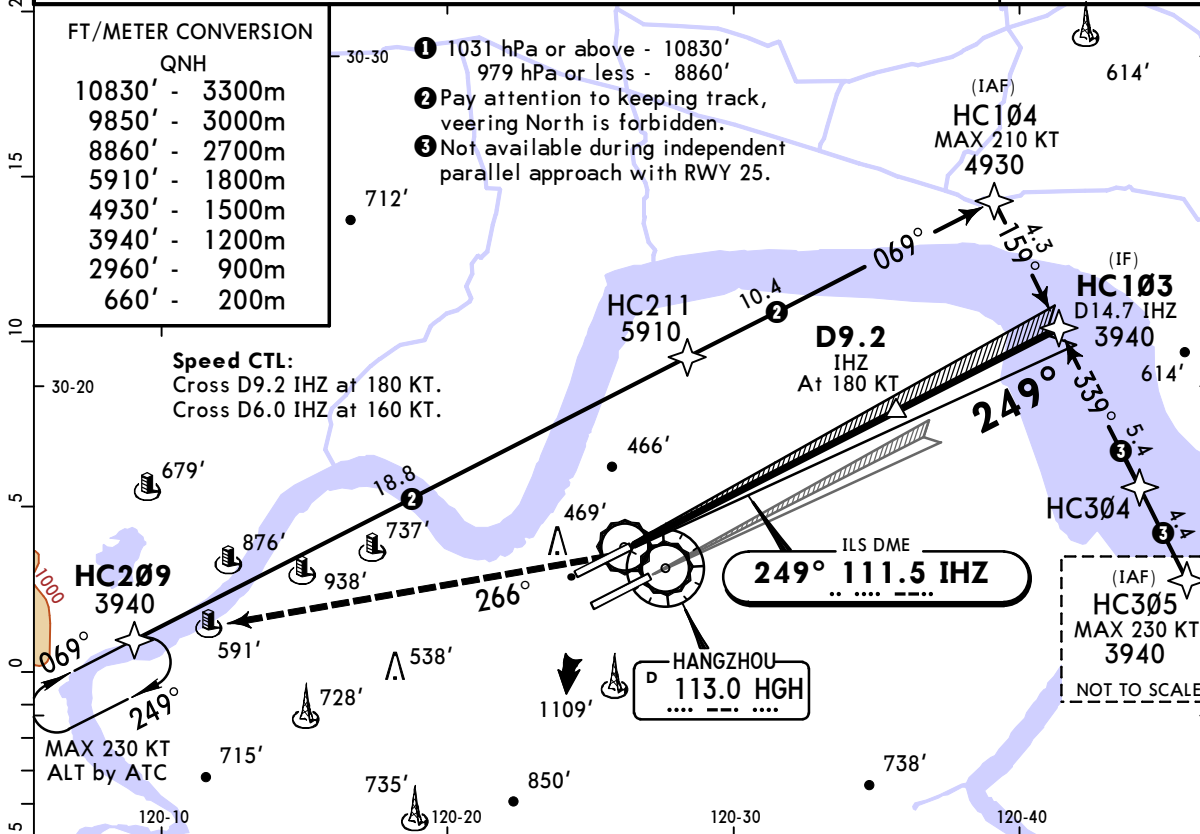
11-6A

D-ATIS 127.25	*APP01 120.05	APP02 125.55X	HANGZHOU Approach (R) APP03 126.05	*APP04 120.4	*APP05 119.425	APP07 127.7X	*HANGZHOU Tower North 123.65	*Ground 121.65
LOC IHZ 111.5	Final Apch Crs 249°	D9.2 IHZ MANDATORY 2960' (2938')		SA CAT I & SA CAT II ILS Refer to Minimums		Apt Elev 22' Rwy 22'		<p>MSA HGH VOR</p>
<p>MISSED APCH: Climb STRAIGHT AHEAD to 660', turn RIGHT (MAX 210 KT) on 266° to HC209 at 3940' or above to HC209, join holding and climb to 5910' for approach and as directed.</p> <p>Alt Set: hPa Rwy Elev: 1 hPa Trans level: FL118 Trans alt: 9850' ①</p> <p>Special Aircrew & Acft Certification Required.</p>								

FT/METER CONVERSION

QNH	
10830'	- 3300m
9850'	- 3000m
8860'	- 2700m
5910'	- 1800m
4930'	- 1500m
3940'	- 1200m
2960'	- 900m
660'	- 200m

Speed CTL:
Cross D9.2 IHZ at 180 KT.
Cross D6.0 IHZ at 160 KT.



Gnd speed-Kts	70	90	100	120	140	160		660'	266°	210 KT	MAX	HC209
Gs	3.00°	372	478	531	637	743						

State	STRAIGHT-IN LANDING	
	SA CAT II ILS ①	SA CAT I ILS ①
	RA 102' DA(H) 122' (100')	RA 155' DA(H) 172' (150')
	R350m	R450m

① HUD required.

ZSHC/HGH

JEPPESSEN HANGZHOU, PR OF CHINA

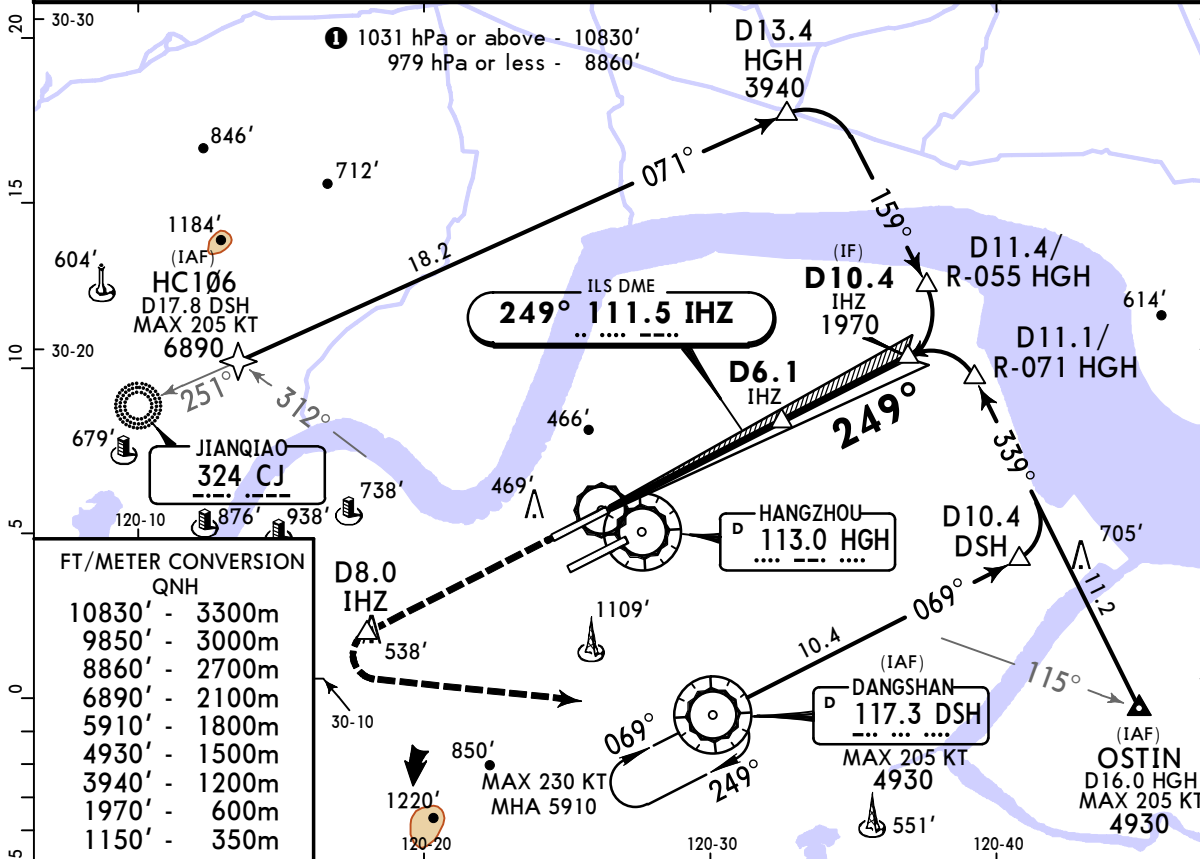
SA CAT I & SA CAT II

ILS DME Y Rwy 24

XIAOSHAN

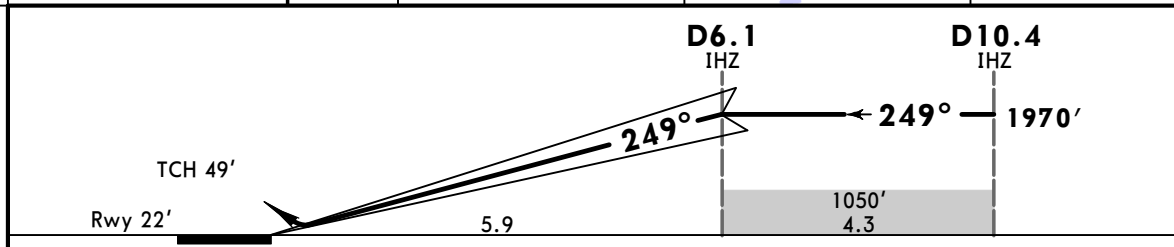
7 JUL 23
Eff 12 Jul 1600Z (11-6B)

D-ATIS	*APP01	APP02	HANGZHOU Approach (R) APP03	*APP04	*APP05	APP07	*HANGZHOU Tower North	*Ground
127.25	120.05	125.55X	126.05	120.4	119.425	127.7X	123.65	121.65
LOC IHZ 111.5	Final Apch Crs 249°	D6.1 IHZ 1970' (1948')		SA CAT I & SA CAT II ILS Refer to Minimums		Apt Elev 22' Rwy 22'		<p>MSA HGH VOR</p>
<p>MISSED APCH: Climb STRAIGHT AHEAD to D8.0 IHZ at 1150' or above, turn LEFT (MAX 205 KT) to DSH VOR at 4930' or above for approach or join holding and as directed.</p>								
Alt Set: hPa		Rwy Elev: 1 hPa		Trans level: FL118		Trans alt: 9850' 1		
Special Aircrew & Acft Certification Required.								



FT/METER CONVERSION QNH

10830'	-	3300m
9850'	-	3000m
8860'	-	2700m
6890'	-	2100m
5910'	-	1800m
4930'	-	1500m
3940'	-	1200m
1970'	-	600m
1150'	-	350m



Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI 	D8.0 IHZ
Gs	3.00°	372	478	531	637	743		

State SA CAT II ILS 1 RA 102' DA(H) 122' (100') R350m	STRAIGHT-IN LANDING	SA CAT I ILS 1 RA 155' DA(H) 172' (150') R450m
	1 HUD required.	
	CHANGES: Procedure, new AOM concept.	

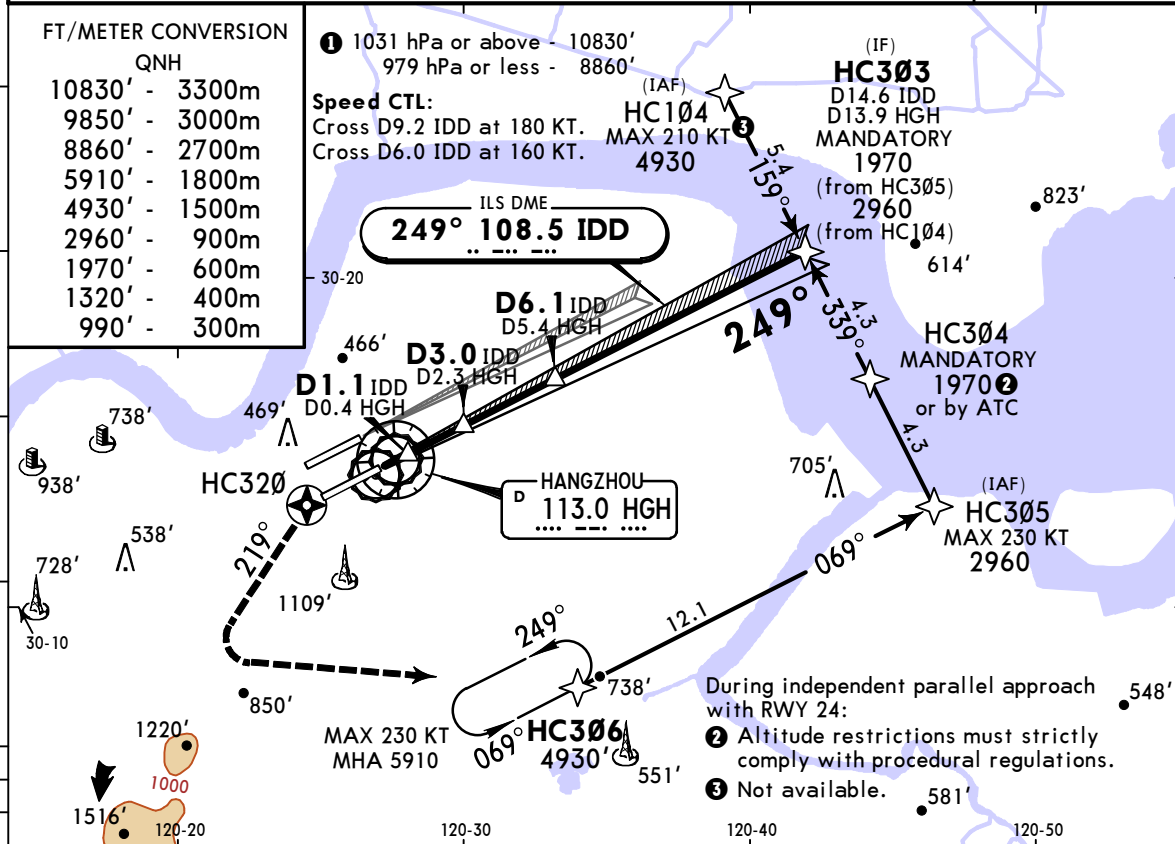
PANS OPS

ZSHC/HGH
XIAOSHAN

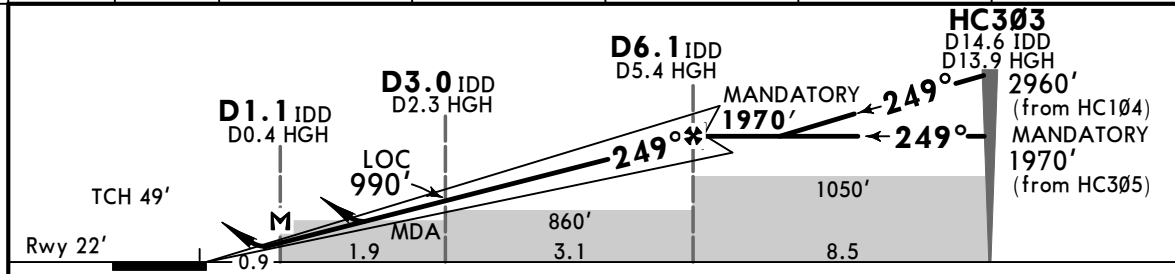
7 JUL 23
Eff 12 Jul 1600Z (11-7)

JEPPESSEN HANGZHOU, PR OF CHINA
RNAV ILS DME Z Rwy 25

D-ATIS 127.25	*APP01 120.05	APP02 125.55X	HANGZHOU Approach (R) APP03 126.05			*APP04 120.4	*APP05 119.425	APP07 127.7X	*HANGZHOU Tower South 118.3	*Ground 121.65
LOC IDD 108.5	Final Apch Crs 249°	D6.1 IDD MANDATORY 1970' (1948')		ILS DA(H) 222' (200')		Apt Elev 22' Rwy 22'				
MISSED APCH: Climb STRAIGHT AHEAD to HC320, then turn LEFT (MAX 210 KT) and climb on 219° to 1320', turn LEFT (MAX 210 KT) at 4930' or above to HC306 for approach or join holding and as directed.										
Alt Set: hPa			Rwy Elev: 1 hPa		Trans level: FL118		Trans alt: 9850' ①		MSA GHG VOR	



LOC	IDD DME	2.0	3.0	4.0	5.0	6.0
(GS out)	ALTITUDE	660'	990'	1300'	1620'	1930'



Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI HC320	
ILS GS or LOC Descent Angle	3.00°	372	478	531	637	743		849
MAP at D1.1 IDD/D0.4 HGH								

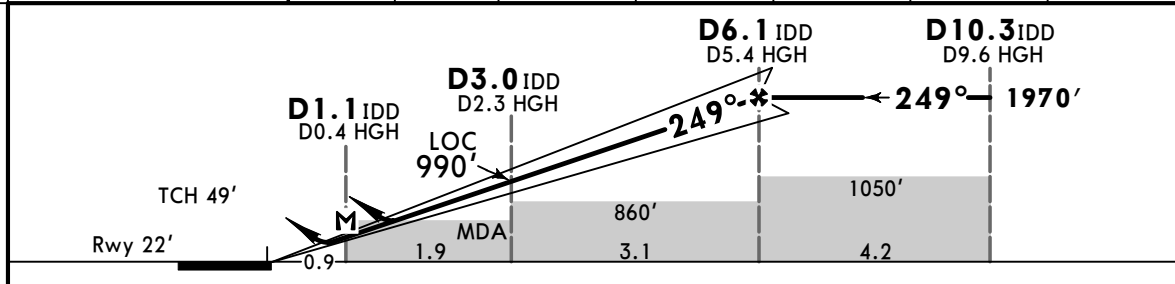
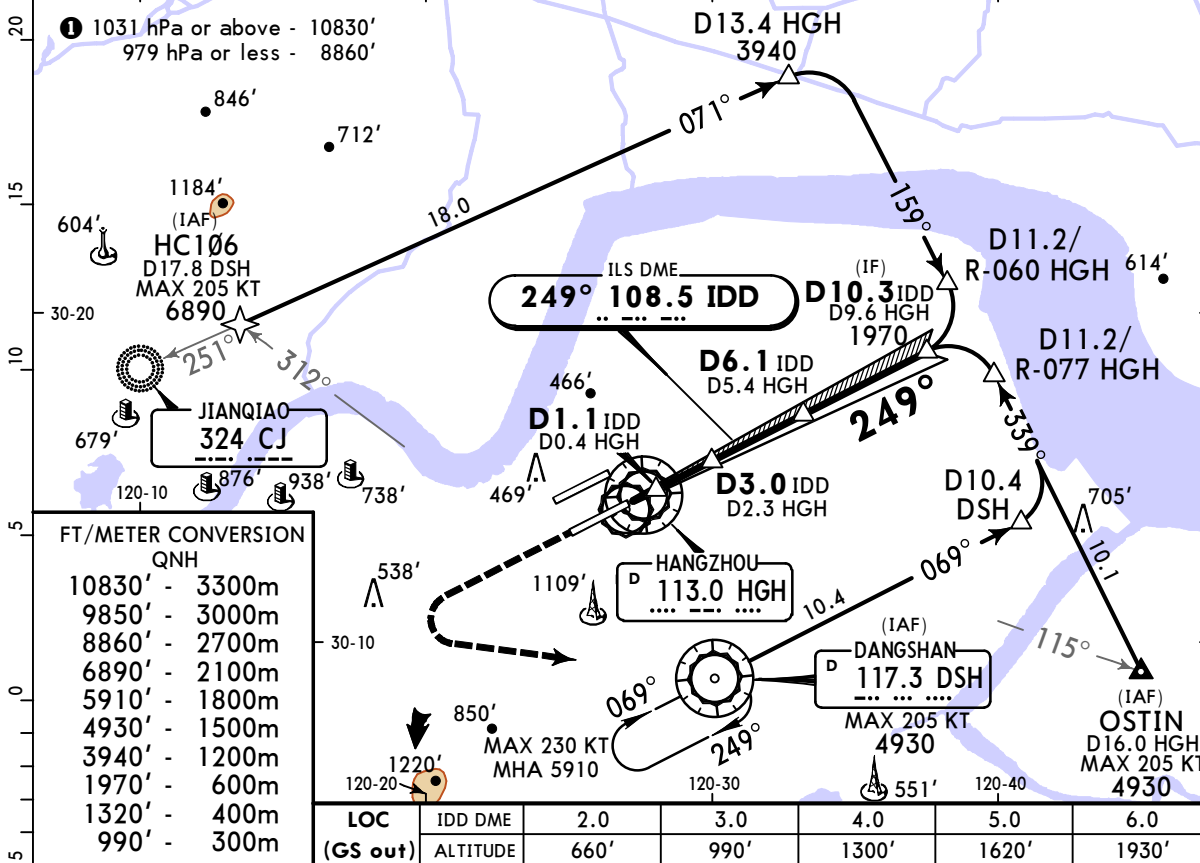
PANS OPS	State				STRAIGHT-IN LANDING		CIRCLE-TO-LAND	
	ILS		LOC (GS out)		Not authorized North of runway			
	DA(H) 222' (200')		CDFA MDA(H) 460' (438')					
	ALS out		ALS out		Max Kts		MDA(H)	
	A		V1800m		100	1420' (1398')	V3200m	
B	R550m	V1200m		135	1420' (1398')	V3600m		
C	V800m		V2000m		180	1510' (1488')	V4800m	
D			V2200m		205	1510' (1488')	V5000m	

ZSHC/HGH
XIAOSHAN

7 JUL 23
Eff 12 Jul 1600Z (11-8)

JEPPESSEN HANGZHOU, PR OF CHINA
ILS DME Y Rwy 25

D-ATIS	*APP01	APP02	HANGZHOU Approach (R)				*HANGZHOU Tower South	*Ground
127.25	120.05	125.55X	APP03 126.05	*APP04 120.4	*APP05 119.425	APP07 127.7X	118.3	121.65
LOC IDD 108.5	Final Apch Crs 249°		D6.1 IDD 1970' (1948')		ILS DA(H) 222' (200')		Apt Elev 22' Rwy 22'	
MISSED APCH: Climb STRAIGHT AHEAD to 1320', turn LEFT (MAX 205 KT) to DSH VOR at 4930' or above to DSH VOR for approach or join holding and as directed.								
Alt Set: hPa		Rwy Elev: 1 hPa	Trans level: FL118		Trans alt: 9850' ①		MSA GHG VOR	



Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI 1320' ↑
ILS GS or	3.00°						
LOC Descent Angle	372	478	531	637	743	849	
MAP at D1.1 IDD/D0.4 HGH							

PANS OPS	State STRAIGHT-IN LANDING				CIRCLE-TO-LAND	
	ILS		LOC (GS out)		Not authorized North of runway	
	DA(H) 222' (200')		CDFA MDA(H) 460' (438')			
	ALS out		ALS out		Max Kts MDA(H)	
	A	R550m	V1800m	V2600m	100	1420' (1398') V3200m
B	V1200m			135	1420' (1398') V3600m	
C	V800m	V2000m		180	1510' (1488') V4800m	
D		V2200m		205	1510' (1488') V5000m	

ZSHC/HGH

JEPPESSEN HANGZHOU, PR OF CHINA

SA CAT I & SA CAT II

RNAV ILS DME Z Rwy 25

XIAOSHAN

7 JUL 23
Eff 12 Jul 1600Z

11-8A

D-ATIS	*APP01	APP02	HANGZHOU Approach (R)		*APP05	APP07	*HANGZHOU Tower South	*Ground
127.25	120.05	125.55X	APP03	*APP04	119.425	127.7X	118.3	121.65
LOC	Final	D6.1 IDD		SA CAT I & SA CAT II ILS		Apt Elev 22'		
IDD	Apch Crs	MANDATORY		Refer to Minimums		Rwy 22'		

MISSED APCH: Climb STRAIGHT AHEAD to HC320, then turn LEFT (MAX 210 KT) and climb on 219° to 1320', turn LEFT (MAX 210 KT) at 4930' or above to HC306 for approach or join holding and as directed.

Alt Set: hPa Rwy Elev: 1 hPa Trans level: FL118 Trans alt: 9850' ①

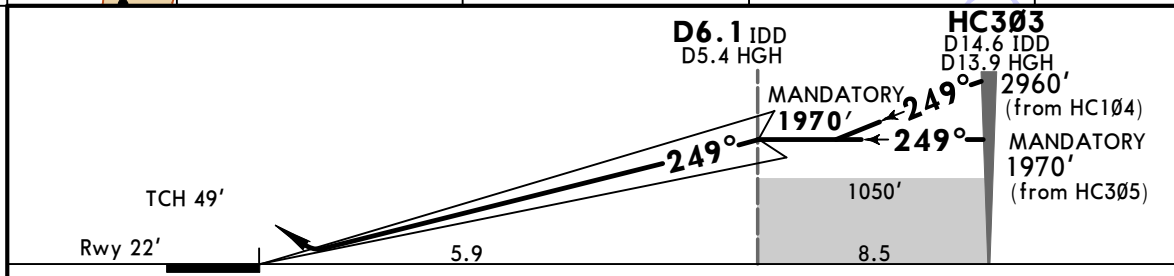
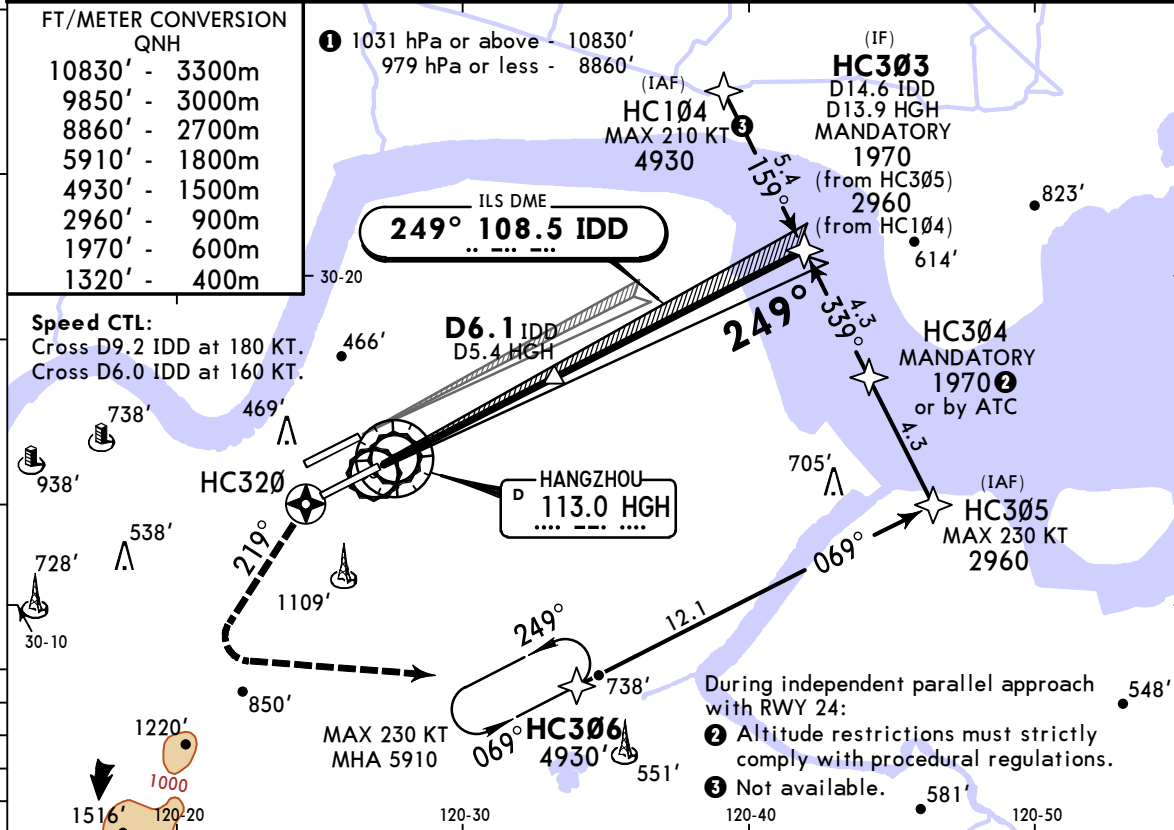
Special Aircrew & Acft Certification Required.

MSA HGH VOR

FT/METER CONVERSION QNH

10830'	-	3300m
9850'	-	3000m
8860'	-	2700m
5910'	-	1800m
4930'	-	1500m
2960'	-	900m
1970'	-	600m
1320'	-	400m

Speed CTL:
Cross D9.2 IDD at 180 KT.
Cross D6.0 IDD at 160 KT.



Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI 	HC320
Gs	3.00°	372	478	531	637	849		

State	SA CAT II ILS ①	STRAIGHT-IN LANDING	SA CAT I ILS ①
	RA 105' DA(H) 122' (100')		RA 155' DA(H) 172' (150')
PANS OPS	R350m		R450m

① HUD required.

ZSHC/HGH

JEPPESEN HANGZHOU, PR OF CHINA

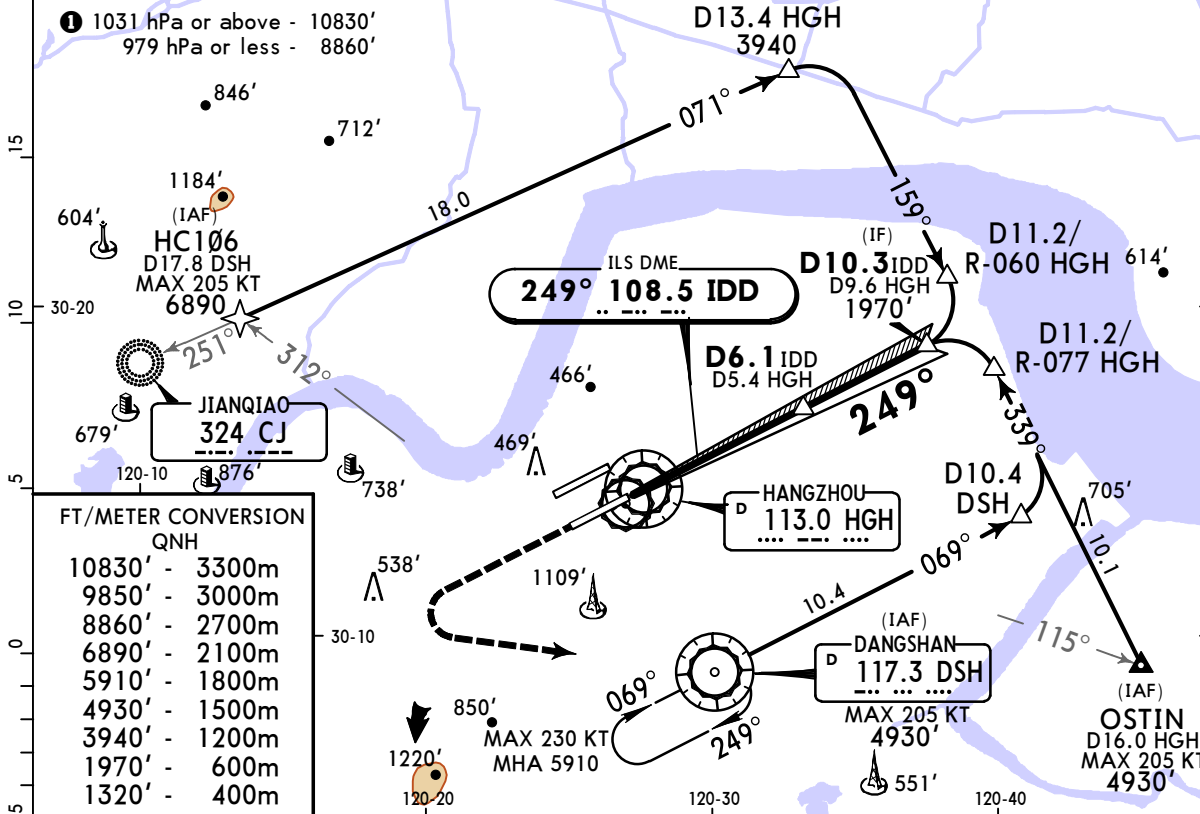
SA CAT I & SA CAT II

ILS DME Y Rwy 25

XIAOSHAN

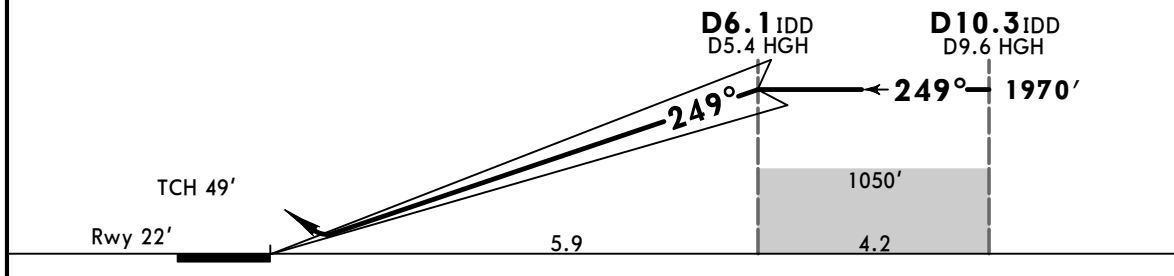
7 JUL 23
Eff 12 Jul 1600Z (11-8B)

BRIEFING STRIP™	D-ATIS	*APP01	APP02	HANGZHOU Approach (R) APP03	*APP04	*APP05	APP07	*HANGZHOU Tower South	*Ground
	127.25	120.05	125.55X	126.05	120.4	119.425	127.7X	118.3	121.65
	LOC IDD 108.5	Final Apch Crs 249°	D6.1 IDD 1970' (1948')		SA CAT I & SA CAT II ILS Refer to Minimums		Apt Elev 22' Rwy 22'	<p>MSA HGH VOR</p>	
<p>MISSED APCH: Climb STRAIGHT AHEAD to 1320', turn LEFT (MAX 205 KT) to DSH VOR at 4930' or above to DSH VOR for approach or join holding and as directed.</p>									
Alt Set: hPa		Rwy Elev: 1 hPa	Trans level: FL118		Trans alt: 9850' ①				
Special Aircrew & Acft Certification Required.									



FT/METER CONVERSION
QNH

10830'	3300m
9850'	3000m
8860'	2700m
6890'	2100m
5910'	1800m
4930'	1500m
3940'	1200m
1970'	600m
1320'	400m



Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI	1320' ↑
Gs	3.00°	372	478	531	637	743		

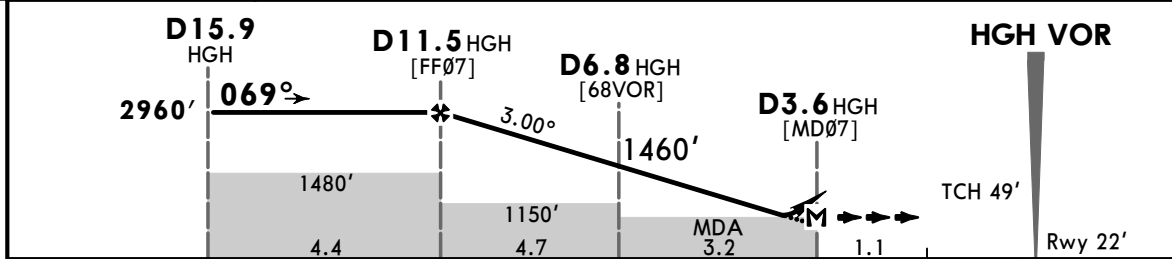
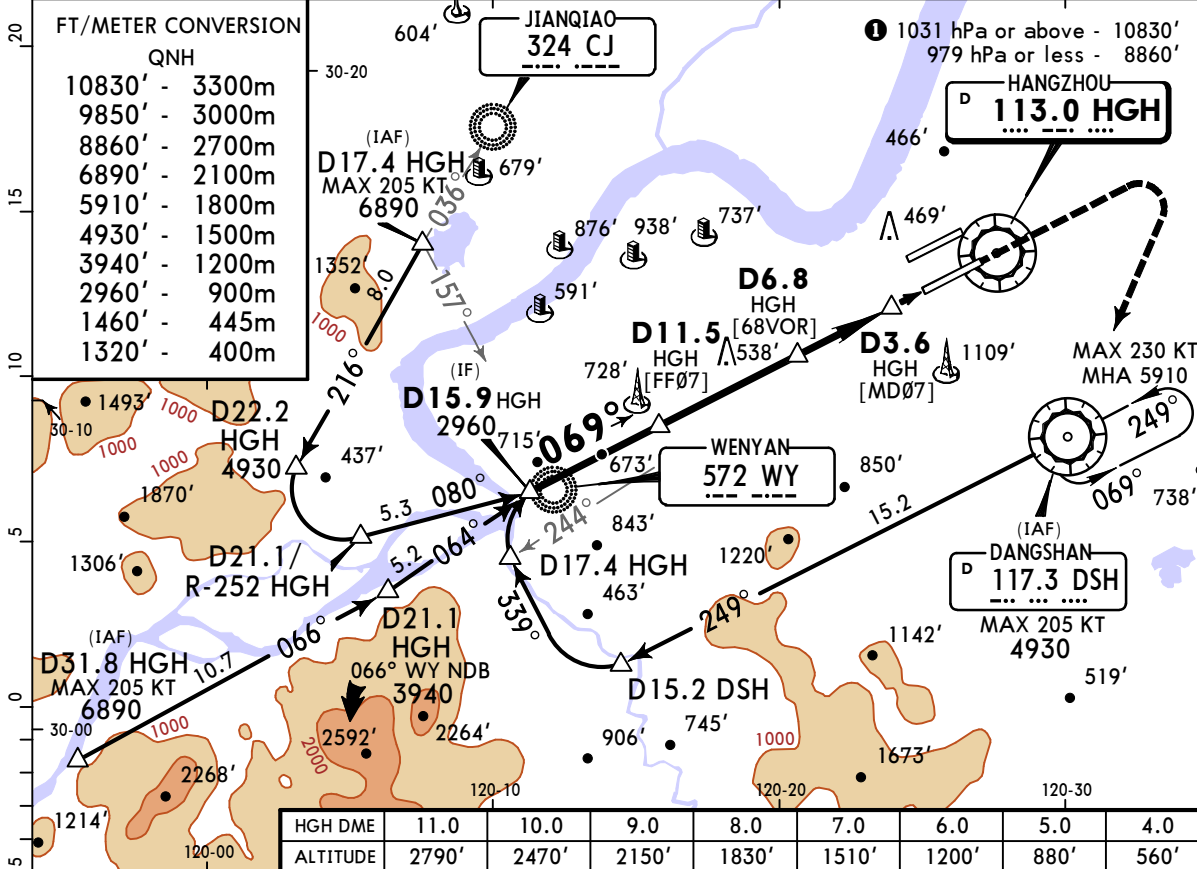
PANS OPS	State	SA CAT II ILS ①	STRAIGHT-IN LANDING	SA CAT I ILS ①
		RA 105' DA(H) 122' (100')		RA 155' DA(H) 172' (150')
		R350m		R450m

① HUD required.

**ZSHC/HGH
XIAOSHAN**

JEPPESSEN HANGZHOU, PR OF CHINA
7 JUL 23 (13-1) Eff 12 Jul 1600Z **VOR DME Rwy 07**

BRIEFING STRIP™	D-ATIS	*APP01	APP02	HANGZHOU Approach (R)			*HANGZHOU Tower	*Ground
	127.25	120.05	125.55X	APP03	*APP04	*APP05	APP07	South
VOR HGH	Final Apch Crs		D11.5 HGH		MDA(H)	Apt Elev 22'		
113.0	069°		2960' (2938')		500' (478')	Rwy 22'		
<p>MISSED APCH: Climb STRAIGHT AHEAD to 1320', turn RIGHT (MAX 205 KT) to DSH VOR at 4930' or above to DSH VOR for approach or join holding and as directed.</p>								
Alt Set: hPa		Rwy Elev: 1 hPa		Trans level: FL118		Trans alt: 9850' ①		MSA GHG VOR



MAP at D3.6 HGH		
-----------------	--	--

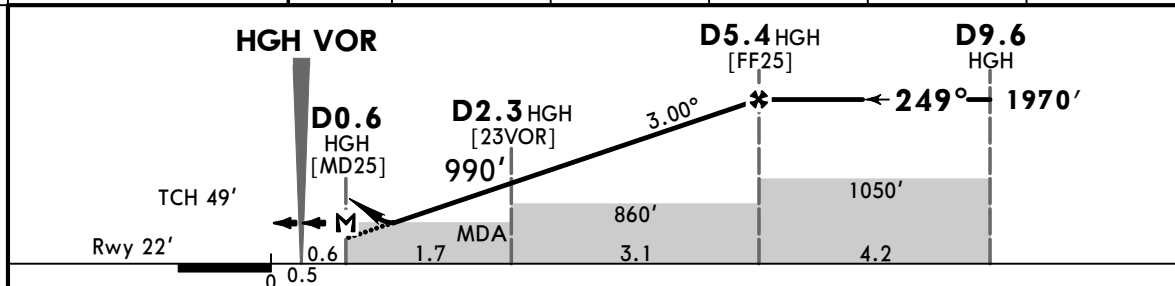
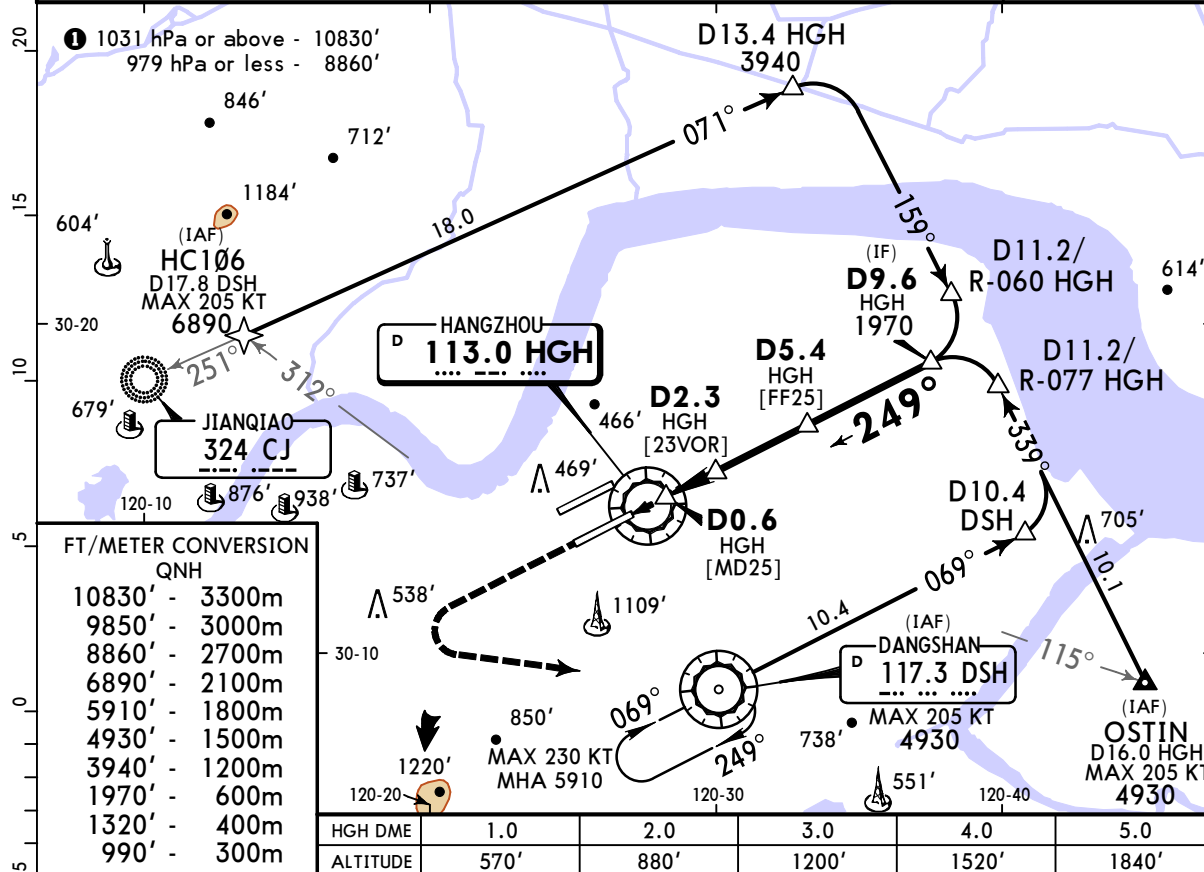
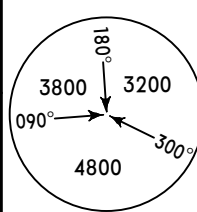
PANS OPS	State STRAIGHT-IN LANDING		CIRCLE-TO-LAND		
	CDFA		Not authorized North of runway		
	MDA(H) 500' (478')		ALS out		
	A	V2000m	V2800m	Max Kts	MDA(H)
	B	V2200m		100	1420' (1398') V3200m
C	V2400m	135		1420' (1398') V3600m	
D	V2400m	180		1510' (1488') V4800m	
			205	1510' (1488') V5000m	

ZSHC/HGH XIAOSHAN

JEPPESEN HANGZHOU, PR OF CHINA

7 JUL 23 (13-2) Eff 12 Jul 1600Z VOR DME Rwy 25

D-ATIS 127.25		*APP01 120.05	APP02 125.55X	HANGZHOU Approach (R) APP03 126.05			*APP04 120.4	*APP05 119.425	APP07 127.7X	*HANGZHOU Tower South 118.3	*Ground 121.65
VOR HGH 113.0		Final Apch Crs 249°		D5.4 HGH 1970' (1948')		MDA(H) 500' (478')		Apt Elev 22' Rwy 22'			
MISSED APCH: Climb STRAIGHT AHEAD to 1320', turn LEFT (MAX 205 KT) to DSH VOR at 4930' or above to DSH for approach or join holding and as directed.											
Alt Set: hPa		Rwy Elev: 1 hPa		Trans level: FL118		Trans alt: 9850' ①		MSA HGH VOR			



Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI	1320'
Descent Angle 3.00°	372	478	531	637	743	849		
MAP at D0.6 HGH								

PANS OPS	State				STRAIGHT-IN LANDING				CIRCLE-TO-LAND			
	CDFA								Not authorized North of runway			
	MDA(H) 500' (478')											
	ALS out								Max Kts			
	A	V2000m			V2800m			100	1420' (1398') V3200m			
B	V2000m			V2800m			135	1420' (1398') V3600m				
C	V2200m			V2800m			180	1510' (1488') V4800m				
D	V2400m			V2800m			205	1510' (1488') V5000m				

Chart changes since cycle 11-2024

ADD = added chart, REV = revised chart, DEL = deleted chart.

ACT	PROCEDURE IDENT	INDEX	REV DATE	EFF DATE
-----	-----------------	-------	----------	----------

BANGKOK, (DON MUEANG INTL - VTBD)

HANGZHOU, (XIAOSHAN - ZSHC)

TERMINAL CHART CHANGE NOTICES

No Chart Change Notices for Airport VTBD

Chart Change Notices for Airport ZSHC

Type: Terminal

Effectivity: Temporary

Begin Date: 20221005

End Date: Until Further Notice

Construction works on ramps and taxiways (based on SUP 008/22, from Eff 12 Jul 23 SUP 007/23). Refer to temporary chart 10-8 and latest NOTAMs.

Chart Change Notices for Country THA

Type: Gen Tmnl

Effectivity: Temporary

Begin Date: 20230615

End Date: 20240715

STN VOR is temporarily suspended. Waypoint SAPUD (090746.24N 0990805.09E) is established at the same coordinates of STN VOR.

Communication Information For VHHK FIR INMARSAT Service: INMARSAT SECURITY NUMBER FOR HONG KONG ATC IS 441299

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
HONG KONG RADAR:	118.92 MHz	(R)	
HONG KONG RADAR:	121.3 MHz	(R)	
HONG KONG RADAR:	122.95 MHz	(R)	
HONG KONG RADAR:	123.47 MHz	(R)	
HONG KONG RADAR:	123.7 MHz	(R)	Secondary
HONG KONG RADAR:	123.95 MHz	(R)	
HONG KONG RADAR:	125.17 MHz	(R)	
HONG KONG RADAR:	125.32 MHz	(R)	
HONG KONG RADAR:	125.8 MHz	(R)	
HONG KONG RADAR:	126.3 MHz	(R)	
HONG KONG RADAR:	126.5 MHz	(R)	
HONG KONG RADAR:	127.1 MHz	(R)	
HONG KONG RADAR:	127.55 MHz	(R)	
HONG KONG RADAR:	128.12 MHz	(R)	
HONG KONG RADAR:	128.75 MHz	(R)	Secondary
HONG KONG RADAR:	132.15 MHz	(R)	
HONG KONG RADAR:	132.52 MHz	(R)	Secondary
HONG KONG RADAR:	132.6 MHz	(R)	Secondary
HONG KONG RADAR:	132.77 MHz	(R)	Secondary
HONG KONG RADAR:	132.8 MHz	(R)	Secondary
HONG KONG RADAR:	134.3 MHz	(R)	Secondary
HONG KONG RADAR:	135.6 MHz	(R)	Secondary
Type: Information:			
HONG KONG:	121.0 MHz		FIS
HONG KONG:	122.07 MHz		FIS, Secondary
HONG KONG:	122.4 MHz		FIS
Type: Radar:			
HONG KONG:	126.3 MHz	(R)	
Type: Radio:			
HONG KONG:	13309 kHz		Secondary
HONG KONG:	5655 kHz		Secondary
HONG KONG:	8942 kHz		Secondary
Type: VOLMET:			
HONG KONG:	128.87 MHz		
HONG KONG:	13282 kHz		
HONG KONG:	6679 kHz		
HONG KONG:	8828 kHz		

Communication Information For VLVT FIR

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
VIENTIANE:	124.1 MHz	(R)	
VIENTIANE:	128.3 MHz	(R)	

Communication Information For VTBB ACC Both (ACC Sector)

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC: BANGKOK CONTROL:	124.5 MHz		
Type: Control: BANGKOK CONTROL:	124.5 MHz		

Communication Information For VTBB FIR INMARSAT Service: INMARSAT SECURITY NUMBER FOR BANGKOK ACC IS 456702

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC: BANGKOK CONTROL:	118.35 MHz	(R)	
BANGKOK CONTROL:	120.5 MHz	(R)	
BANGKOK CONTROL:	120.95 MHz	(R)	
BANGKOK CONTROL:	123.95 MHz	(R)	
BANGKOK CONTROL:	124.5 MHz	(R)	
BANGKOK CONTROL:	125.7 MHz	(R)	
BANGKOK CONTROL:	126.5 MHz	(R)	
BANGKOK CONTROL:	128.1 MHz	(R)	
BANGKOK CONTROL:	132.1 MHz	(R)	
BANGKOK CONTROL:	133.1 MHz	(R)	
BANGKOK CONTROL:	133.9 MHz	(R)	
BANGKOK CONTROL:	135.5 MHz	(R)	
Type: VOLMET: BANGKOK:	11387 kHz		
BANGKOK:	2965 kHz		
BANGKOK:	6676 kHz		

Communication Information For VVHN ACC Both (ACC Sector)

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC: HA NOI:	128.15 MHz		
HA NOI:	132.3 MHz		

Communication Information For VVHN FIR

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC: HA NOI:	123.3 MHz	(R)	
HA NOI:	124.55 MHz	(R)	Secondary
HA NOI:	125.9 MHz	(R)	
HA NOI:	128.15 MHz	(R)	Secondary
HA NOI:	132.3 MHz	(R)	
HA NOI:	132.92 MHz	(R)	Secondary
HA NOI:	133.65 MHz	(R)	
HA NOI:	134.42 MHz	(R)	Secondary

Communication Information For VYYF ACC Both (ACC Sector)

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC: YANGON:	124.75 MHz		

Communication Information For VYYF FIR CPDLC Service: CPDLC SERVICES ARE AVAILABLE WITH LOGON ADDRESS OF VYYF IN YANGON FIR CPDLC. SUITABLY EQUIPPED AIRCRAFT SHOULD LOG ON TO YANGON AFN LOGON ADDRESS AT LEAST 10 MINUTES PRIOR TO ENTER YANGON FIR. INMARSAT Service: INMARSAT SECURITY NUMBER FOR YANGON ACC IS 450601

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC: YANGON:	124.75 MHz	(R)	
YANGON:	126.75 MHz	(R)	
YANGON:	127.75 MHz	(R)	
YANGON:	128.75 MHz	(R)	
Type: Radio: YANGON:	10066 kHz		
YANGON:	5526 kHz		Secondary
YANGON:	6556 kHz		Secondary
YANGON:	6659 kHz		Secondary
YANGON:	8960 kHz		Secondary

Communication Information For ZGZU ACC Both (ACC Sector)

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC: GUANGZHOU CONTROL:	10066 kHz		
GUANGZHOU CONTROL:	132.82 MHz		
GUANGZHOU CONTROL:	134.25 MHz		
GUANGZHOU CONTROL:	3491 kHz		
GUANGZHOU CONTROL:	6556 kHz		

Communication Information For ZGZU ACC High (ACC Sector High)

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC: GUANGZHOU CONTROL:	10066 kHz		
GUANGZHOU CONTROL:	124.52 MHz		
GUANGZHOU CONTROL:	133.9 MHz		
GUANGZHOU CONTROL:	3491 kHz		
GUANGZHOU CONTROL:	6556 kHz		

Communication Information For ZGZU ACC Low (ACC Sector Low)

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
NANNING CONTROL:	10066 kHz		
NANNING CONTROL:	120.55 MHz		
NANNING CONTROL:	132.7 MHz		
NANNING CONTROL:	3491 kHz		
NANNING CONTROL:	6556 kHz		

Communication Information For ZGZU FIR

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
GUANGZHOU CONTROL:	10066 kHz	(R)	
GUANGZHOU CONTROL:	118.95 MHz	(R)	
NANNING CONTROL:	118.97 MHz	(R)	
NANNING CONTROL:	119.32 MHz	(R)	
GUANGZHOU CONTROL:	119.37 MHz	(R)	
NANNING CONTROL:	120.55 MHz	(R)	Secondary
GUANGZHOU CONTROL:	120.75 MHz	(R)	
GUANGZHOU CONTROL:	120.95 MHz	(R)	
GUANGZHOU CONTROL:	122.5 MHz	(R)	Secondary
CHANGSHA CONTROL:	123.2 MHz	(R)	
CHANGSHA CONTROL:	123.72 MHz	(R)	Secondary
CHANGSHA CONTROL:	123.9 MHz	(R)	
GUANGZHOU CONTROL:	124.45 MHz	(R)	
GUANGZHOU CONTROL:	124.52 MHz	(R)	Secondary
NANNING CONTROL:	124.57 MHz	(R)	
GUANGZHOU CONTROL:	124.9 MHz	(R)	
GUANGZHOU CONTROL:	125.35 MHz	(R)	
GUANGZHOU CONTROL:	125.75 MHz	(R)	
GUANGZHOU CONTROL:	126.1 MHz	(R)	Secondary
GUANGZHOU CONTROL:	126.15 MHz	(R)	
GUANGZHOU CONTROL:	126.75 MHz	(R)	
CHANGSHA CONTROL:	127.15 MHz	(R)	
CHANGSHA CONTROL:	127.35 MHz	(R)	Secondary
GUANGZHOU CONTROL:	127.5 MHz	(R)	
GUANGZHOU CONTROL:	128.1 MHz	(R)	
GUANGZHOU CONTROL:	128.3 MHz	(R)	
NANNING CONTROL:	128.37 MHz	(R)	
CHANGSHA CONTROL:	128.55 MHz	(R)	
NANNING CONTROL:	128.7 MHz	(R)	
GUANGZHOU CONTROL:	128.72 MHz	(R)	
GUANGZHOU CONTROL:	132.1 MHz	(R)	Secondary
GUANGZHOU CONTROL:	132.3 MHz	(R)	
NANNING CONTROL:	132.35 MHz	(R)	Secondary
GUANGZHOU CONTROL:	132.4 MHz	(R)	Secondary
CHANGSHA CONTROL:	132.55 MHz	(R)	
GUANGZHOU CONTROL:	132.65 MHz	(R)	Secondary
NANNING CONTROL:	132.7 MHz	(R)	
GUANGZHOU CONTROL:	132.75 MHz	(R)	
GUANGZHOU CONTROL:	132.82 MHz	(R)	
GUANGZHOU CONTROL:	132.92 MHz	(R)	Secondary
NANNING CONTROL:	132.97 MHz	(R)	Secondary
GUANGZHOU CONTROL:	133.07 MHz	(R)	
NANNING CONTROL:	133.1 MHz	(R)	
CHANGSHA CONTROL:	133.15 MHz	(R)	Secondary
GUANGZHOU CONTROL:	133.25 MHz	(R)	
GUANGZHOU CONTROL:	133.27 MHz	(R)	
GUANGZHOU CONTROL:	133.37 MHz	(R)	
NANNING CONTROL:	133.4 MHz	(R)	Secondary

GUANGZHOU CONTROL:	133.47 MHz	(R)	
GUANGZHOU CONTROL:	133.52 MHz	(R)	
NANNING CONTROL:	133.6 MHz	(R)	
NANNING CONTROL:	133.75 MHz	(R)	
GUANGZHOU CONTROL:	133.77 MHz	(R)	Secondary
GUANGZHOU CONTROL:	133.85 MHz	(R)	
GUANGZHOU CONTROL:	133.9 MHz	(R)	
NANNING CONTROL:	133.95 MHz	(R)	
GUANGZHOU CONTROL:	133.97 MHz	(R)	
NANNING CONTROL:	134.02 MHz	(R)	
GUANGZHOU CONTROL:	134.15 MHz	(R)	Secondary
GUANGZHOU CONTROL:	134.2 MHz	(R)	Secondary
GUANGZHOU CONTROL:	134.25 MHz	(R)	Secondary
NANNING CONTROL:	134.37 MHz	(R)	
GUANGZHOU CONTROL:	134.5 MHz	(R)	
GUANGZHOU CONTROL:	134.8 MHz	(R)	
CHANGSHA CONTROL:	135.1 MHz	(R)	
GUANGZHOU CONTROL:	135.45 MHz	(R)	
CHANGSHA CONTROL:	3016 kHz	(R)	
GUANGZHOU CONTROL:	3491 kHz	(R)	
GUANGZHOU CONTROL:	6556 kHz	(R)	Secondary
CHANGSHA CONTROL:	6571 kHz	(R)	Secondary
CHANGSHA CONTROL:	8897 kHz	(R)	

Type: VOLMET:

GUANGZHOU:	13285 kHz
GUANGZHOU:	3458 kHz
GUANGZHOU:	5673 kHz
GUANGZHOU:	8849 kHz

Communication Information For ZPKM ACC Both (ACC Sector)

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
LHASA CONTROL:	10066 kHz		
KUNMING CONTROL:	119.3 MHz		
KUNMING CONTROL:	127.5 MHz		
KUNMING CONTROL:	3491 kHz		
KUNMING CONTROL:	6556 kHz		

Communication Information For ZPKM FIR INMARSAT Service: INMARSAT SECURITY NUMBER FOR KUNMING ACC IS 441204 INMARSAT SECURITY NUMBER FOR CHENGDU ACC IS 441202

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
GUIYANG CONTROL:	10066 kHz	(R)	
CHENGDU CONTROL:	118.95 MHz	(R)	
KUNMING CONTROL:	119.3 MHz	(R)	Secondary
CHENGDU CONTROL:	119.32 MHz	(R)	
LHASA CONTROL:	119.37 MHz		
CHENGDU CONTROL:	120.52 MHz	(R)	Secondary
GUIYANG CONTROL:	120.7 MHz	(R)	
KUNMING CONTROL:	120.77 MHz	(R)	
CHENGDU CONTROL:	120.9 MHz	(R)	
GUIYANG CONTROL:	122.2 MHz	(R)	Secondary
CHENGDU CONTROL:	122.8 MHz	(R)	
CHENGDU CONTROL:	123.77 MHz	(R)	
KUNMING CONTROL:	124.55 MHz	(R)	
CHENGDU CONTROL:	124.57 MHz	(R)	
CHENGDU CONTROL:	124.95 MHz	(R)	

KUNMING CONTROL:	125.35 MHz	(R)	Secondary
CHENGDU CONTROL:	125.7 MHz	(R)	
KUNMING CONTROL:	125.75 MHz	(R)	
CHENGDU CONTROL:	125.95 MHz	(R)	
CHENGDU CONTROL:	126.15 MHz	(R)	Secondary
KUNMING CONTROL:	127.5 MHz	(R)	
CHENGDU CONTROL:	127.55 MHz	(R)	
GUIYANG CONTROL:	128.15 MHz	(R)	
CHENGDU CONTROL:	128.35 MHz	(R)	
CHENGDU CONTROL:	132.12 MHz	(R)	
KUNMING CONTROL:	132.17 MHz	(R)	
CHENGDU CONTROL:	132.25 MHz	(R)	
CHENGDU CONTROL:	132.3 MHz	(R)	
LHASA CONTROL:	132.35 MHz		
GUIYANG CONTROL:	132.37 MHz	(R)	
CHENGDU CONTROL:	132.47 MHz	(R)	
CHENGDU CONTROL:	132.6 MHz	(R)	
CHENGDU CONTROL:	132.67 MHz	(R)	
GUIYANG CONTROL:	132.85 MHz	(R)	
CHENGDU CONTROL:	133.0 MHz	(R)	
CHENGDU CONTROL:	133.07 MHz	(R)	Secondary
CHENGDU CONTROL:	133.12 MHz	(R)	
CHENGDU CONTROL:	133.22 MHz	(R)	
CHENGDU CONTROL:	133.3 MHz	(R)	Secondary
CHENGDU CONTROL:	133.45 MHz	(R)	Secondary
CHENGDU CONTROL:	133.65 MHz	(R)	
CHENGDU CONTROL:	133.8 MHz		
CHENGDU CONTROL:	133.87 MHz	(R)	
GUIYANG CONTROL:	133.92 MHz	(R)	Secondary
CHENGDU CONTROL:	134.0 MHz	(R)	
CHENGDU CONTROL:	134.05 MHz	(R)	Secondary
CHENGDU CONTROL:	134.22 MHz	(R)	
CHENGDU CONTROL:	134.3 MHz	(R)	
KUNMING CONTROL:	134.35 MHz	(R)	
CHENGDU CONTROL:	134.45 MHz	(R)	Secondary
CHENGDU CONTROL:	134.75 MHz	(R)	Secondary
CHENGDU CONTROL:	3016 kHz	(R)	
GUIYANG CONTROL:	3491 kHz	(R)	
GUIYANG CONTROL:	6556 kHz	(R)	Secondary
CHENGDU CONTROL:	6571 kHz	(R)	Secondary
CHENGDU CONTROL:	8897 kHz	(R)	

Communication Information For ZSHA ACC Both (ACC Sector)

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
SHANGHAI CONTROL:	123.7 MHz		
SHANGHAI CONTROL:	125.32 MHz		
SHANGHAI CONTROL:	3016 kHz		
SHANGHAI CONTROL:	6571 kHz		
SHANGHAI CONTROL:	8897 kHz		

Communication Information For ZSHA ACC High (ACC Sector High)

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
SHANGHAI CONTROL:	123.7 MHz		
SHANGHAI CONTROL:	125.95 MHz		
SHANGHAI CONTROL:	3016 kHz		

SHANGHAI CONTROL: 6571 kHz
 SHANGHAI CONTROL: 8897 kHz

Communication Information For ZSHA ACC Low (ACC Sector Low)

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
NANCHANG CONTROL:	124.15 MHz		
NANCHANG CONTROL:	130.3 MHz		
JINAN CONTROL:	3016 kHz		
JINAN CONTROL:	6571 kHz		
JINAN CONTROL:	8897 kHz		

Communication Information For ZSHA FIR

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
SHANGHAI CONTROL:	118.97 MHz	(R)	
SHANGHAI CONTROL:	119.3 MHz	(R)	Secondary
SHANGHAI CONTROL:	120.1 MHz	(R)	
NANCHANG CONTROL:	120.5 MHz	(R)	
XIAMEN CONTROL:	120.52 MHz	(R)	
SHANGHAI CONTROL:	120.55 MHz	(R)	
SHANGHAI CONTROL:	120.7 MHz	(R)	
SHANGHAI CONTROL:	120.75 MHz	(R)	
SHANGHAI CONTROL:	120.9 MHz	(R)	
SHANGHAI CONTROL:	120.95 MHz	(R)	
JINAN CONTROL:	122.9 MHz	(R)	
XIAMEN CONTROL:	123.22 MHz	(R)	
SHANGHAI CONTROL:	123.27 MHz	(R)	Secondary
SHANGHAI CONTROL:	123.37 MHz	(R)	
SHANGHAI CONTROL:	123.7 MHz	(R)	Secondary
SHANGHAI CONTROL:	123.77 MHz	(R)	
SHANGHAI CONTROL:	123.95 MHz	(R)	
SHANGHAI CONTROL:	124.1 MHz	(R)	
NANCHANG CONTROL:	124.15 MHz	(R)	
XIAMEN CONTROL:	124.55 MHz	(R)	
SHANGHAI CONTROL:	124.57 MHz	(R)	Secondary
SHANGHAI CONTROL:	124.95 MHz	(R)	
XIAMEN CONTROL:	125.3 MHz	(R)	Secondary
SHANGHAI CONTROL:	125.32 MHz	(R)	
NANCHANG CONTROL:	125.37 MHz	(R)	
JINAN CONTROL:	125.7 MHz	(R)	
HEFEI CONTROL:	125.77 MHz	(R)	
NANCHANG CONTROL:	125.9 MHz	(R)	
SHANGHAI CONTROL:	125.95 MHz	(R)	
SHANGHAI CONTROL:	125.97 MHz	(R)	
HEFEI CONTROL:	126.12 MHz	(R)	
QINGDAO CONTROL:	126.15 MHz	(R)	Secondary
SHANGHAI CONTROL:	126.17 MHz	(R)	
SHANGHAI CONTROL:	126.9 MHz	(R)	
NANCHANG CONTROL:	127.52 MHz	(R)	
SHANGHAI CONTROL:	127.55 MHz	(R)	Secondary
SHANGHAI CONTROL:	128.12 MHz	(R)	
QINGDAO CONTROL:	128.15 MHz	(R)	
HEFEI CONTROL:	128.17 MHz	(R)	Secondary
SHANGHAI CONTROL:	128.32 MHz	(R)	
JINAN CONTROL:	128.35 MHz	(R)	
QINGDAO CONTROL:	128.55 MHz	(R)	

SHANGHAI CONTROL:	128.7 MHz	(R)	
SHANGHAI CONTROL:	128.75 MHz	(R)	
NANCHANG CONTROL:	130.3 MHz	(R)	Secondary
SHANGHAI CONTROL:	132.05 MHz	(R)	
SHANGHAI CONTROL:	132.1 MHz	(R)	Secondary
QINGDAO CONTROL:	132.12 MHz	(R)	
SHANGHAI CONTROL:	132.27 MHz	(R)	Secondary
QINGDAO CONTROL:	132.3 MHz	(R)	Secondary
SHANGHAI CONTROL:	132.32 MHz	(R)	
JINAN CONTROL:	132.37 MHz	(R)	
SHANGHAI CONTROL:	132.4 MHz	(R)	
SHANGHAI CONTROL:	132.45 MHz	(R)	
SHANGHAI CONTROL:	132.5 MHz	(R)	
SHANGHAI CONTROL:	132.62 MHz	(R)	
XIAMEN CONTROL:	132.72 MHz	(R)	Secondary
SHANGHAI CONTROL:	132.75 MHz	(R)	Secondary
QINGDAO CONTROL:	132.82 MHz	(R)	Secondary
SHANGHAI CONTROL:	132.9 MHz	(R)	Secondary
QINGDAO CONTROL:	132.95 MHz	(R)	
SHANGHAI CONTROL:	133.0 MHz	(R)	
QINGDAO CONTROL:	133.05 MHz	(R)	
SHANGHAI CONTROL:	133.07 MHz	(R)	
QINGDAO CONTROL:	133.15 MHz	(R)	
XIAMEN CONTROL:	133.17 MHz	(R)	
SHANGHAI CONTROL:	133.22 MHz	(R)	
SHANGHAI CONTROL:	133.27 MHz	(R)	
SHANGHAI CONTROL:	133.32 MHz	(R)	Secondary
SHANGHAI CONTROL:	133.4 MHz	(R)	Secondary
JINAN CONTROL:	133.45 MHz	(R)	Secondary
GUANGZHOU CONTROL:	133.47 MHz	(R)	
HEFEI CONTROL:	133.55 MHz	(R)	Secondary
XIAMEN CONTROL:	133.65 MHz	(R)	
SHANGHAI CONTROL:	133.7 MHz	(R)	Secondary
QINGDAO CONTROL:	133.72 MHz	(R)	
SHANGHAI CONTROL:	133.8 MHz	(R)	
NANCHANG CONTROL:	133.82 MHz	(R)	
JINAN CONTROL:	133.85 MHz	(R)	Secondary
SHANGHAI CONTROL:	133.87 MHz	(R)	
QINGDAO CONTROL:	133.95 MHz	(R)	Secondary
SHANGHAI CONTROL:	133.97 MHz	(R)	
SHANGHAI CONTROL:	134.0 MHz	(R)	Secondary
SHANGHAI CONTROL:	134.05 MHz	(R)	Secondary
QINGDAO CONTROL:	134.12 MHz	(R)	
SHANGHAI CONTROL:	134.2 MHz	(R)	Secondary
GUANGZHOU CONTROL:	134.25 MHz	(R)	Secondary
SHANGHAI CONTROL:	134.3 MHz	(R)	
JINAN CONTROL:	134.37 MHz	(R)	
SHANGHAI CONTROL:	134.4 MHz	(R)	Secondary
HEFEI CONTROL:	134.42 MHz	(R)	
SHANGHAI CONTROL:	134.47 MHz	(R)	
SHANGHAI CONTROL:	134.55 MHz	(R)	
HEFEI CONTROL:	134.7 MHz	(R)	
QINGDAO CONTROL:	134.85 MHz	(R)	
SHANGHAI CONTROL:	134.9 MHz	(R)	
SHANGHAI CONTROL:	135.0 MHz	(R)	
SHANGHAI CONTROL:	135.05 MHz	(R)	
HEFEI CONTROL:	135.4 MHz	(R)	
SHANGHAI CONTROL:	135.5 MHz	(R)	Secondary
HEFEI CONTROL:	135.65 MHz	(R)	
SHANGHAI CONTROL:	135.7 MHz	(R)	Secondary
NANCHANG CONTROL:	135.72 MHz	(R)	Secondary
SHANGHAI CONTROL:	135.75 MHz	(R)	
HEFEI CONTROL:	3016 kHz	(R)	
HEFEI CONTROL:	6571 kHz	(R)	Secondary
HEFEI CONTROL:	8897 kHz	(R)	

Operational Notes

Page 1 Strip Charts

HUA HIN Type: Class D Airspace

Notes: EXCLUDING VTR3.

ALFA CONTROL AREA Type: Control Area (Airport)

Notes: ALFA CTA (B), PRIOR TO ENTERING, VFR AIRCRAFT MUST CONTACT BANGKOK ACC AND REPORT POSITION. EXCLUDES VT(D) 16, 19 AND 47.

ALFA CTA (B), PRIOR TO ENTERING, VFR AIRCRAFT MUST CONTACT BANGKOK ACC AND REPORT POSITION. EXCLUDES VT(D) 16, 19 AND 47.

NANNING CTA ZGNNAR12 Type: Control Area (Airport)

Notes: CONTACT ZGNNAR10 WHEN ZGNNAR12 U/S

SANYA CTA ZJSYAR01 Type: Control Area (Airport)

Notes: EXCLUDE ZJSYAR04

SANYA CTA ZJSYAR04 Type: Control Area (Airport)

Notes: CONTACT ZJSYAR01 WHEN ZJSYAR04 U/S.

BANGKOK CTR Type: Control Zone (CTZ/CTR)

Notes: EXCLUDING KAMPHAENG SAEN CTR, VT(D)-16, (D)-17, (D)-18, (D)-72.

CAT BI CTR Type: Control Zone (CTZ/CTR)

Notes: EXCLUDING KIEN AN CTA

KAMPHAENG SAEN CTR Type: Control Zone (CTZ/CTR)

Notes: EXCLUDING BANGKOK CONTROL ZONE

KHORAT CTR Type: Control Zone (CTZ/CTR)

Notes: KHORAT CTR (C) ALL INBOUND TRAFFIC CONTACT KHORAT APP ON 129.75 OR 349.0 MHZ PRIOR TO ENTERING.

NOI BAI CTR Type: Control Zone (CTZ/CTR)

Notes: NOI BAI TOWER PROVIDES ATC SERVICE ONLY WITHIN 5NM CENTERED ON VOR/DME NOB AND FROM GND TO 2000'. THE SERVICE PROVISION IN OTHER PARTS OF CTR ARE DELEGATED TO NOI BAI APP.

PHU BAI CTR Type: Control Zone (CTZ/CTR)

Notes: VERTICAL LIMIT IS 5000' FOR AIRSPACE OVERLAP DA NANG TWR AND PHU BAI TWR.

SUKHOTHAI CTR Type: Control Zone (CTZ/CTR)

Notes: EXCLUDING PHITSANULOK TMA

TAKHLI CTR Type: Control Zone (CTZ/CTR)

Notes: EXCLUDING ALFA CONTROL AREA, VT D31 AND NAKHON SWAN AD TRAFFIC ZONE.

VDPF Type: FIR

Notes: ALL AIRCRAFT IN THE PHNOM PENH FIR ARE UNDER THE CONTROL OF PHNOM PENH ACC ON FREQUENCY 127.5 MHZ.

VTBB Type: FIR

Notes: RVSM AIRSPACE FL290-FL410 INCLUSIVE. AIRSPACE CLASSIFICATION IS DEFINED ALL ATS ROUTES WITHIN BANGKOK FIR ARE AS FOLLOWS: CLASS A FROM FL290 AND ABOVE CLASS B FROM FL280 AND BELOW AIRWAY USABLE ONLY FOR AIRCRAFT WITH AUTOMATED NAVIGATION SYSTEMS. INMARSAT: INMARSAT SECURITY NUMBER FOR BANGKOK ACC IS 456702 INMARSAT: EASTBOUND FROM YANGON {YYYY} FIR CONTACT BANGKOK CONTROL FREQ 128.1 OR 120.5 AT LEAST 15 MINUTES PRIOR TO ENTERING BANGKOK FIR.

VVHM Type: FIR

Notes: CPDLC: CPDLC SERVICES FOR FANS-1/A EQUIPPED AIRCRAFT ARE AVAILABLE WITH LOGON ADDRESS OF VVHM IN HO CHI MINH FIR. LOGON SHOULD BE ESTABLISHED 15 TO 45 MINUTES PRIOR TO ENTERING THE DATA LINK AIRSPACE. DATA LINK ROUTES: L625, L628, L642, M765, M768, M771, N500, N892 CPDLC: INMARSAT: INMARSAT SECURITY NUMBER FOR HO CHI MINH ACC IS 457402 INMARSAT:

YYYY Type: FIR

Notes: CPDLC: CPDLC SERVICES ARE AVAILABLE WITH LOGON ADDRESS OF VYYF IN YANGON FIR CPDLC. SUITABLY EQUIPPED AIRCRAFT SHOULD LOG ON TO YANGON AFN LOGON ADDRESS AT LEAST 10 MINUTES PRIOR TO ENTER YANGON FIR. CPDLC: INMARSAT: INMARSAT SECURITY NUMBER FOR YANGON ACC IS 450601 INMARSAT:

ZGZU Type: FIR

Notes: ABOVE 19700' (6000M) THERE ARE FOLLOWING AIRSPACE CLASSES: 19700' (6000M)- 65700'(20000M) CLASS A AIRSPACE 65700'(20000M)-UNLTD CLASS D AIRSPACE AIRSPACE CLASS B DESIGNATED AS FOLLOWING: THE AIRSPACE DESIGNATED ABOVE TRANSPORT AIRPORTS. FOR TRANSPORT AIRPORTS WITH THREE RUNWAYS (INCLUSIVE) OR MORE, THREE-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 10.8NM (20KM), 21.6NM (40KM), AND 32.4NM (60KM), ALTITUDES RESPECTIVELY FROM RUNWAY SURFACE TO 3000' (900M) ABOVE THE AIRPORT ELEVATION, FROM 3000' (900M) ABOVE THE AIRPORT ELEVATION TO 6000' (1800M) ABOVE THE AIRPORT ELEVATION, FROM 6000' (1800M) ABOVE THE AIRPORT ELEVATION TO QNE 19700' (6000M). FOR TRANSPORT AIRPORTS WITH TWO RUNWAYS, TWO-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 8.1NM (15KM) AND 16.2NM (30KM), ALTITUDES RESPECTIVELY FROM RUNWAY SURFACE TO 2000' (600M) ABOVE THE AIRPORT ELEVATION, FROM 2000' (600M) ABOVE THE AIRPORT ELEVATION TO 11900' (3600M) ABOVE THE AIRPORT ELEVATION, MAXIMUM TO THE LOWER LIMIT OF CLASS A AIRSPACE. FOR TRANSPORT AIRPORTS WITH ONE RUNWAY, ONE-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 6.5NM (12KM), ALTITUDE FROM RUNWAY SURFACE TO 2000' (600M) ABOVE THE AIRPORT ELEVATION. AIRSPACE CLASS C DESIGNATED AS FOLLOWING: THE AIRSPACE DESIGNATED ABOVE GENERAL AVIATION AIRPORTS WITH TOWER, ONE-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 2.7NM (5KM), ALTITUDE FROM RUNWAY SURFACE TO 2000' (600M) ABOVE THE AIRPORT ELEVATION. AIRSPACE CLASS D AND E DESIGNATED AS FOLLOWING: OUTSIDE OF CLASS A, B, C AND G AIRSPACE, IT CAN BE DESIGNATED AS CLASS D OR E AIRSPACE BASED ON OPERATION AND SAFETY REQUIREMENTS. AIRSPACE CLASS G DESIGNATED AS FOLLOWING: - THE AIRSPACE OUTSIDE OF CLASS B AND C AIRSPACE (CLASS W AIRSPACE EXCLUDED) AND BELOW 1000' (300M) AGL - AIRSPACE BELOW 19700' (6000M) MSL THAT DOES NOT AFFECT CIVIL AVIATION TRANSPORT FLIGHTS. AIRSPACE CLASS W DESIGNATED AS FOLLOWING: PART OF THE CLASS G AIRSPACE BELOW 400' (120M) AGL. RVSM AIRSPACE FL291-FL411 INCLUSIVE. ALL AIRCRAFT ENTERING OR EXITING PR OF CHINA SHALL CONTACT ATC 15-20 MINUTES PRIOR TO FIR ENTRY OR EXIT AND OBTAIN A CLEARANCE TO CROSS THE FIR BOUNDARIES.

ZJSA Type: FIR

Notes: ALL FLIGHTS ENTERING THE SANYA FIR SHOULD ESTABLISH TWO-WAY RADIO COMMUNICATION WITH SANYA ACC WITHIN FIVE MINUTES BEFORE DESIGNATED REPORTING POINTS. ABOVE 19700' (6000M) THERE ARE FOLLOWING AIRSPACE CLASSES: 19700' (6000M)- 65700'(20000M) CLASS A AIRSPACE 65700'(20000M)-UNLTD CLASS D AIRSPACE AIRSPACE CLASS B DESIGNATED AS FOLLOWING: THE AIRSPACE DESIGNATED ABOVE TRANSPORT AIRPORTS. FOR TRANSPORT AIRPORTS WITH THREE RUNWAYS (INCLUSIVE) OR MORE, THREE-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 10.8NM (20KM), 21.6NM (40KM), AND 32.4NM (60KM), ALTITUDES RESPECTIVELY FROM RUNWAY SURFACE TO 3000' (900M) ABOVE THE AIRPORT ELEVATION, FROM 3000' (900M) ABOVE THE AIRPORT ELEVATION TO 6000' (1800M) ABOVE THE AIRPORT ELEVATION, FROM 6000' (1800M) ABOVE THE AIRPORT ELEVATION TO QNE 19700' (6000M). FOR TRANSPORT AIRPORTS WITH TWO RUNWAYS, TWO-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 8.1NM (15KM) AND 16.2NM (30KM), ALTITUDES RESPECTIVELY FROM RUNWAY SURFACE TO 2000' (600M) ABOVE THE AIRPORT ELEVATION, FROM 2000' (600M) ABOVE THE AIRPORT ELEVATION TO 11900' (3600M) ABOVE THE AIRPORT ELEVATION, MAXIMUM TO THE LOWER LIMIT OF CLASS A AIRSPACE. FOR TRANSPORT AIRPORTS WITH ONE RUNWAY, ONE-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 6.5NM (12KM), ALTITUDE FROM RUNWAY SURFACE TO 2000' (600M) ABOVE THE AIRPORT ELEVATION. AIRSPACE CLASS C DESIGNATED AS FOLLOWING: THE AIRSPACE DESIGNATED ABOVE GENERAL AVIATION AIRPORTS WITH TOWER, ONE-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 2.7NM (5KM), ALTITUDE FROM RUNWAY SURFACE TO 2000' (600M) ABOVE THE AIRPORT ELEVATION. AIRSPACE CLASS D AND E DESIGNATED AS FOLLOWING: OUTSIDE OF CLASS A, B, C AND G AIRSPACE, IT CAN BE DESIGNATED AS CLASS D OR E AIRSPACE BASED ON OPERATION AND SAFETY REQUIREMENTS. AIRSPACE CLASS G DESIGNATED AS FOLLOWING: - THE AIRSPACE OUTSIDE OF CLASS B AND C AIRSPACE (CLASS W AIRSPACE EXCLUDED) AND BELOW 1000' (300M) AGL - AIRSPACE BELOW 19700' (6000M) MSL THAT DOES NOT AFFECT CIVIL AVIATION TRANSPORT FLIGHTS. AIRSPACE CLASS W DESIGNATED AS FOLLOWING: PART OF THE CLASS G AIRSPACE BELOW 400' (120M) AGL. ALL AIRCRAFT ENTERING OR EXITING PR OF CHINA SHALL CONTACT ATC 15-20

ZPKM Type: FIR

Notes: INMARSAT: INMARSAT SECURITY NUMBER FOR KUNMING ACC IS 441204 INMARSAT: INMARSAT: INMARSAT SECURITY NUMBER FOR CHENGDU ACC IS 441202 INMARSAT: EMERGENCY PROCEDURES FOR ROUTE L888: - THE AVAILABLE ALTERNATE AIRPORTS FOR ROUTE L888 ARE KUNMING, CHENGDU, URUMQI AND KASHI. - THE PILOT SHALL FLY VIA REGULATED WAYPOINTS TO EVACUATE FROM ROUTE L888 WHEN EVACUATING OR ALTERNATING IS DECIDED IN AN EMERGENCY CONDITION. THE BREAKING POINTS ARE: BIDRU - DIRECT TO KUNMING AIRPORT; MAKUL - DIRECT TO KUNMING AIRPORT; NIVUX - DIRECT TO XIC (VOR) - SB (NDB) - XFA (VOR) - KUNMING AIRPORT; LEVBA - DIRECT TO XIC (VOR) - SB (NDB) - XFA (VOR) - KUNMING AIRPORT; PEXUN - DIRECT TO JTG (VOR) - CHENGDU AIRPORT; SANLI - DIRECT TO JTG (VOR) - CHENGDU AIRPORT; LUVAR - DIRECT TO MEPEP - LUSMA - DUMIN - TUSLI - HAM (VOR) - MIMAR - VIKOL - FKG (VOR) - URUMQI AIRPORT; MUMAN - DIRECT TO LUSMA - DUMIN - TUSLI - HAM (VOR) - MIMAR - VIKOL - FKG (VOR) - URUMQI AIRPORT; LEBAK - DIRECT TO LUSMA/DUMIN - TUSLI - HAM (VOR) - MIMAR - VIKOL - FKG (VOR) - URUMQI AIRPORT; - THE PILOT SHALL BE RESPONSIBLE FOR THE OBSTACLE CLEARANCE ALTITUDE AND MANEUVERING TRACK WHEN EMERGENCY DESCENT IS EXECUTED IN THE CONDITION OF AIR CABIN DEPRESSURIZING. - INMARSAT ACC PHONE NUMBERS: KUNMING - 441204; CHENGDU - 441202; LANZHOU - 441205 OR 441215; URUMQI - 441208. RVSM AIRSPACE FL291-FL411 INCLUSIVE. ALL AIRCRAFT ENTERING OR EXITING PR OF CHINA SHALL CONTACT ATC 15-20 MINUTES PRIOR TO FIR ENTRY OR EXIT AND OBTAIN A CLEARANCE TO CROSS

THE FIR BOUNDARIES. ABOVE 19700' (6000M) THERE ARE FOLLOWING AIRSPACE CLASSES: 19700' (6000M)- 65700'(20000M) CLASS A AIRSPACE 65700'(20000M)-UNLTD CLASS D AIRSPACE AIRSPACE CLASS B DESIGNATED AS FOLLOWING: THE AIRSPACE DESIGNATED ABOVE TRANSPORT AIRPORTS. FOR TRANSPORT AIRPORTS WITH THREE RUNWAYS (INCLUSIVE) OR MORE, THREE-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 10.8NM (20KM), 21.6NM (40KM), AND 32.4NM (60KM), ALTITUDES RESPECTIVELY FROM RUNWAY SURFACE TO 3000' (900M) ABOVE THE AIRP

18 Type: Special Use Airspace

Notes: TRAINING AIRCRAFT AT FL200 AND ABOVE WILL BE AUTHORIZED BY BANGKOK ACC.

TRAINING AIRCRAFT AT FL200 AND ABOVE WILL BE AUTHORIZED BY BANGKOK ACC.

20 Type: Special Use Airspace

Notes: EXCLUDING HUA HIN CTR, TMA, AND G458.

32 Type: Special Use Airspace

Notes: EXCLUDING KHORAT CONTROL ZONE AND BURI RAM TERMINAL CONTROL AREA.

34 Type: Special Use Airspace

Notes: EXCLUDING AIRWAY W21.

41 Type: Special Use Airspace

Notes: EXCLUDING AIRWAY W20 BETWEEN FL75-FL200 CHIANG MAI TMA AND CHIANG RAI TMA.

47 Type: Special Use Airspace

Notes: AIRCRAFT DEPARTING FROM DON MUEANG INTERNATIONAL AIRPORT MUST CONTACT DON MUEANG APPROACH. BEFORE LEAVING VT D47 THE PILOT MUST REPORT HIS POSITION, DISTANCE AND HEADING TO BANGKOK APPROACH.

57 Type: Special Use Airspace

Notes: EXCLUDES AIRWAY W-9.

EXCLUDES AIRWAY W-9.

72 Type: Special Use Airspace

Notes: AIRCRAFT DEPARTING FROM DON MUEANG INTERNATIONAL AIRPORT MUST CONTACT DON MUEANG APPROACH, THE CONTROLLER WILL INSTRUCT THE PILOT TO REPORT OVER BANG BUA THONG (N13 56 10 E100 25 40) AT ALTITUDE NOT ABOVE 1,500 FEET BEFORE ENTERING VT D72. BEFORE LEAVING VT D72 THE PILOT MUST REPORT HIS POSITION, DISTANCE AND HEADING TO DON MUEANG APPROACH, THE CONTROLLER WILL INSTRUCT THE PILOT TO REPORT OVER PATHUMTHANI (N14 01 56 E100 32 55) AT ALTITUDE NOT ABOVE 1,000 FEET, THEN REPORT 3 NM WEST (N13 55 56 E100 33 35) AND THEN REPORT ENTERING DOWNWIND FOR LANDING RUNWAY 21L/21R OR RUNWAY 03R/03L.

AIRCRAFT DEPARTING FROM DON MUEANG INTERNATIONAL AIRPORT MUST CONTACT DON MUEANG APPROACH, THE CONTROLLER WILL INSTRUCT THE PILOT TO REPORT OVER BANG BUA THONG (N13 56 10 E100 25 40) AT ALTITUDE NOT ABOVE 1,500 FEET BEFORE ENTERING VT D72. BEFORE LEAVING VT D72 THE PILOT MUST REPORT HIS POSITION, DISTANCE AND HEADING TO DON MUEANG APPROACH, THE CONTROLLER WILL INSTRUCT THE PILOT TO REPORT OVER PATHUMTHANI (N14 01 56 E100 32 55) AT ALTITUDE NOT ABOVE 1,000 FEET, THEN REPORT 3 NM WEST (N13 55 56 E100 33 35) AND THEN REPORT ENTERING DOWNWIND FOR LANDING RUNWAY 21L/21R OR RUNWAY 03R/03L.

SANYA APP CTL AREA ZJSYAP02 Type: Terminal Area

Notes: EXCLUDE ZJSYAP01

BANGKOK TMA EAST Type: Terminal Control Area

Notes: SPEED RESTRICTIONS WITHIN BANGKOK TMA BELOW 10000' 250KTS UNLESS PREVIOUSLY REMOVED BY ATC. VTBD ARRIVALS INTERMEDIATE APPROACH PHASE 210 KTS. FINAL APPROACH PHASE ON OR SHORTLY BEFORE THE CLOSING HEADING ON THE ILS 160KTS TO 180KTS. WHEN ESTABLISHED ON THE ILS 160KTS. EXCLUDING BANGKOK CONTROL ZONE.

BANGKOK TMA NORTH Type: Terminal Control Area

Notes: EXCLUDING BANGKOK CONTROL ZONE. SPEED RESTRICTIONS WITHIN BANGKOK TMA BELOW 10000' 250KTS UNLESS PREVIOUSLY REMOVED BY ATC. VTBD ARRIVALS INTERMEDIATE APPROACH PHASE 210 KTS. FINAL APPROACH PHASE ON OR SHORTLY BEFORE THE CLOSING HEADING ON THE ILS 160KTS TO 180KTS. WHEN ESTABLISHED ON THE ILS 160KTS.

BANGKOK TMA SOUTH Type: Terminal Control Area

Notes: EXCLUDING BANGKOK CONTROL ZONE, VT(D)-19. SPEED RESTRICTIONS WITHIN BANGKOK TMA BELOW 10000' 250KTS UNLESS PREVIOUSLY REMOVED BY ATC. VTBD ARRIVALS INTERMEDIATE APPROACH PHASE 210 KTS. FINAL APPROACH PHASE ON OR SHORTLY BEFORE THE CLOSING HEADING ON THE ILS 160KTS TO 180KTS. WHEN ESTABLISHED ON THE ILS 160KTS.

BANGKOK TMA WEST Type: Terminal Control Area

Notes: SPEED RESTRICTIONS WITHIN BANGKOK TMA BELOW 10000' 250KTS UNLESS PREVIOUSLY REMOVED BY ATC. VTBD ARRIVALS INTERMEDIATE APPROACH PHASE 210 KTS. FINAL APPROACH PHASE ON OR SHORTLY BEFORE THE CLOSING HEADING ON THE ILS 160KTS TO 180KTS. WHEN ESTABLISHED ON THE ILS 160KTS. EXCLUDING BANGKOK CONTROL ZONE.

HUA HIN TMA Type: Terminal Control Area

Notes: HUA HIN TMA EXCLUDES VT(R)3, VT(R)8, AND G458 AIRWAY GND-11000'.

SAKON NAKHON TMA Type: Terminal Control Area

Notes: EXCLUDING NAKHON PHANOM CONTROL ZONE.

TAK TMA Type: Terminal Control Area

Notes: EXCLUDING A464, G473, VT D33 AND VT D56.

U-TAPAO Type: Terminal Control Area

Notes: EXCLUDES A. U-TAPAO CONTROL ZONE B. THAT PORTION OVERLAPPED BY BANGKOK ALFA CONTROL AREA AND HUA HIN TERMINAL CONTROL AREA. C. EXCLUDES ALL AIRSPACE ON AIRWAYS A464, R468, G463, AND G458 FROM FL65 TO FL460

U-TAPAO TMA Type: Terminal Control Area

Notes: EXCLUDES A. U-TAPAO CONTROL ZONE B. THAT PORTION OVERLAPPED BY BANGKOK ALFA CONTROL AREA AND HUA HIN TERMINAL CONTROL AREA. C. EXCLUDES ALL AIRSPACE ON AIRWAYS A464, R468, G463, AND G458 FROM FL65 TO FL460

EXCLUDES A. U-TAPAO CONTROL ZONE B. THAT PORTION OVERLAPPED BY BANGKOK ALFA CONTROL AREA AND HUA HIN TERMINAL CONTROL AREA. C. EXCLUDES ALL AIRSPACE ON AIRWAYS A464, R468, G463, AND G458 FROM FL65 TO FL460

EXCLUDES A. U-TAPAO CONTROL ZONE B. THAT PORTION OVERLAPPED BY BANGKOK ALFA CONTROL AREA AND HUA HIN TERMINAL CONTROL AREA. C. EXCLUDES ALL AIRSPACE ON AIRWAYS A464, R468, G463, AND G458 FROM FL65 TO FL460

ENBIL Type: Waypoint

Notes: A202 ON REQUEST.

LEKOB Type: Waypoint

Notes: ALL TRAFFIC ENTERING THE VIENTIANE FIR SHOULD ESTABLISH AND MAINTAIN TWO-WAY RADIO COMMUNICATION WITH VIENTIANE ACC AT LEAST THREE (3) MINUTES BEFORE DESIGNATED REPORTING POINT LEKOB INT

Page 2 Strip Charts**VHHH Type: Airport**

Notes: FLIGHTS WITHIN 50NM OF HONG KONG INTL AIRPORT SHALL NOT FLIGHT PLAN TO CRUISE AT LEVELS BETWEEN 9000' AND FL120.

GUEIREN Type: Class E Airspace

Notes: EAST TRAFFIC PATTERN IS USED FOR RCXY AD.

SINSHE Type: Class E Airspace

Notes: EAST TRAFFIC PATTERN IS USED FOR RCWK AD.

AIRSPACE BENEATH HONG KONG TMA Type: Class G Airspace

Notes: REQUIRES AIRCRAFT OPERATING IN SUCH CLASS G AIRSPACE TO HAVE EQUIPMENT CAPABLE OF MAINTAINING DIRECT TWO-WAY COMMUNICATION WITH ATC.

REQUIRES AIRCRAFT OPERATING IN SUCH CLASS G AIRSPACE TO HAVE EQUIPMENT CAPABLE OF MAINTAINING DIRECT TWO-WAY COMMUNICATION WITH ATC.

CHANGSHA CTA ZGHAAR01 Type: Control Area (Airport)

Notes: CONTACT ZGHAAR04 WHEN ZGHAAR01 U/S

CHANGSHA CTA ZGHAAR02 Type: Control Area (Airport)

Notes: CONTACT ZGHAAR04 WHEN ZGHAAR01 U/S

CHANGSHA CTA ZGHAAR03 Type: Control Area (Airport)

Notes: CONTACT ZGHAAR02 WHEN ZGHAAR03 U/S

CHANGSHA CTA ZGHAAR05 Type: Control Area (Airport)

Notes: CONTACT ZGHAAR01 WHEN ZGHAAR05 U/S

CHANGSHA CTA ZGHAAR06 Type: Control Area (Airport)

Notes: CONTACT ZGHAAR04 WHEN ZGHAAR06 U/S

GUANGZHOU CTA ZGGGAR20 Type: Control Area (Airport)

Notes: EXCLUDE SECTOR ZGHAAR03

GUANGZHOU CTA ZGGGAR22 Type: Control Area (Airport)

Notes: CONTACT ZGGGAR11 WHEN ZGGGAR22 U/S

HEFEI CTA ZSOFAR02 Type: Control Area (Airport)

Notes: CONTACT ZSOFAR01 WHEN ZSOFAR02 U/S.

HEFEI CTA ZSOFAR03 Type: Control Area (Airport)

Notes: CONTACT ZSOFAR04 WHEN ZSOFAR03 U/S.

HEFEI CTA ZSOFAR04 Type: Control Area (Airport)

Notes: CONTACT ZSOFAR01 WHEN ZSOFAR04 U/S.

HEFEI CTA ZSOFAR05 Type: Control Area (Airport)

Notes: CONTACT ZSOFAR04 WHEN ZSOFAR05 U/S.

NANNING CTA ZGNNAR12 Type: Control Area (Airport)

Notes: CONTACT ZGNNAR10 WHEN ZGNNAR12 U/S

SHANGHAI CTA ZSSSAR41 Type: Control Area (Airport)

Notes: CONTACT ZSSSAR14 WHEN ZSSSAR41 U/S.

SHANGHAI CTA ZSSSAR42 Type: Control Area (Airport)

Notes: CONTACT ZSSSAR01 OR ZSSSAR44 WHEN ZSSSAR42 U/S.

SHANGHAI CTA ZSSSAR43 Type: Control Area (Airport)

Notes: CONTACT ZSSSAR15 WHEN ZSSSAR43 U/S.

SHANGHAI CTA ZSSSAR44 Type: Control Area (Airport)

Notes: CONTACT ZSSSAR01 WHEN ZSSSAR44 U/S.

XI'AN CTA ZLXYAR02 Type: Control Area (Airport)

Notes: CONTACT ZLXYAR01 WHEN ZLXYAR02 U/S.

XI'AN CTA ZLXYAR07 Type: Control Area (Airport)

Notes: CONTACT ZLXYAR02 WHEN ZLXYAR07 U/S.

XIAMEN CTA ZSAMAR02 Type: Control Area (Airport)

Notes: CONTACT ZSAMAR04 WHEN ZSAMAR02 U/S.

XIAMEN CTA ZSAMAR03 Type: Control Area (Airport)

Notes: CONTACT ZSAMAR04 WHEN ZSAMAR03 U/S.

XIAMEN CTA ZSAMAR05 Type: Control Area (Airport)

Notes: CONTACT ZSAMAR01 WHEN ZSAMAR05 U/S.

XIAMEN CTA ZSAMAR06 Type: Control Area (Airport)

Notes: CONTACT ZSAMAR01 WHEN ZSAMAR06 U/S.

RCAA Type: FIR

Notes: TAIPEI RCTP FIR: UNLESS APPLIED IN ADVANCE WITH RELATED DOCUMENTS AND AUTHORIZED BY CAA, NO PERSON MAY OPERATE A CIVIL AIRCRAFT WHILE IN CONTROLLED AIRSPACE BELOW 10,000' FEET [MSL] AT AN INDICATED AIRSPEED OF MORE THAN 250 KNOTS. R-583 AUTHORIZED ONLY W-BND FL380 OR ABOVE WITHIN TAIPEI (RCAA) FIR. UNLESS OTHERWISE APPROVED BY ATC ARRIVAL AIRCRAFT INTO TAIPEI ARE PROHIBITED.

RJJJ Type: FIR

Notes: SPEED RESTRICTIONS WITHIN JAPAN AIRSPACE MAXIMUM IAS UNLESS OTHERWISE AUTHORIZED BY ATC. WITHIN AN APPROACH CONTROL AREA BELOW 10000' MSL 250 KIAS WITHIN A CONTROL ZONE 250 KTS PILOTS SHOULD MONITOR VHF EMERGENCY FREQUENCY 121.5 MHZ ON LONG OVERWATER ROUTES WHEN POSSIBLE. SEE VHF EMERGENCY FREQUENCY REQUIREMENT. CPDLC: CPDLC SERVICES ARE AVAILABLE WITH LOGON ADDRESS OF RJJJ IN FUKUOKA FIR CPDLC: INMARSAT: INMARSAT SECURITY NUMBER IS 443101 INMARSAT: SATCOM: SATCOM VOICE DIRECT DIAL IS 81-78-99-36-501 SATCOM:

VHHK Type: FIR

Notes: AIRCRAFT SHALL ESTABLISH TWO-WAY RADIO COMMUNICATION WITH HONG KONG RADAR WHEN SO PRESCRIBED BY THE RESPECTIVE ATC UNIT, AND MAINTAIN A LISTENING WATCH. SUCH AIRCRAFT SHALL MAKE POSITION REPORTS WHEN ENTERING AND LEAVING HONG KONG AIRSPACE, AND AT SUCH OTHER TIMES AND/OR POSITIONS AS DIRECTED BY HONG KONG ACC. PILOTS SHALL REPORT THE AIRCRAFT CALL SIGN, POSITION (WITH REFERENCE TO A REPORTING POINT), LEVEL (INCLUDING PASSING AND CLEARED LEVELS IF NOT MAINTAINING THE CLEARED LEVEL), TRANSPONDER

CODE AND OTHER PERTINENT INFORMATION (E.G. SPEED ASSIGNED BY LAST ATC, TRACKING IF IT DIFFERS FROM THE FLIGHT PLAN ROUTE) IN THE INITIAL CALL BEFORE ENTERING HONG KONG FIR. AIRCRAFT ENTERING HONG KONG FIR OUTSIDE CONTROLLED AIRSPACE, BUT WISHING TO JOIN CONTROLLED AIRSPACE, SHALL REQUEST CLEARANCE FROM HONG KONG ACC STATING FLIGHT LEVEL AND ESTIMATED TIME/POSITION OF JOINING, IN RELATION TO A REPORTING POINT. UNTIL SPECIFIC CLEARANCE IS RECEIVED FROM HONG KONG ACC, THE AIRCRAFT SHALL REMAIN CLEAR OF CONTROLLED AIRSPACE. WITHIN VHHK FIR ALL NON-COMPULSORY REPORTING POINTS ON CONVENTIONAL AND VICTOR ATS-ROUTES ARE COMPULSORY FOR NON-JET AIRCRAFT. RVSM AIRSPACE FL290-FL410 INCLUSIVE. INMARSAT: INMARSAT SECURITY NUMBER FOR HONG KONG ATC IS 441299 INMARSAT:

ZGZU Type: FIR

Notes: ABOVE 19700' (6000M) THERE ARE FOLLOWING AIRSPACE CLASSES: 19700' (6000M)- 65700'(20000M) CLASS A AIRSPACE 65700'(20000M)-UNLTD CLASS D AIRSPACE AIRSPACE CLASS B DESIGNATED AS FOLLOWING: THE AIRSPACE DESIGNATED ABOVE TRANSPORT AIRPORTS. FOR TRANSPORT AIRPORTS WITH THREE RUNWAYS (INCLUSIVE) OR MORE, THREE-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 10.8NM (20KM), 21.6NM (40KM), AND 32.4NM (60KM), ALTITUDES RESPECTIVELY FROM RUNWAY SURFACE TO 3000' (900M) ABOVE THE AIRPORT ELEVATION, FROM 3000' (900M) ABOVE THE AIRPORT ELEVATION TO 6000' (1800M) ABOVE THE AIRPORT ELEVATION, FROM 6000' (1800M) ABOVE THE AIRPORT ELEVATION TO QNE 19700' (6000M). FOR TRANSPORT AIRPORTS WITH TWO RUNWAYS, TWO-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 8.1NM (15KM) AND 16.2NM (30KM), ALTITUDES RESPECTIVELY FROM RUNWAY SURFACE TO 2000' (600M) ABOVE THE AIRPORT ELEVATION, FROM 2000' (600M) ABOVE THE AIRPORT ELEVATION TO 11900' (3600M) ABOVE THE AIRPORT ELEVATION, MAXIMUM TO THE LOWER LIMIT OF CLASS A AIRSPACE. FOR TRANSPORT AIRPORTS WITH ONE RUNWAY, ONE-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 6.5NM (12KM), ALTITUDE FROM RUNWAY SURFACE TO 2000' (600M) ABOVE THE AIRPORT ELEVATION. AIRSPACE CLASS C DESIGNATED AS FOLLOWING: THE AIRSPACE DESIGNATED ABOVE GENERAL AVIATION AIRPORTS WITH TOWER, ONE-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 2.7NM (5KM), ALTITUDE FROM RUNWAY SURFACE TO 2000' (600M) ABOVE THE AIRPORT ELEVATION. AIRSPACE CLASS D AND E DESIGNATED AS FOLLOWING: OUTSIDE OF CLASS A, B, C AND G AIRSPACE, IT CAN BE DESIGNATED AS CLASS D OR E AIRSPACE BASED ON OPERATION AND SAFETY REQUIREMENTS. AIRSPACE CLASS G DESIGNATED AS FOLLOWING: - THE AIRSPACE OUTSIDE OF CLASS B AND C AIRSPACE (CLASS W AIRSPACE EXCLUDED) AND BELOW 1000' (300M) AGL - AIRSPACE BELOW 19700' (6000M) MSL THAT DOES NOT AFFECT CIVIL AVIATION TRANSPORT FLIGHTS. AIRSPACE CLASS W DESIGNATED AS FOLLOWING: PART OF THE CLASS G AIRSPACE BELOW 400' (120M) AGL. RVSM AIRSPACE FL291-FL411 INCLUSIVE. ALL AIRCRAFT ENTERING OR EXITING PR OF CHINA SHALL CONTACT ATC 15-20 MINUTES PRIOR TO FIR ENTRY OR EXIT AND OBTAIN A CLEARANCE TO CROSS THE FIR BOUNDARIES.

ZHWH Type: FIR

Notes: ABOVE 19700' (6000M) THERE ARE FOLLOWING AIRSPACE CLASSES: 19700' (6000M)- 65700'(20000M) CLASS A AIRSPACE 65700'(20000M)-UNLTD CLASS D AIRSPACE AIRSPACE CLASS B DESIGNATED AS FOLLOWING: THE AIRSPACE DESIGNATED ABOVE TRANSPORT AIRPORTS. FOR TRANSPORT AIRPORTS WITH THREE RUNWAYS (INCLUSIVE) OR MORE, THREE-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 10.8NM (20KM), 21.6NM (40KM), AND 32.4NM (60KM), ALTITUDES RESPECTIVELY FROM RUNWAY SURFACE TO 3000' (900M) ABOVE THE AIRPORT ELEVATION, FROM 3000' (900M) ABOVE THE AIRPORT ELEVATION TO 6000' (1800M) ABOVE THE AIRPORT ELEVATION, FROM 6000' (1800M) ABOVE THE AIRPORT ELEVATION TO QNE 19700' (6000M). FOR TRANSPORT AIRPORTS WITH TWO RUNWAYS, TWO-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 8.1NM (15KM) AND 16.2NM (30KM), ALTITUDES RESPECTIVELY FROM RUNWAY SURFACE TO 2000' (600M) ABOVE THE AIRPORT ELEVATION, FROM 2000' (600M) ABOVE THE AIRPORT ELEVATION TO 11900' (3600M) ABOVE THE AIRPORT ELEVATION, MAXIMUM TO THE LOWER LIMIT OF CLASS A AIRSPACE. FOR TRANSPORT AIRPORTS WITH ONE RUNWAY, ONE-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 6.5NM (12KM), ALTITUDE FROM RUNWAY SURFACE TO 2000' (600M) ABOVE THE AIRPORT ELEVATION. AIRSPACE CLASS C DESIGNATED AS FOLLOWING: THE AIRSPACE DESIGNATED ABOVE GENERAL AVIATION AIRPORTS WITH TOWER, ONE-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 2.7NM (5KM), ALTITUDE FROM RUNWAY SURFACE TO 2000' (600M) ABOVE THE AIRPORT ELEVATION. AIRSPACE CLASS D AND E DESIGNATED AS FOLLOWING: OUTSIDE OF CLASS A, B, C AND G AIRSPACE, IT CAN BE DESIGNATED AS CLASS D OR E AIRSPACE BASED ON OPERATION AND SAFETY REQUIREMENTS. AIRSPACE CLASS G DESIGNATED AS FOLLOWING: - THE AIRSPACE OUTSIDE OF CLASS B AND C AIRSPACE (CLASS W AIRSPACE EXCLUDED) AND BELOW 1000' (300M) AGL - AIRSPACE BELOW 19700' (6000M) MSL THAT DOES NOT AFFECT CIVIL AVIATION TRANSPORT FLIGHTS. AIRSPACE CLASS W DESIGNATED AS FOLLOWING: PART OF THE CLASS G AIRSPACE BELOW 400' (120M) AGL. RVSM AIRSPACE FL291-FL411 INCLUSIVE.

ZLHW Type: FIR

Notes: ABOVE 19700' (6000M) THERE ARE FOLLOWING AIRSPACE CLASSES: 19700' (6000M)- 65700'(20000M) CLASS A AIRSPACE 65700'(20000M)-UNLTD CLASS D AIRSPACE AIRSPACE CLASS B DESIGNATED AS FOLLOWING: THE AIRSPACE DESIGNATED ABOVE TRANSPORT AIRPORTS. FOR TRANSPORT AIRPORTS WITH THREE RUNWAYS (INCLUSIVE) OR MORE, THREE-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 10.8NM (20KM), 21.6NM (40KM), AND 32.4NM (60KM), ALTITUDES RESPECTIVELY FROM RUNWAY SURFACE TO 3000' (900M) ABOVE THE AIRPORT ELEVATION, FROM 3000' (900M) ABOVE THE AIRPORT ELEVATION TO 6000' (1800M) ABOVE THE AIRPORT ELEVATION, FROM 6000' (1800M) ABOVE THE AIRPORT ELEVATION TO QNE 19700' (6000M). FOR TRANSPORT AIRPORTS WITH TWO RUNWAYS, TWO-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 8.1NM (15KM) AND 16.2NM (30KM), ALTITUDES RESPECTIVELY FROM RUNWAY SURFACE TO 2000' (600M) ABOVE THE AIRPORT ELEVATION, FROM 2000' (600M) ABOVE THE AIRPORT ELEVATION TO 11900' (3600M) ABOVE THE AIRPORT ELEVATION, MAXIMUM TO THE LOWER LIMIT OF CLASS A AIRSPACE. FOR TRANSPORT AIRPORTS WITH ONE RUNWAY, ONE-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 6.5NM (12KM), ALTITUDE FROM RUNWAY SURFACE TO 2000' (600M) ABOVE THE AIRPORT ELEVATION. AIRSPACE CLASS C DESIGNATED AS FOLLOWING: THE AIRSPACE DESIGNATED ABOVE GENERAL AVIATION AIRPORTS WITH TOWER, ONE-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 2.7NM (5KM), ALTITUDE FROM RUNWAY SURFACE TO 2000' (600M) ABOVE THE AIRPORT ELEVATION. AIRSPACE CLASS D AND E DESIGNATED AS FOLLOWING: OUTSIDE OF CLASS A, B, C AND G AIRSPACE, IT CAN BE DESIGNATED AS CLASS D OR E AIRSPACE BASED ON OPERATION AND SAFETY REQUIREMENTS. AIRSPACE CLASS G DESIGNATED AS FOLLOWING: - THE AIRSPACE OUTSIDE OF CLASS B AND C AIRSPACE (CLASS W AIRSPACE EXCLUDED) AND BELOW 1000' (300M) AGL - AIRSPACE BELOW 19700' (6000M) MSL THAT DOES NOT AFFECT CIVIL AVIATION TRANSPORT FLIGHTS. AIRSPACE CLASS W DESIGNATED AS FOLLOWING: PART OF THE CLASS G AIRSPACE BELOW 400' (120M) AGL. CPDLC: CPDLC SERVICES ARE AVAILABLE WITH LOGON ADDRESS OF ZLLL IN LANZHOU FIR. LOGON SHOULD BE ESTABLISHED 15 MINUTES PRIOR TO ENTERING THE DATA LINK AIRSPACE. CPDLC IS AVAILABLE FOR AWYS L888, Y1 AND Y2 CPDLC: INMARSAT: INMARSAT SECURITY NUMBER FOR LANZHOU ACC IS 441205 OR 4

ZSHA Type: FIR

Notes: RVSM AIRSPACE FL291-FL411 INCLUSIVE. ALL AIRCRAFT ENTERING OR EXITING PR OF CHINA SHALL CONTACT ATC 15-20 MINUTES PRIOR TO FIR ENTRY OR EXIT AND OBTAIN A CLEARANCE TO CROSS THE FIR BOUNDARIES. ABOVE 19700' (6000M) THERE ARE FOLLOWING AIRSPACE CLASSES: 19700' (6000M)- 65700'(20000M) CLASS A AIRSPACE 65700'(20000M)-UNLTD CLASS D AIRSPACE AIRSPACE CLASS B DESIGNATED AS FOLLOWING: THE AIRSPACE DESIGNATED ABOVE TRANSPORT AIRPORTS. FOR

TRANSPORT AIRPORTS WITH THREE RUNWAYS (INCLUSIVE) OR MORE, THREE-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 10.8NM (20KM), 21.6NM (40KM), AND 32.4NM (60KM), ALTITUDES RESPECTIVELY FROM RUNWAY SURFACE TO 3000' (900M) ABOVE THE AIRPORT ELEVATION, FROM 3000' (900M) ABOVE THE AIRPORT ELEVATION TO 6000' (1800M) ABOVE THE AIRPORT ELEVATION, FROM 6000' (1800M) ABOVE THE AIRPORT ELEVATION TO QNE 19700' (6000M). FOR TRANSPORT AIRPORTS WITH TWO RUNWAYS, TWO-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 8.1NM (15KM) AND 16.2NM (30KM), ALTITUDES RESPECTIVELY FROM RUNWAY SURFACE TO 2000' (600M) ABOVE THE AIRPORT ELEVATION, FROM 2000' (600M) ABOVE THE AIRPORT ELEVATION TO 11900' (3600M) ABOVE THE AIRPORT ELEVATION, MAXIMUM TO THE LOWER LIMIT OF CLASS A AIRSPACE. FOR TRANSPORT AIRPORTS WITH ONE RUNWAY, ONE-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 6.5NM (12KM), ALTITUDE FROM RUNWAY SURFACE TO 2000' (600M) ABOVE THE AIRPORT ELEVATION. AIRSPACE CLASS C DESIGNATED AS FOLLOWING: THE AIRSPACE DESIGNATED ABOVE GENERAL AVIATION AIRPORTS WITH TOWER, ONE-TIERED STRUCTURE IS USUALLY ESTABLISHED WITH RADIUS OF 2.7NM (5KM), ALTITUDE FROM RUNWAY SURFACE TO 2000' (600M) ABOVE THE AIRPORT ELEVATION. AIRSPACE CLASS D AND E DESIGNATED AS FOLLOWING: OUTSIDE OF CLASS A, B, C AND G AIRSPACE, IT CAN BE DESIGNATED AS CLASS D OR E AIRSPACE BASED ON OPERATION AND SAFETY REQUIREMENTS. AIRSPACE CLASS G DESIGNATED AS FOLLOWING: - THE AIRSPACE OUTSIDE OF CLASS B AND C AIRSPACE (CLASS W AIRSPACE EXCLUDED) AND BELOW 1000' (300M) AGL - AIRSPACE BELOW 19700' (6000M) MSL THAT DOES NOT AFFECT CIVIL AVIATION TRANSPORT FLIGHTS. AIRSPACE CLASS W DESIGNATED AS FOLLOWING: PART OF THE CLASS G AIRSPACE BELOW 400' (120M) AGL.

16 Type: Special Use Airspace

Notes: NO FLIGHT IS PERMITTED BELOW 4000 FEET IN R16 UNLESS PERMISSION FROM AOC HAS BEEN OBTAINED. HELICOPTERS ON MEDICAL SERVICES MAY OPERATE IN THIS AREA WITH PERMISSION FROM SUNGSHAN TOWER. IFR AIRCRAFT APPROACHING TAIPEI/SUNGSHAN AIRPORT ARE RESTRICTED TO AN ALTITUDE WHILE CROSSING (APU) VOR AND (LK) LOCATOR NOT LOWER THAN 5000 FEET.

30 Type: Special Use Airspace

Notes: IF PRIOR COORDINATION WITH TAFU PROVING GROUND HAS BEEN COMPLETED, CIVIL AIRCRAFT OPERATIONS IN R30 MAY BE APPROVED BY ATC DURING ACTIVE HOURS.

41 Type: Special Use Airspace

Notes: TAITUNG TMA EXCLUDES RC(R)-41 AND RC(R)-42.

48 Type: Special Use Airspace

Notes: NO AIRCRAFT MAY ENTER THIS AREA WITHOUT PRIOR PERMISSION FROM APPROPRIATE AUTHORITY.

BEIDOU EA* Type: Special Use Airspace

Notes: IN THOSE PARTS WITH HIGH TERRAIN, THE UPPER LIMIT IS 500 FT AGL.

BULAO HOT* Type: Special Use Airspace

Notes: IN THOSE PARTS WITH HIGH TERRAIN, THE UPPER LIMIT IS 500 FT AGL.

DAHAN RIV* Type: Special Use Airspace

Notes: IN THOSE PARTS WITH HIGH TERRAIN, THE UPPER LIMIT IS 500 FT AGL.

DALI Type: Special Use Airspace

Notes: IN THOSE PARTS WITH HIGH TERRAIN, THE UPPER LIMIT IS 500 FT AGL.

IN THOSE PARTS WITH HIGH TERRAIN, THE UPPER LIMIT IS 500 FT AGL.

IN THOSE PARTS WITH HIGH TERRAIN, THE UPPER LIMIT IS 500 FT AGL. FOR ENTERING AND EXITING AREA B. OTHER ACT PROHIBITED.

GAOSHU Type: Special Use Airspace

Notes: IN THOSE PARTS WITH HIGH TERRAIN, THE UPPER LIMIT IS 500 FT AGL.

HUALIEN M* Type: Special Use Airspace

Notes: FOR ENTERING AND EXITING ULM HUATUNG AIRSPACE. OTHER ACT PROHIBITED.

HUATUNG Type: Special Use Airspace

Notes: IN THOSE PARTS WITH HIGH TERRAIN, THE UPPER LIMIT IS 1000 FT AGL.

IN THOSE PARTS WITH HIGH TERRAIN, THE UPPER LIMIT IS 1000 FT AGL.

LUODONG Type: Special Use Airspace

Notes: IN THOSE PARTS WITH HIGH TERRAIN, THE UPPER LIMIT IS 500 FT AGL.

MAOLUO RI* Type: Special Use Airspace

Notes: FOR ENTERING AND EXITING BEIDOU EAST. OTHER ACT PROHIBITED. IN THOSE PARTS WITH HIGH TERRAIN, THE UPPER LIMIT IS 500 FT AGL.

IN THOSE PARTS WITH HIGH TERRAIN, THE UPPER LIMIT IS 500 FT AGL. FOR ENTERING AND EXITING BEIDOU EAST. OTHER ACT PROHIBITED.

MIAOLI Type: Special Use Airspace

Notes: IN THOSE PARTS WITH HIGH TERRAIN, THE UPPER LIMIT IS 500 FT AGL.

NANHUA Type: Special Use Airspace

Notes: IN THOSE PARTS WITH HIGH TERRAIN, THE UPPER LIMIT IS 500 FT AGL.

NINGBO Type: Special Use Airspace

Notes: 9900' (3000M) QNH OR BELOW: BY ATC

RUEIFANG Type: Special Use Airspace

Notes: IN THOSE PARTS WITH HIGH TERRAIN, THE UPPER LIMIT IS 500 FT AGL.

SAIJIA Type: Special Use Airspace

Notes: IN THOSE PARTS WITH HIGH TERRAIN, THE UPPER LIMIT IS 500 FT AGL.

SOUTH LAN* Type: Special Use Airspace

Notes: FOR LANDING ONLY

CHANGSHA APP CTL ZGHAAP02 Type: Terminal Area

Notes: CONTACT ZGHAAP01 WHEN ZGHAAP02 U/S

CHANGSHA APP CTL ZGHAAP03N Type: Terminal Area

Notes: CONTACT ZGHAAP01 WHEN ZGHAAP03 U/S RWY36L/36R IN USE AT ZGHA

CHANGSHA APP CTL ZGHAAP03S Type: Terminal Area

Notes: RWY18L/18R IN USE AT ZGHA CONTACT ZGHAAP01 WHEN ZGHAAP03 U/S

FUZHOU APP CTL AREA AP03 Type: Terminal Area

Notes: CONTACT ZSFZAP01 WHEN ZSFZAP03 U/S

GUANGZHOU APP CTL ZGGGAP01N Type: Terminal Area

Notes: RWY01/02L/02R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP01S Type: Terminal Area

Notes: RWY19/20L/20R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP02N Type: Terminal Area

Notes: RWY01/02L/02R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP02S Type: Terminal Area

Notes: RWY19/20L/20R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP03N1 Type: Terminal Area

Notes: RWY01/02L/02R IN USE AT ZGGG EXCLUDE ZGGGAP02

GUANGZHOU APP CTL ZGGGAP03N2 Type: Terminal Area

Notes: RWY01/02L/02R IN USE AT ZGGG EXCLUDE ZGGGAP02

GUANGZHOU APP CTL ZGGGAP03N3 Type: Terminal Area

Notes: RWY01/02L/02R IN USE AT ZGGG EXCLUDE ZGGGAP02

GUANGZHOU APP CTL ZGGGAP03N4 Type: Terminal Area

Notes: RWY01/02L/02R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP03N5 Type: Terminal Area

Notes: RWY01/02L/02R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP03N6 Type: Terminal Area

Notes: RWY01/02L/02R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP03S1 Type: Terminal Area

Notes: RWY19/20L/20R IN USE AT ZGGG EXCLUDE ZGGGAP01 AND ZGGGAP06

GUANGZHOU APP CTL ZGGGAP03S2 Type: Terminal Area

Notes: EXCLUDE ZGGGAP01 AND ZGGGAP06 RWY19/20L/20R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP03S3 Type: Terminal Area

Notes: RWY19/20L/20R IN USE AT ZGGG EXCLUDE ZGGGAP01 AND ZGGG06

GUANGZHOU APP CTL ZGGGAP03S4 Type: Terminal Area

Notes: EXCLUDE ZGGGAP02 RWY19/20L/20R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP03S5 Type: Terminal Area

Notes: RWY19/20L/20R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP03S6 Type: Terminal Area

Notes: RWY19/20L/20R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP03S7 Type: Terminal Area

Notes: RWY19/20L/20R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP04N1 Type: Terminal Area

Notes: EXCLUDE ZHUHAI TMA RWY01/02L/02R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP04N2 Type: Terminal Area

Notes: RWY01/02L/02R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP04S1 Type: Terminal Area

Notes: RWY19/20L/20R IN USE AT ZGGG EXCLUDE ZHUHAI TMA

GUANGZHOU APP CTL ZGGGAP04S2 Type: Terminal Area

Notes: RWY19/20L/20R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP05N1 Type: Terminal Area

Notes: RWY01/02L/02R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP05N2 Type: Terminal Area

Notes: RWY01/02L/02R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP05N3 Type: Terminal Area

Notes: RWY01/02L/02R IN USE AT ZGGG EXCLUDE ZGGGAP01, ZGGGAP04, ZGGGAP06 AND ZHUHAI TMA

GUANGZHOU APP CTL ZGGGAP05N4 Type: Terminal Area

Notes: RWY01/02L/02R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP05S1 Type: Terminal Area

Notes: RWY19/20L/20R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP05S2 Type: Terminal Area

Notes: RWY19/20L/20R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP05S3 Type: Terminal Area

Notes: RWY19/20L/20R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP05S4 Type: Terminal Area

Notes: EXCLUDE ZGGGAP04 AND ZHUHAI TMA RWY19/20L/20R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP05S5 Type: Terminal Area

Notes: RWY19/20L/20R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP06N Type: Terminal Area

Notes: RWY01/02L/02R IN USE AT ZGGG

GUANGZHOU APP CTL ZGGGAP06S Type: Terminal Area

Notes: RWY19/20L/20R IN USE AT ZGGG

HANGZHOU APP CTL ZSHCAP01 Type: Terminal Area

Notes: CONTACT ZSHCAP04 WHEN ZSHCAP01 U/S EXCLUDE ZSHCAP02/04

HANGZHOU APP CTL ZSHCAP02 Type: Terminal Area

Notes: CONTACT ZSHCAP04 WHEN ZSHCAP02 U/S

HANGZHOU APP CTL ZSHCAP03 Type: Terminal Area

Notes: EXCLUDE ZSHCAP02/06/07

HANGZHOU APP CTL ZSHCAP04 Type: Terminal Area

Notes: CONTACT ZSHCAP03 WHEN ZSHCAP04 U/S

HANGZHOU APP CTL ZSHCAP05 Type: Terminal Area

Notes: CONTACT ZSHCAP03 WHEN ZSHCAP05 U/S EXCLUDE ZSHCAP06/08 AND NINGBO APP

HANGZHOU APP CTL ZSHCAP06 Type: Terminal Area

Notes: CONTACT ZSHCAP02 WHEN ZSHCAP06 U/S

HANGZHOU APP CTL ZSHCAP07 Type: Terminal Area

Notes: CONTACT ZSHCAP03 WHEN ZSHCAP07 U/S

HANGZHOU APP CTL ZSHCAP08 Type: Terminal Area

Notes: CONTACT ZSHCAP04 WHEN ZSHCAP08 U/S

HEFEI APP CTL AREA ZSOFAP02 Type: Terminal Area

Notes: CONTACT ZSOFAP03 WHEN ZSOFAP02 U/S

CONTACT ZSOFAP03 WHEN ZSOFAP02 U/S

HEFEI APP CTL AREA ZSOFAP03 Type: Terminal Area

Notes: CONTACT ZSOFAP01 WHEN ZSOFAP03 U/S

CONTACT ZSOFAP01 WHEN ZSOFAP03 U/S

HEFEI APP CTL AREA ZSOFAP04 Type: Terminal Area

Notes: CONTACT ZSOFAP03 WHEN ZSOFAP04 U/S.

CONTACT ZSOFAP03 WHEN ZSOFAP04 U/S.

JINJIANG APP CONTROL AREA Type: Terminal Area

Notes: CONTACT JINJIANG TWR WHEN JINJIANG APP U/S.

NANJING APP CTL AREA ZSNJ AP04 Type: Terminal Area

Notes: CONTACT ZSNJAP01 WHEN ZSNJAP04 U/S

CONTACT ZSNJAP01 WHEN ZSNJAP04 U/S

NINGBO APP CTL ZSNBAP01N Type: Terminal Area

Notes: RWY31 IN USE AT ZSNB

NINGBO APP CTL ZSNBAP01S Type: Terminal Area

Notes: RWY13 IN USE AT ZSNB

NINGBO APP CTL ZSNBAP02N Type: Terminal Area

Notes: RWY31 IN USE AT ZSNB

NINGBO APP CTL ZSNBAP02S Type: Terminal Area

Notes: RWY13 IN USE AT ZSNB

SHANGHAI APP CTL ZSSSAP01 Type: Terminal Area

Notes: EXCLUDE ZSSSAP05/07

SHANGHAI APP CTL ZSSSAP02N Type: Terminal Area

Notes: RWY34L/34R/35L/35R IN USE AT ZSPD

SHANGHAI APP CTL ZSSSAP02S Type: Terminal Area

Notes: RWY16L/16R/17L/17R IN USE AT ZSPD

SHANGHAI APP CTL ZSSSAP03 Type: Terminal Area

Notes: EXCLUDE ZSSSAP02/04/06/07

SHANGHAI APP CTL ZSSSAP04N Type: Terminal Area

Notes: RWY34L/34R/35L/35R IN USE AT ZSPD

SHANGHAI APP CTL ZSSSAP04S Type: Terminal Area

Notes: RWY16L/16R/17L/17R IN USE AT ZSPD

SHANGHAI APP CTL ZSSSAP06N Type: Terminal Area

Notes: RWY34L/34R/35L/35R IN USE AT ZSPD

SHANGHAI APP CTL ZSSSAP06S Type: Terminal Area

Notes: RWY16L/16R/17L/17R IN USE AT ZSPD

SHANGHAI APP CTL ZSSSAP08 Type: Terminal Area

Notes: EXCLUDE ZSSSAP02/04/06

SHANGHAI APP CTL ZSSSAP09 Type: Terminal Area

Notes: EXCLUDE NANTONG TWR AND WUXI APP

SHANGHAI APP CTL ZSSSAP10 Type: Terminal Area

Notes: EXCLUDE ZSSSAP02/04/06

SHANGHAI APP CTL ZSSSAP11 Type: Terminal Area

Notes: EXCLUDE WUXI APP

TAITUNG TMA Type: Terminal Area

Notes: EXCLUDING RC(R)-41

WENZHOU APP CTL AREA ZSWZAP01 Type: Terminal Area

Notes: EXCLUDE ZSWZAP02

WENZHOU APP CTL AREA ZSWZAP03 Type: Terminal Area

Notes: CONTACT ZSWZAP01 WHEN ZSWZAP03 U/S

WUHAN APP CTL ZHHH AP01 Type: Terminal Area

Notes: EXCLUDE ZHHHAP03 CONTACT ZHHHAP02 WHEN ZHHHAP01 U/S

WUHAN APP CTL ZHHH AP02 Type: Terminal Area

Notes: EXCLUDE ZHHHAP03

WUHAN APP CTL ZHHH AP03 Type: Terminal Area

Notes: CONTACT ZHHHAP01 WHEN ZHHHAP03 U/S RWY04L/04R IN USE AT ZHHH

CONTACT ZHHHAP02 WHEN ZHHHAP03 U/S RWY22L/22R IN USE AT ZHHH

WUHAN APP CTL ZHHH AP04 Type: Terminal Area

Notes: CONTACT ZHHHAP02 WHEN ZHHHAP04 U/S EXCLUDE ZHHHAP03

WUXI APPROACH CONTROL AREA Type: Terminal Area

Notes: CONTACT WUXI TOWER WHEN WUXI APP U/S

XIAMEN APP CTL AREA ZSAMAP01 Type: Terminal Area

Notes: EXCLUDE JINJIANG APP CONTROL AREA

ZHUHAI TMA ZGJDTM01N1 Type: Terminal Area

Notes: CONTACT APP04 WHEN APP01 U/S RWY33/34 IN USE AT ZGSZ

ZHUHAI TMA ZGJDTM01N2 Type: Terminal Area

Notes: CONTACT APP04 WHEN APP01 U/S RWY33/34 IN USE AT ZGSZ

ZHUHAI TMA ZGJDTM01S1 Type: Terminal Area

Notes: RWY15/16 IN USE AT ZGSZ CONTACT APP04 WHEN APP01 U/S

ZHUHAI TMA ZGJDTM01S2 Type: Terminal Area

Notes: CONTACT APP04 WHEN APP01 U/S RWY15/16 IN USE AT ZGSZ

ZHUHAI TMA ZGJDTM03N1 Type: Terminal Area

Notes: CONTACT APP02 WHEN APP03 U/S RWY33/34 IN USE AT ZGSZ

ZHUHAI TMA ZGJDTM03N2 Type: Terminal Area

Notes: RWY33/34 IN USE AT ZGSZ CONTACT APP02 WHEN APP03 U/S

ZHUHAI TMA ZGJDTM03S Type: Terminal Area

Notes: RWY15/16 IN USE AT ZGSZ CONTACT APP02 WHEN APP03 U/S

ZHUHAI TMA ZGJDTM04N1 Type: Terminal Area

Notes: RWY33/34 IN USE AT ZGSZ CONTACT APP02 WHEN APP04 U/S

ZHUHAI TMA ZGJDTM04N2 Type: Terminal Area

Notes: RWY33/34 IN USE AT ZGSZ CONTACT APP02 WHEN APP04 U/S

ZHUHAI TMA ZGJDTM04S1 Type: Terminal Area

Notes: RWY15/16 IN USE AT ZGSZ

ZHUHAI TMA ZGJDTM04S2 Type: Terminal Area

Notes: RWY15/16 IN USE AT ZGSZ CONTACT APP02 WHEN APP04 U/S

ZHUHAI TMA ZGJDTM05N Type: Terminal Area

Notes: RWY33/34 IN USE AT ZGSZ CONTACT APP03 WHEN APP05 U/S

ZHUHAI TMA ZGJDTM05S Type: Terminal Area

Notes: CONTACT APP03 WHEN APP05 U/S RWY15/16 IN USE AT ZGSZ

LIG Type: VOR

Notes: TRAFFIC TO HONG KONG OR BEYOND REPORT ETO TAMOT OR SIERA INT TO GUANGZHOU ATC.

PLT Type: VOR

Notes: TRAFFIC TO HONG KONG OR BEYOND REPORT ETO TAMOT OR SIERA INT TO GUANGZHOU ATC.

BEKOL Type: Waypoint

Notes: CONTACT NEXT ATC UNIT AT LEAST 3 MINUTES PRIOR TO BEKOL.

DOTMI Type: Waypoint

Notes: CONTACT HONG KONG RADAR ON 121.300 AT LEAST 10NM PRIOR TO DOTMI.

ELAGO Type: Waypoint

Notes: AIRCRAFT FROM ZSHC IN DIRECTION OF ZSQD OR RJTG FIR AND VICE VERSA ROUTE W36 AND CROSS ELAGO AT FL197/FL6000M OR ABOVE. EXPECT REROUTING VIA W-37 BY ATC.

ELATO Type: Waypoint

Notes: CONTACT HONG KONG RADAR ON 121.300 AT LEAST 10NM PRIOR TO ELATO.

LELIM Type: Waypoint

Notes: CONTACT HONG KONG RADAR ON 121.300 AT LEAST 10NM PRIOR TO LELIM.

ROMEO Type: Waypoint

Notes: CONTACT HONG KONG RADAR ON 123.950 AT LEAST 3 MINUTES PRIOR TO ROMEO.

SIERA Type: Waypoint

Notes: CONTACT HONG KONG RADAR ON 127.550 AT LEAST 3 MINUTES PRIOR TO SIERA.

TAMOT Type: Waypoint

Notes: CONTACT HONG KONG RADAR ON 127.100 AT LEAST 10 NM PRIOR TO TAMOT.

Regional Notes

Page 1 Strip Charts

VLVT Type: FIR

REGIONAL COMMUNICATIONS

Flights to or from Vientiane crossing Thailand Territory must submit flight plan 24 hours in advance.

ZGZU Type: FIR

ALTIMETER SETTING Use QNH (where transition altitude established) for Take-off and climb until passing transition altitude. Use QFE (where transition height established) for Take-off and climb until passing transition height. Use QFE (where no transition altitude or transition height established) for Take-off and climb until passing 600m/1970'. Descent and landing as soon as passing transition level where established or after crossing ACA boundary or as instructed by ATC.

CRUISING LEVEL PROCEDURES

CRUISING LEVELS CHINA ATC will issue the Flight Level clearance in meters. Pilots shall use the PR of China RVSM FLAS Diagram to determine the corresponding Flight Level in feet. The aircraft shall be flown using the Flight Level in FEET. Pilots should be aware that due to the rounding differences, the metric readout of the onboard avionics will not necessarily correspond to the cleared Flight Level in meters however the difference will never be more than 30 meters.

ZJSA Type: FIR

ALTIMETER SETTING Use QNH (where transition altitude established) for Take-off and climb until passing transition altitude. Use QFE (where transition height established) for Take-off and climb until passing transition height. Use QFE (where no transition altitude or transition height established) for Take-off and climb until passing 600m/1970'. Descent and landing as soon as passing transition level where established or after crossing ACA boundary or as instructed by ATC.

CRUISING LEVEL PROCEDURES

CRUISING LEVELS CHINA ATC will issue the Flight Level clearance in meters. Pilots shall use the PR of China RVSM FLAS Diagram to determine the corresponding Flight Level in feet. The aircraft shall be flown using the Flight Level in FEET. Pilots should be aware that due to the rounding differences, the metric readout of the onboard avionics will not necessarily correspond to the cleared Flight Level in meters however the difference will never be more than 30 meters.

ZPKM Type: FIR

ALTIMETER SETTING Use QNH (where transition altitude established) for Take-off and climb until passing transition altitude. Use QFE (where transition height established) for Take-off and climb until passing transition height. Use QFE (where no transition altitude or transition height established) for Take-off and climb until passing 600m/1970'. Descent and landing as soon as passing transition level where established or after crossing ACA boundary or as instructed by ATC.

CRUISING LEVEL PROCEDURES

CRUISING LEVELS CHINA ATC will issue the Flight Level clearance in meters. Pilots shall use the PR of China RVSM FLAS Diagram to determine the corresponding Flight Level in feet. The aircraft shall be flown using the Flight Level in FEET. Pilots should be aware that due to the rounding differences, the metric readout of the onboard avionics will not necessarily correspond to the cleared Flight Level in meters however the difference will never be more than 30 meters.

Page 2 Strip Charts

RJJJ Type: FIR

JDA AREAS, JDA CORRIDORS, AND JAPAN TRAINING AND TESTING AREAS

JDA AREAS Aircraft flying for purposes other than training/testing should not enter this airspace without prior coordination with Controlling Unit. Aircraft entering airspace inevitably for emergencies or avoidance of thunderclouds etc., should make a report to Controlling Unit on 121.5 MHz or 243.0 MHz (emergencies) or on the published frequency of the Controlling Unit (all other situations).

JDA CORRIDORS Aircraft should not penetrate corridors without permission by ACC controlling corridors.

JAPAN TRAINING AND TESTING AREAS EXCLUDES: Airways, ATS routes, SIDs, STARs, instrument approach routes, radar vectoring routes and holding areas and their protective airspace.

ZGZU Type: FIR

ALTIMETER SETTING Use QNH (where transition altitude established) for Take-off and climb until passing transition altitude. Use QFE (where transition height established) for Take-off and climb until passing transition height. Use QFE (where no transition altitude or transition height established) for Take-off and climb until passing 600m/1970'. Descent and landing as soon as passing transition level where established or after crossing ACA boundary or as instructed by ATC.

CRUISING LEVEL PROCEDURES

CRUISING LEVELS CHINA ATC will issue the Flight Level clearance in meters. Pilots shall use the PR of China RVSM FLAS Diagram to determine the corresponding Flight Level in feet. The aircraft shall be flown using the Flight Level in FEET. Pilots should be aware that due to the rounding differences, the metric readout of the onboard avionics will not necessarily correspond to the cleared Flight Level in meters however the difference will never be more than 30 meters.

ZHWH Type: FIR

ALTIMETER SETTING Use QNH (where transition altitude established) for Take-off and climb until passing transition altitude. Use QFE (where transition height established) for Take-off and climb until passing transition height. Use QFE (where no transition altitude or transition height established) for Take-off and climb until passing 600m/1970'. Descent and landing as soon as passing transition level where established or after crossing ACA boundary or as instructed by ATC.

CRUISING LEVEL PROCEDURES

CRUISING LEVELS CHINA ATC will issue the Flight Level clearance in meters. Pilots shall use the PR of China RVSM FLAS Diagram to determine the corresponding Flight Level in feet. The aircraft shall be flown using the Flight Level in FEET. Pilots should be aware that due to the rounding differences, the metric readout of the onboard avionics will not necessarily correspond to the cleared Flight Level in meters however the difference will never be more than 30 meters.

ZLHW Type: FIR

ALTIMETER SETTING Use QNH (where transition altitude established) for Take-off and climb until passing transition altitude. Use QFE (where transition height established) for Take-off and climb until passing transition height. Use QFE (where no transition altitude or transition height established) for Take-off and climb until passing 600m/1970'. Descent and landing as soon as passing transition level where established or after crossing ACA boundary or as instructed by ATC.

CRUISING LEVEL PROCEDURES

CRUISING LEVELS CHINA ATC will issue the Flight Level clearance in meters. Pilots shall use the PR of China RVSM FLAS Diagram to determine the corresponding Flight Level in feet. The aircraft shall be flown using the Flight Level in FEET. Pilots should be aware that due to the rounding differences, the metric readout of the onboard avionics will not necessarily correspond to the cleared Flight Level in meters however the difference will never be more than 30 meters.

ZSHA Type: FIR

ALTIMETER SETTING Use QNH (where transition altitude established) for Take-off and climb until passing transition altitude. Use QFE (where transition height established) for Take-off and climb until passing transition height. Use QFE (where no transition altitude or transition height established) for Take-off and climb until passing 600m/1970'. Descent and landing as soon as passing transition level where established or after crossing ACA boundary or as instructed by ATC.

CRUISING LEVEL PROCEDURES

CRUISING LEVELS CHINA ATC will issue the Flight Level clearance in meters. Pilots shall use the PR of China RVSM FLAS Diagram to determine the corresponding Flight Level in feet. The aircraft shall be flown using the Flight Level in FEET. Pilots should be aware that due to the rounding differences, the metric readout of the onboard avionics will not necessarily correspond to the cleared Flight Level in meters however the difference will never be more than 30 meters.

Reference Notes

Page 1 Strip Charts

VLVT Type: FIR

MACH NUMBER TECHNIQUE For information about routes and/or areas affected, see Air Traffic Control Tab.

ATS ROUTE RESTRICTION NOTES

ATS Route Restriction Notes for information regarding flight planning purposes see Enroute Tab.

CRUISING LEVELS

Cruising levels for flight level transition procedures refer to ENROUTE CH-201 and consecutive pages.

CRUISING LEVEL PROCEDURES

CRUISING LEVELS: For Flight Level Transition Procedures refer to Enroute section.

RVSM PROCEDURES

REDUCED VERTICAL SEPARATION MINIMUMS (RVSM) For procedures and equipment requirements see Air Traffic Control Tab.

REQUIRED NAVIGATION PERFORMANCE (RNP)

For procedures and equipment requirements, see Air Traffic Control pages and/or Air Traffic Control State pages for detailed information.

VTBB Type: FIR

TRANSPONDER SETTING (Secondary Surveillance Radar-SSR) For Beacon Code procedures see Enroute Tab.

ADIZ REQUIREMENTS

FOR ADIZ REQUIREMENTS See Enroute Tab.

ADIZ REQUIREMENTS

THAILAND ADIZ REQUIREMENTS see Enroute section.

ATS ROUTE RESTRICTION NOTES

ATS Route Restriction Notes for information regarding flight planning purposes see Enroute Tab.

MACH NUMBER TECHNIQUE For information about routes and/or areas affected, see Air Traffic Control Tab.

RVSM PROCEDURES

REDUCED VERTICAL SEPARATION MINIMUMS (RVSM) For procedures and equipment requirements see Air Traffic Control Tab.

REQUIRED NAVIGATION PERFORMANCE (RNP)

For procedures and equipment requirements, see Air Traffic Control pages and/or Air Traffic Control State pages for detailed information.

VVHM Type: FIR

TRANSPONDER SETTING (Secondary Surveillance Radar-SSR) For Beacon Code procedures see Enroute Tab.

ATS ROUTE RESTRICTION NOTES

ATS Route Restriction Notes for information regarding flight planning purposes see Enroute Tab.

MACH NUMBER TECHNIQUE For information about routes and/or areas affected, see Air Traffic Control Tab.

RVSM PROCEDURES

REDUCED VERTICAL SEPARATION MINIMUMS (RVSM) For procedures and equipment requirements see Air Traffic Control Tab.

REQUIRED NAVIGATION PERFORMANCE (RNP)

For procedures and equipment requirements, see Air Traffic Control pages and/or Air Traffic Control State pages for detailed information.

VVHN Type: FIR

CRUISING LEVEL PROCEDURES

CRUISING LEVELS: For Flight Level Transition Procedures refer to Enroute section.

ATS ROUTE RESTRICTION NOTES

ATS Route Restriction Notes for information regarding flight planning purposes see Enroute Tab.

CRUISING LEVELS

Crusing levels for flight level transition procedures refer to ENROUTE CH-201 and consecutive pages.

MACH NUMBER TECHNIQUE For information about routes and/or areas affected, see Air Traffic Control Tab.

RVSM PROCEDURES

REDUCED VERTICAL SEPARATION MINIMUMS (RVSM) For procedures and equipment requirements see Air Traffic Control Tab.

REQUIRED NAVIGATION PERFORMANCE (RNP)

For procedures and equipment requirements, see Air Traffic Control pages and/or Air Traffic Control State pages for detailed information.

VYYF Type: FIR

RVSM PROCEDURES

REDUCED VERTICAL SEPARATION MINIMUMS (RVSM) For procedures and equipment requirements see Air Traffic Control Tab.

REQUIRED NAVIGATION PERFORMANCE (RNP)

For procedures and equipment requirements, see Air Traffic Control pages and/or Air Traffic Control State pages for detailed information.

MACH NUMBER TECHNIQUE For information about routes and/or areas affected, see Air Traffic Control Tab.

TRANSPONDER SETTING (Secondary Surveillance Radar-SSR) For Beacon Code procedures see Enroute Tab.

ADIZ REQUIREMENTS

FOR ADIZ REQUIREMENTS See Enroute Tab.

ATS ROUTE RESTRICTIONS: For information regarding flight planning purposes refer to Enroute section.

MACH NUMBER TECHNIQUE: For information about routes and/or areas affected, see AIR TRAFFIC CONTROL section.

ADIZ REQUIREMENTS

MYANMAR ADIZ REQUIREMENTS see Enroute section.

CRUISING LEVEL PROCEDURES

CRUISING LEVELS: For Flight Level Transition Procedures refer to Enroute section.

ATS ROUTE RESTRICTION NOTES

ATS Route Restriction Notes for information regarding flight planning purposes see Enroute Tab.

CRUISING LEVELS

Crusing levels for flight level transition procedures refer to ENROUTE CH-201 and consecutive pages.

ZGZU Type: FIR

ATS ROUTE RESTRICTIONS: For information regarding flight planning purposes refer to Enroute section.

TRANSPONDER SETTING (Secondary Surveillance Radar-SSR): For Beacon Code procedures see ENROUTE section.

CRUISING LEVEL PROCEDURES

CRUISING LEVELS: For Flight Level Transition Procedures refer to Enroute section.

REQUIRED NAVIGATION PERFORMANCE (RNP)

For procedures and equipment requirements, see Air Traffic Control pages and/or Air Traffic Control State pages for detailed information.

RVSM PROCEDURES

REDUCED VERTICAL SEPARATION MINIMUMS (FL290 - FL410) For RVSM procedures and equipment requirements see AIR TRAFFIC CONTROL pages series.

ZJSA Type: FIR

CRUISING LEVEL PROCEDURES

CRUISING LEVELS: For Flight Level Transition Procedures refer to Enroute section.

RVSM PROCEDURES

REDUCED VERTICAL SEPARATION MINIMUMS (FL290 - FL410) For RVSM procedures and equipment requirements see AIR TRAFFIC CONTROL pages series.

ATS ROUTE RESTRICTIONS: For information regarding flight planning purposes refer to Enroute section.

TRANSPONDER SETTING (Secondary Surveillance Radar-SSR): For Beacon Code procedures see ENROUTE section.

ZPKM Type: FIR

ATS ROUTE RESTRICTIONS: For information regarding flight planning purposes refer to Enroute section.

TRANSPONDER SETTING (Secondary Surveillance Radar-SSR): For Beacon Code procedures see ENROUTE section.

CRUISING LEVEL PROCEDURES

CRUISING LEVELS: For Flight Level Transition Procedures refer to Enroute section.

ATS ROUTE RESTRICTION NOTES

ATS Route Restriction Notes for information regarding flight planning purposes see Enroute Tab.

CRUISING LEVELS

Cruising levels for flight level transition procedures refer to ENROUTE CH-201 and consecutive pages.

MACH NUMBER TECHNIQUE For information about routes and/or areas affected, see Air Traffic Control Tab.

RVSM PROCEDURES

REDUCED VERTICAL SEPARATION MINIMUMS (RVSM) For procedures and equipment requirements see Air Traffic Control Tab.

REQUIRED NAVIGATION PERFORMANCE (RNP)

For procedures and equipment requirements, see Air Traffic Control pages and/or Air Traffic Control State pages for detailed information.

RVSM PROCEDURES

REDUCED VERTICAL SEPARATION MINIMUMS (FL290 - FL410) For RVSM procedures and equipment requirements see AIR TRAFFIC CONTROL pages series.

Page 2 Strip Charts**RCAA Type: FIR**

TRANSPONDER SETTING (Secondary Surveillance Radar-SSR) For Beacon Code procedures see Enroute Tab.

ADIZ REQUIREMENTS

FOR ADIZ REQUIREMENTS See Enroute Tab.

CRUISING LEVEL PROCEDURES

CRUISING LEVELS: For Flight Level Transition Procedures refer to Enroute section.

REQUIRED NAVIGATION PERFORMANCE (RNP)

For procedures and equipment requirements, see Air Traffic Control pages and/or Air Traffic Control State pages for detailed information.

RJJJ Type: FIR

NORTH PACIFIC (NOPAC) ROUTE PROCEDURES

a. The NOPAC Route System is comprised of five Air Traffic Service (ATS) routes which transit the North Pacific between Alaska and Japan. The two northern routes are used for westbound traffic. The three southern routes are used for eastbound traffic, except that R-591 or G-344 may be used for westbound aircraft crossing the Fukuoka/Anchorage FIR between 0000UTC and 0600UTC. The routes are as follows: R-220, R-580, A-590, R-591 and G-344.

b. Transition Routes

1. Within the Fukuoka FIR, Oceanic Transition Routes (OTRs) and, in one case, a Victor route, have been established for aircraft transitioning to or from the NOPAC Route System.

2. Within the Anchorage FIR, certain ATS routes are used for the same purpose. They are as follows: B-327 (For Westbound use only between BAMOK and SELDM), R-341, G-469, A-342, G-215, R-330, R-451, R-336, R-338, G-583 and G-349.

c. Separation Standards

1. The primary form of lateral separation within the NOPAC Route System is 25NM lateral either side of the centerline, based on Required Navigation Performance 10 (RNP-10) and 1000' vertical separation (FL290 - FL410) based on Reduced Vertical Separation Minimums (RVSM).

2. Lateral separation for Non-RNP10 aircraft and aircraft operating below FL180 is 50NM lateral either side of the centerline.

3. Standard longitudinal separation within the Anchorage Oceanic FIR is 15 minutes "in trail".

d. Flight Plans

1. Aircraft shall enter "R" in item 10 of the ICAO flight plan if the aircraft and operator have been approved for RNP 10 operations for the route of flight.
2. Aircraft shall enter "W" in item 10 of the ICAO flight plan if the aircraft and operator have been approved for RVSM.
3. Aircraft not approved for RNP 10 and/or RVSM shall not enter "R" and/or "W" in item 10.
4. Aircraft approved for both RNP 10 and RVSM may flight plan any of the NOPAC routes with the following altitude restrictions:

(a) R-220: Even Altitudes FL180 to FL400, also FL330, FL350, FL370, FL390, FL410

(b) R-580: Even Altitudes FL180 to FL400, also FL350, FL370

(c) A-590: Odd Altitudes FL190 to FL410, also FL300, FL320, FL340

(d) R-591: Eastbound, Odd Altitudes FL190 to FL410

(e) R-591: Westbound, Even Altitudes FL300 to FL400

(f) G-344: Eastbound, Odd Altitudes FL190 to FL410

(g) G-344: Westbound, Even Altitudes FL300 to FL400

(h) R-591 and G-344 are Eastbound routes unless designated as Westbound PACOTS. Traffic flows are either Eastbound or Westbound with the tracks being emptied of traffic before changing direction.

5. Non-RNP-10 aircraft shall flight plan as follows:

(a) Westbound: R-220 at all times.

(b) Eastbound: A-590 at all times.

(c) Eastbound: G-344 when available for eastbound flights.

(d) The altitudes available on these routes are at or below FL280 and at or above FL430.

e. Procedures

1. Peak traffic periods:

(a) Eastbound - 0700UTC to 2100UTC

(b) Westbound - 1200UTC to 1900UTC and 2200UTC to 0800UTC

(c) Due to traffic volume, flights desiring to operate contrary to the predominant traffic flow can expect to be rerouted or assigned less than optimum flight levels. If feasible, users planning to operate in the NOPAC Route System at airspeeds below MACH 0.78 should use other than the peak hours for their flights. This will reduce congestion and expedite traffic.

f. Aircraft cannot always be accommodated on their flight planned NOPAC route. In an effort to reduce coordination time and errors between ATC and flight crews, JCAB (Fukuoka ATMC) and FAA (Anchorage ARTCC) have agreed on a common procedure to accommodate most reroutes. Aircraft rerouted from one NOPAC ATC route to another NOPAC ATC route will be given short range clearances into the adjoining FIR's RADAR coverage airspace. The receiving ATC facility will then issue further routing to the aircraft prior to the aircraft reaching the clearance limit.

1. Example 1: aircraft ABC101 is routed via R-220 to RJTT but can not be accommodated on R-220. The aircraft may be re-cleared as follows: "ABC101 cleared to OATIS via R-580, expect further clearance from ATMC after OMOTO."

2. Example 2: aircraft ABC102 is routed via A-590 to PAFA but can not be accommodated on A-590. The aircraft may be re-cleared as follows: "ABC102 cleared to SYA via R-591, expect further routing from Anchorage ARTCC after AKISU."

CRUISING LEVEL PROCEDURES

CRUISING LEVELS: For Flight Level Transition Procedures refer to Enroute section.

FLIGHT PLANNING AND OVERFLIGHT ROUTES within the Pacific region: For complete Information see Enroute Tab.

TRANSPONDER SETTING (Secondary Surveillance Radar-SSR) For Beacon Code procedures see Enroute Tab.

ADIZ REQUIREMENTS

FOR ADIZ REQUIREMENTS See Enroute Tab.

TRANSPONDER REQUIRED

Transponder (Mode A/3 & Mode C) required in Approach Control Area and Control Zones.

TRANSPONDER REQUIRED

Transponder (Mode A/3 & Mode C) required in Approach Control Area and Control Zones.

REQUIRED NAVIGATION PERFORMANCE (RNP)

For procedures and equipment requirements, see Air Traffic Control pages and/or Air Traffic Control State pages for detailed information.

FLIGHT PROCEDURES Okinawa Approach Control provides full time Stage III Service (RADAR sequencing and separation service for VFR aircraft) within the Okinawa TCA. No aircraft may operate within the TCA unless appropriate authorization is received from TAC prior to the operation.

a. VFR aircraft enroute to destination airports within the Okinawa TCA, should contact Okinawa Approach Control 50NM from the Kadena VORTAC.

1. Aircraft operating southeast of Kadena 050/230 radials use 258.3/126.5 MHz.
2. Aircraft operating northwest of Kadena 230/050 radials use 335.8/119.1 MHz.
3. Monitor ATIS broadcasts of destination airport prior to contacting Approach Control and advise ATIS code received on initial contact.

b. VFR aircraft departing Kadena AB will advise Ground Control prior to taxi, of intended direction of flight and proposed altitude to depart the TCA. VFR aircraft departing other airports that desire ATC service, will advise the appropriate tower prior to departure. The tower will then advise when to contact Departure Control and assign a frequency and beacon code.

c. The procedures used in this program are not to be interpreted as relieving pilots of their responsibilities to:

1. See, and avoid other traffic operating in VFR conditions,
2. Maintain appropriate terrain and obstruction clearance,
3. Remain in weather conditions equal to, or better than, the minimum required by pertinent regulations, and
4. Whenever compliance with an assigned route or heading is likely to compromise any of the above, Okinawa Approach Control shall be so advised.

d. Except in the case of inflight failure, no person may operate an aircraft within the TCA unless equipped with the following:

1. VOR or TACAN receiver (except helicopters),
2. Two-way radio capable of communicating with ATC on the appropriate frequencies for the TCA, or
3. Coded RADAR Beacon Transponder having at least a Mode A/3 & Mode C, 64 code capability, replying to A/3 interrogation with the code specified by ATC.

VHHK Type: FIR

FLIGHT PLANNING AND OVERFLIGHT ROUTES within the Pacific region: For complete Information see Enroute Tab.

TRANSPONDER SETTING (Secondary Surveillance Radar-SSR) For Beacon Code procedures see Enroute Tab.

ATS ROUTE RESTRICTIONS: For information regarding flight planning purposes refer to Enroute section.

FLIGHT PLANNING AND OVERFLIGHT ROUTES within the Pacific region: For complete information see Enroute section.

TRANSPONDER SETTING (Secondary Surveillance Radar-SSR): For Beacon Code procedures see ENROUTE section.

VHHK Transition Routes

For complete information of Terminal Transition Routes within VHHK FIR see VHHH Terminal charts.

REQUIRED NAVIGATION PERFORMANCE (RNP)

For procedures and equipment requirements, see Air Traffic Control pages and/or Air Traffic Control State pages for detailed information.

RVSM PROCEDURES

REDUCED VERTICAL SEPARATION MINIMUMS (FL290 - FL410) For RVSM procedures and equipment requirements see AIR TRAFFIC CONTROL pages series.

ATS ROUTE RESTRICTION NOTES

ATS ROUTE RESTRICTIONS For information regarding flight planning purposes refer to Enroute EE-101 and consecutive pages.

ZGZU Type: FIR

RVSM PROCEDURES

REDUCED VERTICAL SEPARATION MINIMUMS (FL290 - FL410) For RVSM procedures and equipment requirements see AIR TRAFFIC CONTROL pages series.

REQUIRED NAVIGATION PERFORMANCE (RNP)

For procedures and equipment requirements, see Air Traffic Control pages and/or Air Traffic Control State pages for detailed information.

CRUISING LEVEL PROCEDURES

CRUISING LEVELS: For Flight Level Transition Procedures refer to Enroute section.

TRANSPONDER SETTING (Secondary Surveillance Radar-SSR): For Beacon Code procedures see ENROUTE section.

ATS ROUTE RESTRICTIONS: For information regarding flight planning purposes refer to Enroute section.

ZHWH Type: FIR

ATS ROUTE RESTRICTIONS: For information regarding flight planning purposes refer to Enroute section.

TRANSPONDER SETTING (Secondary Surveillance Radar-SSR): For Beacon Code procedures see ENROUTE section.

RVSM PROCEDURES

REDUCED VERTICAL SEPARATION MINIMUMS (FL290 - FL410) For RVSM procedures and equipment requirements see AIR TRAFFIC CONTROL pages series.

ZLHW Type: FIR

TRANSPONDER SETTING (Secondary Surveillance Radar-SSR): For Beacon Code procedures see ENROUTE section.

ATS ROUTE RESTRICTIONS: For information regarding flight planning purposes refer to Enroute section.

RVSM PROCEDURES

REDUCED VERTICAL SEPARATION MINIMUMS (FL290 - FL410) For RVSM procedures and equipment requirements see AIR TRAFFIC CONTROL pages series.

CRUISING LEVEL PROCEDURES

CRUISING LEVELS: For Flight Level Transition Procedures refer to Enroute section.

CRUISING LEVEL PROCEDURES

CRUISING LEVELS: For Flight Level Transition Procedures refer to Enroute section.

CRUISING LEVELS

Cruising levels for flight level transition procedures refer to ENROUTE CH-201 and consecutive pages.

TRANSPONDER SETTING (Secondary Surveillance Radar-SSR) For Beacon Code procedures see Enroute Tab.

ZSHA Type: FIR

ATS ROUTE RESTRICTIONS: For information regarding flight planning purposes refer to Enroute section.

TRANSPONDER SETTING (Secondary Surveillance Radar-SSR): For Beacon Code procedures see ENROUTE section.

CRUISING LEVEL PROCEDURES

CRUISING LEVELS: For Flight Level Transition Procedures refer to Enroute section.

REQUIRED NAVIGATION PERFORMANCE (RNP)

For procedures and equipment requirements, see Air Traffic Control pages and/or Air Traffic Control State pages for detailed information.

TRANSPONDER SETTING (Secondary Surveillance Radar-SSR) For Beacon Code procedures see Enroute Tab.

RVSM PROCEDURES

REDUCED VERTICAL SEPARATION MINIMUMS (FL290 - FL410) For RVSM procedures and equipment requirements see AIR TRAFFIC CONTROL pages series.