

SUARNABHUMI INTERNATIONAL AIRPORT
AERONAUTICAL INFORMATION

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SUARNABHUMI INTERNATIONAL AIRPORT

AERONAUTICAL INFORMATION

PART 1. GENERAL (GEN)

GEN 2. TABLE AND CODES

GEN 2.4 LOCATION INDICATORS

1. ENCODE		2. DECODE	
Location	Indicator	Indicator	Location
Suvarnabhumi International Airport	VTBS	VTBS	Suvarnabhumi International Airport

GEN 3. SERVICES

GEN 3.1 AERONAUTICAL INFORMATION SERVICES

Pre-flight information Service at Aerodromes

A pre-flight information service unit is available at each of the following listed aerodrome, with the coverage indicated.

Aerodrome	Briefing coverage
SUARNABHUMI / Suvarnabhumi International Airport	Bangkok, Bombay, Calcutta, Delhi, Jakarta, Hong Kong, Karachi, Manila, Yangon, Singapore and Malaysia FIRs.

PART 2. EN-ROUTE (ENR)

ENR 1. GENERAL RULES AND PROCEDURES

ENR 1.10 FLIGHT PLANNING

1. Procedures for the submission of a flight plan

a. Submission of flight plan

- Aircraft departing from Suvarnabhumi Airport, the flight plan shall be submitted to Aerodrome Aeronautical Information Services Unit at the Airports.

ENR 1.11 ADDRESSING OF FLIGHT PLAN MESSAGES

Note – Flight movement messages in this context comprise flight plan messages, amendment messages relating thereto and flight cancellation messages (ICAO PANS / ATM DOC 4444, Chapter 11, para. 11.2.1.1.3) refers

Category of flight (IFR, VFR or both)	Route (into or via FIR and /or TMA)	Message address
1	2	3
All flight	into Bangkok TMA	VTBSZPZX

ENR 1.6 RADAR SERVICES AND PROCEDURES

1. Operation

1.1. Air traffic control radar is the predominant means of control at Bangkok Area Control Centre and Approach Control Units at Bangkok, **Suvarnabhumi**, Chaing Mai, Hat Yai, Phuket, U-Tapao International Airport Phitsanulok and Hua-Hin Airport under jurisdiction of Aeronautical Radio of Thailand Limited. provided in accordance with **ICAO Doc4444, ATM/501 Chapter 8.**

1.2. Radio communications procedures

Station	Service	Callsign
- Bangkok Area Control Centre	Procedural and Radar	Bangkok Control
- Bangkok Approach Control Unit	Procedural and Radar	Bangkok Approach
- Chaing Mai Approach Control Unit	Procedural and Radar	Chaing Mai Approach
- Hat Yai Approach Control Unit	Procedural and Radar	Hat Yai Approach
- Phuket Approach Control Unit	Procedural and Radar	Phuket Approach
- U-Tapao Approach Control Unit	Procedural and Radar	U-Tapao Approach
- Phitsanulok Approach Control Unit	Procedural and Radar	Phitsanulok Approach
- Hua-Hin Approach Control Unit	Procedural and Radar	Hua-Hin Approach

2. Theoretical Primary and Secondary Radar coverage within BKK FIR

2.1. Bangkok Area Control Service operates five radar stations

2.1.1 SSR – station at Bangkok Airport	135518.00N	1003633.00E	range 250 nm.
2.1.2 SSR – station at Suvarnabhumi Airport	134149.60N	1004615.20E	range 250 nm.
2.1.3 SSR – station at Chaing Mai Airport	184533.00N	0985808.00E	range 250 nm.
2.1.4 SSR – station at Surat Thani Airport	090751.00N	0990839.00E	range 200 nm.
2.1.5 SSR – station at Ubon Airport	151420.00N	1045202.00E	range 250 nm.

2.2. Hours of operation (Secondary Surveillance Radar)

- Hours of operation will be 24 hours with the exception of scheduled preventive maintenance period

- SSR – station at Bangkok Airport
The third Saturday of each month from 2000 – 2200 UTC.
- SSR – station at Suvarnabhumi Airport**
The first Saturday of each month from 2000 – 2200 UTC.
- SSR ASR – station at Chiang Mai Airport
The second and fourth Saturday of each month from 1600 – 1800 UTC.
- SSR – station at Surat Thani Airport
The third Wednesday of each month from 1900 – 2100 UTC
- SSR – station at Ubon Airport
The first Tuesday of each month from 1900 – 2100 UTC
- SSR – station at U-Taphao Airport
Between 2300 – 1100 UTC (Other period is on requested 1 HR PN to ATC)

2.3 Bangkok Approach Control Service Operates :

- ASR - station at Bangkok position 135436N 1003611E
- Range 80 nm.
- ASR - station at Suvarnabhumi position 134123.3N 1004613.1E**
- Range 80 nm.

2.4 Chaing Mai Approach Control Service Operates :

- ASR – station at Chiang Mai position 184533N 985808E
- Range 60 nm. with coverage restricted as follow:
Between 270 radial and 342 radial clockwise, beyond 12 nm from CMA DVOR/DME below 8 000 ft

2.5 Hat Yai Approach Control Service Operates :

- ASR – station at Hat Yai position 065606N 1002400E

- Range 60 nm. with following limitations:
 - 1) Altitude 3 000 ft within 30 nm.
 - 2) Altitude 4 000 ft within 40 nm.
 - 3) Altitude 5 000 ft within 50 nm.
 - 4) Altitude 6 000 ft within 60 nm.

2.6 Phuket Approach Control Service Operates :

- ASR – station at Bang duk Hill, Phuket position 080754N 0981954E
- Range 60 nm. with following limitations:
 - 1) Altitude 3 000 ft within 35 nm.
 - 2) Altitude 5 000 ft within 40 nm.
 - 3) Altitude 7 000 ft within 60 nm.

2.7 Hua-Hin Approach Control Service Operates :

- ASR – station at Hua Hin position 123729N 995655E (On aerodrome HHN R195/0.6nm.)
- Range 60 nm. with following limitations:
 - 1) Altitude 1 000 ft within 10 nm.
 - 2) Altitude 2 000 ft within 15 nm.
 - 3) Altitude 3 000 ft within 20 nm.
 - 4) Altitude 4 000 ft within 25 nm.
 - 5) Altitude 5 000 ft within 35 nm.
 - 6) Altitude 7 000 ft within 40 nm.
 - 7) Altitude 10 000 ft within 60 nm.
 - 8) Altitude 20 000 ft within 60 nm.

2.8 Phitsanulok Approach Control Service Operates :

- ASR – station at Phitsanulok position 164023N 1001643E
- Range 60 nm. with following limitations:
 - 1) Altitude 1 000 ft within 35 nm.
 - 2) Altitude 2 000 ft within 45 nm.
 - 3) Altitude 5 000 ft within 50 nm.
 - 4) Altitude 7 000 ft within 50 nm.
 - 5) Altitude 10 000 ft within 50 nm.
 - 6) Altitude 15 000 ft and above within 60 nm.

2.9 U-Taphao Approach Control Service Operates :

- ASR – station at U-Taphao position 124055.104N 1005953.74E
- Range 250 nm. with following limitations:
 - 1) Altitude 1 000 ft outer fringe 59.2 nm.
 - 2) Altitude 2 000 ft outer fringe 71.2 nm. inner fringe 0.8 nm.
 - 3) Altitude 3 000 ft outer fringe 84.4 nm.
 - 4) Altitude 5 000 ft outer fringe 113.6 nm. inner fringe 1.9 nm.
 - 5) Altitude 7 000 ft outer fringe 129.9 nm.
 - 6) Altitude 10 000 ft outer fringe 160.0 nm. inner fringe 2.9 nm.
 - 7) Altitude 20 000 ft outer fringe 168.9 nm. inner fringe 5.6 nm.

2.10 Hours of operation (Primary Radar)

- Hours of operation will be 24 hours with the exception of scheduled preventive maintenance period :
 - a) ASR – station at Bangkok Airport
The second and fourth Saturday of each month from 1900 – 2100 UTC.
 - b) ASR – station at Suvarnabhumi Airport
The third Saturday of each month from 1900 – 2100 UTC.**
 - c) ASR – station at Chiang Mai Airport
The second and fourth Friday of each month from 0800 – 1000 UTC.
 - d) ASR – station at Hat Yai Airport
The second and fourth Friday of each month from 0600 – 0800 UTC.
 - e) ASR – station at Bang duk hill, Phuket
The second and fourth Friday of each month from 1230 – 1500 UTC.
 - f) ASR – station at Hua Hin Airport
The second and fourth Thursday of each month from 1400 - 1700 UTC.
 - g) ASR – station at Phitsanulok Airport
The second and fourth Friday of each month from 0700 – 1000 UTC.

ENR 2. AIR TRAFFIC SERVICES AIRSPACE

1. Re-sectorization of air traffic, Bangkok TMA is divided geographically into east, south and west sectors.
- 1.1 The area of responsibility of the east sector is defined by straight line joining successively the following points VTBS ARP (134108.59N 1004456.24E) and 'SVB' DVOR R020/58D thence clockwise by the arc of a circle to 'SVB' DVOR R163/33D thence straight line to VTBS ARP, which encompasses ATS routes A1, A202, G474, N891, R468 and W1.
- 1.2 The area of responsibility of the south sector is defined by straight line joining successively the following points VTBS ARP (134108.59N 1004456.24E) and 'SVB' DVOR R163/33D thence clockwise by the arc of a circle to 'SVB' DVOR R236/45D thence straight line to VTBS ARP excluding D19, which encompasses ATS route A464, G458, M751, R201, W19 and W31.
- 1.3 The area of responsibility of the west sector is defined by straight line joining successively the following points VTBS ARP (134108.59N 1004456.24E) and 'SVB' DVOR R236/45D thence clockwise by the arc of a circle to 'SVB' DVOR R020/58D thence straight line to VTBS ARP excluding D16, D17, D18, D47, D72, which encompasses ATS route A464, B346, G463, L507, P646, R468, R474, W9 and W21.
- 1.4 Air Traffic Services will be provided in each sector by Approach Control on frequencies 122.35 MHz or 257.6 MHz (east sector), 124.35 MHz or 262.5 MHz (south sector) and 125.2 MHz or 259.6 MHz (west sector).

PART 3. AERODROME (AD)

AD 2. AERODROMES

VTBS AD 2.1 AERODROME LOCATION INDICATOR AND NAME

VTBS — BANGKOK / SUVARNABHUMI INTERNATIONAL

VTBS AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	13° 41' 09'' N 100° 44' 56'' E Midpoint between taxiways G, H, H2 and H3
2	Direction and distance from (city)	25 KM East of Bangkok
3	Elevation/Reference temperature	1.4 M (4.6 FT) / 35 °C
4	Geoid undulation at AD ELEV PSN	- 29.7 M (-97.5)
5	MAG VAR/Annual change	0° 30' W (2005) / 4' W increasing
6	AD Administration, address, telephone, telefax, telex, AFS	99 Mu 10 Bangna-Trad Highway, KM 15, Rachathewa, Bangphli, Samut Prakan 10540, Thailand Telephone : (662) 723-0000 Telefax : (662) 723-0010 E-mail : nbia@bangkokairport.co.th URL : www.suvarnabhumiairport.com AFS : VTBSYDYX
7	Types of traffic permitted (IFR/VFR)	IFR / Authorised VFR
8	Remarks	Nil

VTBS AD 2.3 OPERATIONAL HOURS

1	AD Administration	H24
2	Customs and immigration	H24
3	Health and sanitation	H24
4	AIS Briefing Office	H24
5	ATS Reporting Office (ARO)	H24
6	MET Briefing Office	H24
7	ATS	H24
8	Fuelling	H24
9	Handling	H24
10	Security	H24
11	De-icing	Nil
12	Remarks	AIS briefing office and ATS reporting office located at level 4 in the passenger terminal building. The type of services via AFTN, internet : www.aerothai.co.th , fax, phone and E-mail : aisservices@aerothai.co.th

VTBS AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	Available from Thai Airways International Plc. and Bangkok Flight Services Cargo
2	Fuel/oil types	Jet A1 and AVGAS
3	Fuelling facilities/capacity	Available from BAFS and ASIG.
4	De-icing facilities	Nil
5	Hangar space for visiting aircraft	Limited, operated by Thai Airways International Plc.
6	Repair facilities for visiting aircraft	Major and minor repair available from Thai Airways International Plc. and line maintenance from International Airlines Technical Pool.
7	Remarks	a) Fixed ground power supply (400Hz) is available at all stands and must be utilized if in service. Operators are recommended to reduce electric load immediately after parking. If fixed ground power supply is out of service, mobile GPU shall be used. APU may not be used for more than 5 minutes after parking. b) Fixed pre-conditioned air supply is available at all stands served with passenger loading bridges and must be utilized if in service. Operators are recommended to turn off the cabin air re-circulation system to prevent outside air mixing with PC-Air. If fixed PCA is out of service, mobile ACU may be used. c) Visual Docking Guidance System is provided at all stands. If VDGS is out of service, a marshaller shall guide the aircraft from the taxi lane to the parking position on the stand.

VTBS AD 2.5 PASSENGER FACILITIES

1	Hotels	At AD and in the city.
2	Restaurants	At AD and in the city.
3	Transportation	Buses, taxis and car hire from the AD.
4	Medical facilities	First Aid at AD. Hospital near the AD and in the city. Medical clinics at airport, located in the passenger terminal Building, Level 1, and in Concourses A and G, are available H24 General hospital located near the airport and in Bangkok.
5	Bank and Post Office	At AD.
6	Tourist Office	At AD.
7	Remarks	For further information visit Internet address : www.bangkokairport.co.th www.suvarnabhumiairport.com

VTBS AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	CAT 10
2	Rescue equipment	Adequately provided as recommended by ICAO
3	Capability for removal of disabled aircraft	Capable of handling all aircraft up to B744 dimensions & weight
4	Remarks	Nil

VTBS AD 2.7 SEASONAL AVAILABILITY — CLEARING

1	Types of clearing equipment	Nil
2	Clearance priorities	--
3	Remarks	The AD is available all seasons.

VTBS AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Apron surface and strength	Surface : Concrete Strength : PCN 126/ R /D / X / T		
2	Taxiway width, surface and strength	Width : 30 m. Surface : Asphalt Strength : PCN 137 / F / D / X / T		
3	Altimeter checkpoint location and elevation	Location : At Apron Elevation : 1.8 m (5.9 ft)		
4	VOR checkpoints	Nil		
5	INS checkpoints	Aircraft Parking	Geographical Co-ordinates	
		Stand Identification		
			Latitude	Longitude
		A1	13° 41' 30.11" N	100° 45' 17.81" E
		A2	13° 41' 31.95" N	100° 45' 18.44" E
		A3L	13° 41' 33.46" N	100° 45' 19.31" E
		A3	13° 41' 34.19" N	100° 45' 18.72" E
		A3R	13° 41' 34.51" N	100° 45' 18.69" E
		A4	13° 41' 35.91" N	100° 45' 19.54" E
		A5L	13° 41' 37.06" N	100° 45' 20.27" E
		A5	13° 41' 37.77" N	100° 45' 19.77" E
		A5R	13° 41' 38.12" N	100° 45' 19.64" E
		A6L	13° 41' 39.38" N	100° 45' 20.88" E
		A6	13° 41' 40.11" N	100° 45' 20.27" E
		A6R	13° 41' 40.43" N	100° 45' 20.25" E
		B1	13° 41' 26.73" N	100° 45' 19.83" E
		B3	13° 41' 26.38" N	100° 45' 21.79" E
		B5L	13° 41' 26.10" N	100° 45' 24.80" E
		B5	13° 41' 25.74" N	100° 45' 23.97" E
		B5R	13° 41' 25.72" N	100° 45' 23.59" E
		101L	13° 41' 41.76" N	100° 45' 21.25" E
		101	13° 41' 42.44" N	100° 45' 20.82" E
		101R	13° 41' 42.92" N	100° 45' 21.56" E
		102L	13° 41' 44.78" N	100° 45' 21.73" E
		102	13° 41' 45.40" N	100° 45' 21.89" E
		102R	13° 41' 46.01" N	100° 45' 22.05" E
103L	13° 41' 47.24" N	100° 45' 22.37" E		

	103	13° 41' 47.86" N	100° 45' 22.54" E
	103R	13° 41' 48.47" N	100° 45' 22.70" E
	104L	13° 41' 49.70" N	100° 45' 23.02" E
	104	13° 41' 50.31" N	100° 45' 23.18" E
	104R	13° 41' 50.929" N	100° 45' 23.34" E
	105L	13° 41' 52.16" N	100° 45' 23.67" E
	105	13° 41' 52.77" N	100° 45' 23.83" E
	105R	13° 41' 53.39" N	100° 45' 23.99" E
	106L	13° 41' 54.62" N	100° 45' 24.31" E
	106	13° 41' 55.23" N	100° 45' 24.48" E
	106R	13° 41' 55.85" N	100° 45' 24.64" E
	107L	13° 41' 57.07" N	100° 45' 24.96" E
	107	13° 41' 57.69" N	100° 45' 25.12" E
	107R	13° 41' 58.30" N	100° 45' 25.28" E
	108L	13° 41' 59.53" N	100° 45' 25.61" E
	108	13° 42' 00.15" N	100° 45' 25.77" E
	108R	13° 42' 00.76" N	100° 45' 25.93" E
	109L	13° 42' 01.99" N	100° 45' 26.25" E
	109	13° 42' 02.61" N	100° 45' 26.41" E
	109R	13° 42' 03.22" N	100° 45' 26.58" E
	110L	13° 42' 04.45" N	100° 45' 26.90" E
	110	13° 42' 05.06" N	100° 45' 27.06" E
	110R	13° 42' 05.68" N	100° 45' 27.22" E
	111L	13° 42' 06.91" N	100° 45' 27.55" E
	111	13° 42' 07.52" N	100° 45' 27.71" E
	111R	13° 42' 08.14" N	100° 45' 27.87" E
	112L	13° 42' 09.36" N	100° 45' 28.19" E
	112	13° 42' 09.98" N	100° 45' 28.35" E
	112R	13° 42' 10.59" N	100° 45' 28.51" E
	113L	13° 42' 11.82" N	100° 45' 28.84" E
	113	13° 42' 12.44" N	100° 45' 29.00" E
	113R	13° 42' 13.05" N	100° 45' 29.16" E
	114L	13° 42' 14.28" N	100° 45' 29.48" E

	114	13° 42' 14.90" N	100° 45' 29.65" E
	114R	13° 42' 15.51" N	100° 45' 29.81" E
	115L	13° 41' 32.69" N	100° 45' 26.76" E
	115	13° 41' 32.06" N	100° 45' 26.65" E
	115R	13° 41' 31.46" N	100° 45' 26.44" E
	116L	13° 41' 35.15" N	100° 45' 27.41" E
	116	13° 41' 34.52" N	100° 45' 27.30" E
	116R	13° 41' 33.92" N	100° 45' 27.09" E
	117L	13° 41' 37.60" N	100° 45' 28.05" E
	117	13° 41' 36.98" N	100° 45' 27.94" E
	117R	13° 41' 36.37" N	100° 45' 27.73" E
	118L	13° 41' 40.06" N	100° 45' 28.70" E
	118	13° 41' 39.43" N	100° 45' 28.59" E
	118R	13° 41' 38.83" N	100° 45' 28.38" E
	119L	13° 41' 46.52" N	100° 45' 30.46" E
	119	13° 41' 45.91" N	100° 45' 30.30" E
	119R	13° 41' 45.29" N	100° 45' 30.13" E
	120L	13° 41' 48.98" N	100° 45' 31.10" E
	120	13° 41' 48.36" N	100° 45' 30.94" E
	120R	13° 41' 47.75" N	100° 45' 30.78" E
	121L	13° 41' 51.44" N	100° 45' 31.75" E
	121	13° 41' 50.82" N	100° 45' 31.59" E
	121R	13° 41' 50.21" N	100° 45' 31.43" E
	122L	13° 41' 53.90" N	100° 45' 32.40" E
	122	13° 41' 53.28" N	100° 45' 32.24" E
	122R	13° 41' 52.67" N	100° 45' 32.07" E
	123L	13° 41' 56.35" N	100° 45' 33.04" E
	123	13° 41' 55.74" N	100° 45' 32.88" E
	123R	13° 41' 55.12" N	100° 45' 32.72" E
	124	13° 42' 01.03" N	100° 45' 34.27" E
	125L	13° 42' 03.73" N	100° 45' 34.98" E
	125	13° 42' 03.11" N	100° 45' 34.82" E
	125R	13° 42' 02.57" N	100° 45' 34.68" E

	126L	13° 42' 06.19" N	100° 45' 35.63" E
	126	13° 42' 05.57" N	100° 45' 35.47" E
	126R	13° 42' 04.96" N	100° 45' 35.31" E
	127L	13° 42' 08.64" N	100° 45' 36.28" E
	127	13° 42' 08.03" N	100° 45' 36.11" E
	127R	13° 42' 07.41" N	100° 45' 35.95" E
	128L	13° 42' 11.10" N	100° 45' 36.92" E
	128	13 42' 10.49" N	100° 45' 36.76" E
	128R	13° 42' 09.87" N	100° 45' 36.60" E
	129L	13° 42' 13.56" N	100° 45' 37.57" E
	129	13° 42' 12.95" N	100° 45' 37.41" E
	129R	13° 42' 12.33" N	100° 45' 37.24" E
	130	13° 42' 16.57" N	100° 45' 37.23" E
	131	13° 42' 18.24" N	100° 45' 31.74" E
	132	13° 42' 18.83" N	100° 45' 29.41" E
	B2	13° 41' 22.94" N	100° 45' 18.94" E
	B4	13° 41' 22.65" N	100° 45' 20.91" E
	B6L	13° 41' 21.67" N	100° 45' 22.40" E
	B6	13° 41' 22.24" N	100° 45' 23.16" E
	B6R	13° 41' 22.17" N	100° 45' 23.49" E
	C1L	13° 41' 20.11" N	100° 45' 15.79" E
	C1	13° 41' 20.86" N	100° 45' 15.21" E
	C1R	13° 41' 21.18" N	100° 45' 15.27" E
	C3L	13° 41' 17.70" N	100° 45' 15.16" E
	C3	13° 41' 18.45" N	100° 45' 14.58" E
	C3R	13° 41' 18.77" N	100° 45' 14.63" E
	C5L	13° 41' 15.28" N	100° 45' 14.53" E
	C5	13° 41' 16.04" N	100° 45' 13.94" E
	C5R	13° 41' 16.36" N	100° 45' 14.00" E
	C7L	13° 41' 12.87" N	100° 45' 13.89" E
	C7	13° 41' 13.62" N	100° 45' 13.31" E
	C7R	13° 41' 13.95" N	100° 45' 13.37" E
	C9L	13° 41' 10.46" N	100° 45' 13.26" E

	C9	13° 41' 11.17" N	100° 45' 12.85" E
	C9R	13° 41' 11.54" N	100° 45' 12.85" E
	201L	13° 41' 15.92" N	100° 45' 22.35" E
	201	13° 41' 15.30" N	100° 45' 22.24" E
	201R	13° 41' 14.69" N	100° 45' 22.03" E
	202L	13° 41' 13.46" N	100° 45' 21.71" E
	202	13° 41' 12.84" N	100° 45' 21.60" E
	202R	13° 41' 12.23" N	100° 45' 21.38" E
	203L	13° 41' 11.01" N	100° 45' 21.06" E
	203	13° 41' 10.38" N	100° 45' 20.95" E
	203R	13° 41' 09.78" N	100° 45' 20.74" E
	C2L	13° 41' 22.46" N	100° 45' 11.25" E
	C2	13° 41' 21.71" N	100° 45' 11.83" E
	C2R	13° 41' 21.38" N	100° 45' 11.78" E
	C4L	13° 41' 20.04" N	100° 45' 10.62" E
	C4	13° 41' 19.29" N	100° 45' 11.20" E
	C4R	13° 41' 18.97" N	100° 45' 11.15" E
	C6L	13° 41' 17.64" N	100° 45' 09.99" E
	C6	13° 41' 16.88" N	100° 45' 10.57" E
	C6R	13° 41' 16.56" N	100° 45' 10.51" E
	C8L	13° 41' 15.22" N	100° 45' 09.36" E
	C8	13° 41' 14.47" N	100° 45' 09.93" E
	C8R	13° 41' 14.15" N	100° 45' 09.88" E
	C10L	13° 41' 12.81" N	100° 45' 08.72" E
	C10	13° 41' 12.06" N	100° 45' 09.30" E
	C10R	13° 41' 11.75" N	100° 45' 09.41" E
	D1	13° 41' 25.32" N	100° 45' 09.71" E
	D2L	13° 41' 25.63" N	100° 45' 06.78" E
	D2	13° 41' 26.16" N	100° 45' 07.54" E
	D2R	13° 41' 26.33" N	100° 45' 07.86" E
	D3L	13° 41' 26.22" N	100° 45' 04.41" E
	D3	13° 41' 26.76" N	100° 45' 05.17" E
	D3R	13° 41' 26.78" N	100° 45' 05.50" E

	D4L	13° 41' 26.83" N	100° 45' 01.99" E
	D4	13° 41' 27.37" N	100° 45' 02.76" E
	D4R	13° 41' 27.39" N	100° 45' 03.08" E
	D5	13° 41' 27.83" N	100° 44' 59.52" E
	D6L	13° 41' 28.16" N	100° 44' 56.70" E
	D6	13° 41' 28.69" N	100° 44' 57.48" E
	D6R	13° 41' 28.72" N	100° 44' 57.81" E
	D7L	13° 41' 28.72" N	100° 44' 54.32" E
	D7	13° 41' 29.29" N	100° 44' 55.11" E
	D7R	13° 41' 29.31" N	100° 44' 55.44" E
	D8	13° 41' 29.58" N	100° 44' 52.80" E
	E1	13° 41' 27.42" N	100° 44' 49.11" E
	E3	13° 41' 25.01" N	100° 44' 48.47" E
	E5	13° 41' 22.59" N	100° 44' 47.84" E
	E7	13° 41' 20.18" N	100° 44' 47.20" E
	E9	13° 41' 17.73" N	100° 44' 46.74" E
	301	13° 41' 21.43" N	100° 45' 01.43" E
	302	13° 41' 19.29" N	100° 45' 00.78" E
	303	13° 41' 16.93" N	100° 45' 00.16" E
	304	13° 41' 14.47" N	100° 44' 59.52" E
	305	13° 41' 22.27" N	100° 44' 58.08" E
	306	13° 41' 20.09" N	100° 44' 57.60" E
	307	13° 41' 17.73" N	100° 44' 56.97" E
	308	13° 41' 15.27" N	100° 44' 56.33" E
	E2	13° 41' 28.27" N	100° 44' 45.73" E
	E4	13° 41' 25.86" N	100° 44' 45.09" E
	E6	13° 41' 23.45" N	100° 44' 44.46" E
	E8	13° 41' 21.03" N	100° 44' 43.83" E
	E10	13° 41' 18.62" N	100° 44' 43.19" E
	F1	13° 41' 32.04" N	100° 44' 43.65" E
	F3	13° 41' 32.37" N	100° 44' 41.65" E
	F5	13° 41' 33.03" N	100° 44' 39.50" E
	401	13° 41' 26.72" N	100° 44' 36.79" E

	402	13° 41' 24.26" N	100° 44' 36.15" E
	403	13° 41' 21.80" N	100° 44' 35.50" E
	F2	13° 41' 35.77" N	100° 44' 44.53" E
	F4	13° 41' 36.26" N	100° 44' 42.57" E
	F6	13° 41' 36.53" N	100° 44' 40.32" E
	G1	13° 41' 37.62" N	100° 44' 48.03" E
	G2	13° 41' 39.74" N	100° 44' 48.49" E
	G3	13° 41' 42.02" N	100° 44' 49.34" E
	G4	13° 41' 44.43" N	100° 44' 49.98" E
	G5	13° 41' 46.95" N	100° 44' 50.19" E
	501	13° 41' 49.24" N	100° 44' 51.31" E
	502	13° 41' 43.48" N	100° 44' 41.20" E
	503	13° 41' 45.94" N	100° 44' 41.85" E
	504	13° 41' 48.40" N	100° 44' 42.49" E
	505	13° 41' 50.86" N	100° 44' 43.14" E
	506L	13° 41' 57.99" N	100° 44' 45.65" E
	506	13° 41' 57.17" N	100° 44' 46.07" E
	506R	13° 41' 56.65" N	100° 44' 45.30" E
	507L	13° 42' 00.67" N	100° 44' 46.36" E
	507	13° 41' 59.85" N	100° 44' 46.78" E
	507R	13° 41' 59.33" N	100° 44' 46.00" E
	508L	13° 42' 03.35" N	100° 44' 47.06" E
	508	13° 42' 02.53" N	100° 44' 47.48" E
	508R	13° 42' 02.01" N	100° 44' 46.71" E
	509L	13° 42' 06.03" N	100° 44' 47.76" E
	509	13° 42' 05.21" N	100° 44' 48.18" E
	509R	13° 42' 04.69" N	100° 44' 47.41" E
	510L	13° 42' 08.71" N	100° 44' 48.47" E
	510	13° 42' 07.89" N	100° 44' 48.89" E
	510R	13° 42' 07.37" N	100° 44' 48.12" E
	511L	13° 42' 11.38" N	100° 44' 49.17" E
	511	13° 42' 10.61" N	100° 44' 49.40" E
	511R	13° 42' 10.05" N	100° 44' 48.82" E
	512L	13° 42' 14.06" N	100° 44' 49.88" E

	512	13° 42' 13.29" N	100° 44' 50.10" E
	512R	13° 42' 12.73" N	100° 44' 49.52" E
	513L	13° 42' 16.74" N	100° 44' 50.58" E
	513	13° 42' 15.97" N	100° 44' 50.81" E
	513R	13° 42' 15.40" N	100° 44' 50.23" E
	514L	13° 42' 19.42" N	100° 44' 51.29" E
	514	13° 42' 18.65" N	100° 44' 51.51" E
	514R	13° 42' 18.08" N	100° 44' 50.93" E
	515L	13° 42' 22.10" N	100° 44' 51.99" E
	515	13° 42' 21.33" N	100° 44' 52.22" E
	515R	13° 42' 20.76" N	100° 44' 51.64" E
	516L	13° 42' 24.78" N	100° 44' 52.69" E
	516	13° 42' 24.01" N	100° 44' 52.92" E
	516R	13° 42' 23.44" N	100° 44' 52.34" E
	517L	13° 42' 27.46" N	100° 44' 53.40" E
	517	13° 42' 26.69" N	100° 44' 53.63" E
	517R	13° 42' 26.12" N	100° 44' 53.05" E
	518L	13° 42' 30.14" N	100° 44' 54.10" E
	518	13° 42' 29.37" N	100° 44' 54.33" E
	518R	13° 42' 28.80" N	100° 44' 53.75" E
	519L	13° 42' 32.81" N	100° 44' 54.81" E
	519	13° 42' 32.04" N	100° 44' 55.03" E
	519R	13° 42' 31.48" N	100° 44' 54.45" E
	520L	13° 42' 35.49" N	100° 44' 55.51" E
	520	13° 42' 34.72" N	100° 44' 55.74" E
	520R	13° 42' 34.15" N	100° 44' 55.16" E
	521L	13° 42' 38.17" N	100° 44' 56.22" E
	521	13° 42' 37.40" N	100° 44' 56.44" E
	521R	13° 42' 36.83" N	100° 44' 55.86" E
	522L	13° 42' 40.85" N	100° 44' 56.92" E
	522	13° 42' 40.08" N	100° 44' 57.15" E
	522R	13° 42' 39.51" N	100° 44' 56.57" E
	523	13° 42' 42.54" N	100° 44' 57.80" E
	524	13° 42' 45.00" N	100° 44' 58.44" E

		525	13° 42' 47.42" N	100° 44' 59.08" E
6	Remarks	1. Special general, corporate, private, government and military aviation operations subject to authorisation from Aerothai and AOT. Aircraft may be assigned parking positions on Stands 124 – 129 or 521 – 525. 2. Coordinates are provided for forwardmost nose-wheel stopping position. 3. A346 nose-wheel stopping positions will be relocated slightly forward of the positions for which coordinates are provided. Coordinates to be updated once markings are modified and coordinates are re-surveyed on stands B6, C1, C2, C3, C4, C6, C8, C10, D3, D6, E1, E2, E3, E4, E5, E6, E7, E8, E10 and F6.		

VTBS AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	Taxiing guidance signs at all intersections with TWY and RWY and at all holding positions. Guidelines at apron. Nose-in guidance at aircraft stands. Description of VDGS follows.
2	RWY and TWY markings and LGT	RWY : Designation, THR, TDZ, center line, edge and runway end marked and lighted. TWY : Centreline and edge marked and lighted.
3	Stop bars	Stop bars at runway holding positions on all TWY/RWY intersections.
4	Remarks	Intermediate holding positions are provided at some TWY/TWY intersections

1. SAFETY PROCEDURES

1.1 GENERAL WARNING

The DGS System has a built-in error detection program to inform the aircraft pilot of impending dangers during the docking procedure.

IF THE PILOT IS UNSURE OF THE INFORMATION, BEING SHOWN ON THE DGS DISPLAY UNIT, HE MUST IMMEDIATE STOP THE AIRCRAFT AND OBTAIN FURTHER INFORMATION FOR CLEARANCE.

1.2 ITEMS TO CHECK BEFORE ENTERING THE STAND AREA

WARNING: THE PILOT SHALL NOT ENTER THE STAND AREA, UNLESS THE DOCKING SYSTEM FIRST IS SHOWING THE VERTICAL RUNNING ARROWS. THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE, UNLESS THESE ARROWS HAVE BEEN SUPERSEDED BY THE CLOSING RATE BAR.

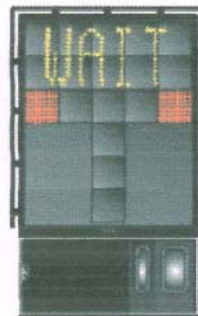
WARNING: THE PILOT SHALL NOT ENTER THE STAND AREA, UNLESS THE AIRCRAFT TYPE DISPLAYED IS EQUAL TO THE APPROACHING AIRCRAFT. THE CORRECTNESS OF OTHER INFORMATION, SUCH AS 'DOOR 2', SHALL ALSO BE CHECKED.

1.3 THE SBU MESSAGE

The message STOP SBU means that docking has been interrupted and has to be resumed only by manual guidance. DO NOT TRY TO RESUME DOCKING WITHOUT MANUAL GUIDANCE.

2. START-OF-DOCKING

The system is started by pressing one of the aircraft type buttons on the Operator Panel. When the button has been pressed, WAIT will be displayed.

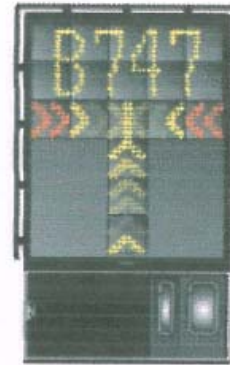


3. CAPTURE

The floating arrows indicate that the system is activated and in capture mode, searching for an approaching aircraft.

It shall be checked that the correct aircraft type is displayed. The lead-in line shall be followed.

THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE, UNLESS THE ARROWS HAVE BEEN SUPERSEDED BY THE CLOSING RATE BAR.



4. TRACKING

When the aircraft has been caught by the laser, the floating arrow is replaced by the yellow centre line indicator.

A flashing red arrow indicates the direction to turn.

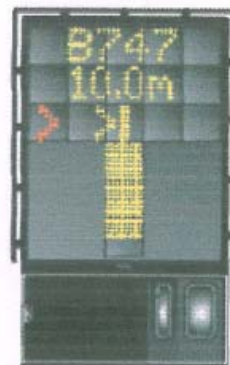
The vertical yellow arrow shows position in relation to the centre line. This indicator gives correct position and azimuth guidance.



5. CLOSING RATE

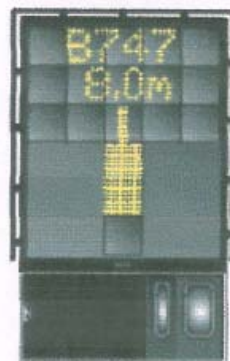
Display of digital countdown will start when the aircraft is 20 meters from stop position.

When the aircraft is less than 12 meter from the stop position, the closing rate is indicated by turning off one row of the centre line symbol per 0.5 metres, covered by the aircraft. Thus, when the last row is turned off, 0.5 metre remains to stop.



6. ALIGNED TO CENTRE

The aircraft is eight meters from the stop position. The absence of any direction arrow indicates an aircraft on the centre line.



7. SLOW DOWN

If the aircraft is approaching faster than the accepted speed, the system will show SLOW DOWN as a warning to the pilot.



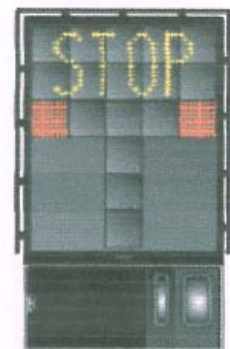
8. AZIMUTH GUIDANCE

The aircraft is four meters from the stop-position. The yellow arrow indicates an aircraft to the right of the centre line, and the red flashing arrow indicates the direction to turn.



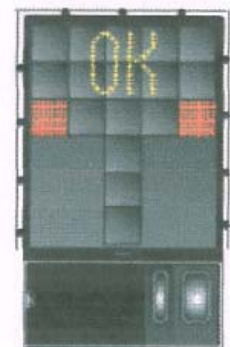
9. STOP POSITION REACHED

When the correct stop-position is reached, the display will show STOP and red lights will be lit.



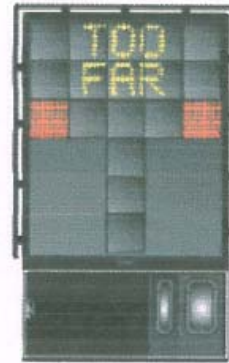
10. DOCKING COMPLETED

When the aircraft has parked, OK will be displayed.



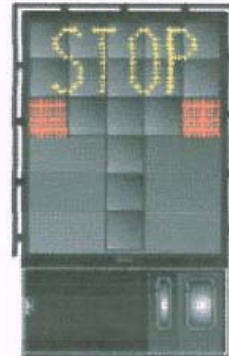
11. OVERSHOOT

If the aircraft has overshoot the stop-position, TOO FAR will be displayed.



12. STOP SHORT

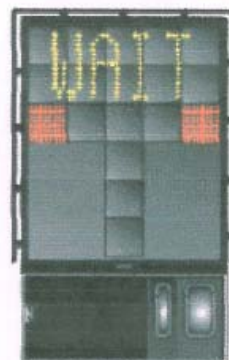
If the aircraft is found standing still but has not reached the intended stop position, the message STOP OK will be shown after a while.



13. WAIT

If some object is blocking the view toward the approaching aircraft or the detected aircraft is lost during docking, before 12 meters to STOP, the display will show WAIT. The docking will continue as soon as the blocking object has disappeared or the system detects the aircraft again.

THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE, UNLESS THE "WAIT" MESSAGE has BEEN SUPERSEDED BY THE CLOSING RATE BAR.



14. BAD WEATHER CONDITION

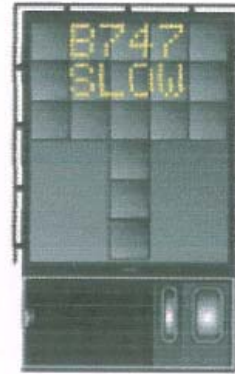
During heavy fog, rain or snow, the visibility for the docking system can be reduced.

When the system is activated and in capture mode, the display will disable the floating arrows and display SLOW and the Aircraft Type.

As soon as the system detects the approaching aircraft, the vertical closing-rate bar will appear.

If the system has been configured in this mode to make a shortened ID verification (check of engine position excluded), the Aircraft symbol will blink to give attention.

THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE, UNLESS THE CLOSING-RATE BAR IS SHOWN.



15. AIRCRAFT VERIFICATION FAILURE

During entry into the Stand, the aircraft geometry is being checked. If, for any reason, aircraft verification is not made 12 meters before the stop-position, the display will first show WAIT and make a second verification check. If this fails STOP and ID FAIL will be displayed. The text will be alternating on the upper two rows of the display.

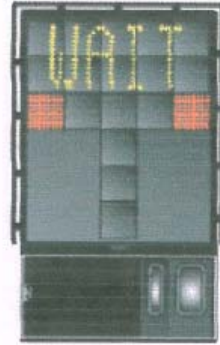
THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE WITHOUT MANUAL GUIDANCE, UNLESS THE WAIT MESSAGE HAS BEEN SUPERSEDED BY THE CLOSING RATE BAR.



16. GATE BLOCKED

If an object is found blocking the view from the DGS to the planned stop position for the aircraft, the docking procedure will be halted with a WAIT and GATE BLOCK message. The docking procedure will resume as soon as the blocking object has been removed.

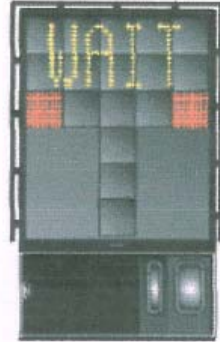
THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE WITHOUT MANUAL GUIDANCE, UNLESS THE WAIT MESSAGE HAS BEEN SUPERSEDED BY THE CLOSING RATE BAR.



17. VIEW BLOCKED

If the view towards the approaching aircraft is hindered, for instance by dirt on the window, the DGS will report a View blocked condition. Once the system is able to see the aircraft through the dirt, the message will be replaced with a closing rate display.

THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE WITHOUT MANUAL GUIDANCE, UNLESS THE WAIT MESSAGE HAS BEEN SUPERSEDED BY THE CLOSING RATE BAR.



18. SBU-STOP

Any unrecoverable error during the docking procedure will generate an SBU (safety backu-up) condition. The display will show red stop bar and the text STOP SBU.

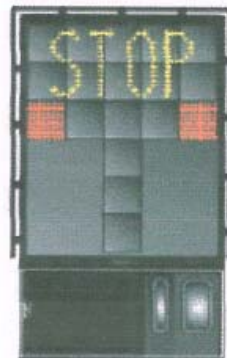
A MANUAL BACKUP PROCEDURE MUST BE USED FOR DOCKING GUIDANCE.



19. TOO FAST

If the aircraft approaches with a speed higher than the docking system can handle, the message STOP (with red squares) and TOO FAST will be displayed.

THE DOCKING SYSTEM MUST BE RE-STARTED OR THE DOCKING PROCEDURE COMPLETED BY MANUAL GUIDANCE.



20. EMERGENCY STOP

When the Emergency Stop button is pressed, STOP is displayed.



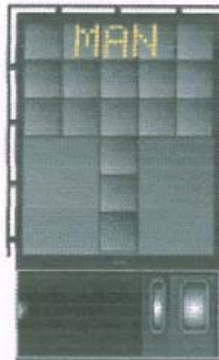
21. CHOCKS ON

CHOCK ON will be displayed, when the ground staff has put the chocks in front of the nose wheel and pressed the "Chocks On" button on the Operator Panel.



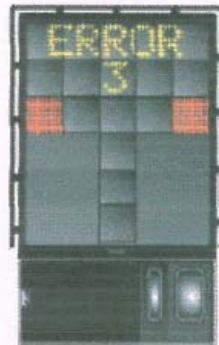
22. MANUAL DOCKING

When a docking is to be performed manually the system will display "MAN" on the tableau. The system will not give any guidance for the docking operation.



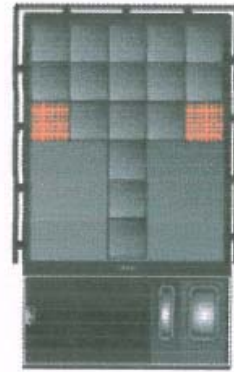
23. ERROR

If a system error occurs, the message ERROR is displayed with an error code. The code is used for maintenance purposes and explained elsewhere.



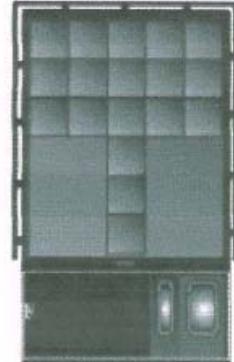
24. SYSTEM BREAKDOWN

In case of a severe system failure, the display will go black, except for a red stop indicator. A manual backup procedure must be used for docking guidance.



25. POWER FAILURE

In case of a power failure, the display will be completely black. A manual backup procedure must be used for docking guidance.



VTBS AD 2.10 AERODROME OBSTACLES

In approach/TKOF areas			In circling area and at AD		Remarks
1			2		3
RWY NR/Area affected	Obstacle type Elevation Markings/LGT	Coordinates	Obstacle type Elevation Markings/LGT	Coordinates	
a	B	C	A	b	
19R/APCH 01L/TKOF			Control Tower Top of Antenna 144.9 M (475.4 FT) LGTD	13°41'47.2"N 100°44'58.3"E	
			Tower on top of building 54.3 M (178.2 FT)	13°41'24.1"N 100°43'46.5"E	
01L/APCH 19R/TKOF	Tower on top of building 53.2 M (174.6 FT)	13°38'08.2"N 100°43'40.2"E	Tower 49.0 M (160.8 FT)	13°39'43.8"N 100°42'59.5"E	
	Tower on top of building 54.8 M (179.8 FT)	13°37'51.8"N 100°43'54.2"E	Tower on top of building 58.2 M (191.0 FT)	13°38'10.0"N 100°42'33.7"E	
			Tower 116.4 M (381.9 FT)	13°38'02.9"N 100°42'17.7"E	
			Tower 91.6 M (300.5 FT)	13°37'47.5"N 100°42'26.1"E	
			Tower 49.0 M (160.8 FT)	13°38'06.3"N 100°42'37.6"E	
19L/APCH 01R/TKOF	Tower on top of building 78.1 M (256.3 FT)	13°43'39.8"N 100°46'20.6"E			
	Tower 44.4 M (145.7 FT)	13°43'16.9"N 100°45'49.8"E			
	Hangar roof 46.7 M (153.2 FT) LGTD	13°42'24.7"N 100°45'34.8"E			
	Hangar corner 39.7 M (130.3 FT) LGTD	13°42'22.0"N 100°45'38.9"E			
	Tower on top of building 48.9 M (160.4 FT)	13°43'32.3"N 100°46'17.2"E			
01R/APCH 19L/TKOF	Building 101.8 M (334.0 FT)	13°35'12.8"N 100°44'25.7"E	Tower 69.8 M (229.0 FT)	13°37'22.2"N 100°45'36.0"E	
	Tower 106.7 M (350.1 FT)	13°34'58.3"N 100°44'30.7"E			
	Tower 118.7 M (389.5 FT)	13°34'58.1"N 100°44'29.0"E			

VTBS AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	Suvarnabhumi Airport
2	Hours of service MET Office outside hours	H24
3	Office responsible for TAF preparation Periods of validity	VTBS Long TAF valid 24 HR Short TAF valid 9 HR
4	Trend forecast Interval of issuance	Trend forecast 2 HR
5	Briefing/consultation provided	personal consultation telephone self-briefing display
6	Flight documentation Language(s) used	Charts and abbreviated plain English language texts.
7	Charts and other information available for briefing or consultation	S, U85, U70, U50, U40, U30, U25, U20, SWH, SWM, T
8	Supplementary equipment available for providing information	AWOS, Windshear, Radar, Lightning, SAT, SADIS, ISCS
9	ATS units provided with information	Suvarnabhumi TWR Suvarnabhumi APP
10	Additional information (limitation of service, etc.)	Nil

VTBS AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimensions of RWY (M)	Strength (PCN) and surface of RWY and SWY	THR coordinates RWY end coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY
1	2	3	4	5	6
01L	14.42 °	3700 x 60	PCN 137/F/D/X/T Asphalt	13° 40' 16.60" N 100° 44' 04.79" E -29.7 M (-97.5 FT)	THR/TDZ 1.38 m (4.53 ft)
19R	194.42 °	3700 x 60	PCN 137/F/D/X/T Asphalt	13° 42' 13.21" N 100° 44' 35.44" E - 29.7 M (-97.5 FT)	THR/TDZ 1.36 m. (4.46 ft)
01R	14.42 °	4000 x 60	PCN 137/F/D/X/T Asphalt	13° 39' 24.11" N 100° 45' 06.59" E -29.6 M (-97.1 FT)	THR/TDZ 1.36 m. (4.46 ft)
19L	194.42 °	4000 x 60	PCN 137/F/D/X/T Asphalt	13° 41' 30.17" N 100° 45' 39.72" E - 29.6 M (-97.1 FT)	THR/TDZ 1.34 m. (4.40 ft)
Slope of RWY-SWY	SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	OFZ	Remarks
7	8	9	10	11	12
0 %	Nil	1100 x 150	3820 x 300	Provided for all runways to precision approach category 2 requirements.	Paved jet blast protection areas at runway ends; 120 m long and 75 m wide. Runway end safety areas are non-standard; 60 m long and 75 m wide. Runway 01L/19R surface is grooved; Runway 01R/19L surface is not grooved. Concrete drainage channels are located in the runway strips, parallel to and at 120 m offset from the runway centrelines
0 %	Nil	700 x 150	3820 x 300		
0 %	Nil	Nil	4120 x 300		
0 %	Nil	550 x 150	4120 x 300		

VTBS AD 2.13 DECLARED DISTANCES

RWY Designator	TORA* (M)	TODA* (M)	ASDA* (M)	LDA (M)	Remarks
1	2	3	4	5	6
01L	3500	4600	3500	3700	The TORA/ASDA when entering RWY from TWY E19 is 3400 m.
19R	3500	4200	3500	3700	The TORA/ASDA when entering RWY from TWY E2 is 3400 m.
01R	3800	3800	3800	4000	The TORA/ASDA when entering RWY from TWY B12 is 3700 m.
19L	3800	4350	3800	4000	The TORA/ASDA when entering RWY from TWY B2 is 3700 m.

* TORA, TODA and ASDA distances take account of the loss of runway length available for take-off due to alignment of the aircraft on the runway prior to take-off.

VTBS AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Desig nator	APCH LGT type LEN INTST	THR LGT colour WBAR	VASIS (MEHT) PAPI	TDZ, LGT LEN	RWY Centre Line LGT Length, spacing, Colour, INTST	RWY edge LGT LEN, spacing colour INTST	RWY End LGT colour WBAR	SWY LGT LEN (m) colour	Remarks
1	2	3	4	5	6	7	8	9	10
01L	CAT II 900 m 5 steps LIH ; With FLG	Green	PAPI LEFT/3° (63.82 ft)	900 m	3700 m, 30 m White, FM 2800 m Red / White FM 3400 m Red 5 steps LIH	3700 m,60 m White FM 3100 m Yellow 5 steps LIH	Red	Nil	Nil
19R	CAT II 900 m 5 steps LIH ; With FLG	Green	PAPI LEFT/3° (63.82 ft)	900 m	3700 m, 30 m White, FM 2800 m Red/White FM 3400 m Red 5 steps LIH	3700 m,60 m White, FM 3100 m Yellow 5 steps LIH	Red	Nil	Nil
01R	CAT II 900 m 5 steps LIH ; With FLG	Green	PAPI LEFT/3° (63.82 ft)	900 m	4000 m, 30 m White, FM 3100 m Red/White FM 3700 m, Red 5 steps LIH	4000 m,60 m White, FM 3400 m Yellow 5 Steps LIH	Red	Nil	Nil
19L	CAT II 900 m 5 steps LIH ; With FLG	Green	PAPI LEFT/3° (63.82 ft)	900 m	4000 m, 30 m White, FM 3100 m Red/White FM 3700 m, Red 5 steps LIH	4000 m,60 m White, FM 3400 m Yellow 5 Steps LIH	Red	Nil	Nil

VTBS AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN: On top of ATC tower (13°41'47"N, 100°44'58"E), H24, Flashing White/Green every 4 seconds IBN: NIL
2	LDI location and LGT Anemometer location and LGT	4 WDI's 300 m from THR 01L, THR 19R, THR 01R, THR 19L, 115 m off-set from RWY Centre Line. All Lighted 4 Anemometers 350 m from THR 01L and THR 19R, 400 m from THR 01R and THR 19 L, 110 m off-set from RWY centerline
3	TWY edge and centre line lighting	All Taxiways
4	Secondary power supply/switch-over time	Secondary power supply to all airfield lighting at AD Switch-over time : Lights Associated to Runway 0 sec (UPS) Other lighting 15 sec
5	Remarks	Nil

VTBS AD 2.16 HELICOPTER LANDING AREA

1	Coordinates TLOF or THR of FATO Geoid undulation	--
2	TLOF and/or FATO elevation M/FT	--
3	TLOF and FATO area dimensions, surface, strength, marking	--
4	True BRG of FATO	--
5	Declared distance available	--
6	APP and FATO lighting	--
7	Remarks	Special helicopter operations subject to authorization from Aerothai and AOT

VTBS AD 2.17 ATS AIRSPACE

1	Designation and lateral limits	Suvarnabhumi Aerodrome traffic zone (ATZ) a circle, radius 5 NM centred on 134108.59N 1004456.24E (ARP)
2	Vertical limits	SFC to 2000 FT. MSL
3	Airspace classification	C
4	ATS unit call sign Language(s)	Suvarnabhumi Tower English, Thai
5	Transition altitude	11000 FT MSL.
6	Remarks	See VTBS AD 2.20 section 1

VTBS AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
APP	Bangkok Approach	122.35 MHz / 257.6 MHz 124.35 MHz / 262.5 MHz 125.2 MHz / 259.6 MHz 119.4 MHz / 254.6 MHz 125.8 MHz ⁽²⁾ 121.5 MHz ⁽¹⁾ / 243.0 MHz ⁽¹⁾	H24	(1) Emergency frequency (2) Clearance delivery for aircraft departing to adjacent aerodromes and helicopters operating within BKK CTR (3) For RWY 01R / 19L (4) For RWY 01L / 19R
ARR	Suvarnabhumi Arrival	124.7 MHz 121.5 MHz ⁽¹⁾		
TWR	Suvarnabhumi Tower	118.2 MHz ⁽³⁾ / 274.5 MHz 119.0 MHz ⁽⁴⁾ 121.5 MHz ⁽¹⁾ / 243.0 MHz ⁽¹⁾		
SMC	Suvarnabhumi Ground	121.65 MHz / 275.8 MHz 121.75 MHz 121.95 MHz		
ATIS	Suvarnabhumi Airport	127.8 MHz / 278.6 MHz		D-ATIS Synthesis Voice Broadcast

VTBS AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid, MAG VAR CAT of ILS/MLS (For VOR/ILS/MLS, give declination)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
DVOR/DME	SVB	111.4 MHZ CH51X		13 39 32.5 N 100 43 53.2 E		
ILS CAT II LLZ/DME RWY 01L GP	I-SWS	109.1 MHZ CH28X 331.4 MHZ		13 42 22.3 N 100 44 37.8 E 13 40 27.8 N 100 44 03.6 E		
ILS CAT II LLZ/DME RWY 19R GP	I-SWN	109.5 MHZ CH32X 332.6 MHZ	H24	13 40 07.5 N 100 44 02.4 E 13 42 03.9 N 100 44 28.9 E		
ILS CAT II LLZ/DME RWY 01R GP	I-SES	110.1 MHZ CH38X 334.4 MHZ		13 41 39.3 N 100 45 42.1 E 13 39 33.4 N 100 45 13.1 E		
ILS CAT II LLZ/DME RWY 19L GP	I-SEN	110.5 MHZ CH42X 329.6 MHZ		13 39 15.0 N 100 45 04.2 E 13 41 19.0 N 100 45 40.9 E		

VTBS AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Airport Regulations
 - 1.1 Suvarnabhumi Aerodrome Traffic Zone (ATZ) airspace is classified as class C.
 - 1.2 IFR and authorised VFR flights only are permitted, all flights are subject to air traffic control service and separated from each other.
 - 1.3 To retain the defined value of runway capacity at Suvarnabhumi International Airport, and to provide efficient separation between aircraft for the safety of flight and orderly flow of air traffic, only aircraft category B or above with the minimum final approach speed of 110 kt. are permitted to use Suvarnabhumi International Airport. However, other aircraft may be authorized to operate within Suvarnabhumi ATZ if:
 - 1.3.1 The aircraft is being used for or in connection with:
 - a) a search and rescue operation;
 - b) a medical emergency; or
 - c) a flight inspection of air navigation facilities.
 - 1.3.2 The pilot of the aircraft has declared an in-flight emergency.
 - 1.3.3 The aircraft constitutes VIP flight.
 - 1.3.4 The aircraft is as may be determined by the appropriate authority.
 - 1.4 The following school and training flights are not permitted:
 - a) school and training flights;
 - b) continuous take-off and landing exercises;
 - c) solo flight during basic flight training.
2. Provision of Aerodrome Air Traffic Services
 - 2.1 Aerodrome air traffic services are generally sectorized as follows:
 - 2.1.1 Tower Control on frequency 118.20 MHz for arrivals and departures on runway 19L / 01R or East runway.
 - 2.1.2 Tower Control on frequency 119.00 MHz for arrivals and departures on runway 19R / 01L or West runway.
 - 2.1.3 Ground Control on frequency 121.65 MHz for operations on East apron:
 - Aircraft parking stands:
A1, A2, A3, A4, A5, A6
B1, B2, B3, B4, B5, B6
C1, C3, C5, C7, C9
101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116,
117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132,
133, 134
201, 202, 203
 - Including:
 - Aircraft stand taxilane T1, T2, T3, T4, T5, T6, T7
 - Taxiway B, B1, B2, B3, B4, B5, B6, B7, B8, B9, B10, B11, B12, B13
 - Taxiway C, C1, C2, C3, C4, C5, C6, C7, C8, C10
 - Taxiway G between taxiway C and taxiway H4 including taxiway H4
 - Taxiway H between taxiway C and taxiway H3

- 2.1.4 Ground Control on frequency 121.75 MHz for operations on Main apron:
- Aircraft parking stands:
C2, C4, C6, C8, C10
D1, D2, D3, D4, D5, D6, D7, D8
E1, E3, E5, E7, E9
301, 302, 303, 304, 305, 306, 307, 308
 - Including:
 - Aircraft stand taxilane T8, T9, T10, T11, T12
 - Taxiway G between taxiway H4 and taxiway H2 including taxiway H2
 - Taxiway H between taxiway H1 and taxiway H3 including taxiway H3
- 2.1.5 Ground Control on frequency 121.95 MHz for operations on West apron:
- Aircraft parking stands:
E2, E4, E6, E8, E10
F1, F2, F3, F4, F5, F6
G1, G2, G3, G4, G5,
401, 402, 403
501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516,
517, 518, 519, 520, 521, 522, 523, 524, 525
 - Including:
 - Aircraft stand taxilane T13, T14, T15, T16, T17
 - Taxiway D, D1, D2, D3, D4, D5, D6, D7, D8, D9
 - Taxiway E, E1, E2, E5, E6, E7, E8, E9, E12, E13, E15, E19, E21
 - Taxiway G between taxiway D and taxiway H2
 - Taxiway H between taxiway D and taxiway H1 including taxiway H1
3. Ground Movement
- 3.1 General
- 3.1.1 All surface movement of aircraft, vehicles and personnel on the manoeuvring area is subject to prior permission from ATC.
- 3.1.2 Within the movement area, pilots will be cleared to and from the aircraft stands under general direction from Ground Control. Pilots are reminded of the extreme importance of maintaining a careful look out at all times.
- 3.1.3 Directions issued by ATC should be followed specifically. RTF transmissions must be brief, concise and kept to the minimum number.
- 3.2 Operation of mode S transponders on the ground
- 3.2.1 Suvarnabhumi International Airport is equipped with an Advanced Surface Movement Radar utilizing mode S multilateration. Aircraft operators intending to use Suvarnabhumi International Airport should ensure that mode S transponders are able to operate when the aircraft is on the ground.
- 3.2.2 For aircraft that are capable of reporting aircraft identification (i.e. call signs used 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 ICAO plan e.g. THA640, CPA701, SIA068) shall be used.
- 3.2.3 Flight crew should select XPDR or the equivalent according to specific installation. It must also be ensured that the transponder is operating (i.e. OUT OF STAND-BY or OFF POSITION) and the assigned mode A code is selected in accordance with the following:
- a) for a departing flight, upon received airway clearance;
 - b) for an arriving flight, continuously until the aircraft is fully parked at the stand.
- 3.2.4 To prevent possible interference to radar surveillance systems, TCAS should be functioned:
- a) for departure, when aircraft are entering the runway or line up clearance is received;
 - b) for arrival, until aircraft have vacated the runway.

- 3.2.5 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 unit:
- for departure, when starting up engine;
 - for arrival, until aircraft have completely parked.

3.2.6 Tracking and identifications of airport surface vehicles

To provide tracking and identification of authorized movements, any authorized vehicle intended to be used on the manoeuvring area at Suvarnabhumi International Airport shall be equipped with mode S squitter box to inform mode S multilateration system of its position.

4. ATC Clearance Procedures

4.1 Issuance of en route clearance

When flight formalities have been completed and aircraft is ready for departure (all doors are closed), all aircraft are to call Bangkok Control for ATC clearance on the following frequencies:

4.1.1 International flights

Frequency	Outbound routes
120.8 MHz	A464 (SOUTHBOUND), G458, M751
133.8 MHz	A1 (EASTBOUND), A202
135.8 MHz	N891, G474, R468 (EASTBOUND)
128.7 MHz	A1, L507, A464 (NORTHBOUND), W21, B346, G463, P646, R468 (WESTBOUND), R474, W9

4.1.2 Domestic flights

Frequency	Outbound routes
133.6 MHz	A1 (EASTBOUND), W1, A464 (NORTHBOUND), R474, W21, B346, W9
126.5 MHz	A464 (SOUTHBOUND), G458, W19, W31 (flight level 090 or above), N891

(Except : IFR aircraft departing to VTBD, VTBU, VTBK, VTBL, VTPI and VTPH at or below FL160 are to call Bangkok Approach on 125.8 MHz)

A call as in para 4.1 above shall include the aircraft call sign and proposed flight level, if different from flight plan.

4.2 Cancellation of en route clearance

After the ATC clearance received, pilots will be instructed to call the relevant Ground Control frequency for push back and start up, and should give parking stand number or location and received ATIS information.

4.2.1 Except as specified in 4.2.2 the aircraft must be pushed back within 5 minutes from the time ATC clearance is received, otherwise ATC clearance will be cancelled.

4.2.2 If ATC clearance includes a departure time restrictions in order to establish longitudinal separation, pilots shall:

- keep listening watch on relevant Suvarnabhumi Ground Control frequency at all times for additional or revised ATC clearance and in readiness for push back; and
- call that Ground Control in the appropriate time with the departure time restriction.

Pilot who fail to comply with 4.2.2a and/or 4.2.2b will result in cancellation of ATC clearance.

5. Push Back Procedures

5.1 Scope

The procedure covers and details the activities to be carried out by ATC staff, AOT staff and airport agencies staff when involved in the process of an aircraft start up and push back at Suvarnabhumi International Airport.

5.2 Objective

5.2.1 The procedure “Aircraft start up and push back” applies to all persons involved in handling the process of aircraft start up and push back.

5.2.2 The procedure also implies conditions for operations during Low Visibility Conditions at the airport.

5.3 General

5.3.1 Aircraft which are parked either nose in to the terminal building on a stand attached to a PASSENGER LOADING BRIDGE or nose in on a remote stand will need to be pushed back from the stand towards the taxilane centerline taking into account the standard taxiway routing.

5.3.2 Once the pilot-in-command of an aircraft has decided that the aircraft is fully ready for departure he/she will contact Ground Control for start up, stating the parking position and after that for push back permission.

Note.- fully ready in this sense means all passengers, hold and cargo doors are closed, the Passenger Loading Bridge is disconnected and back in its rest position, the tug is connected to the aircraft and the ground engineer is in position and in contact with the pilot in command.

5.3.3 When the anti-collision beacons of the aircraft have been switched on no vehicular movement is permitted behind the aircraft.

5.3.4 ATC may deviate from the standard push back procedure as stated below for reasons such as traffic or work in progress. The deviation will be given in the push back permission and the pilot-in-command has to make sure that the ground engineer fully understands the deviation.

5.3.5 The P.i.C. shall use minimum break away power and minimum taxi power when operating on the aprons and taxi lanes.

5.3.6 Nose wheel positions have been marked on the taxi lane centerline to indicate to the driver where the push pull manoeuvre has to be stopped and the tug can be disconnected.

5.3.7 A340-600 aircraft may only be pushed back using a towbarless tow tractor. This is to avoid blocking the road in front of the aircraft by a tractor with towbar.

5.4 Push Back Procedures

5.4.1 Aircraft parking at Main Apron (26 stands)

Aircraft stands	Frequency Ground Control	Push Back Instructions
C2	121.75 Mhz	Aircraft shall be pushed back to face east onto aircraft stand taxi lane T12 and then towed forward until abeam stand D2 with aircraft nose wheel on marking on taxilane.
C4, C6	121.75 Mhz	Aircraft shall be pushed back to face south onto aircraft stand taxi lane T8 and then towed forward until abeam stand C6 with aircraft nose wheel on marking on taxilane.
C8, C10	121.75 Mhz	Aircraft shall be pushed back to face south on to aircraft stand taxi lane T8 and then towed forward until abeam stand C10 with aircraft nose wheel on marking on taxilane.
301,302	121.75 Mhz	Aircraft shall be pushed back to face north onto aircraft stand taxi lane T9 and then towed forward until abeam stand 302 with aircraft nose wheel on marking on taxilane.
303, 304	121.75 Mhz	Aircraft shall be pushed back to face north onto aircraft stand taxi lane T9 and then towed forward until abeam stand 304 with nose wheel on marking on taxilane
305,306	121.75 Mhz	Aircraft shall be pushed back to face north onto aircraft stand taxi lane T10 then towed forward until abeam stand 306 with nose wheel on marking on taxilane
307,308	121.75 Mhz	Aircraft shall be pushed back to face north onto aircraft stand taxi lane T10 then towed forward until abeam stand 308 with nose wheel on marking on taxilane
D1, D2, D3	121.75 Mhz	Aircraft shall be pushed back to face east onto aircraft stand taxi lane T12 and then towed forward until abeam stand D2 with nose wheel on marking on taxilane
D4	121.75 Mhz	Aircraft shall be pushed back to face east onto aircraft stand taxi lane T12 and then towed forward until abeam stand D3 with nose wheel on marking on taxilane
D5	121.75 Mhz	Aircraft shall be pushed back to face west onto aircraft stand taxi lane T12 and then towed forward until abeam stand D6 with nose wheel on marking on taxilane
D6	121.75 Mhz	Aircraft shall be pushed back to face west onto aircraft stand taxi lane T12 and then towed forward until abeam stand D6 with nose wheel on marking on taxilane
D7, D8	121.75 Mhz	Aircraft shall be pushed back to face west onto aircraft stand taxi lane T12 and then towed forward until abeam stand D7 with nose wheel on marking on taxilane
E1	121.75 Mhz	Aircraft shall be pushed back to face west onto aircraft stand taxi lane T12 and then towed forward until abeam stand D7 with nose wheel on marking on taxilane
E3, E5	121.75 Mhz	Aircraft shall be pushed back to face south onto aircraft stand taxi lane T11 then towed forward until abeam stand E5 with nose wheel on marking on taxilane
E7, E9	121.75 Mhz	Aircraft shall be pushed back to face south onto aircraft stand taxi lane T11 then towed forward until abeam stand E9 with nose wheel on marking on taxilane

5.4.2 Aircraft parking at East Apron (54 stands)

Aircraft stands	Frequency Ground Control	Push Back Instructions
A1, A2	121.65 Mhz	Aircraft shall be pushed back to face south onto aircraft stand taxi lane T5 until abeam stand A2 with nose wheel on marking on taxi lane
A3, A4, A5	121.65 Mhz	Aircraft shall be pushed back to face south onto aircraft stand taxi lane T5
A6, 101	121.65 Mhz	Aircraft shall be pushed back to face south onto aircraft stand taxi lane T5 then towed forward until abeam stand A6 with nose wheel on marking on taxilane
102, 103	121.65 Mhz	Aircraft shall be pushed back to face north onto aircraft stand taxi lane T5 then towed forward until abeam stand 104 with nose wheel on marking on taxilane
104, 105, 106, 107	121.65 Mhz	Aircraft shall be pushed back to face north onto aircraft stand taxi lane T5
108, 109	121.65 Mhz	Aircraft shall be pushed back to face north onto aircraft stand taxi lane T5 then towed forward until abeam stand 110 with nose wheel on marking on taxilane
110, 111, 112, 113, 114	121.65 Mhz	Aircraft shall be pushed back to face north onto aircraft stand taxi lane T5
115, 116, 117	121.65 Mhz	Aircraft shall be pushed back to face south onto aircraft stand taxi lane T5
118	121.65 Mhz	Aircraft shall be pushed back to face south onto aircraft stand taxi lane T5 then towed forward until abeam stand A6 with nose wheel on marking on taxilane
119	121.65 Mhz	Aircraft shall be pushed back to face north onto aircraft stand taxi lane T5 then towed forward until abeam stand 104 with nose wheel on marking on taxilane
120, 121, 122, 123	121.65 Mhz	Aircraft shall be pushed back to face north onto aircraft stand taxi lane T5
124	121.65 Mhz	Aircraft shall be pushed back to face north onto aircraft stand taxi lane T5 then towed forward until abeam stand 110 with nose wheel on marking on taxilane
125, 126, 127, 128, 129	121.65 Mhz	Aircraft shall be pushed back to face north onto aircraft stand taxi lane T5
130-134	121.65 Mhz	Aircraft shall be pushed back to face east onto aircraft stand taxi lane T1
B1, B3	121.65 Mhz	Aircraft shall be pushed back to face south onto aircraft stand taxi lane T5 then towed forward until abeam stand A2 with nose wheel on marking on taxilane
B2, B4, B6	121.65 Mhz	Aircraft shall be pushed back to face west onto aircraft stand taxi lane T6 then towed forward until abeam stand B4 with nose wheel on marking on taxilane
B5	121.65 Mhz	Aircraft shall be pushed back to face east onto aircraft stand taxi lane T4 then towed forward until abeam stand B5 with nose wheel on marking on taxilane
C1	121.65 Mhz	Aircraft shall be pushed back to face west onto aircraft stand taxi lane T6 then towed forward until abeam stand B4 with nose wheel on marking on taxilane
C3, C5	121.65 Mhz	Aircraft shall be pushed back to face south onto aircraft stand taxi lane T7 then towed forward until abeam stand C5 with nose wheel on marking on taxilane
C7, C9	121.65 Mhz	Aircraft shall be pushed back to face south onto aircraft stand taxi lane T7 then towed forward until abeam stand C9 with nose wheel on marking on taxilane
201	121.65 Mhz	Aircraft shall be pushed back to face south onto aircraft stand taxi lane T7 then towed forward until abeam stand C5 with nose wheel on marking on taxilane

202, 203	121.65 Mhz	Aircraft shall be pushed back to face south onto aircraft stand taxi lane T7 then towed forward until abeam stand C9 with nose wheel on marking on taxilane
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5.4.3 Aircraft parking at West Apron (44 stands)

Aircraft stands	Frequency Ground Control	Push Back Instructions
E2	121.95 Mhz	Aircraft shall be pushed back to face east onto aircraft stand taxi lane T14 then towed forward until abeam stand F3 with nose wheel on marking on taxilane
E4, E6	121.95 Mhz	Aircraft shall be pushed back to face south onto aircraft stand taxi lane T13 then towed forward until abeam stand E6 with nose wheel on marking on taxilane
E8, E10	121.95 Mhz	Aircraft shall be pushed back to face south onto aircraft stand taxi lane T13 then towed forward until abeam stand E10 with nose wheel on marking on taxilane
401	121.95 Mhz	Aircraft shall be pushed back to face south onto aircraft stand taxi lane T13 then towed forward until abeam stand E6 with nose wheel on marking on taxilane
402, 403	121.95 Mhz	Aircraft shall be pushed back to face south onto aircraft stand taxi lane T13 then towed forward until abeam stand E10 with nose wheel on marking on taxilane
F1, F3, F5	121.95 Mhz	Aircraft shall be pushed back to face east onto aircraft stand taxi lane T14 then towed forward until abeam stand F3 with nose wheel on marking on taxilane
F2, F4, F6	121.95 Mhz	Aircraft shall be pushed back to face east onto aircraft stand taxi lane T15 then towed forward until abeam stand F4 with nose wheel on marking on taxilane
G1, G2	121.95 Mhz	Aircraft shall be pushed back to face east onto aircraft stand taxi lane T15 then towed forward until abeam stand F4 with nose wheel on marking on taxilane
G3, G4, G5	121.95 Mhz	Aircraft shall be pushed back to face north onto aircraft stand taxi lane T17
501, 502, 503, 504, 505	121.95 Mhz	Aircraft shall be pushed back to face north onto aircraft stand taxi lane T17
506-525	121.95 Mhz	Aircraft shall be pushed back to face south onto taxiway D

5.5 Responsibilities

5.5.1 Responsibilities of the pilot-in-command

When the aircraft is fully ready the pilot-in-command is responsible to obtain start up and push back permission, stating the parking position.

5.5.2 Responsibilities of the ground engineer

The ground engineer of the Airline or Ground Handling Agent is responsible for a safe process of aircraft start up and push back and to report to the pilot-in-command when he/she and the tug are clear of the taxiway in the event of Low Visibility Condition.

5.5.3 Responsibilities of the tug driver

The tug driver is responsible to ensure that the aircraft is pushed back (and pulled forward if required) into the right direction onto the taxilane.

5.5.4 Responsibilities of the Apron Control Tower

The Apron Controller is responsible to monitor the engines start up and push back activities and to ensure that the aircraft will be pushed back into the right direction onto the taxilane.

5.6 Actions to be taken

5.6.1 Actions to be taken by the pilot-in-command

When the aircraft is fully ready the pilot-in-command shall:

- Contact Ground Control for permission to start up the engines. It may be that not all engines are being started up at the stand, but only one, and the other engines after the push back manoeuvre has been completed and the tug has been disconnected.
- Ensure that the ground engineer, who is in direct intercom-radio contact with the pilot-in-command, acknowledges the start up permission.
- Ensure that the anti-collision beacons of the aircraft have been switched on before starting the engines.
- Ask Ground Control for push back permission when the engine(s) have been started.
- Ensure that the ground engineer acknowledges the permission.
- Ensure that the aircraft is being pushed back in the right direction onto the taxilane.
- Request permission from Ground Control to taxi when the tug has been disconnected as confirmed by the ground engineer and the ground engineer has given the “all clear” signal.

5.6.2 Actions to be taken by the ground engineer

The ground engineer of the Airline or Handling Agent shall:

- Ensure that the stand area is clear of any obstacle and FOD.
- Ensure that the tug is connected to the aircraft and that the tug driver is ready.
- Acknowledge the Ground Control permission to start up the engine(s) to the pilot-in-command.
- Ensure that the anti-collision beacons of the aircraft are switched on.
- Monitor the engine(s) start up sequence.
- Acknowledge the Ground Control permission for push back to the pilot-in-command.
- Ensure that the tug driver understood the push back permission (by hand -signaling to the tug driver) and is starting the push back maneuver.
- Ensure that the aircraft is pushed back into the right direction onto the taxilane.
- Make sure that during the push back maneuver he/she will be in contact with the pilot-in-command at all times.
- Ensure that the tug has been disconnected from the aircraft on the taxilane stop position and confirm so to the pilot-in-command.
- When disconnected from the radio contact with the pilot-in-command, give the “all clear” signal to the Pilot-in-command, being well clear of the aircraft’s path of taxiing.
- Return to the stand area.

During low visibility conditions (CAT II) the ground engineer will, together with the tug driver, return behind the double white marking line on the apron surface as soon as possible and will indicate to the pilot-in-command that both of them are clear of the taxiway.

Note: CAT II: Runway Visual Range of less than 550 meters or cloud base of less than 200 feet.

5.6.3 Actions to be taken by the tug driver

The tug driver of the Airline or Handling Agent shall:

- Ensure that the tug is well connected to the aircraft
- Start the push back maneuver when permission to do so has been given by the ground engineer.
- Make sure that the aircraft is pushed back into the right direction onto the taxilane stop position.
- Disconnect the tug from the aircraft when in position on the taxilane.
- Return to the stand area.

During low visibility conditions (CAT II) the tug driver will, together with the ground engineer, return behind the red clearance line marking on the apron surface as soon as possible.

Note: CAT II: Runway Visual Range of less than 550 meters or cloud base of less than 200 feet.

5.6.4 Actions to be taken by the Apron Control Tower

The Apron Controller will:

- Monitor the engines start up and push back activities.
- Ensure that the aircraft will be pushed back into the right direction onto the taxilane.

6. Taxi Procedures

6.1 When issuing taxi instructions to departing aircraft, Ground controller shall provide a standard taxi route which is in accordance with the relevant parking area, the taxi-out position of an aircraft and runway-in-use. The clearance limit shall be at the holding position of runway-in-use.

The following phrase will be transmitted:

“...C/S...TAXI VIA ROUTE MIKE TANGO ONE ZERO, RUNWAY ONE NINE LEFT.”

6.2 If traffic permits or in any cases the standard taxi route shall not be provided, the detailed taxi instruction may be applicable including the following items in the order list:

- a) taxi routes;
- b) holding position;
- c) runway designator;
- d) any other pertinent information.

The following phrase will be transmitted:

“...C/S... TAXI VIA C, C3, B1 TO HOLDING POSITION RUNWAY ONE NINE LEFT.”

6.3 For arriving aircraft, the standard taxi routes to aircraft parking stand are provided in relation to landing runway followed by series of relevant taxiways, and parking area.

The following phrase will be transmitted:

“...C/S...TAXI VIA ROUTE ONE NINE RIGHT, ECHO TANGO THREE TO STAND ONE ZERO THREE.”

6.4 If traffic permits or in any cases the standard taxi route shall not be provided, the detailed taxi instruction may be applicable including the following items in the order list:

- a) taxi routes ;
- b) parking stand ;
- c) any other pertinent information.

The following phrase will be transmitted :

“...C/S... TAXI VIA E, D7, G, T10 TO STAND D6.”

6.5 The standard taxi routes provided by aerodrome controller shall be in effect until:

- a) the departing aircraft reaches the holding position of active runway;
- b) the arriving aircraft, completely parks at the assigned stand.

Pilots are reminded that, in no case shall the taxi instruction received on initial contact be altered, except approved otherwise specified by ATC.

6.6 The standard taxi routes for arriving and departing aircraft

6.6.1 Inbound taxi route runway 19R

MAIN APRON

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19R	MAIN APRON	19R / MT9	EXIT ONTO E , D7, G, T9 THEN TURN RIGHT T12, T8	C2 C10	C4	C6	C8
			EXIT ONTO E, D7, G, T9	301	302	303	304
			EXIT ONTO E, D7, G, T9 THEN TURN RIGHT T12	D1	D2		
			EXIT ONTO E, D7, G, T9 THEN TURN LEFT T12	D3	D4		

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19R	MAIN APRON	19R / MT10	EXIT ONTO E, D7, G,T10 THEN TURN RIGHT T12	D5	D6		
			EXIT ONTO E, D7, G, T10 THEN TURN LEFT T12	D7	D8		
			EXIT ONTO E, D7, G, T10 THEN TURN LEFT T12, T11	E1 E9	E3	E5	E7
			EXIT ONTO E, D7, G, T10	305	306	307	308

EAST APRON

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19R	EAST APRON	19R / ET3	EXIT ONTO E, D7, G THEN TURN LEFT C, T3 THEN TURN LEFT T5	A1	A2	A3	A4
				A5	A6	101	115
				116	117	118	
			EXIT ONTO E D7, G THEN TURN LEFT C, T3 THEN TURN RIGHT T5	102	103	104	105
				106	107	108	109
				110	111	112	113
				114	119	120	121
				122	123	124	125
				126	127	128	129
			EXIT ONTO E, D7, G THEN TURN LEFT C, T3 THEN TURN LEFT T5, T4	B1	B3	B5	
			EXIT ONTO E, D7, G THEN TURN LEFT C, T3 THEN TURN RIGHT T5, T1	130	131	132	133
				134			

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19R	EAST APRON	19R / ET6	EXIT ONTO E, D7, G THEN TURN LEFT C T6	B2	B4	B6	
			EXIT ONTO E, D7, G THEN TURN LEFT C T6, T7	C1	C3	C5	C7
				C9	201	202	203

WEST APRON

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19R	WEST APRON	19R / WD1	EXIT ONTO E, D1 THEN TURN RIGHT D	510	511	512	513
				514	515	516	517
				518			
			EXIT ONTO E, D1 THEN TURN LEFT D	519	520	521	522
				523	524	525	

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19R	WEST APRON	19R / WD3	EXIT ONTO E, D3 THEN TURN RIGHT D	506	507	508	509

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19R	WEST APRON	19R / WT14	EXIT ONTO E, D6, T14, T13	E2	E4	E6	E8
				E10	401	402	403
			EXIT ONTO E, D6, T14	F1	F3	F5	

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19R	WEST APRON	19R / WT15	EXIT ONTO E, D5, T15	F2	F4	F6	
			EXIT ONTO E , D5, T15, T17	G1	G2	G3	G4
				G5	501	502	503
				504	505		

6.6.2 Inbound taxi route runway 19L

MAIN APRON

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19L	MAIN APRON	19L / MT9	EXIT ONTO B, C7, H, H3, T9 THEN TURN RIGHT T12, T8	C2	C4	C6	C8
				C10			
			EXIT ONTO B, C7, H, H3, T9	301	302	303	304
			EXIT ONTO B, C7, H, H3, T9 THEN TURN RIGHT T12	D1	D2		
			EXIT ONTO B, C7, H, H3 T9 THEN TURN LEFT T12	D3	D4		

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19L	MAIN APRON	19L / MT10	EXIT ONTO B, C7, H, H2, T10 THEN TURN RIGHT T12	D5	D6		
			EXIT ONTO B, C7, H, H2, T10 THEN TURN LEFT T12	D7	D8		
			EXIT ONTO B, C7, H, H2, T10 THEN TURN LEFT T12, T11	E1	E3	E5	E7
				E9			
			EXIT ONTO B, C7, H, H2, T10	305	306	307	308

EAST APRON

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19L	EAST APRON	19L / ET3	EXIT ONTO B, C7 THEN TURN RIGHT C, T3 THEN TURN LEFT T5	A1	A2	A3	A4
				A5	A6	101	115
				116	117	118	
			EXIT ONTO B, C7 THEN TURN RIGHT C, T3 THEN TURN RIGHT T5	102	103	104	105
				106	107	108	109
				110	111	112	113
				114	119	120	121
				122	123	124	125
				126	127	128	129
			EXIT ONTO B, C7 THEN TURN RIGHT C, T3, THEN TURN LEFT T5, T4	B1	B3	B5	
			EXIT ONTO B, C7 THEN TURN RIGHT C, T3 THEN TURN RIGHT T5, T1	130	131	132	133
				134			

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19L	EAST APRON	19L / ET6	EXIT ONTO B, C7 THEN TURN RIGHT C, T6	B2	B4	B6	
			EXIT ONTO B, C7 THEN TURN RIGHT C, T6, T7	C1	C3	C5	C7
				C9	201	202	203

WEST APRON

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19L	WEST APRON	19L / WD1	EXIT ONTO B, C7, H, D8 THEN TURN RIGHT E, D1 THEN TURN RIGHT D	510	511	512	513
				514	515	516	517
				518			
			EXIT ONTO B, C7 H, D8 THEN TURN RIGHT E, D1 THEN TURN LEFT D	519	520	521	522
				523	524	525	

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19L	WEST APRON	19L / WD3	EXIT ONTO B, C7, H, D8 THEN TURN RIGHT E, D3 THEN TURN RIGHT D	506	507	508	509

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19L	WEST APRON	19L / WT14	EXIT ONTO B, C7, H, D8 THEN TURN RIGHT E, D6, T14, T13	E2	E4	E6	E8
				E10	401	402	403
			EXIT ONTO B, C7, H, D8 THEN TURN RIGHT E, D6, T14	F1	F3	F5	

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19L	WEST APRON	19L / WT15	EXIT ONTO B, C7, H, D8 THEN TURN RIGHT E, D5, T15	F2	F4	F6	
			EXIT ONTO B, C7, H, D8 THEN TURN RIGHT E, D5, T15, T17	G1	G2	G3	G4
				G5	501	502	503
				504	505		

6.6.3 Outbound taxi route runway 19R

MAIN APRON

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19R	MAIN APRON	MT8 / 19R	T12, T8, H3 THEN TURN RIGHT H, D8 THEN TURN RIGHT E TO HOLDING POSITION E1	D1	D2	D3	D4
			T9 THEN TURN RIGHT T12, T8, H3 THEN TURN RIGHT H, D8 THEN TURN RIGHT E TO HOLDING POSITION E1	301	302	303	304
			T8, H3 THEN TURN RIGHT H, D8 THEN TURN RIGHT E TO HOLDING POSITION E1	C2	C4	C6	C8
				C10			

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19R	MAIN APRON	MT11 / 19R	T12, T11, H2 THEN TURN RIGHT H, D8 THEN TURN RIGHT E TO HOLDING POSITION E1	D5	D6	D7	D8
			T11, H2 THEN TURN RIGHT H, D8 THEN TURN RIGHT E TO HOLDING POSITION E1	E1	E3	E5	E7
			T10 THEN TURN LEFT T12, T11, H2 THEN TURN RIGHT H, D8 THEN TURN RIGHT E TO HOLDING POSITION E1	E9			
				305	306	307	308

EAST APRON

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19R	EAST APRON	ET1 / 19R	T5, T1, C, C2, B, C7, H, D8 THEN TURN RIGHT E TO HOLDING POSITION E1	109	110	111	112
				113	114	124	125
				126	127	128	129
			T1, C, C2, B, C7, H, D8 THEN TURN RIGHT E TO HOLDING POSITION E1	130	131	132	133
				134			

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19R	EAST APRON	ET2 / 19R	T5, T2 THEN TURN RIGHT C, C2, B, C7, H, D8 THEN TURN RIGHT E TO HOLDING POSITION E1	102	103	104	105
				106	107	108	119
				120	121	122	123

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19R	EAST APRON	ET4 / 19R	T5, T4 ,C4 THEN TURN RIGHT B, C7, H, D8 THEN TURN RIGHT E TO HOLDING POSITION E1	A1	A2	A3	A4
				A5	A6	101	115
				116	117	118	
			T4, C4 THEN TURN RIGHT B, C7, H, D8 THEN TURN RIGHT E TO HOLDING POSITION E1	B1	B3	B5	

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19R	EAST APRON	ET7 / 19R	T6, T7, H4, THEN TURN RIGHT H, D8 THEN TURN RIGHT E TO HOLDING POSITION E1	B2	B4	B6	
			T7, H4 THEN TURN RIGHT H, D8 THEN TURN RIGHT E TO HOLDING POSITION E1	C1	C3	C5	C7
				C9	201	202	203

WEST APRON

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19R	WEST APRON	WD2 / 19R	D, D2 TO HOLDING POSITION E1	511	512	513	514
				515	516	517	518
				519	520	521	522
				523	524	525	

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19R	WEST APRON	WD4 / 19R	D, D4 THEN TURN RIGHT E TO HOLDING POSITION E1	506	507	508	509
				510			

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19R	WEST APRON	WT13 / 19R	T13, H1 THEN TURN RIGHT H, D8 THEN	E2	E4	E6	E8
				E10	401	402	403
			TURN RIGHT E TO HOLDING POSITION E1				
			T14, T13, H1 THEN TURN RIGHT H, D8 THEN TURN RIGHT E TO HOLDING POSITION E1	F1	F3	F5	

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19R	WEST APRON	WT16 / 19R	T15, T17, T16, D4 THEN TURN RIGHT E TO HOLDING POSITION E1	F2	F4	F6	
			T17, T16, D4 THEN TURN RIGHT E TO HOLDING POSITION E1	G1	G2	G3	G4
				G5	501	502	503
				504	505		

6.6.4 Outbound taxi route runway 19L

MAIN APORN

MAIN APRON							
RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19L	MAIN APRON	MT8 / 19L	T8 THEN TURN LEFT G	C2	C4	C6	C8
			THEN TURN LEFT C	C10			
			C2 , B TO HOLDING POSITION B1				
			T9 THEN TURN RIGHT	301	302	303	304
			T12, T8 THEN TURN LEFT G THEN TURN LEFT C, C2, B TO HOLDING POSITION B1				
			T12 ,T8 THEN TURN LEFT	D1	D2	D3	D4
			G THEN TURN LEFT C, C2, B TO HOLDING POSITION B1				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19L	MAIN APRON	MT11 / 19L	T12,T11, THEN TURN LEFT G THEN TURN LEFT C, C2 , B TO HOLDING POSITION B1	D5	D6	D7	D8
			T11 THEN TURN LEFT G THEN TURN LEFT C, C2 , B TO HOLDING POSITION B1	E1	E3	E5	E7
				E9			
			T10 THEN TURN LEFT T12, T11 THEN TURN LEFT G THEN TURN LEFT C, C2, B TO HOLDING POSITION B1	305	306	307	308

EAST APRON

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19L	EAST APRON	ET1 /19L	T5 THEN TURN RIGHT T1, C, C2 ,B TO HOLDING POSITION B1	109	110	111	112
				113	114	124	125
				126	127	128	129
			T1, C, C2 , B TO HOLDING POSITION B1	130	131	132	133
				134			

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19L	EAST APRON	ET2 / 19L	T5,T2 THEN TURN RIGHT C, C2, B TO HOLDING POSITION B1	102	103	104	105
				106	107	108	119
				120	121	122	123

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19L	EAST APRON	ET4 / 19L	T5, T4, THEN TURN LEFT C, C2 , B TO HOLDING POSITION B1	A1	A2	A3	A4
				A5	A6	101	115
				116	117	118	
			T4, THEN TURN LEFT C, C2 B TO HOLDING POSITION B1	B1	B3	B5	

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19L	EAST APRON	ET7 / 19L	T6, T7 THEN TURN LEFT G THEN TURN LEFT C, C2, B TO HOLDING POSITION B1	B2	B4	B6	
			T7 THEN TURN LEFT G THEN TURN LEFT C, C2 B TO HOLDING POSITION B1	C1	C3	C5	C7
				C9	201	202	203

WEST APRON

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19L	WEST APRON	WD / 19L	STRAIGHT AHEAD ON D, G THEN TURN LEFT C, C2 , B TO HOLDING POSITION B1	506	507	508	509
				510	511	512	513
				514	515	516	517
				518	519	520	521
				522	523	524	525

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19L	WEST APRON	WT13 / 19L	T13 THEN TURN LEFT G THEN TURN LEFT C, C2 , B TO HOLDING POSITION B1	E2	E4	E6	E8
				E10	401	402	403
			T14, T13 THEN TURN LEFT G THEN TURN LEFT C, C2 , B TO HOLDING POSITION B1	F1	F3	F5	

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
19L	WEST APRON	WT16 / 19L	T15, T17, T16 THEN TURN LEFT D , G THEN TURN LEFT C, C2 , B TO HOLDING POSITION B1	F2	F4	F6	
			T17, T16 THEN TURN LEFT D, G THEN TURN LEFT C, C2 , B TO HOLDING POSITION B1	G1	G2	G3	G4
				G5	501	502	503
				504	505		

6.6.5 Inbound taxi route runway 01L

MAIN APRON

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
				C2	C4	C6	C8
01L	MAIN APRON	01L/MT9	EXIT ON E12 THEN TURN LEFT E, D7, G, T9 THEN TURN RIGHT T12, T8	C10			
			EXIT ON E7, E8, D6 THEN TURN RIGHT D, G, T9 THEN TURN RIGHT T12,T8				
			EXIT ON E5 THEN TURN LEFT E, D3 THEN TURN RIGHT D, G, T9 THEN TURN RIGHT T12,T8				
			EXIT ON E2, D3 THEN TURN RIGHT D, G, T9 THEN TURN RIGHT T12, T8				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	MAIN APRON	01L/MT9	EXIT ON E12 THEN TURN LEFT E, D7, G, T9	301	302	303	304
			EXIT ON E7, E8, D6 THEN TURN RIGHT D, G, T9				
			EXIT ON E5 THEN TURN LEFT E, D3 THEN TURN RIGHT D, G, T9				
			EXIT ON E2, D3 THEN TURN RIGHT D, G, T9				
			EXIT ON E12 THEN TURN LEFT E, D7, G, T9 THEN TURN RIGHT T12	D1	D2		
			EXIT ON E7, E8, D6 THEN TURN RIGHT D, G, T9 THEN TURN RIGHT T12				
			EXIT ON E5 THEN TURN LEFT E, D3 THEN TURN RIGHT D, G, T9 THEN TURN RIGHT T12				
			EXIT ON E2, D3 THEN TURN RIGHT D, G, T9 THEN TURN RIGHT T12				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS		
01L	MAIN APRON	01L/MT9	EXIT ON E12 THEN TURN LEFT E, D7, G, T9 THEN TURN LEFT T12	D3	D4	
			EXIT ON E7, E8, D6 THEN TURN RIGHT D, G, T9 THEN TURN LEFT T12			
			EXIT ON E5 THEN TURN LEFT E, D3 THEN TURN RIGHT D, G, T9 THEN TURN LEFT T12			
			EXIT ON E2, D3 THEN TURN RIGHT D, G, T9 THEN TURN LEFT T12			

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS		
01L	MAIN APRON	01L/MT10	EXIT ON E12 THEN TURN LEFT E, D7, G, T10 THEN TURN RIGHT T12	D5	D6	
			EXIT ON E7, E8, D6 THEN TURN RIGHT D, G, T10 THEN TURN RIGHT T12			
			EXIT ON E5 THEN TURN LEFT E, D3 THEN TURN RIGHT D, G, T10 THEN TURN RIGHT T12			
			EXIT ON E2, D3 THEN TURN RIGHT D, G, T10 THEN TURN RIGHT T12			

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS		
01L	MAIN APRON	01L/MT10	EXIT ON E12 THEN TURN LEFT E, D7, G, T10 THEN TURN LEFT T12	D7	D8	
			EXIT ON E7, E8, D6 THEN TURN RIGHT D, G, T10 THEN TURN LEFT T12			
			EXIT ON E5 THEN TURN LEFT E, D3 THEN TURN RIGHT D, G, T10 THEN TURN LEFT T12			
			EXIT ON E2, D3 THEN TURN RIGHT D, G, T10 THEN TURN LEFT T12			

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	MAIN APRON	01L/MT10	EXIT ON E12 THEN TURN LEFT E, D7, G, T10 THEN TURN LEFT T12, T11	E1	E3	E5	E7
			EXIT ON E7, E8, D6 THEN TURN RIGHT D, G, T10 THEN TURN LEFT T12, T11	E9			
			EXIT ON E5 THEN TURN LEFT E, D3 THEN TURN RIGHT D, G, T10 THEN TURN LEFT T12, T11				
			EXIT ON E2, D3 THEN TURN RIGHT D, G, T10 THEN TURN LEFT T12, T11				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	MAIN APRON	01L/MT10	EXIT ON E12 THEN TURN LEFT E, D7, G, T10	305	306	307	308
			EXIT ON E7, E8, D6 THEN TURN RIGHT D, G, T10				
			EXIT ON E5 THEN TURN LEFT E, D3 THEN TURN RIGHT D, G, T10				
			EXIT ON E2, D3 THEN TURN RIGHT D, G, T10				

EAST APRON

EAST APRON							
RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	EAST APRON	01L/ET3	EXIT ON E12 THEN TURN LEFT E, D7, G THEN TURN LEFT C, T3 THEN TURN LEFT T5	A1	A2	A3	A4
				A5	A6	101	115
				116	117	118	
			EXIT ON E7, E8, D6 THEN TURN RIGHT D, G THEN TURN LEFT C, T3 THEN TURN LEFT T5				
EXIT ON E5 THEN TURN LEFT E, D3 THEN TURN RIGHT D, G THEN TURN LEFT C, T3 THEN TURN LEFT T5							
EXIT ON E2, D3 THEN TURN RIGHT D, G THEN TURN LEFT C, T3 THEN TURN LEFT T5							

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
				102	103	104	105
01L	EAST APRON	01L/ET3	EXIT ON E12 THEN TURN LEFT E, D7, G THEN TURN LEFT C, T3 THEN TURN RIGHT T5	106	107	108	109
				110	111	112	113
				114	119	120	121
				122	123	124	125
				126	127	128	129
			EXIT ON E7, E8, D6 THEN TURN RIGHT D, G THEN TURN LEFT C, T3 THEN TURN RIGHT T5				
			EXIT ON E5 THEN TURN LEFT E, D3 THEN TURN RIGHT D, G THEN TURN LEFT C, T3 THEN TURN RIGHT T5				
			EXIT ON E2, D3 THEN TURN RIGHT D, G THEN TURN LEFT C, T3 THEN TURN RIGHT T5				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	EAST APRON	01L/ET3	EXIT ON E12 THEN TURN LEFT E, D7, G THEN TURN LEFT C, T3 THEN TURN LEFT T5, T4	B1	B3	B5	
			EXIT ON E7, E8, D6 THEN TURN RIGHT D, G THEN TURN LEFT C, T3 THEN TURN LEFT T5, T4				
			EXIT ON E5 THEN TURN LEFT E, D3 THEN TURN RIGHT D, G THEN TURN LEFT C, T3 THEN TURN LEFT T5, T4				
			EXIT ON E2, D3 THEN TURN RIGHT D, G THEN TURN LEFT C, T3 THEN TURN LEFT T5, T4				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	EAST APRON	01L/ET3	EXIT ON E12 THEN TURN LEFT E, D7, G THEN TURN LEFT C, T3 THEN TURN RIGHT T5, T1	130	131	132	133
			EXIT ON E7, E8, D6 THEN TURN RIGHT D, G THEN TURN LEFT C, T3 THEN TURN RIGHT T5, T1	134			
			EXIT ON E5 THEN TURN LEFT E, D3 THEN TURN RIGHT D, G THEN TURN LEFT C, T3 THEN TURN RIGHT T5, T1				
			EXIT ON E2, D3 THEN TURN RIGHT D, G THEN TURN LEFT C, T3 THEN TURN RIGHT T5, T1				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	EAST APRON	01L/ET6	EXIT ON E12 THEN TURN LEFT E, D7, G THEN TURN LEFT C, T6	B2	B4	B6	
			EXIT ON E7, E8, D6 THEN TURN RIGHT D, G THEN TURN LEFT C, T6				
			EXIT ON E5 THEN TURN LEFT E, D3 THEN TURN RIGHT D, G THEN TURN LEFT C, T6				
			EXIT ON E2, D3 THEN TURN RIGHT D, G THEN TURN LEFT C, T6				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	EAST APRON	01L/ET6	EXIT ON E12 THEN TURN LEFT E, D7, G THEN TURN LEFT C, T6, T7	C1	C3	C5	C7
				C9	201	202	203
			EXIT ON E7, E8, D6 THEN TURN RIGHT D, G THEN TURN LEFT C, T6, T7				
			EXIT ON E5 THEN TURN LEFT E, D3 THEN TURN RIGHT D, G THEN TURN LEFT C, T6, T7				
			EXIT ON E2, D3 THEN TURN RIGHT D, G THEN TURN LEFT C, T6, T7				

WEST APRON

WEST APRON								
RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS				
01L	WEST APRON	01L/WD1	EXIT ON E12 THEN TURN	510	511	512	513	
			LEFT E, D1 THEN TURN	514	515	516	517	
			RIGHT D	518				
			EXIT ON E7 THEN TURN					
			LEFT E, D1 THEN TURN					
			RIGHT D					
			EXIT ON E5 THEN TURN					
			LEFT E, D1 THEN TURN					
			RIGHT D					
			EXIT ON E2, THEN					
			TURN LEFT E, D1 THEN					
			TURN RIGHT D					

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	WEST APRON	01L/WD1	EXIT ON E12 THEN TURN LEFT E, D1 THEN TURN LEFT D	519	520	521	522
			EXIT ON E7 THEN TURN LEFT E, D1 THEN TURN LEFT D	523	524	525	
			EXIT ON E5 THEN TURN LEFT E, D1 THEN TURN LEFT D				
			EXIT ON E2, THEN TURN LEFT E, D1 THEN TURN LEFT D				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	WEST APRON	01L/WD3	EXIT ON E12 THEN TURN LEFT E, D3 THEN TURN RIGHT D	506	507	508	509
			EXIT ON E7 THEN TURN LEFT E, D3 THEN TURN RIGHT D				
			EXIT ON E5 THEN TURN LEFT E, D3 THEN TURN RIGHT D				
			EXIT ON E2, D3 THEN TURN RIGHT D				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	WEST APRON	01L/WT14	EXIT ON E12 THEN TURN	E2	E4	E6	E8
			LEFT E, D6, T14, T13	E10	401	402	403
			EXIT ON E7, E8, D6, T14, T13				
			EXIT ON E5 THEN TURN LEFT E, D3 THEN TURN RIGHT D, T14, T13				
			EXIT ON E2, D3 THEN TURN RIGHT D, T14, T13				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	WEST APRON	01L/WT14	EXIT ON E12 THEN TURN LEFT E, D6, T14	F1	F3	F5	
			EXIT ON E7, E8, D6, T14,				
			EXIT ON E5 THEN TURN LEFT E, D3 THEN TURN RIGHT D, T14				
			EXIT ON E2, D3 THEN TURN RIGHT D, T14				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	WEST APRON	01L/WT15	EXIT ON E12 THEN TURN LEFT E, D5, T15	F2	F4	F6	
			EXIT ON E7 THEN TURN LEFT E, D5, T15				
			EXIT ON E5 THEN TURN LEFT E, D3 THEN TURN RIGHT D, T15				
			EXIT ON E2, D3 THEN TURN RIGHT D, T15				
			EXIT ON E12 THEN TURN LEFT E, D5, T15, T17	G1	G2	G3	G4
				G5	501	502	503
				504	505		
			EXIT ON E7 THEN TURN LEFT E, D5, T15, T17				
			EXIT ON E5 THEN TURN LEFT E, D3 THEN TURN RIGHT D, T15, T17				
			EXIT ON E2, D3 THEN TURN RIGHT D, T15, T17				

6.6.6 Inbound taxi route runway 01R

MAIN APRON

MAIN APRON							
RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	MAIN APRON	01R / MT9	EXIT ON B7, B9, C10, C, H, H3, T9 THEN TURN RIGHT T12, T8	C2	C4	C6	C8
				C10			
			EXIT ON B5, B6, C8 THEN TURN RIGHT C, H, H3, T9 THEN TURN RIGHT T12, T8				
			EXIT ON B3, B4 THEN TURN LEFT B, C7, H, H3,T9 THEN TURN RIGHT T12, T8				
			EXIT ON B2 THEN TURN LEFT B, C7, H, H3, T9 THEN TURN RIGHT T12,T8				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	MAIN APRON	01R / MT9	EXIT ON B8, B9, C10, C, H, H3, T9	301	302	303	304
			EXIT ON B5, B6, C8, THEN TURN RIGHT C, H, H3, T9				
			EXIT ON B3, B4 THEN TURN LEFT B, C7, H, H3, T9				
			EXIT ON B2 THEN TURN LEFT B, C7, H, H3, T9				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS		
01R	MAIN APRON	01R / MT9	EXIT ON B7, B9, C10, C, H, H3, T9 THEN TURN RIGHT T12	D1	D2	
			EXIT ON B5, B6, C8, THEN TURN RIGHT C, H, H3, T9 THEN TURN RIGHT T12			
			EXIT ON B3, B4 THEN TURN LEFT B, C7, H, H3, T9 THEN TURN RIGHT T12			
			EXIT ON B2 THEN TURN LEFT B, C7, H, H3, T9 THEN TURN RIGHT T12			

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS		
01R	MAIN APRON	01R / MT9	EXIT ON B8, B9, C10, C, H, H3, T9 THEN TURN LEFT T12	D3	D4	
			EXIT ON B5, B6, C8, THEN TURN RIGHT C, H, H3, T9 THEN TURN LEFT T12			
			EXIT ON B3, B4 THEN TURN LEFT B, C7, H, H3, T9 THEN TURN LEFT T12			
			EXIT ON B2 THEN TURN LEFT B, C7, H, H3, T9 THEN TURN LEFT T12			

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS		
01R	MAIN APRON	01R / MT10	EXIT ON B7, B9, C10, C, H, H2, T10 THEN TURN RIGHT T12	D5	D6	
			EXIT ON B5, B6, C8, THEN TURN RIGHT C, H, H2, T10 THEN TURN RIGHT T12			
			EXIT ON B3, B4 THEN TURN LEFT B, C7, H, H2, T10 THEN TURN RIGHT T12			
			EXIT ON B2 THEN TURN LEFT B, C7, H, H2, T10 THEN TURN RIGHT T12			

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS		
01R	MAIN APRON	01R / MT10	EXIT ON B7, B9, C10, C, H, H2, T10 THEN TURN LEFT T12	D7	D8	
			EXIT ON B5, B6, C8, THEN TURN RIGHT C, H, H2, T10 THEN TURN LEFT T12			
			EXIT ON B3, B4 THEN TURN LEFT B, C7, H, H2, T10 THEN TURN LEFT T12			
			EXIT ON B2 THEN TURN LEFT B, C7, H, H2, T10 THEN TURN LEFT T12			

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS						
01R	MAIN APRON	01R / MT10	EXIT ON B7, B9, C10, C, H, H2, T10 THEN TURN LEFT T12, T11	E1	E3	E5	E7			
				E9						
			EXIT ON B5, B6, C8 THEN TURN RIGHT C, H, H2, T10 THEN TURN LEFT T12, T11							
			EXIT ON B3, B4 THEN TURN LEFT B, C7, H, H2, T10 THEN TURN LEFT T12, T11							
			EXIT ON B2 THEN TURN LEFT B, C7, H, H2, T10 THEN TURN LEFT T12,T11							

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	MAIN APRON	01R / MT10	EXIT ON B7, B9, C10, C, H, H2, T10	305	306	307	308
			EXIT ON B5, B6, C8 THEN TURN RIGHT C, H, H2, T10				
			EXIT ON B3, B4 THEN TURN LEFT B, C7, H, H2, T10				
			EXIT ON B2 THEN TURN LEFT B, C7, H, H2, T10				

EAST APRON

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	EAST APRON	01R / ET3	EXIT ON B7, B9, C10, C,T3 THEN TURN LEFT T5	A1	A2	A3	A4
				A5	A6	101	115
				116	117	118	
			EXIT ON B5, B6, C8 THEN TURN RIGHT C, T3 THEN TURN LEFT T5				
			EXIT ON B3, B4 THEN TURN LEFT B, C7 THEN TURN RIGHT C, T3 THEN TURN LEFT T5				
			EXIT ON B2 THEN TURN LEFT B, C5 THEN TURN RIGHT C, T3 THEN LEFT T5				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	EAST APRON	01R / ET3	EXIT ON B7, B9, C10, C,T3 THEN TURN RIGHT T5	102	103	104	105
				106	107	108	109
				110	111	112	113
			EXIT ON B5, B6, C8 THEN TURN RIGHT C, T3 THEN TURN RIGHT T5	114	119	120	121
				122	123	124	125
				126	127	128	129
			EXIT ON B3, B4 THEN TURN LEFT B, C7 THEN TURN RIGHT C, T3 THEN TURN RIGHT T5				
			EXIT ON B2 THEN TURN LEFT B, C5 THEN TURN RIGHT C, T3 THEN RIGHT T5				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	EAST APRON	01R / ET3	EXIT ON B7, B9, C10, C,T3 THEN TURN LEFT T5, T4	B1	B3	B5	
			EXIT ON B5, B6, C8 THEN TURN RIGHT C, T3THEN TURN LEFT T5, T4				
			EXIT ON B3, B4 THEN TURN LEFT B, C7 THEN TURN RIGHT C, T3 THEN TURN LEFT T5, T4				
			EXIT ON B2 THEN TURN LEFT B, C5 THEN TURN RIGHT C, T3 THEN LEFT T5, T4				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	EAST APRON	01R / ET3	EXIT ON B7, B9, C10, C,T3 THEN TURN RIGHT T5, T1	130	131	132	133
				134			
			EXIT ON B5, B6, C8 THEN TURN RIGHT C, T3 THEN TURN RIGHT T5, T1				
			EXIT ON B3, B4 THEN TURN LEFT B, C7 THEN TURN RIGHT C, T3 THEN TURN RIGHT T5, T1				
			EXIT ON B2 THEN TURN LEFT B, C5 THEN TURN RIGHT C, T3 THEN RIGHT T5, T1				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	EAST APRON	01R / ET6	EXIT ON B7, B9, C10, C,T6	B2	B4	B6	
			EXIT ON B5, B6, C8 THEN TURN RIGHT C, T6				
			EXIT ON B3, B4 THEN TURN LEFT B, C7 THEN TURN RIGHT C, T6				
			EXIT ON B2 THEN TURN LEFT B, C5, T6				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	EAST APRON	01R / ET6	EXIT ON B7, B9, C10, C, T6, T7	C1	C3	C5	C7
				C9	201	202	203
			EXIT ON B5, B6, C8 THEN TURN RIGHT C, T6, T7				
			EXIT ON B3, B4 THEN TURN LEFT B, C7 THEN TURN RIGHT C, T6, T7				
			EXIT ON B2 THEN TURN LEFT B, C5, T6, T7				

WEST APRON

WEST APRON								
RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS				
01R	WEST APRON	01R/ WD1	EXIT ON B7, B9, C10, C, H, D8 THEN TURN RIGHT E, D1 THEN TURN RIGHT D	510	511	512	513	
				514	515	516	517	
				518				
			EXIT ON B5, B6, C8 THEN TURN RIGHT C, H, D8 THEN TURN RIGHT E, D1 THEN TURN RIGHT D					
			EXIT ON B3, B4 THEN LEFT B, C7, H, D8 THEN TURN RIGHT E, D1 THEN TURN RIGHT D					
			EXIT ON B2 THEN TURN LEFT B, C7, H, D8 THEN TURN RIGHT E, D1 THEN TURN RIGHT D					

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	WEST APRON	01R / WD1	EXIT ON B7, B9, C10, C, H, D8 THEN TURN RIGHT E, D1 THEN TURN LEFT D	519	520	521	522
				523	524	525	
			EXIT ON B5, B6, C8 THEN TURN RIGHT C, H, D8 THEN TURN RIGHT E, D1 THEN TURN LEFT D				
			EXIT ON B3, B4 THEN LEFT B, C7, H, D8 THEN TURN RIGHT E, D1 THEN TURN LEFT D				
			EXIT ON B2 THEN TURN LEFT B, C7, H, D8 THEN TURN RIGHT E, D1 THEN TURN LEFT D				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	WEST APRON	01R / WD3	EXIT ON B7, B9, C10, C, H, D8 THEN TURN RIGHT E, D3 THEN TURN RIGHT D	506	507	508	509
			EXIT ON B5, B6, C8 THEN TURN RIGHT C, H, D8 THEN TURN RIGHT E, D3 THEN TURN RIGHT D				
			EXIT ON B3, B4 THEN LEFT B, C7, H, D8 THEN TURN RIGHT E, D3 THEN TURN RIGHT D				
			EXIT ON B2 THEN TURN LEFT B, C7, H, D8 THEN TURN RIGHT E, D3 THEN TURN RIGHT D				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	WEST APRON	01R / WT14	EXIT ON B7, B9, C10, C, H, D8 THEN TURN RIGHT E, D6, T14, T13	E2	E4	E6	E8
			EXIT ON B5, B6, C8 THEN TURN RIGHT C, H, D8 THEN TURN RIGHT E, D6, T14, T13	E10	401	402	403
			EXIT ON B3, B4 THEN LEFT B, C7, H, D8 THEN TURN RIGHT E, D6, T14, T13				
			EXIT ON B2 THEN TURN LEFT B, C7, H, D8 THEN TURN RIGHT E, D6, T14, T13				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	WEST APRON	01R / WT14	EXIT ON B7, B9, C10, C, H, D8 THEN TURN RIGHT E, D6, T14	F1	F3	F5	
			EXIT ON B5, B6, C8 THEN TURN RIGHT C, H, D8 THEN TURN RIGHT E, D6, T14				
			EXIT ON B3, B4 THEN LEFT B, C7, H, D8 THEN TURN RIGHT E, D6, T14				
			EXIT ON B2 THEN TURN LEFT B, C7, H, D8 THEN TURN RIGHT E, D6, T14				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	WEST APRON	01R / WT15	EXIT ON B7, B9, C10, C, H, D8 THEN TURN RIGHT E, D5, T15	F2	F4	F6	
			EXIT ON B5, B6, C8 THEN TURN RIGHT C, H, D8 THEN TURN RIGHT E, D5, T15				
			EXIT ON B3, B4 THEN TURN LEFT B, C7, H, D8 THEN TURN RIGHT E, D5, T15				
			EXIT ON B2 THEN TURN LEFT B, C7, H, D8 THEN TURN RIGHT E, D5, T15				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	WEST APRON	01R / WT15	EXIT ON B7, B9, C10, C, H, D8 THEN TURN RIGHT E, D5, T15, T17	G1	G2	G3	G4
				G5	501	502	503
				504	505		
			EXIT ON B5, B6, C8 THEN TURN RIGHT C, H, D8 THEN TURN RIGHT E, D5, T15, T17				
			EXIT ON B3, B4 THEN LEFT B, C7, H, D8 THEN TURN RIGHT E, D5, T15, T17				
			EXIT ON B2 THEN TURN LEFT B, C7, H, D8 THEN TURN RIGHT E, D5, T15, T17				

6.6.7 Outbound taxi route runway 01L

MAIN APRON

MAIN APRON							
RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	MAIN APRON	MT8 / 01L	T8, H3 THEN TURN RIGHT H THEN TURN LEFT D,D9 THEN TURN LEFT E TO HOLDING POSITION E21	C2	C4	C6	C8
				C10			
			T9 THEN TURN RIGHT T12, T8, H3 THEN TURN RIGHT H THEN TURN LEFT D,D9 THEN TURN LEFT E TO HOLDING POSITION E21	301	302	303	304
			T12, T8, H3 THEN TURN RIGHT H THEN TURN LEFT D,D9 THEN TURN LEFT E TO HOLDING POSITION E21				

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	MAIN APRON	MT11 / 01L	T12, T11, H2 THEN TURN RIGHT H THEN TURN LEFT D,D9 THEN TURN LEFT E TO HOLDING POSITION E21	D5	D6	D7	D8
			T11, H2 THEN TURN RIGHT H THEN TURN LEFT D,D9 THEN TURN LEFT E TO HOLDING POSITION E21	E1	E3	E5	E7
				E9			
			T10 THEN TURN LEFT T12, T11, H2 THEN TURN RIGHT H THEN TURN LEFT D,D9 THEN TURN LEFT E TO HOLDING POSITION E21	305	306	307	308

EAST APRON

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	EAST APRON	ET1 / 01L	T5, T1 THEN TURN RIGHT C,C2,B,C7,H THEN TURN LEFT D, D9 THEN TURN LEFT E TO HOLDING POSITION E21	109	110	111	112
				113	114	124	125
				126	127	128	129
			T1 C, C2, B, C7, H THEN TURN LEFT D,D9 THEN TURN LEFT E TO HOLDING POSITION E21	130	131	132	133
				134			

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	EAST APRON	ET2 / 01L	T5, T2 THEN TURN RIGHT C,C2,B,C7,H THEN TURN LEFT D,D9 THEN TURN LEFT E TO HOLDING POSITION E21	102	103	104	105
				106	107	108	119
				120	121	122	123

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	EAST APRON	ET4 / 01L	T5, T4 ,C4 THEN TURN RIGHT B, C7 ,H THEN TURN LEFT D,D9 THEN TURN LEFT E TO HOLDING POSITION E21	A1	A2	A3	A4
				A5	A6	101	115
				116	117	118	
			T4 ,C4 THEN TURN RIGHT B, C7 ,H THEN TURN LEFT D,D9 THEN TURN LEFT E TO HOLDING POSITION E21	B1	B3	B5	

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	EAST APRON	ET7 /01L	T6, T7, H4, THEN TURN RIGHT H THEN TURN LEFT D,D9 THEN TURN LEFT E TO HOLDING POSITION E21	B2	B4	B6	
				C1	C3	C5	C7
				C9	201	202	203
			T7, H4, THEN TURN RIGHT H THEN TURN LEFT D,D9 THEN TURN LEFT E TO HOLDING POSITION E21				

WEST APRON

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	WEST APRON	WD / 01L	STRAIGHT AHEAD ON D, D9 THEN TURN LEFT E TO HOLDING POSITION E21	506	507	508	509
				510	511	512	513
				514	515	516	517
				518	519	520	521
				522	523	524	525

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	WEST APRON	WT13 / 01L	T13, H1 THEN TURN RIGHT H THEN LEFT D,D9 THEN TURN	E2	E4	E6	E8
				E10	401	402	403
			LEFT E TO HOLDING POSITION E21				
			T14,T13, H1 THEN TURN RIGHT H THEN TURN LEFT D,D9 THEN TURN LEFT E TO HOLDING POSITION E21	F1	F3	F5	

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01L	WEST APRON	WT16 / 01L	T15, T17, T16 THEN TURN LEFT D, D9 THEN TURN LEFT E TO HOLDING POSITION E21	F2	F4	F6	
			T17, T16 THEN TURN LEFT D, D9 THEN TURN LEFT E TO HOLDING POSITION E21	G1	G2	G3	G4
				G5	501	502	503
				504	505		

6.6.8 Outbound taxi route runway 01R

MAIN APRON

MAIN APRON								
RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS				
01R	MAIN APRON	MT8 / 01R	T8 THEN TURN LEFT	C2	C4	C6	C8	
			G ,C6 THEN TURN RIGHT	C10				
			B TO HOLDING POSITION					
			B13					
			T9 THEN TURN RIGHT	301	302	303	304	
			T12, T8 THEN TURN LEFT G,C6 THEN TURN RIGHT B TO HOLDING POSITION B13					
			T12, T8 THEN TURN LEFT G, C6 THEN TURN RIGHT B TO HOLDING POSITION B13	D1	D2	D3	D4	

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	MAIN APRON	MT11 / 01R	T12, T11 THEN TURN LEFT G, C6 THEN TURN RIGHT B TO HOLDING POSITION B13	D5	D6	D7	D8
			T11 THEN TURN LEFT G,C6 THEN TURN RIGHT B TO HOLDING POSITION B13	E1	E3	E5	E7
				E9			
			T10 THEN TURN LEFT T12, T11 THEN TURN LEFT G,C6 THEN TURN RIGHT B TO HOLDING POSITION B13	305	306	307	308

EAST APRON

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	EAST APRON	ET1/01R	T5 THEN TURN RIGHT T1, C, C2, B TO HOLDING POSITION B13	109	110	111	112
				113	114	124	125
				126	127	128	129
			T1, C, C2, B TO HOLDING POSITION B13	130	131	132	133
				134			

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	EAST APRON	ET2 / 01R	T5, T2 THEN TURN RIGHT C, C2, B TO HOLDING POSITION B13	102	103	104	105
				106	107	108	119
				120	121	122	123

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	EAST APRON	ET4 / 01R	T5, T4, C4 THEN TURN RIGHT B TO HOLDING POSITION B13	A1	A2	A3	A4
				A5	A6	101	115
				116	117	118	
			T4, C4 THEN TURN RIGHT B TO HOLDING POSITION B13	B1	B3	B5	

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	EAST APRON	ET7 /01R	T6, T7 THEN TURN LEFT G, C6 THEN TURN RIGHT B TO HOLDING POSITION B13	B2	B4	B6	
			T7 THEN TURN LEFT G, C6 THEN RIGHT B TO HOLDING POSITION B13	C1	C3	C5	C7
				C9	201	202	203

WEST APRON

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	WEST APRON	WD / 01R	STRAIGHT AHEAD ON D THEN TURN LEFT G, C6 THEN TURN RIGHT B TO HOLDING POSITION B13	506	507	508	509
				510	511	512	513
				514	515	516	517
				518	519	520	521
				522	523	524	525

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	WEST APRON	WT13 / 01R	T13 THEN TURN LEFT G, C6 THEN TURN RIGHT B TO HOLDING POSITION B13	E2	E4	E6	E8
				E10	401	402	403
			T14,T13 THEN TURN LEFT G, C6 THEN TURN RIGHT B TO HOLDING POSITION B13	F1	F3	F5	

RUNWAY	APRON	TAXI ROUTE DESIGNATOR	TAXI ROUTE DETAIL	AIRCRAFT STANDS			
01R	WEST APRON	WT16 / 01R	T15, T17, T16 THEN TURN LEFT D THEN TURN LEFT G, C6 THEN TURN RIGHT B TO HOLDING POSITION B13	F2	F4	F6	
			T17, T16 THEN TURN LEFT D THEN TURN LEFT G, C6 THEN TURN RIGHT B TO HOLDING POSITION B13	G1	G2	G3	G4
				G5	501	502	503
				504	505		

7. Runway Utilization Procedures

7.1 Runway-in-use

The runway-in-use is selected by Suvarnabhumi Control Tower as the best for general purpose. If it is unsuitable for a particular operation, the pilot can obtain permission from ATC to use another but must accept that he may thereby incur a delay.

7.2 Departure sequence

7.2.1 Departure 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.

7.2.2 To increase runway capacity and to comply with slot times if required, ATC may re-order departure sequence at any time. In addition, intersections will be assigned for departure. Pilots unable to accept the reduced take-off run available for the assigned intersection, shall inform ATC directly.

7.3 Departure clearance

7.3.1 The order in which aircraft are given take-off clearances will be determined on the basis of normal traffic priorities, the application of wake turbulence standard separation and departure slot allocations and management.

7.3.2 Under normal circumstances all departing aircraft will be issued with SIDs. If, for traffic management reason, a SID has to be cancelled, the pilot will be given a specific departure instruction.

7.4 Intersection departure

Departing aircraft will normally be directed by ATC to use the full length of the runway for take-off. Pilots-in-command may request or ATC may propose an intersection departure to resolve a particular runway or manoeuvring area conflict. The final decision whether to make an intersection departure rests with the pilot-in-command.

7.5 Clearance for immediate take-off

A pilot receiving an immediate take-off instruction is required to act as follows:

- a) if waiting clear of the runway, taxi immediately on to it and begin his take off run without stopping his aircraft ;
- b) if already lined up on the runway, take off without delay ;
- c) if unable to comply with the instruction, inform ATC immediately.

7.6 Departures – Minimum Runway Occupancy Time

7.6.1 On receipt of line-up clearance pilots should ensure, commensurate with safety and standard operation procedures, that they are able to taxi into the correct position at the hold and line up on the runway as soon as the preceding aircraft has commenced its take off roll.

7.6.2 Whenever possible, cockpit checks should be completed prior to line up and any checks requiring completion whilst on the runway should be kept to the minimum required. Pilots should ensure that they are able to commence the take off roll immediately after take off clearance is issued.

7.6.3 Pilots not able to comply with these requirements should notify ATC as soon as possible.

7.6.4 Pilots shall prepare for the following take-off run available (TORA):

RUNWAY 19L	TORA (M)
B1	3800
B2	3700

RUNWAY 19R	TORA (M)
E1	3500
E2	3 400

RUNWAY 01R	TORA (M)
B13	3800
B12	3700

RUNWAY 01L	TORA (M)
E21	3500
E19	3400

7.7 Arrivals – Minimum Runway Occupancy Time

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 and will minimize the occurrence of ‘go-arounds’.

7.8 High Intensity Runway Operation

7.8.1 To achieve the highest possible rate/hour for arrivals and departures, runway occupancy times are to be reduced to a minimum, as a rule. Runways shall be vacated via high speed turn-offs.

7.8.2 Whenever runway conditions permit, pilots should prepare their landing so as to vacate the runways via the following high speed turn-offs.

RUNWAY 19L	DISTANCE TO TURN OFF (M)
B8	1640
B10	2050
B11	2560

RUNWAY 19R	DISTANCE TO TURN OFF (M)
E9	1470
E13	2050
E15	2440

RUNWAY 01R	DISTANCE TO TURN OFF (M)
B7	1770
B5	2350
B3	2740

RUNWAY 01L	DISTANCE TO TURN OFF (M)
E12	1360
E7	2050
E5	2560

Remark : Distance to turn off is the distance of the respective runway to turn-off intersection.

8. Low Visibility Operations
 - 8.1 General
 - 8.1.1 Low visibility procedures will be established for operation in a visibility of less than RVR 550 m or a cloud base of less than 200 ft.
 - 8.1.2 Special ATC 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. Pilots will be informed when these procedures are in operation by ATIS or RTF.
 - 8.1.3 Runway 19L/01R and runway 19R/01L, subject to serviceability of the required facilities, are suitable for Cat II operations by operators whose minima have been accepted by the Department of Civil Aviation (DCA).
 - 8.2 Arrival
 - 8.2.1 Cat II approach and landing
 - 8.2.1.1 Pilots who wish to carry out an ILS Cat II approach shall inform Bangkok Approach on initial contact.
 - 8.2.1.2 Pilots may carry out a practice ILS Cat II approach at any time. But the full safeguarding procedures will not be applied and pilots should anticipate the possibility of ILS signal interference.
 - 8.2.1.3 When Low Visibility Procedures are in operation, a much reduced landing rate can be expected due to the requirement for increased spacing between arriving aircraft.
 - 8.2.1.4 Aircraft will be vectored to intercept the ILS localizer at least 10 nm from touchdown.
 - 8.2.2 Runway exits
 - 8.2.2.1 All runway exits are equipped with green/yellow coded taxiway center line lights to indicate the boundary of the localizer sensitive area.
 - 8.2.2.2 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.
 - 8.2.2.3 Aircraft shall vacate the runway via the first convenient exist taxiways which are designated as follows:
 - Runway 19L via B8, B10, B11,B12, B13
 - Runway 01R via B7, B5, B3, B2, B1
 - Runway 19R via E9, E13, E15, E19, E21
 - Runway 01L via, E12, E7, E5, E2, E1
 - Pilots not able to comply with these requirements should notify ATC immediately.
- 8.3 Departure
 - 8.3.1 Runway holding positions
 - 8.3.1.1 ATC will require departing aircraft to use the Cat II holding positions listed below:
 - Runway 19L : B1, B2
 - Runway 01R : B13, B12
 - Runway 19R : E1, E2
 - Runway 01L : E21, E19
 - 8.3.1.2 Except as described above, other intersection take-offs are not permitted.
 - 8.3.2 Low visibility take-off
 - 8.3.2.1 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.

- 8.4 Taxiing aircraft
 - 8.4.1 Taxiing aircraft must follow the lighted taxiway centre line in relation to the standard taxi route provided by ATC. The deviation from the standard taxi route may be approved for traffic reason.
 - 8.4.2 When low visibility operating procedures are in operation pilots-in-command shall adjust aircraft taxiing speeds to ensure that they are able to comply with ATC instructions.
- 8.5 Towing of aircraft
 - 8.5.1 Aircraft towing will be restricted when the RVR down to less than 550 m.
- 8.6 Aircraft guidance under all-weather operations category II
 - 8.6.1 Taxiway centre line lights
 - 8.6.1.1 As soon as the operation of category II low visibility procedures is announced, aircraft will be only permitted to taxi on taxiways with operating centre line lights.
 - 8.6.1.2 Taxiway centre line lights within the ILS sensitive area are colour-coded (Green/Yellow) from runway 19L/01R to taxiway B and from runway 19R/01L to taxiway E. To indicate that the aircraft has vacated the ILS sensitive area, pilots are to delay the call “RUNWAY VACATED” until the aircraft has completely passed the end of the Green/Yellow colour-coded taxiway centre line lights.
 - 8.6.2 Stop bars
 - 8.6.2.1 Taxiing across stop bars is strictly prohibited as long as they are in operation. No kind of clearance includes permission to taxi across a stop bar in operation.
 - 8.6.2.2 Stop bars are installed at every runway holding position to assist in preventing inadvertent incursions of aircraft and vehicles onto the runway. In addition, stop bars are arranged on the following listed below to provide traffic control by visual means.
 - on taxiway B at the intermediate holding position to taxiway C7
 - on taxiway G at the intermediate holding position to taxiway C
 - on taxiway E at the intermediate holding position to taxiway E12
 - on taxiway D at the intermediate holding position to taxiway G
 - 8.6.3 Clearance bars / Intermediate holding position lights
 - 8.6.3.1 Taxiing across clearance bars / intermediate holding position lights is allowed.
 - 8.6.3.2 Clearance bars / intermediate holding position lights are installed at every intermediate holding position except where a stop bar has been installed.
 - 8.6.3.3 Clearance bars / intermediate holding position lights consist of seven fixed unidirectional lights showing yellow in the direction of approach to intermediate holding position.

9. Modes of Operation

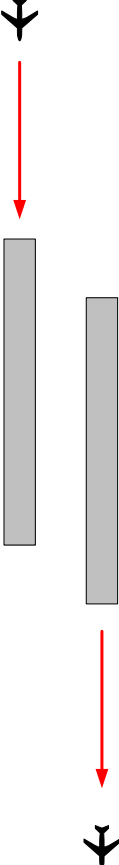
9.1 Selected Modes of Operation for Suvarnabhumi International Airport .

Segregated Parallel Approaches / Departures (Mode 4) will be the standard operating mode for Suvarnabhumi International Airport. There may be semi-mixed operations, i.e. one runway is used exclusively for departures, while the other runway is used for a mixture of approaches and departures; or, one runway is used exclusively for approaches while the other is used for a mixture of approaches and departures, there may also be mixed operations, i.e. simultaneous parallel approaches with departures interspersed on both runways (ICAO DOC 9643). Several types of parallel runway operations, which are described as operational models may be conducted in segregated parallel approaches and departures.

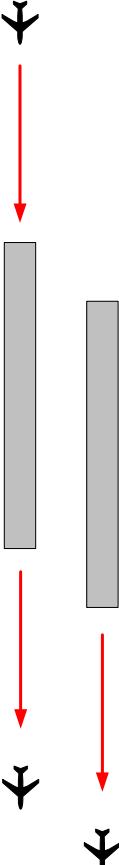
9.2 The utilization of operational models shall be based on traffic situations at the time with the purpose to achieve an orderly and expeditious flow of traffic. The criteria shall also meet the most effectiveness of runway utilization. However, as far as the operational model is selected, the basic concept of operating aircraft on ground movement area shall not aim at the shortest taxi route to the active runway but the respective departure direction. In addition, the selected model should support the independent parallel departure operation with safety and maximum runway capacity.

9.3 Operational models

The operational models applicable to Suvarnabhumi are described, together with related RNAV SIDs as follows.

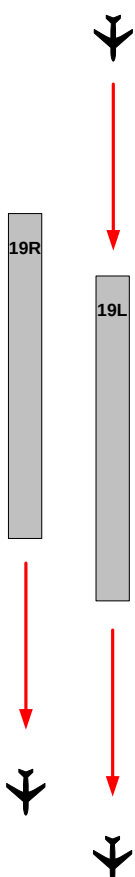
MODEL 1 SEGREGATED PARALLEL OPERATION				
OPERATIONAL CONDITIONS ✦ DEPARTURE RUNWAY 19L ✦ ARRIVAL RUNWAY 19R				
FIGURE	AIRWAYS	DEPARTURE RUNWAY		RNAV SIDs
	W1,A202		19L	COSMO 1C DEPARTURE KRT TRANSITION
	A1		19L	COSMO 1C DEPARTURE SELKA TRANSITION
	G474		19L	COSMO 1C DEPARTURE BATOK TRANSITION
	R468		19L	COSMO 1C DEPARTURE GOMES TRANSITION
	N891		19L	SIMON 1C DEPARTURE RYN TRANSITION
	R201		19L	SIMON 1C DEPARTURE BUT TRANSITION
	A464, M751, W19		19L	SEESA 1C DEPARTURE REGOS TRANSITION
	G458, W31		19L	SEESA 1C DEPARTURE HOTEL TRANSITION
	R468		19L	ANTIC 1C DEPARTURE TANERK TRANSITION
	G463, P646		19L	ANTIC 1C DEPARTURE BETNO TRANSITION
	A1, L507		19L	NESTA 1C DEPARTURE LIMLA TRANSITION
	A464		19L	NESTA 1C DEPARTURE BEKOD TRANSITION
	W9		19L	NESTA 1C DEPARTURE TL TRANSITION
	B346, W21		19L	NESTA 1C DEPARTURE NOBER TRANSITION
	R474		19L	NESTA 1C DEPARTURE ALBOS TRANSITION

19R

MODEL 2 SEMI - MIXED OPERATION				
OPERATIONAL CONDITIONS ✦ DEPARTURE RUNWAY 19L AND 19R – OUTBOUND ROUTES W1, A1, A202, G474, R468, N891, R201, A464, M751, W19 DEPARTURE RUNWAY 19L – OUTBOUND ROUTES G458, W31, R468, G463, P646, A1, L507, A464, W9, B346, W21, R474 DEPARTURE RUNWAY 19R ✦ ARRIVAL RUNWAY 19R				
FIGURE	AIRWAYS	DEPARTURE RUNWAY		RNAV SIDs
	W1,A202		19L	COSMO 1C DEPARTURE KRT TRANSITION
	A1		19L	COSMO 1C DEPARTURE SELKA TRANSITION
	G474		19L	COSMO 1C DEPARTURE BATOK TRANSITION
	R468		19L	COSMO 1C DEPARTURE GOMES TRANSITION
	N891		19L	SIMON 1C DEPARTURE RYN TRANSITION
	R201		19L	SIMON 1C DEPARTURE BUT TRANSITION
	A464, M751, W19		19L	SEESA 1C DEPARTURE REGOS TRANSITION
	G458, W31	19R		COMET 1B DEPARTURE HOTEL TRANSITION
	R468	19R		ANTIC 1B DEPARTURE TANEK TRANSITION
	G463, P646	19R		ANTIC 1B DEPARTURE BETNO TRANSITION
	A1, L507	19R		NESTA 1B DEPARTURE LIMLA TRANSITION
	A464	19R		NESTA 1B DEPARTURE BEKOD TRANSITION
	W9	19R		NESTA 1B DEPARTURE TL TRANSITION
	B346, W21	19R		NESTA 1B DEPARTURE NOBER TRANSITION
	R474	19R		NESTA 1B DEPARTURE ALBOS TRANSITION

19R

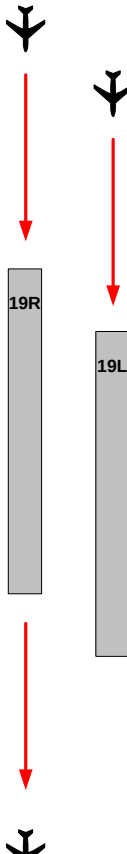
19L

MODEL 3 SEMI - MIXED OPERATION				
OPERATIONAL CONDITIONS ✦ DEPARTURE RUNWAY 19L AND 19R – OUTBOUND ROUTES W1, A1, A202, G474, R468, N891, R201, A464, M751, W19 DEPARTURE RUNWAY 19L – OUTBOUND ROUTES G458, W31, R468, G463, P646, A1, L507, A464, W9, B346, W21, R474 DEPARTURE RUNWAY 19R ✦ ARRIVAL RUNWAY 19L				
FIGURE	AIRWAYS	DEPARTURE RUNWAY		RNAV SIDs
	W1,A202		19L	COSMO 1C DEPARTURE KRT TRANSITION
	A1		19L	COSMO 1C DEPARTURE SELKA TRANSITION
	G474		19L	COSMO 1C DEPARTURE BATOK TRANSITION
	R468		19L	COSMO 1C DEPARTURE GOMES TRANSITION
	N891		19L	SIMON 1C DEPARTURE RYN TRANSITION
	R201		19L	SIMON 1C DEPARTURE BUT TRANSITION
	A464, M751, W19		19L	SEESA 1C DEPARTURE REGOS TRANSITION
	G458, W31	19R		COMET 1B DEPARTURE HOTEL TRANSITION
	R468	19R		ANTIC 1B DEPARTURE TANEK TRANSITION
	G463, P646	19R		ANTIC 1B DEPARTURE BETNO TRANSITION
	A1, L507	19R		NESTA 1B DEPARTURE LIMLA TRANSITION
	A464	19R		NESTA 1B DEPARTURE BEKOD TRANSITION
	W9	19R		NESTA 1B DEPARTURE TL TRANSITION
	B346, W21	19R		NESTA 1B DEPARTURE NOBER TRANSITION
	R474	19R		NESTA 1B DEPARTURE ALBOS TRANSITION

MODEL 4 SEMI - MIXED OPERATION				
OPERATIONAL CONDITIONS ♦DEPARTURE RUNWAY 19L ♦ARRIVAL RUNWAY 19L AND 19R				
FIGURE	AIRWAYS	DEPARTURE RUNWAY		RNAV SIDs
	W1, A202		19L	COSMO 1C DEPARTURE KRT TRANSITION
	A1		19L	COSMO 1C DEPARTURE SELKA TRANSITION
	G474		19L	COSMO 1C DEPARTURE BATOK TRANSITION
	R468		19L	COSMO 1C DEPARTURE GOMES TRANSITION
	N891		19L	SIMON 1C DEPARTURE RYN TRANSITION
	R201		19L	SIMON 1C DEPARTURE BUT TRANSITION
	A464, M751, W19		19L	SEESA 1C DEPARTURE REGOS TRANSITION
	G458, W31		19L	SEESA 1C DEPARTURE HOTEL TRANSITION
	R468		19L	ANTIC 1C DEPARTURE TANEK TRANSITION
	G463, P646		19L	ANTIC 1C DEPARTURE BETNO TRANSITION
	A1, L507		19L	NESTA 1C DEPARTURE LIMLA TRANSITION
	A464		19L	NESTA 1C DEPARTURE BEKOD TRANSITION
	W9		19L	NESTA 1C DEPARTURE TL TRANSITION
	B346, W21		19L	NESTA 1C DEPARTURE NOBER TRANSITION
	R474		19L	NESTA 1C DEPARTURE ALBOS TRANSITION

19R

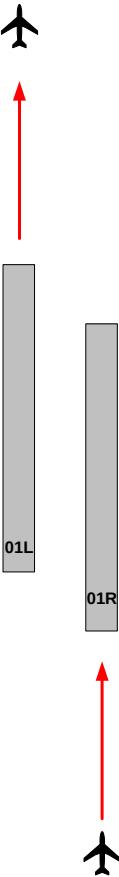
19L

MODEL 5 SEMI - MIXED OPERATION				
OPERATIONAL CONDITIONS ✦ DEPARTURE RUNWAY 19R ✦ ARRIVAL RUNWAY 19L AND 19R				
FIGURE	AIRWAYS	DEPARTURE RUNWAY		RNAV SIDs
	W1, A202	19R		COSMO 1 B DEPARTURE KRT TRANSITION
	A1	19R		COSMO 1B DEPARTURE SELKA TRANSITION
	G474	19R		COSMO 1B DEPARTURE BATOK TRANSITION
	R468	19R		COSMO 1B DEPARTURE GOMES TRANSITION
	N891	19R		SIMON 1B DEPARTURE RYN TRANSITION
	R201	19R		SIMON 1B DEPARTURE BUT TRANSITION
	A464, M751, W19	19R		COMET 1B DEPARTURE REGOS TRANSITION
	G458, W31	19R		COMET 1B DEPARTURE HOTEL TRANSITION
	R468	19R		ANTIC 1B DEPARTURE TANEK TRANSITION
	G463, P646	19R		ANTIC 1B DEPARTURE BETNO TRANSITION
	A1, L507	19R		NESTA 1B DEPARTURE LIMLA TRANSITION
	A464	19R		NESTA 1B DEPARTURE BEKOD TRANSITION
	W9	19R		NESTA 1B DEPARTURE TL TRANSITION
	B346, W21	19R		NESTA 1B DEPARTURE NOBER TRANSITION
	R474	19R		NESTA 1B DEPARTURE ALBOS TRANSITION

MODEL 6 MIXED OPERATION				
OPERATIONAL CONDITIONS ✦ DEPARTURE RUNWAY 19L AND 19R – OUTBOUND ROUTES W1, A1, A202, G474, R468, N891, R201, A464, M751, W19 DEPARTURE RUNWAY 19L – OUTBOUND ROUTES G458, W31, R468, G463, P646, A1, L507, A464, W9, B346, W21, R474 DEPARTURE RUNWAY 19R ✦ ARRIVAL RUNWAY 19L AND 19R				
FIGURE	AIRWAYS	DEPARTURE RUNWAY		RNAV SIDs
	W1, A202		19L	COSMO 1C DEPARTURE KRT TRANSITION
	A1		19L	COSMO 1C DEPARTURE SELKA TRANSITION
	G474		19L	COSMO 1C DEPARTURE BATOK TRANSITION
	R468		19L	COSMO 1C DEPARTURE GOMES TRANSITION
	N891		19L	SIMON 1C DEPARTURE RYN TRANSITION
	R201		19L	SIMON 1C DEPARTURE BUT TRANSITION
	A464, M751, W19		19L	SEESA 1C DEPARTURE REGOS TRANSITION
	G458, W31	19R		COMET 1B DEPARTURE HOTEL TRANSITION
	R468	19R		ANTIC 1B DEPARTURE TANEK TRANSITION
	G463, P646	19R		ANTIC 1B DEPARTURE BETNO TRANSITION
	A1, L507	19R		NESTA 1B DEPARTURE LIMLA TRANSITION
	A464	19R		NESTA 1B DEPARTURE BEKOD TRANSITION
	W9	19R		NESTA 1B DEPARTURE TL TRANSITION
	B346, W21	19R		NESTA 1B DEPARTURE NOBER TRANSITION
	R474	19R		NESTA 1B DEPARTURE ALBOS TRANSITION

19R

19L

MODEL 7 SEGREGATED PARALLEL OPERATION				
OPERATIONAL CONDITIONS ✦ DEPARTURE RUNWAY 01L ✦ ARRIVAL RUNWAY 01R				
FIGURE	AIRWAYS	DEPARTURE RUNWAY		RNAV SIDs
	W1, A202	01L		CHEST 1B DEPARTURE KRT TRANSITION
	A1	01L		CHEST 1B DEPARTURE SELKA TRANSITION
	G474	01L		CHEST 1B DEPARTURE BATOK TRANSITION
	R468	01L		CHEST 1B DEPARTURE GOMES TRANSITION
	N891	01L		CHEST 1B DEPARTURE RYN TRANSITION
	R201	01L		FIRNN 1B DEPARTURE BUT TRANSITION
	A464, M751, W19	01L		FIRNN 1B DEPARTURE REGOS TRANSITION
	G458, W31	01L		FIRNN 1B DEPARTURE HOTEL TRANSITION
	R468	01L		JEANS 1B DEPARTURE TANEK TRANSITION
	G463, P646	01L		JEANS 1B DEPARTURE BETNO TRANSITION
	A1, L507	01L		JEANS 1B DEPARTURE LIMLA TRANSITION
	A464	01L		JEANS 1B DEPARTURE BEKOD TRANSITION
	W9	01L		JEANS 1B DEPARTURE TL TRANSITION
	B346, W21	01L		JORGE 1B DEPARTURE NOBER TRANSITION
	R474	01L		JORGE 1B DEPARTURE ALBOS TRANSITION

VTBS AD 2.21 NOISE ABATEMENT PROCEDURES

NIL

VTBS AD 2.22 FLIGHT PROCEDURES

1. Provision of Radar Services

- 1.1. Bangkok Approach is responsible for providing radar service to aircraft operating within Bangkok Terminal Control Area and Bangkok Control Zone. (See ENR 2. Para.3)
- 1.2. Arriving aircraft intending to land at Suvarnabhumi Airport (VTBS) will be transferred to Suvarnabhumi Arrival on frequency 124.7 MHz, and to Bangkok Approach on frequency 119.4 MHz for aircraft landing at Bangkok International Airport (VTBD).

2. Approach Procedures with Radar Control

- 2.1. All procedures are designed to maximize departure and arrival capacity in Bangkok TMA and to minimize noise disturbance in areas overflown.
- 2.2. The final approach may be carried out by means of ILS or other available instrument approach system at the discretion of the pilot.
- 2.3. 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 validity of the separation provide, and to the achievement of optimum runway capacity, that runway occupancy time is kept to a minimum consistent with the prevailing conditions.
- 2.4. The horizontal radar separation minimum shall be 5 NM except within BKK TMA, BKK CTR and Suvarnabhumi ATZ a reduced separation of 3 NM may be applied.
- 2.5. Missed approach
 - 2.5.1. As directed by ATC.
 - 2.5.2. In the absence of instructions from ATC, aircraft shall follow the missed approach procedures which contained on the Instrument Approach Charts. (See VTBS AD 2.24)

3. Standard Instrument Departures/Arrivals (RNAV SIDs/STARs)

- 3.1 Departing aircraft
 - 3.1.1 Aircraft departing from Suvarnabhumi Airport will normally be assigned via the RNAV SIDs detailed in AD VTBS 2.24.
 - 3.1.2 If, after take-off, a pilot experiences radio failure, shall comply with communication failure procedures as published in the RNAV SID Charts.
- 3.2 Arriving aircraft
 - 3.2.1 Aircraft inbound to Suvarnabhumi Airport via the airways system, will be instructed to fly on the appropriate RNAV STARs by ATC.
 - 3.2.2 In the event of an aircraft radio failure, a pilot shall select mode A code 7600 continue on cleared transition to final approach and comply with the vertical constraints depicted on the procedure.
- 3.3 Pilots of Non-RNAV equipped aircraft shall inform ATC and request for radar vectors.

4. Speed limitation

- 4.1 All aircraft when flying below 10 000 ft. are subject to a speed limitation of 250 kt unless previously removed by ATC. ATC will endeavour to remove the speed limitation as soon as possible and will use the phrase 'No ATC speed restrictions'.
- 4.2 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.
- 4.3 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.
- 4.4 Except as detailed in 4.1, 4.2, and 4.3, all aircraft navigating under conditions of RNAV (GNSS) SIDs/STARs shall conform to speed limitation as published in the procedures.
- 4.5 En-route holding and IAWP holding will be in accordance with ICAO standard holding speeds requirement.
Note: - *En-route holding ; MOCHI, BATOK, GOMES, RYN, JASSY, PASTA, TARDY, OSUKA, TL, NOBER.*
- *IAWP holding ; ARONS, CAROS, DANNY, NAUTY, SILVA, CABIN, DAREN, GIPSY, NUMAN, TERRY.*

VTBS AD 2.23 ADDITIONAL INFORMATION

NIL

VTBS AD 2.24 CHARTS RELATED TO THE AERODROME

Aerodrome Chart - ICAO

Aircraft Parking / Docking Chart – ICAO

Aerodrome Ground Movement Chart - ICAO

Standard Taxi Route - Inbound - Landing RWY 19R

Standard Taxi Route - Inbound - Landing RWY 19L

Standard Taxi Route - Inbound - Landing RWY 01R

Standard Taxi Route - Inbound - Landing RWY 01L

Standard Taxi Route - Outbound - Take-off RWY 19R

Standard Taxi Route - Outbound - Take-off RWY 19L

Standard Taxi Route - Outbound - Take-off RWY 01R

Standard Taxi Route - Outbound - Take-off RWY 01L

Aerodrome Obstacle Chart - ICAO - Type A - RWY 01L / 19R

Aerodrome Obstacle Chart - ICAO - Type A - RWY 01R / 19L

Precision Approach Terrain Chart - ICAO - RWY 01L / 19R

Precision Approach Terrain Chart - ICAO - RWY 01R / 19L

Standard Departure Charts

RNAV (GNSS) SIDs - RWY 19L – ANTIC 1C / RWY 19R – ANTIC 1B

RNAV (GNSS) SIDs - RWY 19L – COSMO 1C / RWY 19R – COSMO 1B

RNAV (GNSS) SIDs - RWY 19L – SIMON 1C / RWY 19R – SIMON 1B

RNAV (GNSS) SIDs - RWY 19R – COMET 1B

RNAV (GNSS) SIDs - RWY 19L – SEESA 1C

RNAV (GNSS) SIDs - RWY 19L – NESTA 1C / RWY 19R – NESTA 1B

RNAV (GNSS) SIDs - RWY 01L – JEANS 1B / RWY 01R – JEANS 1C

RNAV (GNSS) SIDs - RWY 01L – JORGE 1B / RWY 01R – JORGE 1C

RNAV (GNSS) SIDs - RWY 01L – CHEST 1B / RWY 01R – CHEST 1C

RNAV (GNSS) SIDs - RWY 01L – FIRNN 1B / RWY 01R – FIRNN 1C

Standard Arrival Charts

RNAV (GNSS) STAR - RWY 19L / 19R – CAROS 1B

RNAV (GNSS) STAR - RWY 19L / 19R – NAUTY 1B

RNAV (GNSS) STAR - RWY 19L / 19R – ARONS 1B

RNAV (GNSS) STAR - RWY 19L / 19R – DANNY 1B

RNAV (GNSS) STAR - RWY 19L / 19R – SILVA 1B

RNAV (GNSS) STAR - RWY 01L / 01R – NUMAN 1B

RNAV (GNSS) STAR - RWY 01L / 01R – GIPSY 1B

RNAV (GNSS) STAR - RWY 01L / 01R – DAREN 1B

RNAV (GNSS) STAR - RWY 01L / 01R – CABIN 1B

RNAV (GNSS) STAR - RWY 01L / 01R – TERRY 1B

Instrument Approach Chart - ICAO - ILS or LLZ RWY 19L CAT II

Instrument Approach Chart - ICAO - ILS or LLZ RWY 19R CAT II

Instrument Approach Chart - ICAO - ILS or LLZ RWY 01L CAT II

Instrument Approach Chart - ICAO - ILS or LLZ RWY 01R CAT II

Visual Approach Chart – ICAO

Bird concentrations in the vicinity of aerodromes

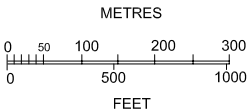
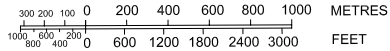
RWY	DIRECTION	THR	BEARING STRENGTH
01R	14.92°	13 39 24.11 N 100 45 06.59 E	all runways and taxiways PCN 137/F/D/X/T asphalt
19L	194.92°	13 41 30.17 N 100 45 39.72 E	
01L	14.92°	13 40 16.60 N 100 44 04.79 E	
19R	194.92°	13 42 13.21 N 100 44 35.44 E	
TAXIWAYS 30 M. WIDE			PCN 126/R/D/X/T concrete

VAR 0° 30' W (2005)

ANNUAL CHANGE 4' W

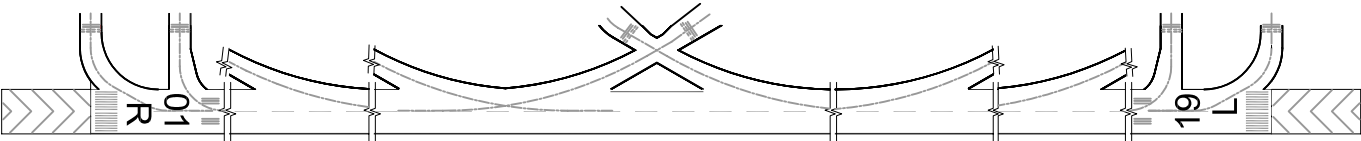


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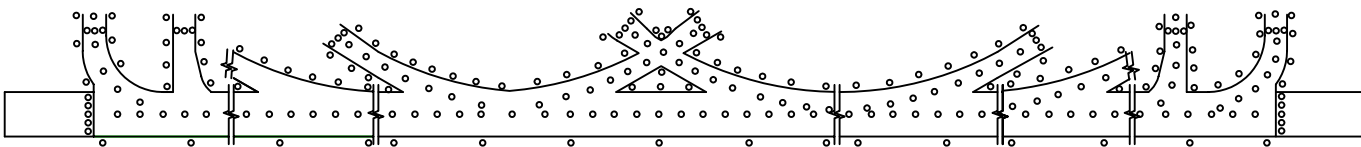


MARKING AND LIGHTING AIDS
RWY 01L/19R SIMILAR TO RWY 01R/19L

MARKING AIDS RWY 01R/19L AND EXIT TWY



LIGHTING AIDS RWY 01R/19L AND EXIT TWY



AIRCRAFT PARKING /
DOCKING CHART- ICAO

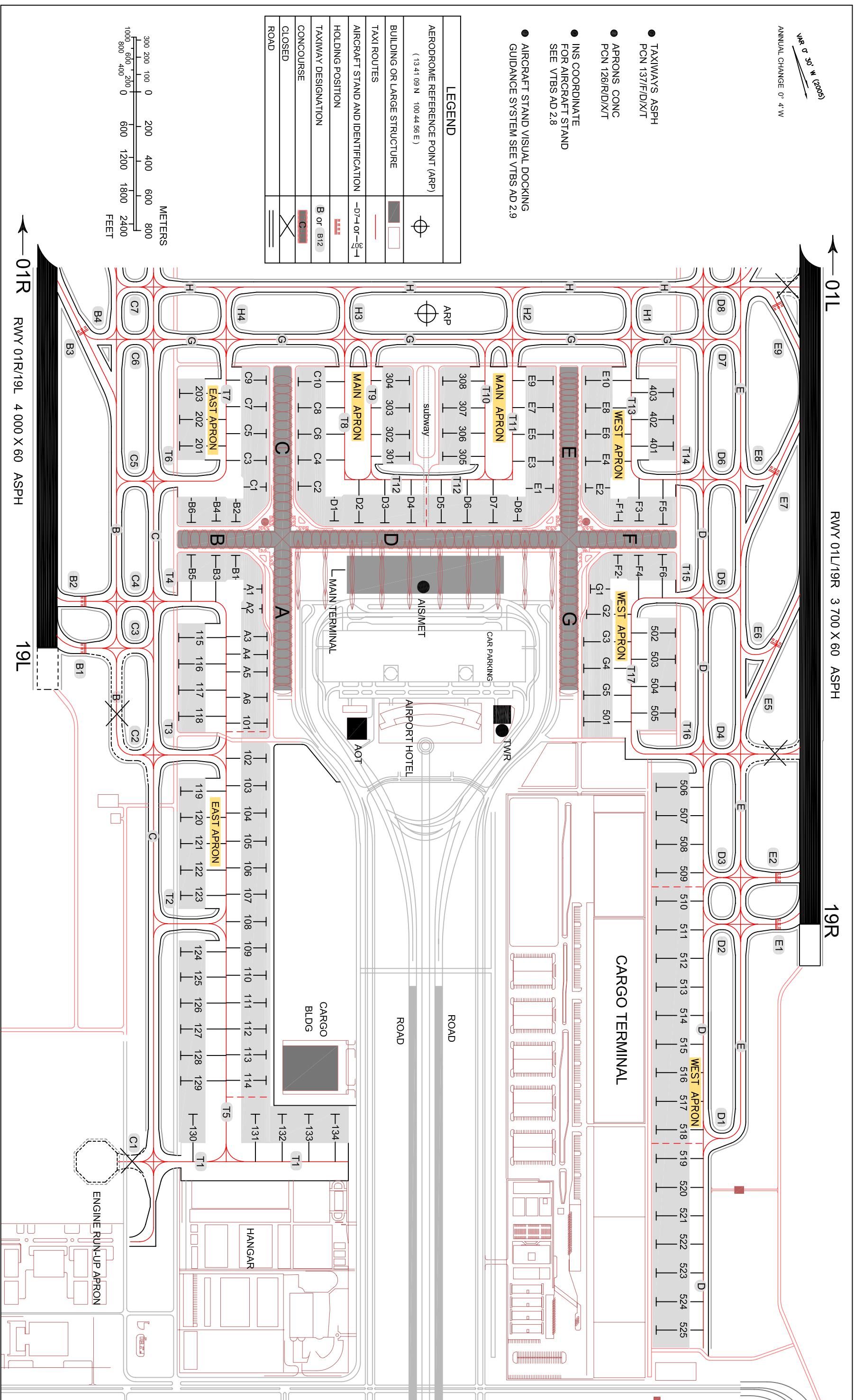
13 41 09 N
100 44 56 E

APRON ELEV
1.8 m(5.9 ft)

TWR FREQ 118.2 (RWY 19L/01R)
TWR FREQ 119.0 (RWY 19R/01L)

GND FREQ 121.95 (WEST APRON)
GND FREQ 121.75 (MAIN APRON)
GND FREQ 121.65 (EAST APRON)

BANGKOK/Suvarnabhumi International



STANDARD TAXI ROUTES

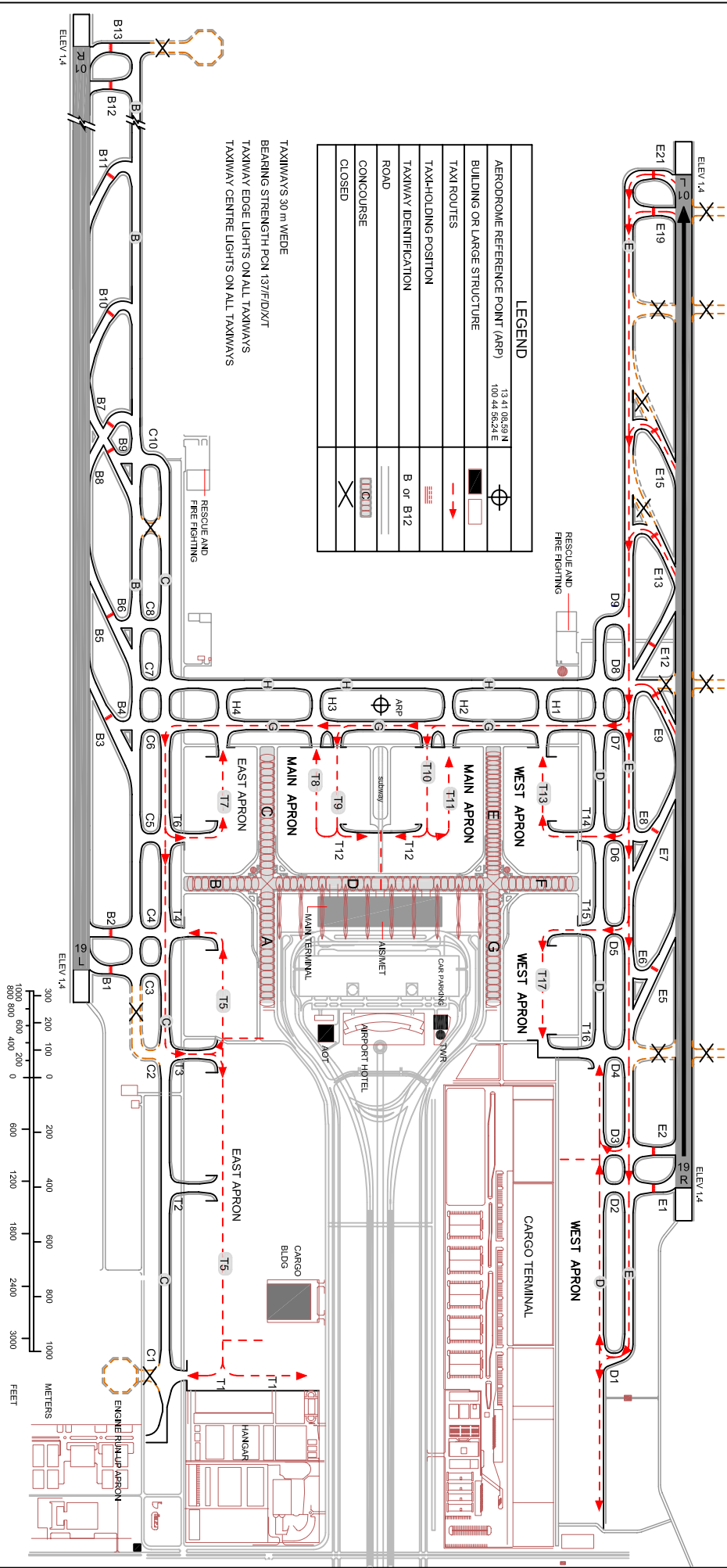
INBOUND TAXI ROUTES - LANDING RUNWAY 19R

ELEVATIONS IN METRES
BEARINGS ARE MAGNETIC

MAG 35° W (2005)
ANNUAL CHANGE OF 4 W

LEGEND	
AERODROME REFERENCE POINT (ARP)	13 41 08.69 N 100 44 56.24 E
BUILDING OR LARGE STRUCTURE	■ □
TAXI ROUTES	— — — — — — — — — —
TAXI-HOLDING POSITION	— — — — —
TAXIWAY IDENTIFICATION	B or B12
ROAD	— — — — —
CONCOURSE	— — — — —
CLOSED	X

TAXIWAYS 30 m WEDE
BEARING STRENGTH PCN 13/F/D/X/T
TAXIWAY EDGE LIGHTS ON ALL TAXIWAYS
TAXIWAY CENTRE LIGHTS ON ALL TAXIWAYS



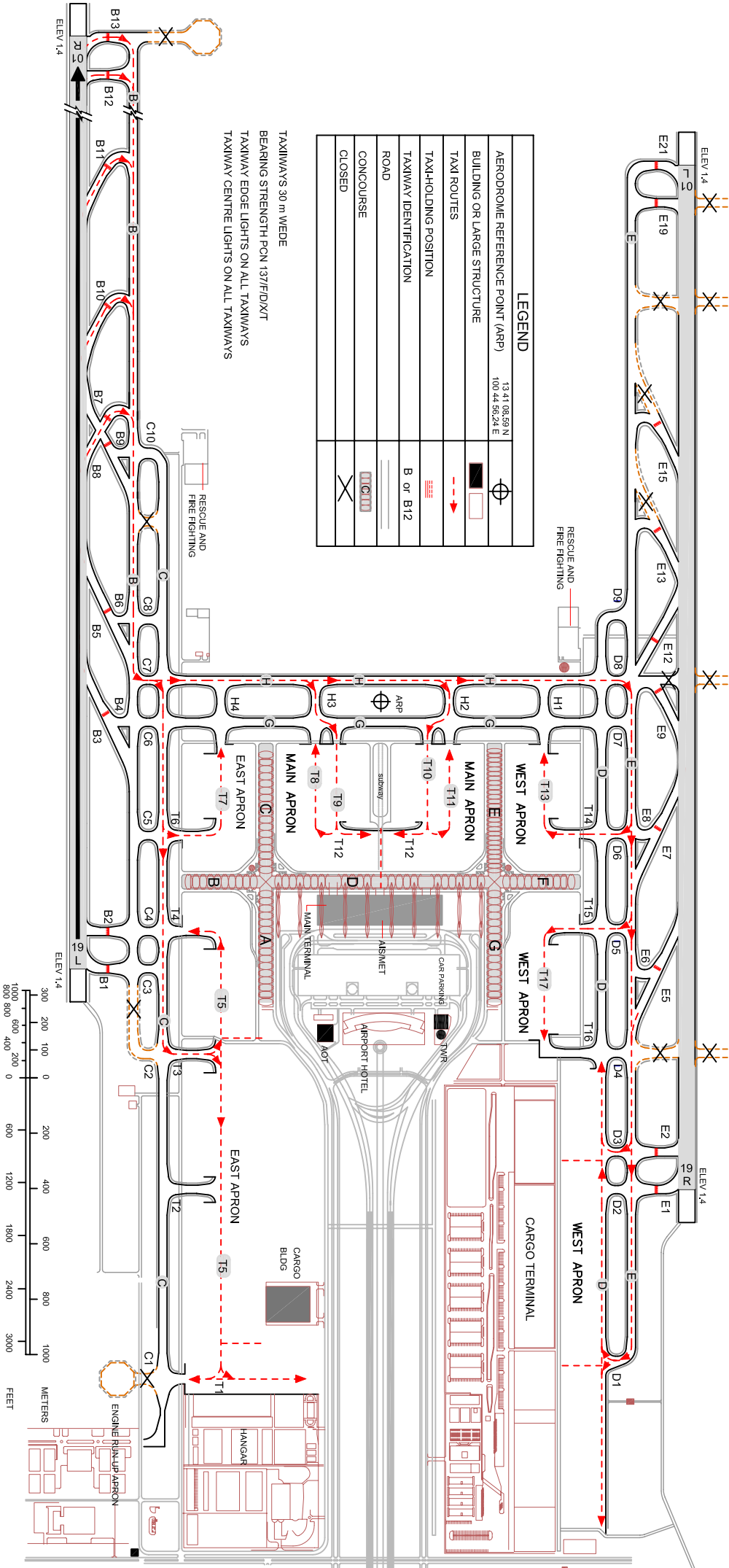
STANDARD TAXI ROUTES

INBOUND TAXI ROUTES - LANDING RUNWAY 19L

ELEVATIONS IN METRES
BEARINGS ARE MAGNETIC
ANNUAL CHANGE 0° 4' W

LEGEND	
AERODROME REFERENCE POINT (ARP)	13 41 08.59 N 100 44 56.24 E
BUILDING OR LARGE STRUCTURE	
TAXI ROUTES	
TAXI-HOLDING POSITION	
TAXIWAY IDENTIFICATION	B or B12
ROAD	
CONCOURSE	
CLOSED	

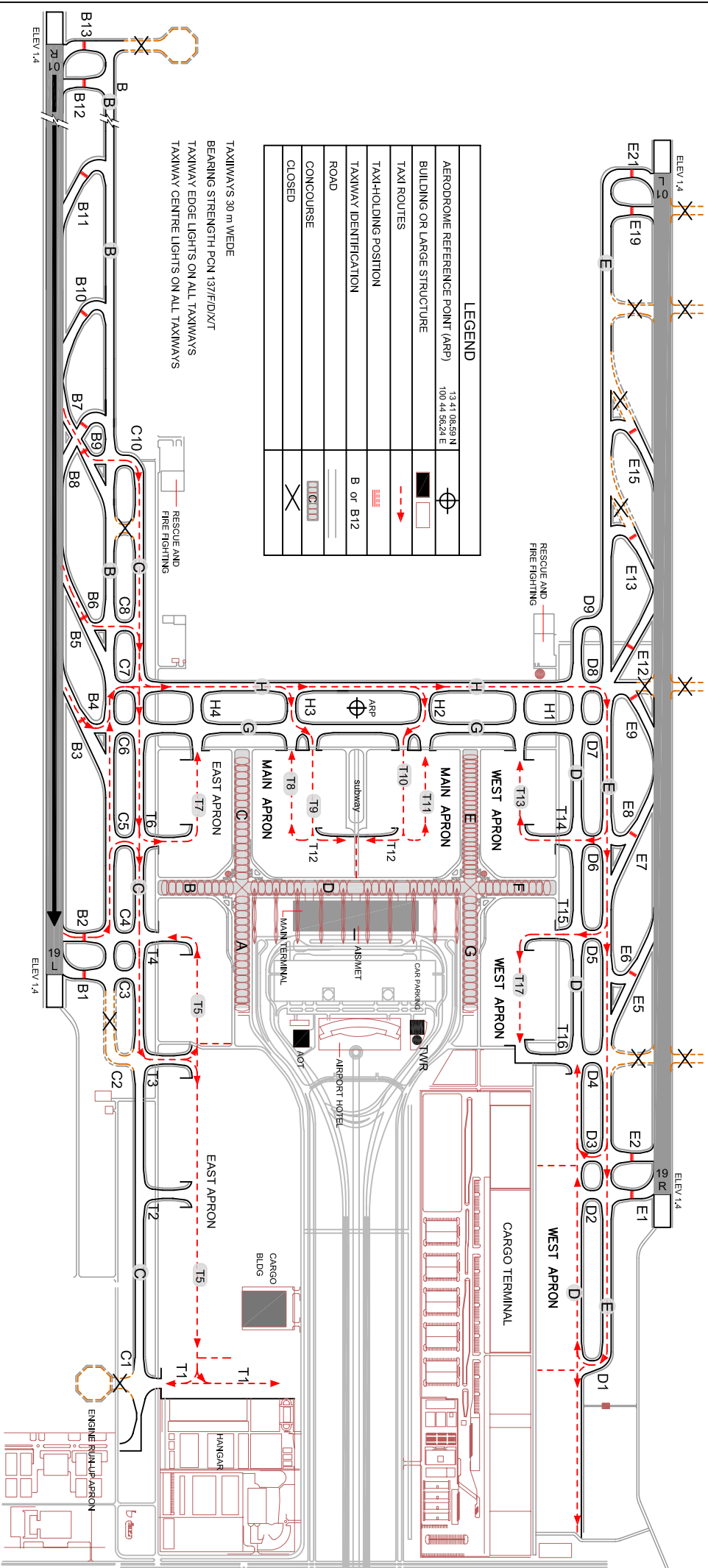
TAXIWAYS 30 m WEDE
BEARING STRENGTH PCN 137/F/D/X/T
TAXIWAY EDGE LIGHTS ON ALL TAXIWAYS
TAXIWAY CENTRE LIGHTS ON ALL TAXIWAYS



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INBOUND TAXI ROUTES - LANDING RUNWAY 01R

ANNUAL CHANGE 0° 4'W



AERODROME GROUND
MOVEMENT CHART - ICAO

APRON ELEV
1.8 m(5.9 ft)

TWR FREQ 119.0 (RWY 19R/01L)
TWR FREQ 118.2 (RWY 19L/01R)

GND FREQ 121.95 (WEST APRON)
GND FREQ 121.75 (MAIN APRON)
GND FREQ 121.85 (EAST APRON)

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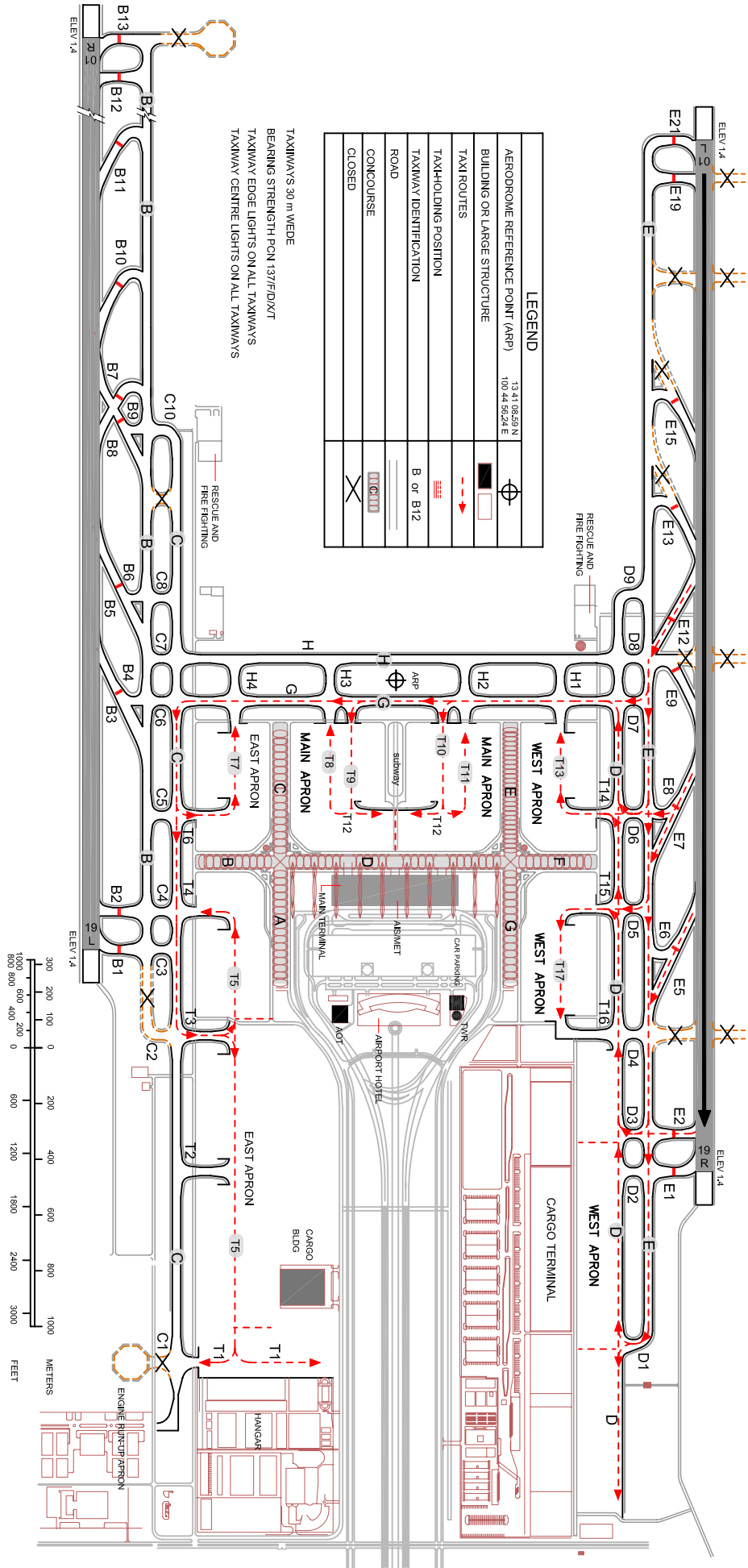
STANDARD TAXI ROUTES

INBOUND TAXI ROUTES - LANDING RUNWAY 01L

ELEVATIONS IN METRES
BEARINGS ARE MAGNETIC
WAS 0 30 W (2005)
ANNUAL CHANGE 0" 4 W

LEGEND	
AERODROME REFERENCE POINT (ARP)	13 41 08.59 N 100 44 58.24 E
BUILDING OR LARGE STRUCTURE	
TAXI ROUTES	
TAXI HOLDING POSITION	
TAXIWAY IDENTIFICATION	B or B12
ROAD	
CONCOURSE	
CLOSED	

TAXIWAYS 30 m WEDE
BEARING STRENGTH PCN 137/F/D/X/T
TAXIWAY EDGE LIGHTS ON ALL TAXIWAYS
TAXIWAY CENTRE LIGHTS ON ALL TAXIWAYS



BANGKOK / Suvarnabhumi International

OUTBOUND TAXI ROUTES - TAKE - OFF RUNWAY 19R

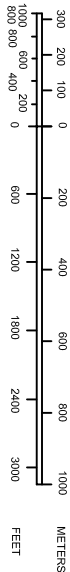
~~VAR 0 30' W (2005)~~
ANNUAL CHANGE 0° 4' W

[illegible]

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OUTBOUND TAXI ROUTES - TAKE - OFF RUNWAY 19L

~~1/8" 0 30" W (2005)~~
ANNUAL CHANGE 0° 4' W



AERODROME GROUND
MOVEMENT CHART - ICAO

APRON ELEV
1.8 m(5.9 ft)

TWR FREQ 119.0 (RWY 19R/01L)
TWR FREQ 118.2 (RWY 19L/01R)

GND FREQ 121.95 (WEST APRON)
GND FREQ 121.75 (MAIN APRON)
GND FREQ 121.95 (EAST APRON)

BANGKOK / Suvarnabhumi International

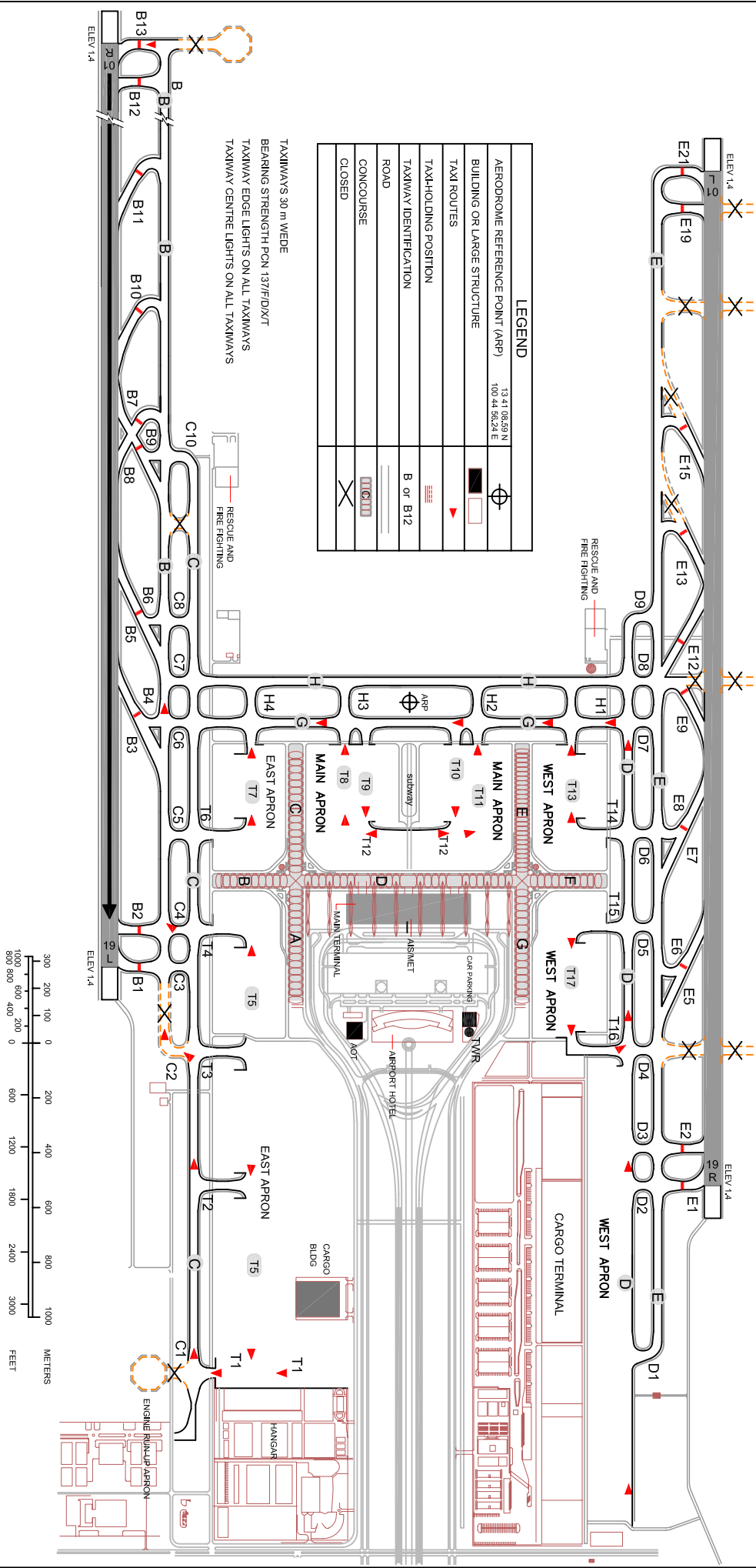
STANDARD TAXI ROUTES

OUTBOUND TAXI ROUTES - TAKE - OFF RUNWAY 01R

ELEVATIONS IN METRES
BEARINGS ARE MAGNETIC
MAG 35° W (2005)
ANNUAL CHANGE 0° 4' W

LEGEND	
AERODROME REFERENCE POINT (ARP)	13 41 08.59 N 100 44 56.24 E
BUILDING OR LARGE STRUCTURE	
TAXI ROUTES	
TAXIHOLDING POSITION	
TAXIWAY IDENTIFICATION	B or B12
ROAD	
CONCOURSE	
CLOSED	

TAXIWAYS 30 m WEDE
BEARING STRENGTH PCN 13/F/D/X/T
TAXIWAY EDGE LIGHTS ON ALL TAXIWAYS
TAXIWAY CENTRE LIGHTS ON ALL TAXIWAYS

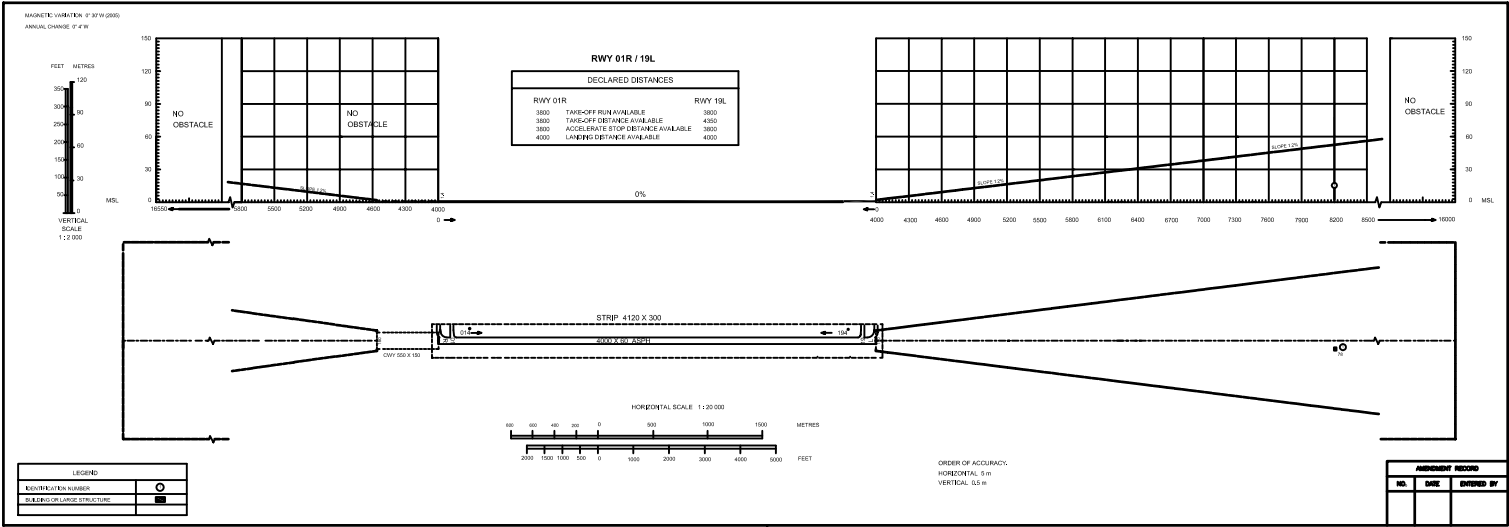


BANGKOK / Suvarnabhumi International

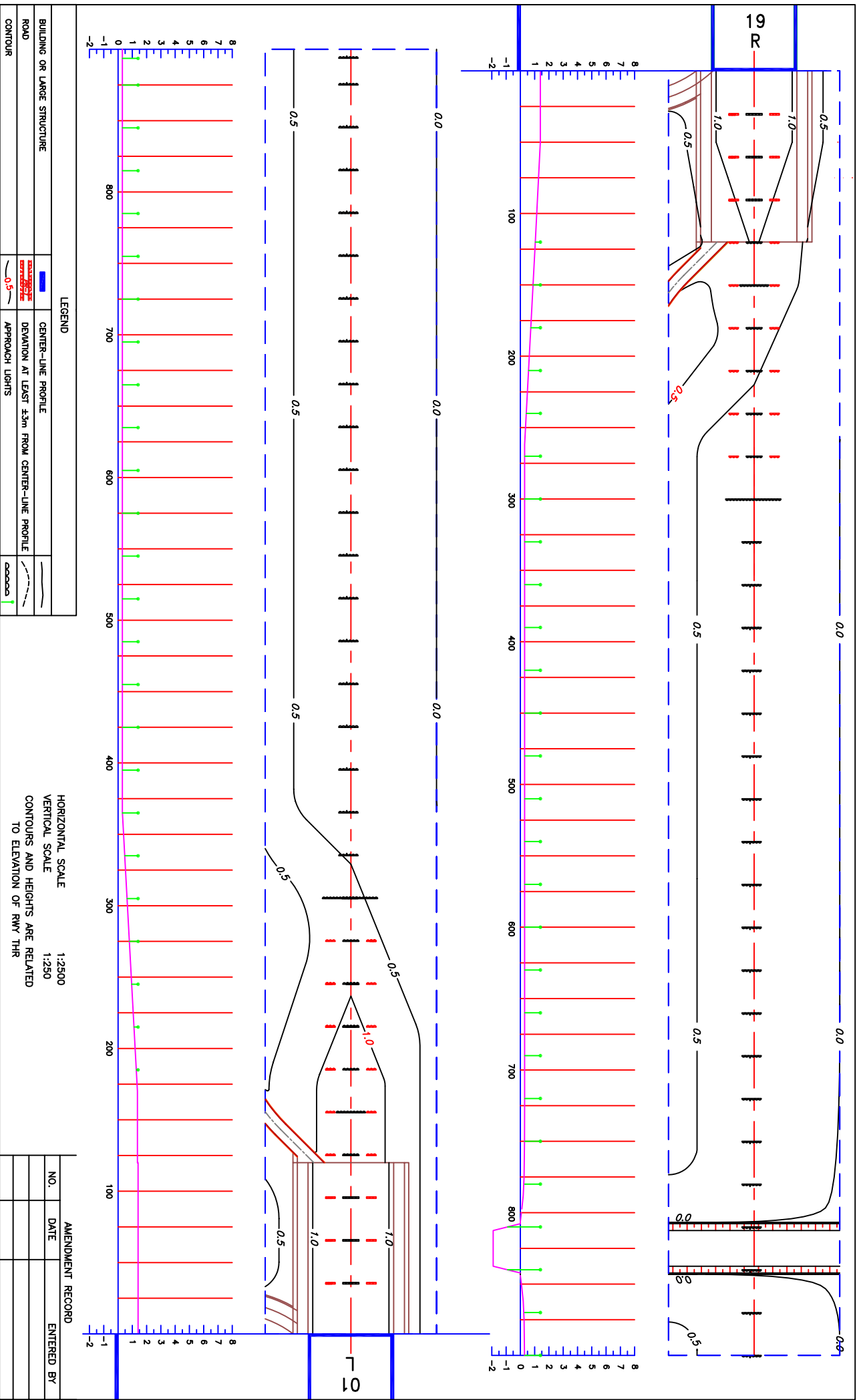


BANGKOK / Suvarnabhumi International





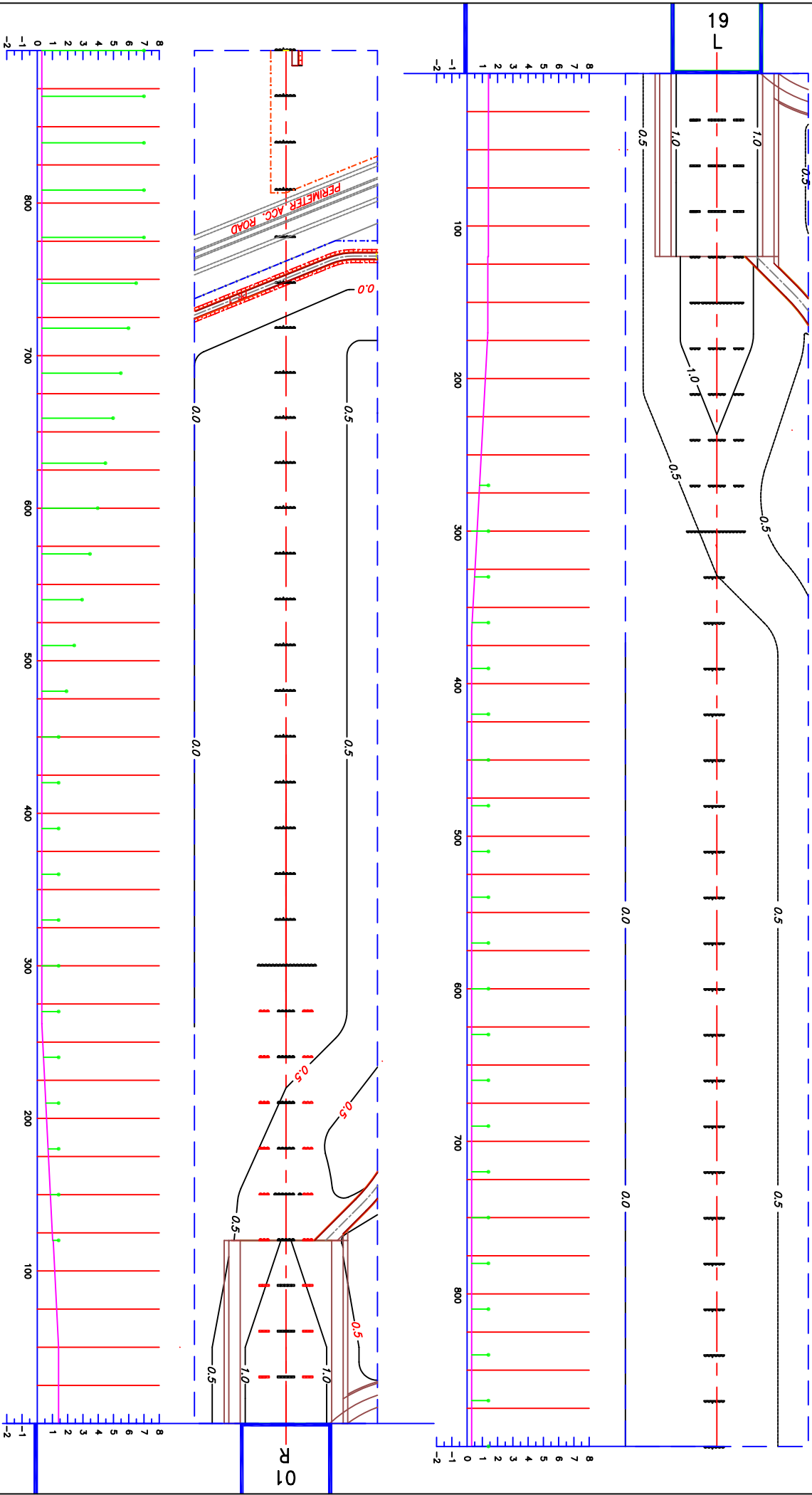
PRECISION APPROACH TERRAIN CHART – ICAO



DIMENSIONS AND ELEVATIONS IN METRES

PRECISION APPROACH TERRAIN CHART – ICAO

BANGKOK/Suvarnabhumi International
.....
RWY 01R/19L



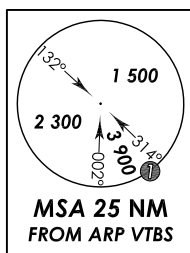
LEGEND		HORIZONTAL SCALE		AMENDMENT RECORD	
BUILDING OR LARGE STRUCTURE		CENTER-LINE PROFILE	1:2500	NO.	DATE
ROAD		DEVIATION AT LEAST 3m FROM CENTER-LINE PROFILE	1:250	ENTERED BY	
CONTOUR		APPROACH LIGHTS	CONTOURS AND HEIGHTS ARE RELATED TO ELEVATION OF RWY THR		

RNAV (GNSS) SIDs**RUNWAY 19L - ANTIC 1C**
RUNWAY 19R - ANTIC 1B

APP : 122.35 , 257.6
: 124.35 , 262.5
: 125.2 , 259.6
TWR : 118.2 , 119.0, 274.5
ATIS : 127.8 , 278.6

BANGKOK / Suvarnabhumi Intl
RWY 19L / 19R

TRANSITION LEVEL : FL130
TRANSITION ALT : 11000 FT

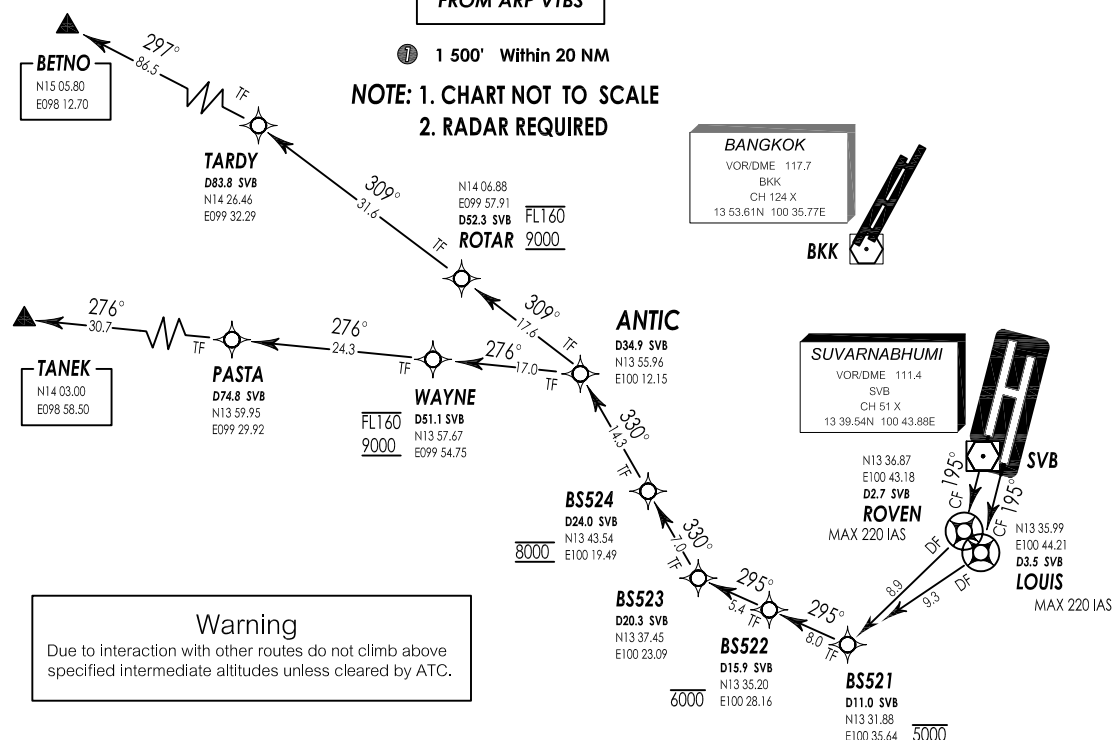


① 1 500' Within 20 NM

NOTE: 1. CHART NOT TO SCALE
2. RADAR REQUIRED

VAR 0° 30' W 2005

BEARINGS AND TRACKS ARE
MAGNETIC
ALTITUDES, ELEVATIONS
AND HEIGHTS IN FEET
DISTANCES IN NAUTICAL MILES

**General Information**

1. After departure immediately contact Bangkok Approach on 125.2 MHz.
2. Non - GNSS equipped aircraft shall inform ATC and request for radar vectoring.
3. En-route cruising level will be issued by " Bangkok Control ". Do not climb above RNAV SID levels until instructed by ATC.
4. Maximum IAS 250 kt. below 10000 ft. Unless otherwise authorized.

Lost Communication Procedures

- Squawk A7600
- Comply with last assigned level to ANTIC then continue on ANTIC 1B / ANTIC 1C departure until next compulsory reporting point then climb to flight plan cruising level.

Climb Instruction

These SIDs are also minimum noise routing and require a minimum climb gradient of 304' per NM (5.0%) until passing altitude 3000 ft.

GS (KT)	75	100	150	200	250	300
304' per NM	380	507	760	1014	1267	1520

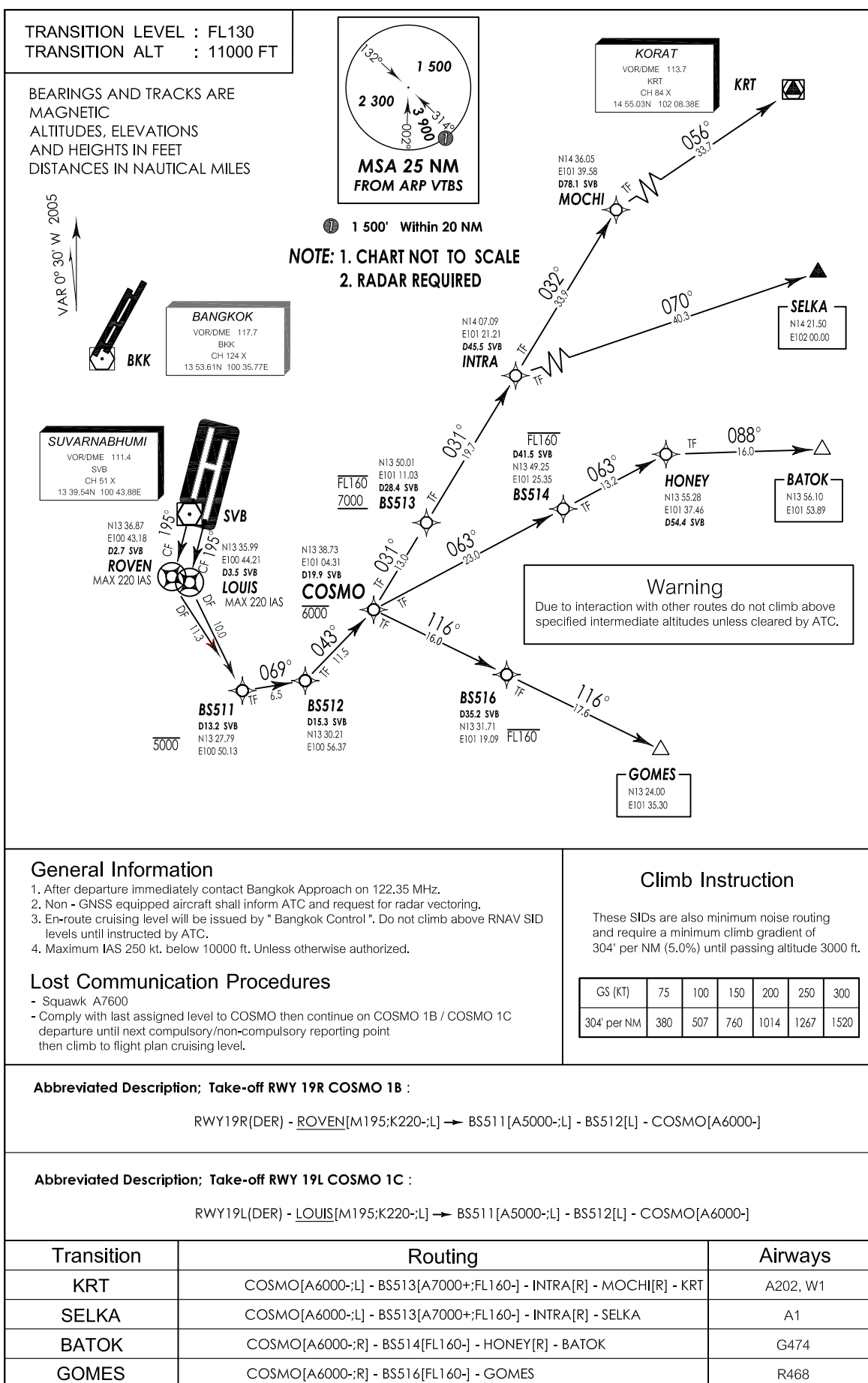
Abbreviated Description; Take-off RWY 19R ANTIC 1B :

RWY19R(DER) - ROVEN[M195;K220-;R] → BS521[A5000-;R] - BS522[A6000-] - BS523[R] - BS524[A8000] - ANTIC

Abbreviated Description; Take-off RWY 19L ANTIC 1C :

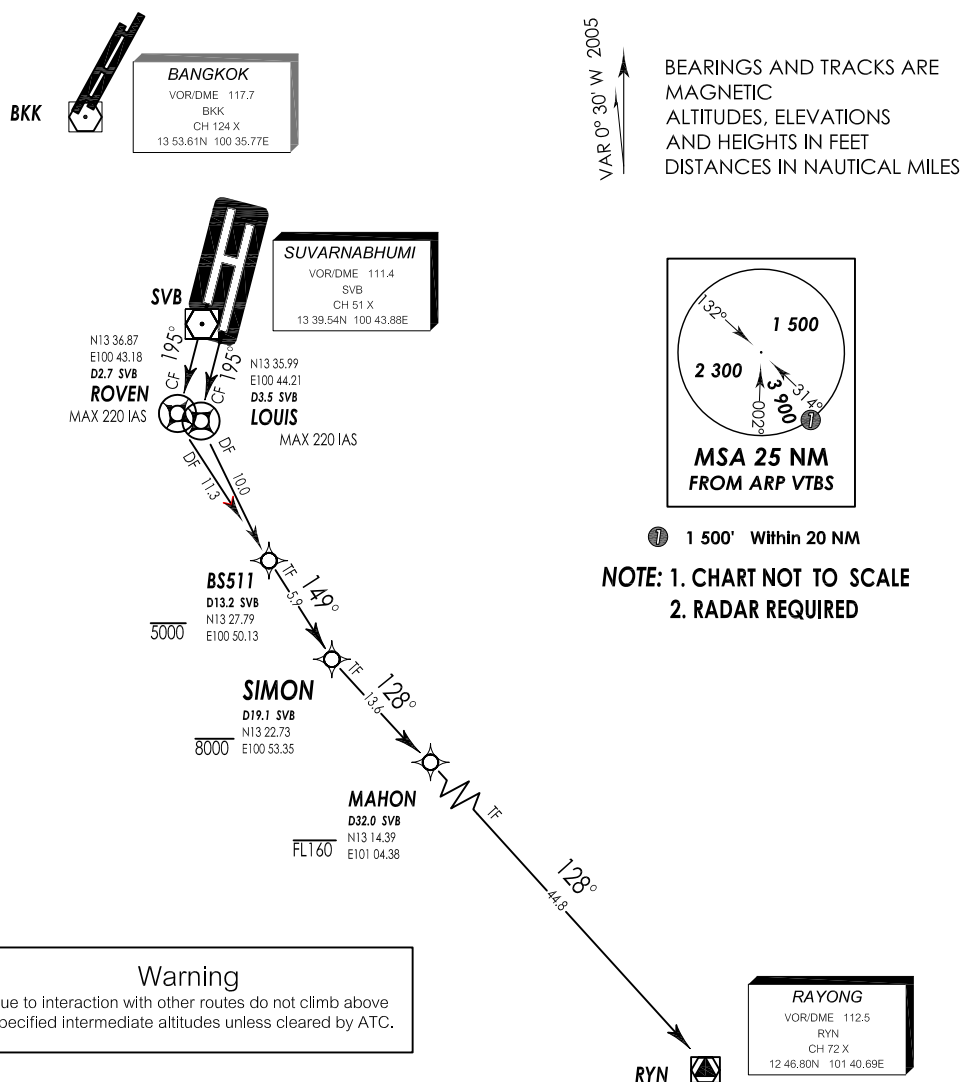
RWY19L(DER) - LOUIS[M195;K220-;R] → BS521[A5000-;R] - BS522[A6000-] - BS523[R] - BS524[A8000] - ANTIC

Transition	Routing	Airways
TANEK	ANTIC[L] - WAYNE[A9000+;FL160-] - PASTA - TANEK	R468
BETNO	ANTIC[L] - ROTAR[A9000+;FL160-] - TARDY[L] - BETNO	G463, P646

RNAV (GNSS) SIDs**RUNWAY 19L - COSMO 1C**
RUNWAY 19R - COSMO 1BAPP : 122.35 , 257.6
: 124.35 , 262.5
: 125.2 , 259.6
TWR : 118.2 , 119.0, 274.5
ATIS : 127.8 , 278.6**BANGKOK / Suvarnabhumi Intl**
RWY 19L / 19R

RNAV (GNSS) SIDs**RUNWAY 19L - SIMON 1C**
RUNWAY 19R - SIMON 1B

APP : 122.35 , 257.6
: 124.35 , 262.5
: 125.2 , 259.6
TWR : 118.2 , 119.0, 274.5
ATIS : 127.8 , 278.6

BANGKOK / Suvarnabhumi Intl
RWY 19L / 19RTRANSITION LEVEL : FL130
TRANSITION ALT : 11000 FT**General Information**

1. After departure immediately contact Bangkok Approach on 122.35 MHz.
2. Non - GNSS equipped aircraft shall inform ATC and request for radar vectoring.
3. En-route cruising level will be issued by " Bangkok Control ". Do not climb above RNAV SID levels until instructed by ATC.
4. Maximum IAS 250 kt. below 10000 ft. Unless otherwise authorized.

Lost Communication Procedures

- Squawk A7600
- Comply with last assigned level to SIMON then continue on SIMON 1B / SIMON 1C departure until next compulsory reporting point then climb to flight plan cruising level.

Climb Instruction

These SIDs are also minimum noise routing and require a minimum climb gradient of 304' per NM (5.0%) until passing altitude 3000 ft.

GS (KT)	75	100	150	200	250	300
304' per NM	380	507	760	1014	1267	1520

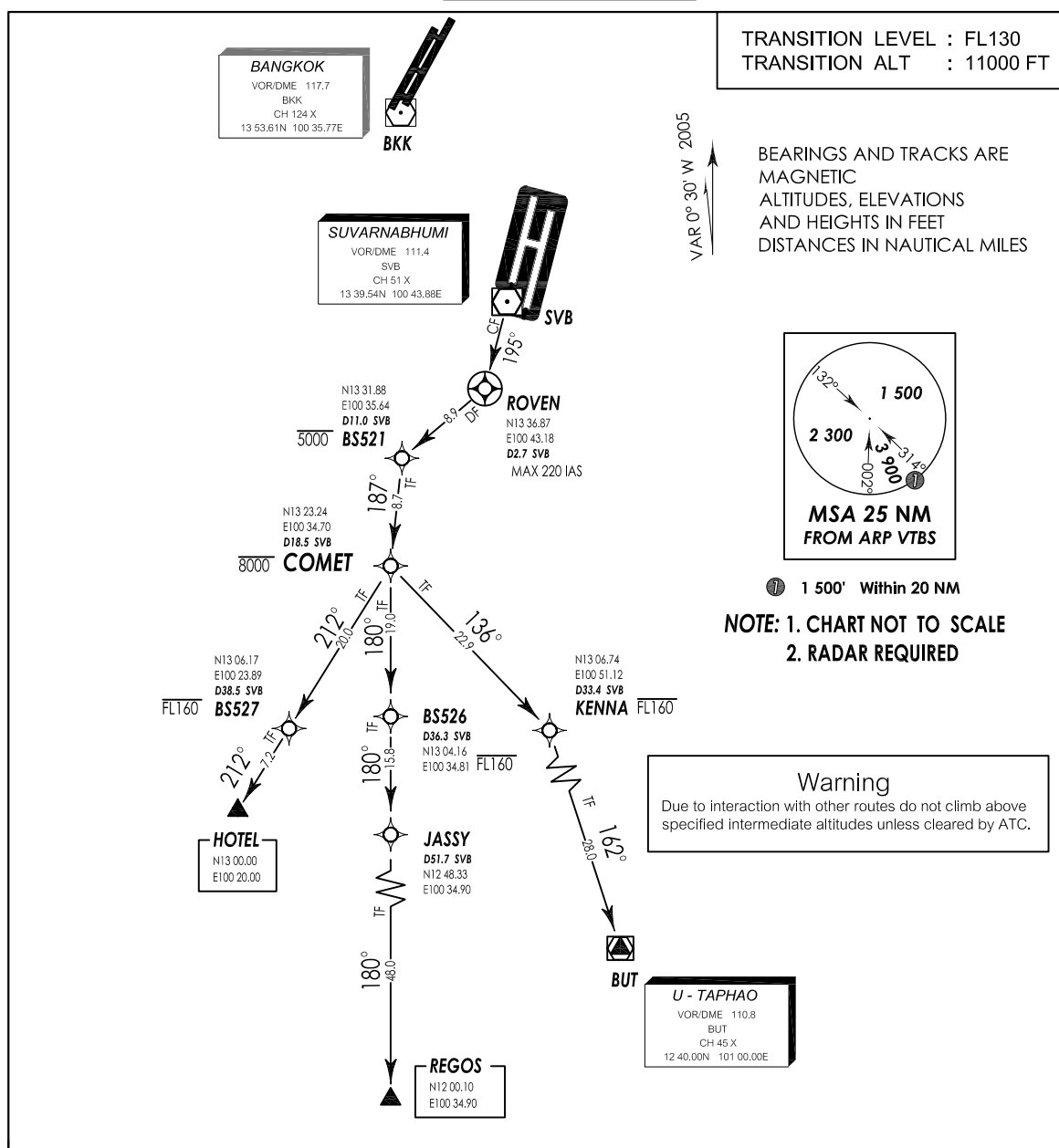
Abbreviated Description; Take-off RWY 19R SIMON 1B :RWY19R(DER) - ROVEN[M195;K220-;L] → BS511[A5000-] - SIMON[A8000-]**Abbreviated Description; Take-off RWY 19L SIMON 1C :**RWY19L(DER) - LOUIS[M195;K220-;L] → BS511[A5000-;L] - SIMON[A8000-]

Transition	Routing	Airways
RYN	SIMON[A8000-] - MAHON[FL160-] - RYN	N891

RNAV (GNSS) SID**RUNWAY 19R - COMET 1B**

APP : 122.35 , 257.6
: 124.35 , 262.5
: 125.2 , 259.6
TWR : 118.2 , 119.0, 274.5
ATIS : 127.8 , 278.6

BANGKOK / Suvarnabhumi Intl
RWY 19L / 19R

**General Information**

1. After departure immediately contact Bangkok Approach on 124.35 MHz.
2. Non - GNSS equipped aircraft shall inform ATC and request for radar vectoring.
3. En-route cruising level will be issued by " Bangkok Control ". Do not climb above RNAV SID levels until instructed by ATC.
4. Maximum IAS 250 kt. below 10000 ft. Unless otherwise authorized.

Lost Communication Procedures

- Squawk A7600
- Comply with last assigned level to COMET then continue on COMET 1B departure until next compulsory reporting point then climb to flight plan cruising level .

Climb Instruction

These SIDs are also minimum noise routing and require a minimum climb gradient of 304' per NM (5.0%) until passing altitude 3000 ft.

GS (KT)	75	100	150	200	250	300
304' per NM	380	507	760	1014	1267	1520

Abbreviated Description; Take-off RWY 19R COMET 1B :

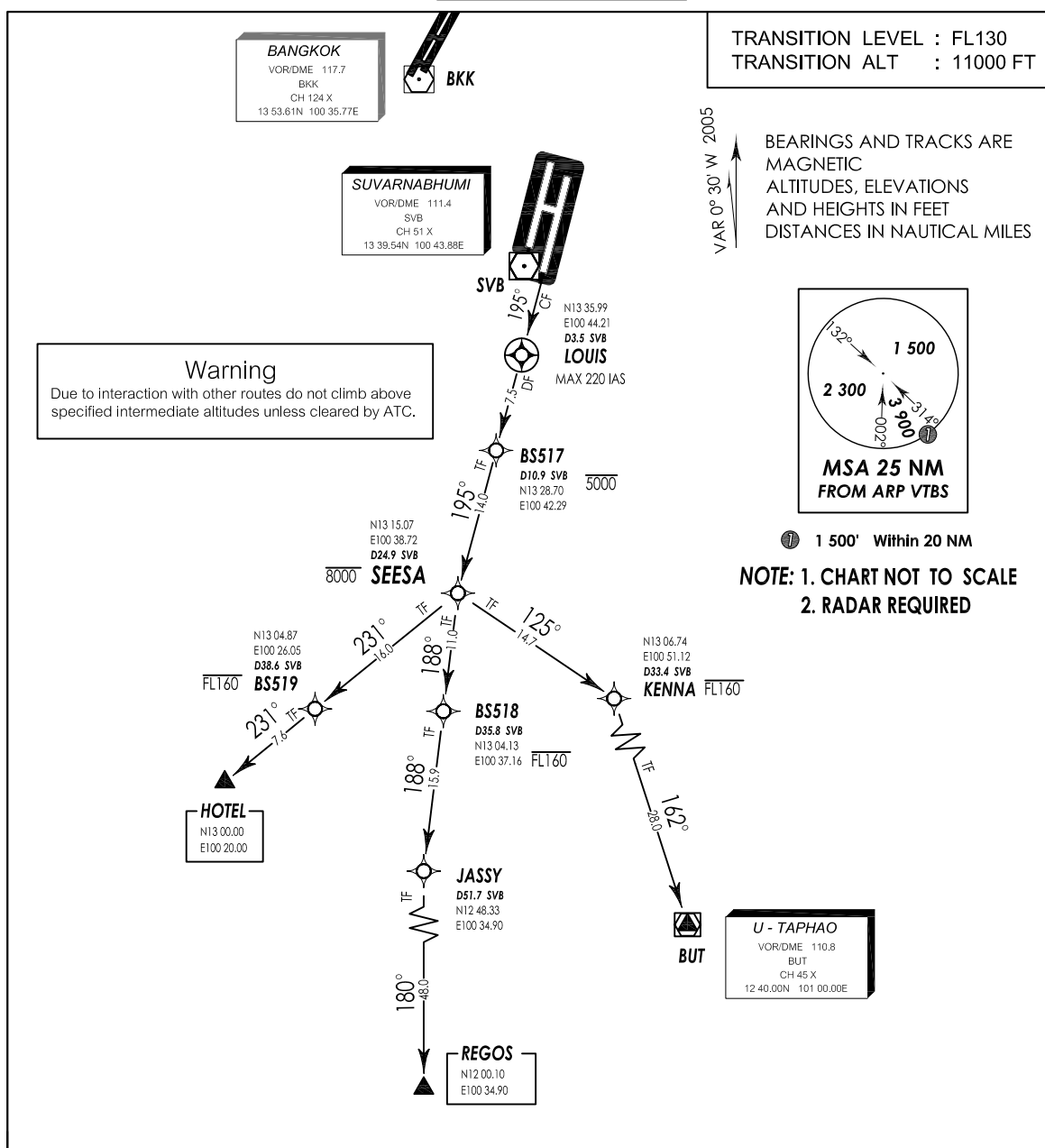
RWY19R(DER) - ROVEN[M195;K220;-R] → BS521[A5000;-L] - COMET[A8000;-]

Transition	Routing	Airways
BUT	COMET[A8000;-L] - KENNA[FL160;-R] - BUT	R201
REGOS	COMET[A8000;-L] - BS526[FL160;-] - JASSY - REGOS	A464, M751, W19
HOTEL	COMET[A8000;-R] - BS527[FL160;-] - HOTEL	G458, W31

RNAV (GNSS) SID**RUNWAY 19L - SEESA 1C**

APP : 122.35 , 257.6
: 124.35 , 262.5
: 125.2 , 259.6
TWR : 118.2 , 119.0, 274.5
ATIS : 127.8 , 278.6

BANGKOK / Suvarnabhumi Intl
RWY 19L / 19R

**General Information**

1. After departure immediately contact Bangkok Approach on 124.35 MHz.
2. Non - GNSS equipped aircraft shall inform ATC and request for radar vectoring.
3. En-route cruising level will be issued by " Bangkok Control ". Do not climb above RNAV SID levels until instructed by ATC.
4. Maximum IAS 250 kt. below 10000 ft. Unless otherwise authorized.

Lost Communication Procedures

- Squawk A7600
- Comply with last assigned level to SEESA then continue on SEESA 1C departure until next compulsory reporting point then climb to flight plan cruising level .

Climb Instruction

These SIDs are also minimum noise routing and require a minimum climb gradient of 304' per NM (5.0%) until passing altitude 3000 ft.

GS (KT)	75	100	150	200	250	300
304' per NM	380	507	760	1014	1267	1520

Abbreviated Description; Take-off RWY 19L SEESA 1C :

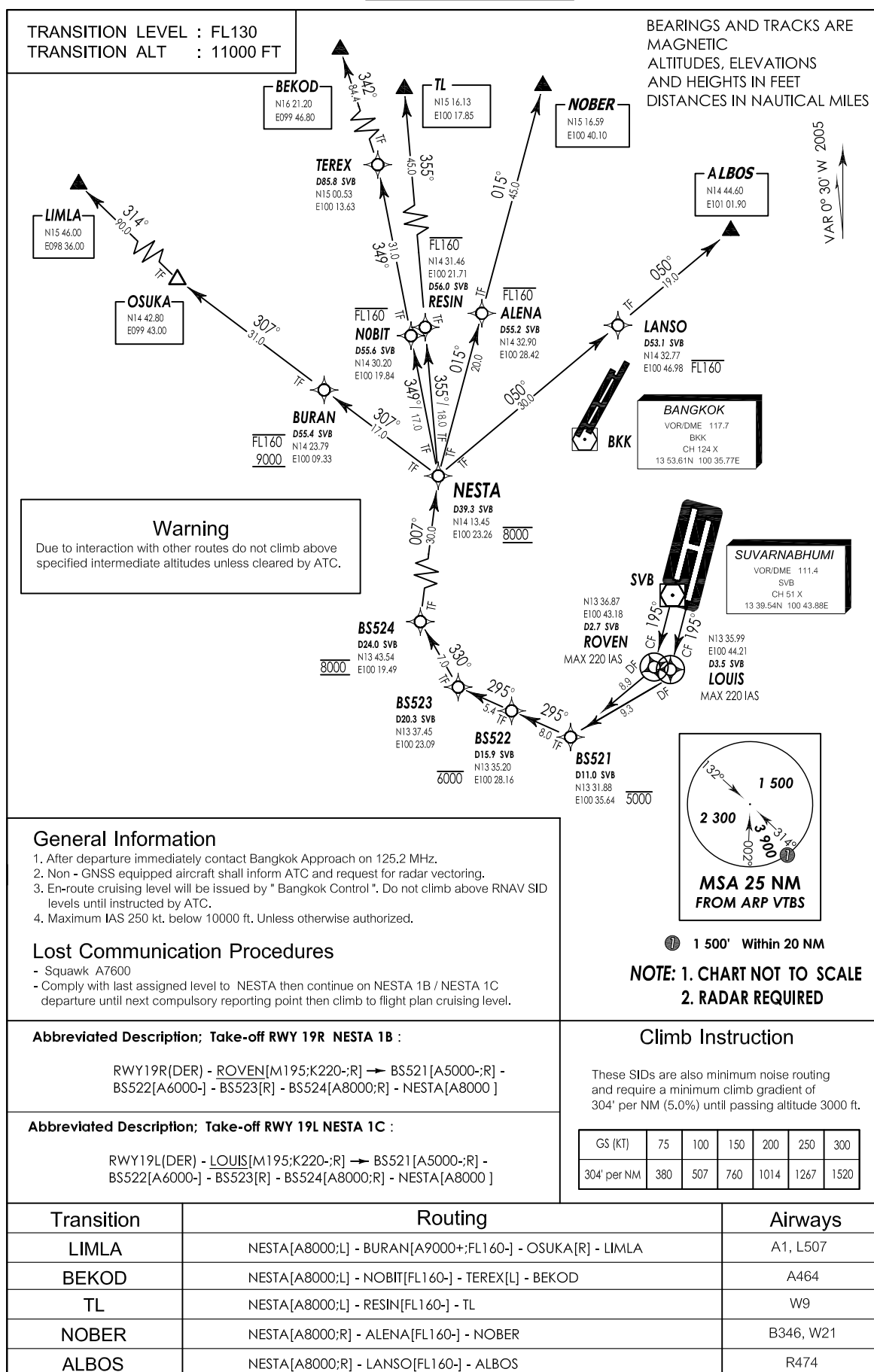
RWY19L(DER) - LOUIS[M195;K220] → BS517[A5000] - SEESA[A8000]

Transition	Routing	Airways
BUT	SEESA[A8000-;L] - KENNA[FL160-;R] - BUT	R201
REGOS	SEESA[A8000-;L] - BS518[FL160-] - JASSY[L] - REGOS	A464, M751, W19
HOTEL	SEESA[A8000-;R] - BS519[FL160-] - HOTEL	G458, W31

RNAV (GNSS) SIDs**RUNWAY 19L - NESTA 1C**
RUNWAY 19R - NESTA 1B

APP : 122.35 , 257.6
: 124.35 , 262.5
: 125.2 , 259.6
TWR : 118.2 , 119.0, 274.5
ATIS : 127.8 , 278.6

BANGKOK / Suvarnabhumi Intl
RWY 19L / 19R



RNAV (GNSS) SIDsBANGKOK / Suvarnabhumi Intl
RWY 19L / 19R

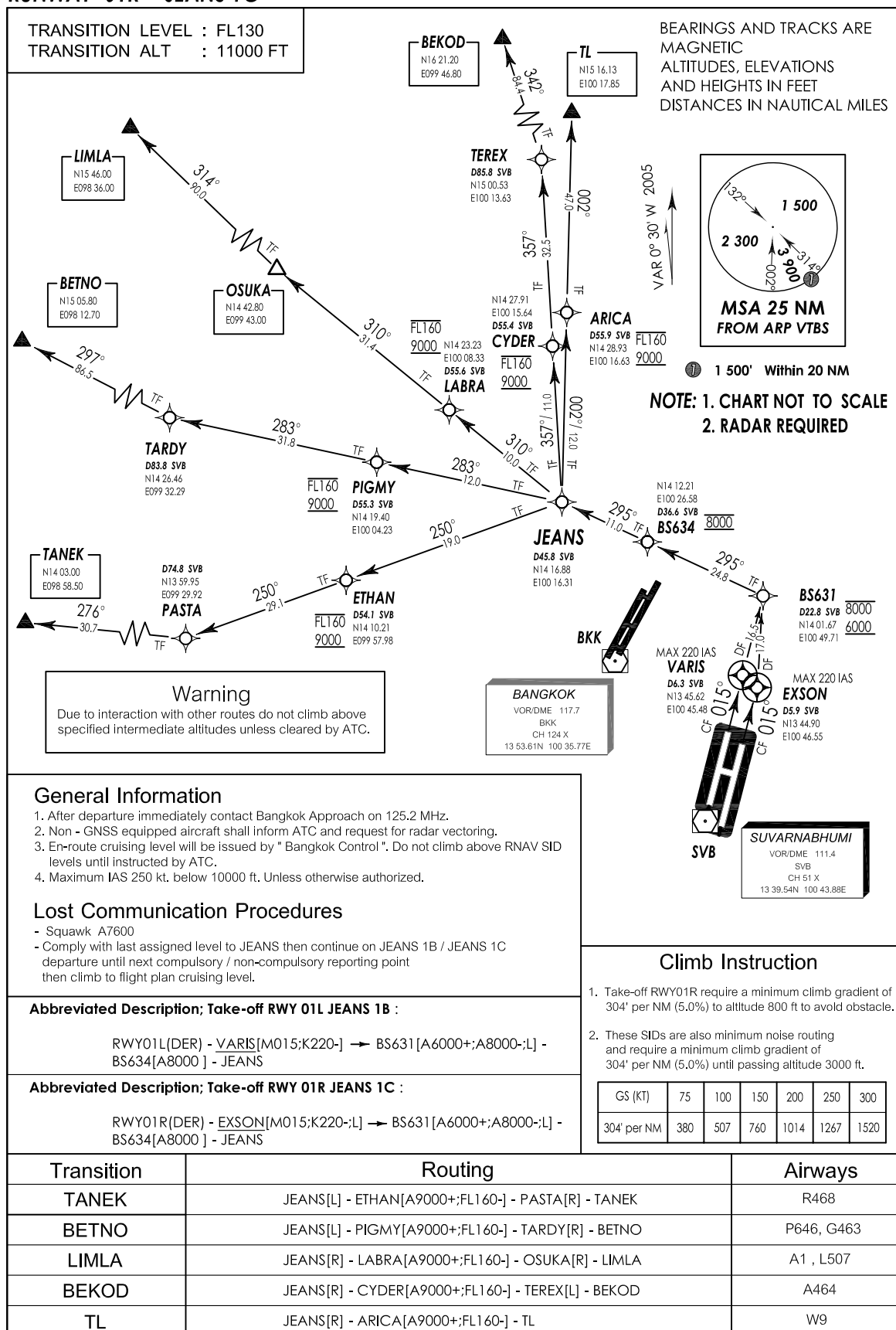
COORDINATES OF SID WAYPOINTS (WGS84 DATUM)

IDENT	SVB		Degrees,Minutes		Degrees,Minutes and Seconds		REMARK
	RADIAL	DME	LAT	L ONG	LAT	LONG	
BS511	153	13.2	N13 27.79	E100 50.13	N13 27 47.72	E100 50 08.35	
BS512	127	15.3	N13 30.21	E100 56.37	N13 30 12.89	E100 56 22.41	
BS513	069	28.4	N13 50.01	E101 11.03	N13 50 00.95	E101 11 01.93	
BS514	077	41.5	N13 49.25	E101 25.35	N13 49 15.14	E101 25 21.12	
BS516	103	35.2	N13 31.71	E101 19.09	N13 31 42.90	E101 19 05.88	
BS517	189	10.9	N13 28.70	E100 42.29	N13 28 42.02	E100 42 17.92	
BS518	191	35.8	N13 04.13	E100 37.16	N13 04 08.21	E100 37 09.69	
BS519	207	38.6	N13 04.87	E100 26.05	N13 04 52.79	E100 26 03.22	
BS521	227	11.0	N13 31.88	E100 35.64	N13 31 53.18	E100 35 38.94	
BS522	255	15.9	N13 35.20	E100 28.16	N13 35 12.25	E100 28 10.06	
BS523	265	20.3	N13 37.45	E100 23.09	N13 37 27.37	E100 23 05.71	
BS524	280	24.0	N13 43.54	E100 19.49	N13 43 32.70	E100 19 29.94	
BS526	195	36.3	N13 04.16	E100 34.81	N13 04 09.88	E100 34 48.70	
BS527	211	38.5	N13 06.17	E100 23.89	N13 06 10.41	E100 23 53.90	
ALENA	345	55.2	N14 32.90	E100 28.42	N14 32 54.03	E100 28 25.68	
BURAN	323	55.4	N14 23.79	E100 09.33	N14 23 47.86	E100 09 19.88	
HONEY	074	54.4	N13 55.28	E101 37.46	N13 55 17.38	E101 37 27.85	
INTRA	053	45.5	N14 07.09	E101 21.21	N14 07 05.52	E101 21 13.11	
JASSY	190	51.7	N12 48.33	E100 34.90	N12 48 20.04	E100 34 54.19	
KENNA	168	33.4	N13 06.74	E100 51.12	N13 06 44.49	E100 51 07.35	
LANSO	004	53.1	N14 32.77	E100 46.98	N14 32 46.26	E100 46 59.24	
LOUIS	175	3.5	N13 35.99	E100 44.21	N13 35 59.82	E100 44 12.92	
MAHON	142	32.0	N13 14.39	E101 04.38	N13 14 23.80	E101 04 22.93	
MOCHI	044	78.1	N14 36.05	E101 39.58	N14 36 03.26	E101 39 34.93	
NOBIT	336	55.6	N14 30.20	E100 19.84	N14 30 12.01	E100 19 50.72	
PASTA	286	74.8	N13 59.95	E099 29.92	N13 59 57.33	E099 29 55.20	
RESIN	338	56.0	N14 31.46	E100 21.71	N14 31 28.15	E100 21 42.61	
ROTAR	302	52.3	N14 06.88	E099 57.91	N14 06 53.13	E099 57 55.12	
ROVEN	195	2.7	N13 36.87	E100 43.18	N13 36 52.30	E100 43 11.13	
TARDY	304	83.8	N14 26.46	E099 32.29	N14 26 27.87	E099 32 17.79	
TEREX	340	85.8	N15 00.53	E100 13.63	N15 00 31.91	E100 13 38.21	
WAYNE	291	51.1	N13 57.67	E099 54.75	N13 57 40.77	E099 54 45.50	
ANTIC	298	34.9	N13 55.96	E100 12.15	N13 55 57.82	E100 12 09.24	
COMET	209	18.5	N13 23.24	E100 34.70	N13 23 14.89	E100 34 42.08	
COSMO	093	19.9	N13 38.73	E101 04.31	N13 38 43.80	E101 04 18.95	
NESTA	330	39.3	N14 13.45	E100 23.26	N14 13 27.20	E100 23 15.81	
SEESA	192	24.9	N13 15.07	E100 38.72	N13 15 04.70	E100 38 43.69	
SIMON	151	19.1	N13 22.73	E100 53.35	N13 22 44.36	E100 53 21.29	
RWY19R (DER)	015	0.7	N13 40.27	E100 44.07	N13 40 16.59	E100 44 04.79	
RWY19L (DER)	097	1.2	N13 39.40	E100 45.10	N13 39 24.11	E100 45 06.59	

Department of Civil Aviation

RNAV (GNSS) SIDs

BANGKOK / Suvarnabhumi Intl

RWY 01L / 01R**RUNWAY 01L - JEANS 1B****RUNWAY 01R - JEANS 1C**

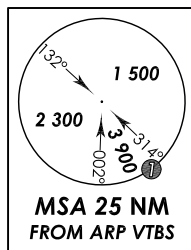
RNAV (GNSS) SIDsBANGKOK / Suvarnabhumi Intl
RWY 01L / 01R**RUNWAY 01L - CHEST 1B****RUNWAY 01R - CHEST 1C**

APP : 122.35 , 257.6
: 124.35 , 262.5
: 125.2 , 259.6
TWR : 118.2 , 119.0, 274.5
ATIS : 127.8 , 278.6

TRANSITION LEVEL : FL130
TRANSITION ALT : 11000 FT

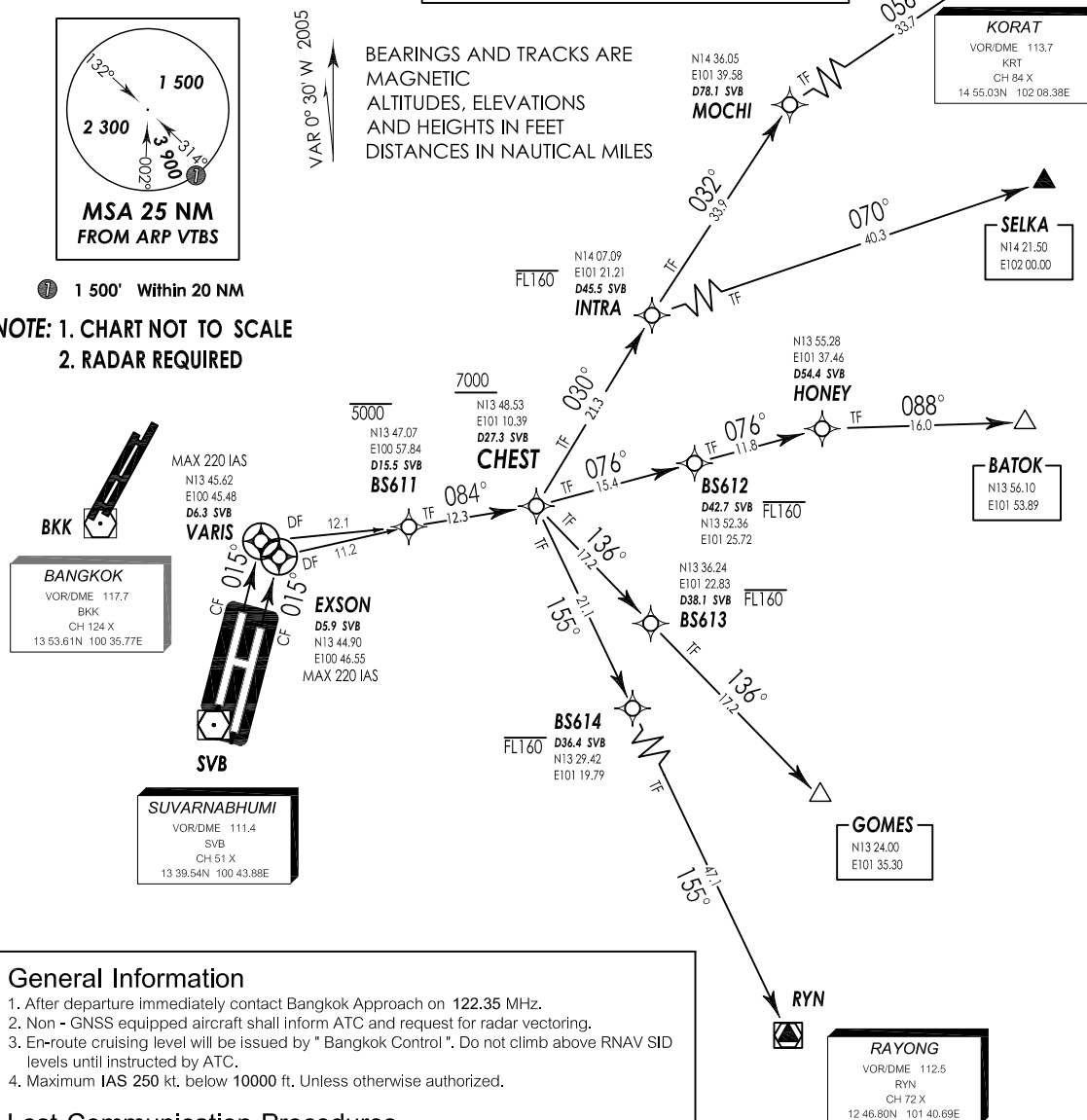
Warning

Due to interaction with other routes do not climb above specified intermediate altitudes unless cleared by ATC.



① 1 500' Within 20 NM

**NOTE: 1. CHART NOT TO SCALE
2. RADAR REQUIRED**

**General Information**

1. After departure immediately contact Bangkok Approach on 122.35 MHz.
2. Non - GNSS equipped aircraft shall inform ATC and request for radar vectoring.
3. En-route cruising level will be issued by "Bangkok Control". Do not climb above RNAV SID levels until instructed by ATC.
4. Maximum IAS 250 kt. below 10000 ft. Unless otherwise authorized.

Lost Communication Procedures

- Squawk A7600
- Comply with last assigned level to CHEST then continue on CHEST 1B / CHEST 1C departure until next compulsory / non-compulsory reporting point then climb to flight plan cruising level.

Abbreviated Description; Take-off RWY 01L CHEST 1B :

RWY01L(DER) - VARIS[M015;K220;R] → BS611[A5000;-] - CHEST[A7000+]

Abbreviated Description; Take-off RWY 01R CHEST 1C :

RWY01R(DER) - EXSON[M015;K220;R] → BS611[A5000;-] - CHEST[A7000+]

Climb Instruction

1. Take-off RWY01R require a minimum climb gradient of 304' per NM (5.0%) to altitude 800 ft to avoid obstacle.
2. These SIDs are also minimum noise routing and require a minimum climb gradient of 304' per NM (5.0%) until passing altitude 3000 ft.

GS (KT)	75	100	150	200	250	300
304' per NM	380	507	760	1014	1267	1520

Transition	Routing	Airways
KRT	CHEST[A7000+;L] - INTRA[FL160;-;R] - MOCHI[R] - KRT	W1, A202
SELKA	CHEST[A7000+;L] - INTRA[FL160;-;R] - SELKA	A1
BATOK	CHEST[A7000+;L] - BS612[FL160;-] - HONEY[R] - BATOK	G474
GOMES	CHEST[A7000+;R] - BS613[FL160;-] - GOMES	R468
RYN	CHEST[A7000+;R] - BS614[FL160;-] - RYN	N891

RNAV (GNSS) SIDs

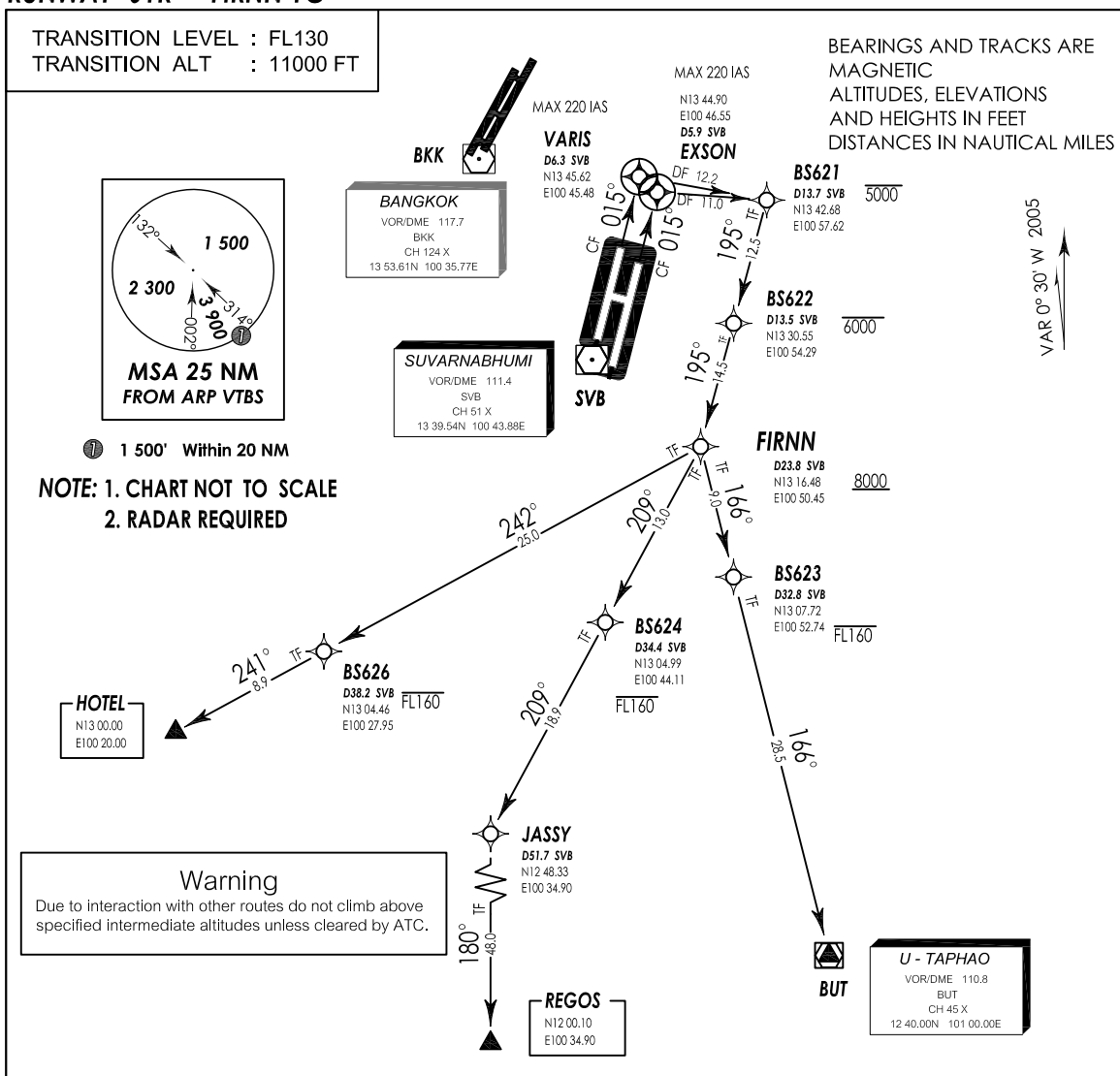
BANGKOK / Suvarnabhumi Intl

RWY 01L / 01R**RUNWAY 01L - FIRNN 1B****RUNWAY 01R - FIRNN 1C**

APP : 122.35 , 257.6
: 124.35 , 262.5
: 125.2 , 259.6
TWR : 118.2 , 119.0, 274.5
ATIS : 127.8 , 278.6

TRANSITION LEVEL : FL130
TRANSITION ALT : 11000 FT

BEARINGS AND TRACKS ARE
MAGNETIC
ALTITUDES, ELEVATIONS
AND HEIGHTS IN FEET
DISTANCES IN NAUTICAL MILES



RNAV (GNSS) SIDsBANGKOK / Suvarnabhumi Intl
RWY 01L / 01R

COORDINATES OF SID WAYPOINTS (WGS84 DATUM)

IDENT	SVB		Degrees,Minutes		Degrees,Minutes and Seconds		REMARK
	RADIAL	DME	LAT	LONG	LAT	LONG	
BS611	062	15.5	N13 47.07	E100 57.84	N13 47 04.50	E100 57 50.60	
BS612	073	42.7	N13 52.36	E101 25.72	N13 52 22.12	E101 25 43.55	
BS613	095	38.1	N13 36.24	E101 22.83	N13 36 14.65	E101 22 50.02	
BS614	106	36.4	N13 29.42	E101 19.79	N13 29 25.55	E101 19 47.81	
BS621	077	13.7	N13 42.68	E100 57.62	N13 42 40.81	E100 57 37.29	
BS622	132	13.5	N13 30.55	E100 54.29	N13 30 33.10	E100 54 17.98	
BS623	165	32.8	N13 07.72	E100 52.74	N13 07 43.47	E100 52 44.95	
BS624	180	34.4	N13 04.99	E100 44.11	N13 04 59.63	E100 44 07.16	
BS626	204	38.2	N13 04.46	E100 27.95	N13 04 27.75	E100 27 57.15	
BS631	015	22.8	N14 01.67	E100 49.71	N14 01 40.45	E100 49 42.79	
BS632	015	48.8	N14 26.89	E100 56.64	N14 26 53.66	E100 56 38.56	
BS633	009	50.5	N14 29.72	E100 51.74	N14 29 43.20	E100 51 44.83	
BS634	333	36.6	N14 12.21	E100 26.58	N14 12 13.08	E100 26 35.22	
ARICA	332	55.9	N14 28.93	E100 16.63	N14 28 55.92	E100 16 38.24	
CYDER	331	55.4	N14 27.91	E100 15.64	N14 27 54.71	E100 15 38.49	
ETHAN	305	54.1	N14 10.21	E099 57.98	N14 10 13.11	E099 57 59.31	
EXSON	026	5.9	N13 44.90	E100 46.55	N13 44 54.41	E100 46 33.44	
HONEY	074	54.4	N13 55.28	E101 37.46	N13 55 17.38	E101 37 27.85	
INTRA	053	45.5	N14 07.09	E101 21.21	N14 07 05.52	E101 21 13.11	
JASSY	190	51.7	N12 48.33	E100 34.90	N12 48 20.04	E100 34 54.19	
LABRA	322	55.6	N14 23.23	E100 08.33	N14 23 13.98	E100 08 20.21	
MOCHI	044	78.1	N14 36.05	E101 39.58	N14 36 03.26	E101 39 34.93	
PASTA	286	74.8	N13 59.95	E099 29.92	N13 59 57.33	E099 29 55.20	
PIGMY	316	55.3	N14 19.40	E100 04.23	N14 19 24.54	E100 04 13.96	
TARDY	304	83.8	N14 26.46	E099 32.29	N14 26 27.87	E099 32 17.79	
TEREX	340	85.8	N15 00.53	E100 13.63	N15 00 31.91	E100 13 38.21	
VARIS	015	6.3	N13 45.62	E100 45.48	N13 45 37.45	E100 45 29.14	
CHEST	071	27.3	N13 48.53	E101 10.39	N13 48 32.21	E101 10 23.42	
FIRNN	165	23.8	N13 16.48	E100 50.45	N13 16 28.87	E100 50 27.29	
JEANS	325	45.8	N14 16.88	E100 16.31	N14 16 52.98	E100 16 19.12	
JORGE	015	40.8	N14 19.17	E100 54.35	N14 19 10.53	E100 54 21.31	
RWY01R (DER)	042	2.6	N13 41.50	E100 45.66	N13 41 30.17	E100 45 39.72	
RWY01L (DER)	015	2.7	N13 42.22	E100 44.59	N13 42 13.20	E100 44 35.43	

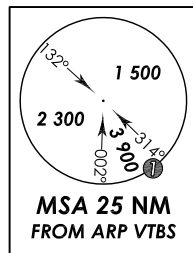
Department of Civil Aviation

RNAV (GNSS) **STARs**

APP : 122.35 , 257.6
: 124.35 , 262.5
: 125.2 , 259.6
ARR : 124.7
TWR : 118.2 , 119.0, 274.5
ATIS : 127.8 , 278.6

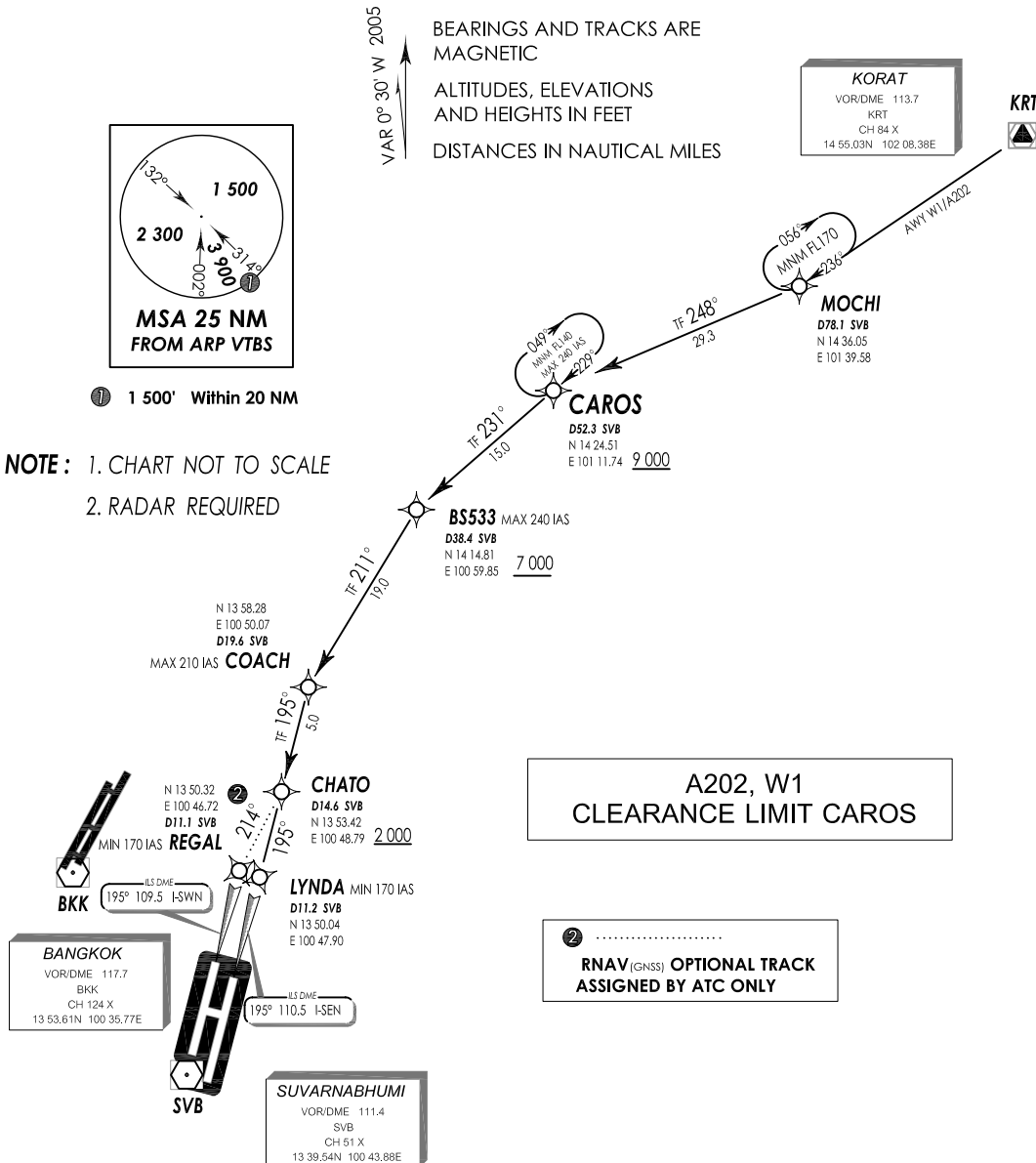
BANGKOK / Suvarnabhumi Intl
RWY 19L / 19R
CAROS 1B

TL : FL130
TA : 11000 FT



① 1 500' Within 20 NM

NOTE : 1. CHART NOT TO SCALE
2. RADAR REQUIRED

**General Information**

1. Aircraft will be cleared for the appropriate RNAV (GNSS) STAR by ATC.
2. Non - GNSS equipped aircraft shall inform ATC and request for radar vectoring.
3. En-route holding : during periods of congestion in Bangkok TMA, the arriving aircraft may be required to hold at MOCHI, as directed by ATC. The holding speeds will be in accordance with standard ICAO holding speeds.

Lost Communication Procedures

- Squawk A7600
- Continue on cleared transition to final approach, comply the vertical constraints depicted on the procedure, then make a straight in approach to the nominated runway.

Clearance phraseology

1. "Cleared CAROS 1B Arrival " : Authorization to fly the lateral RNAV (GNSS) STAR - Route; altitude and speed assignment will be issued by ATC.
2. "Cleared CAROS 1B Arrival and Profile " : Authorization to fly the RNAV (GNSS) STAR - Route as published, including the vertical constraints depicted on the procedure.
3. "Cleared ... (Type) ... Approach " : Authorization to execute the instrument approach via the particular RNAV (GNSS) STAR - Route.

RNAV (GNSS) **STARs**

BANGKOK / Suvarnabhumi Intl

FMC DATABASE CODING REFERENCE FOR RNAV (GNSS) **STARs****CAROS 1B****Runway 19R**

Path Descriptor	Fix Identifier (Waypoint name)	Fly Over	Course °M	Turn Direction	Altitude	Speed Limit	Magnetic Variation	Vertical Angle	Navigation Performance
IF	CAROS	-	-	-	+ 9 000	-240	-	-	B-RNAV
TF	BS533	-	211	L	+ 7 000	-240	-	-	B-RNAV
TF	COACH	-	195	L	-	-210	-	-	B-RNAV
TF	CHATO	-	214	R	+ 2 000	-	-	-	B-RNAV
TF	REGAL	-	195	L	+ 2 000	+170	-	-	B-RNAV

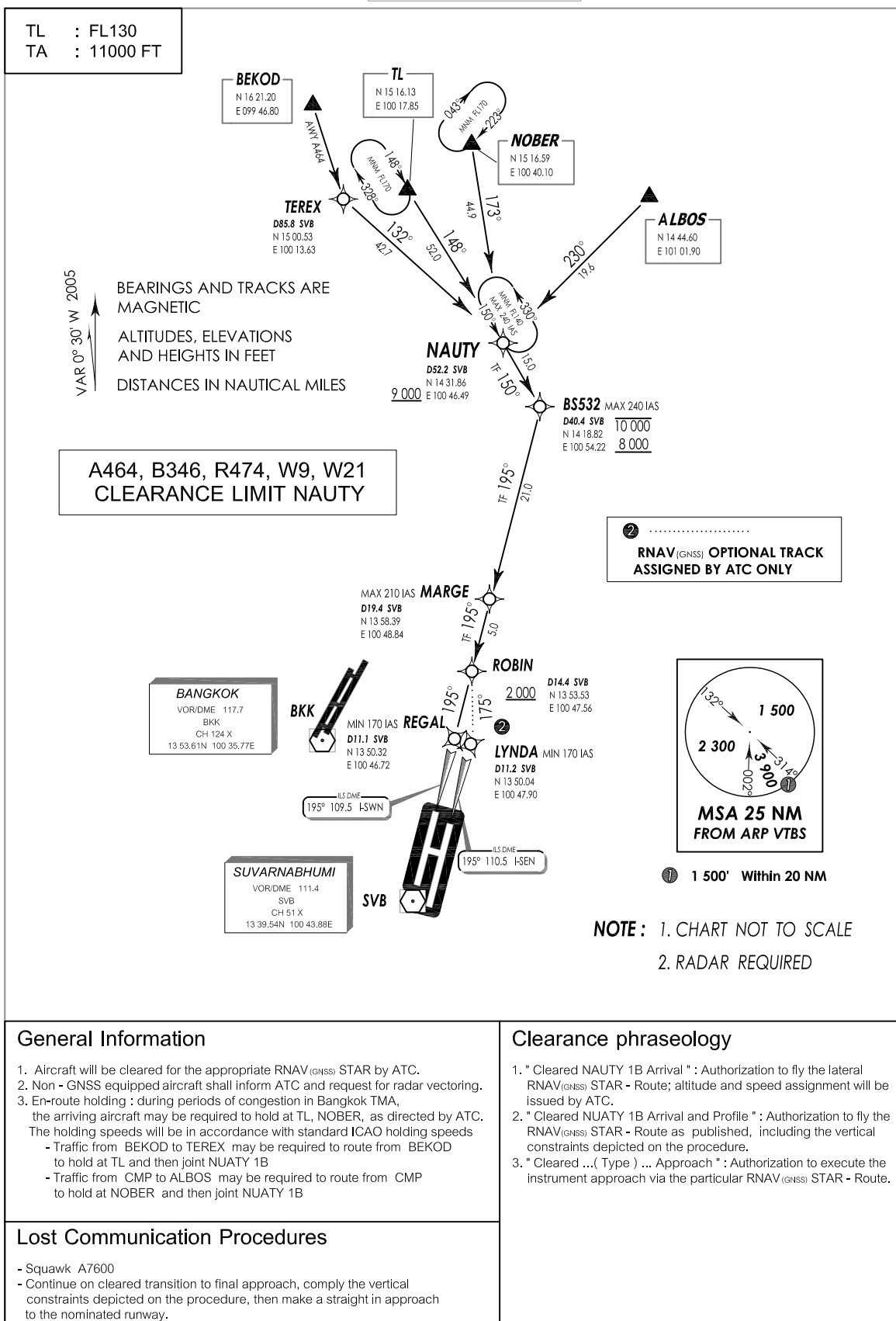
Runway 19L

Path Descriptor	Fix Identifier (Waypoint name)	Fly Over	Course °M	Turn Direction	Altitude	Speed Limit	Magnetic Variation	Vertical Angle	Navigation Performance
IF	CAROS	-	-	-	+ 9 000	-240	-	-	B-RNAV
TF	BS533	-	211	L	+ 7 000	-240	-	-	B-RNAV
TF	COACH	-	195	L	-	-210	-	-	B-RNAV
TF	CHATO	-	195	-	+ 2 000	-	-	-	B-RNAV
TF	LYNDA	-	195	-	+ 2 000	+170	-	-	B-RNAV

RNAV (GNSS) **STARs**

APP : 122.35 , 257.6
: 124.35 , 262.5
: 125.2 , 259.6
ARR : 124.7
TWR : 118.2 , 119.0, 274.5
ATIS : 127.8 , 278.6

BANGKOK / Suvarnabhumi Intl
RWY 19L / 19R
NAUTY 1B

**General Information**

1. Aircraft will be cleared for the appropriate RNAV (GNSS) STAR by ATC.
2. Non - GNSS equipped aircraft shall inform ATC and request for radar vectoring.
3. En-route holding : during periods of congestion in Bangkok TMA, the arriving aircraft may be required to hold at TL, NOBER, as directed by ATC. The holding speeds will be in accordance with standard ICAO holding speeds
 - Traffic from BEKOD to TEREX may be required to route from BEKOD to hold at TL and then joint NUATY 1B
 - Traffic from CMP to ALBOS may be required to route from CMP to hold at NOBER and then joint NUATY 1B

Lost Communication Procedures

- Squawk A7600
- Continue on cleared transition to final approach, comply the vertical constraints depicted on the procedure, then make a straight in approach to the nominated runway.

Clearance phraseology

1. "Cleared NAUTY 1B Arrival" : Authorization to fly the lateral RNAV (GNSS) STAR - Route; altitude and speed assignment will be issued by ATC.
2. "Cleared NUATY 1B Arrival and Profile" : Authorization to fly the RNAV (GNSS) STAR - Route as published, including the vertical constraints depicted on the procedure.
3. "Cleared ... (Type) ... Approach" : Authorization to execute the instrument approach via the particular RNAV (GNSS) STAR - Route.

RNAV (GNSS) **STARs**

BANGKOK / Suvarnabhumi Intl

FMC DATABASE CODING REFERENCE FOR RNAV (GNSS) **STARs****NAUTY 1B****Runway 19R**

Path Descriptor	Fix Identifier (Waypoint name)	Fly Over	Course °M(°T)	Turn Direction	Altitude	Speed Limit	Magnetic Variation	Vertical Angle	Navigation Performance
IF	NAUTY	-	-	-	+ 9 000	-240	-	-	B-RNAV
TF	BS532	-	195	R	+ 8 000	-240	-	-	B-RNAV
TF	MARGE	-	195	-	-	-210	-	-	B-RNAV
TF	ROBIN	-	195	-	+ 2 000	-	-	-	B-RNAV
TF	REGAL	-	195	-	+ 2 000	+170	-	-	B-RNAV

Runway 19L

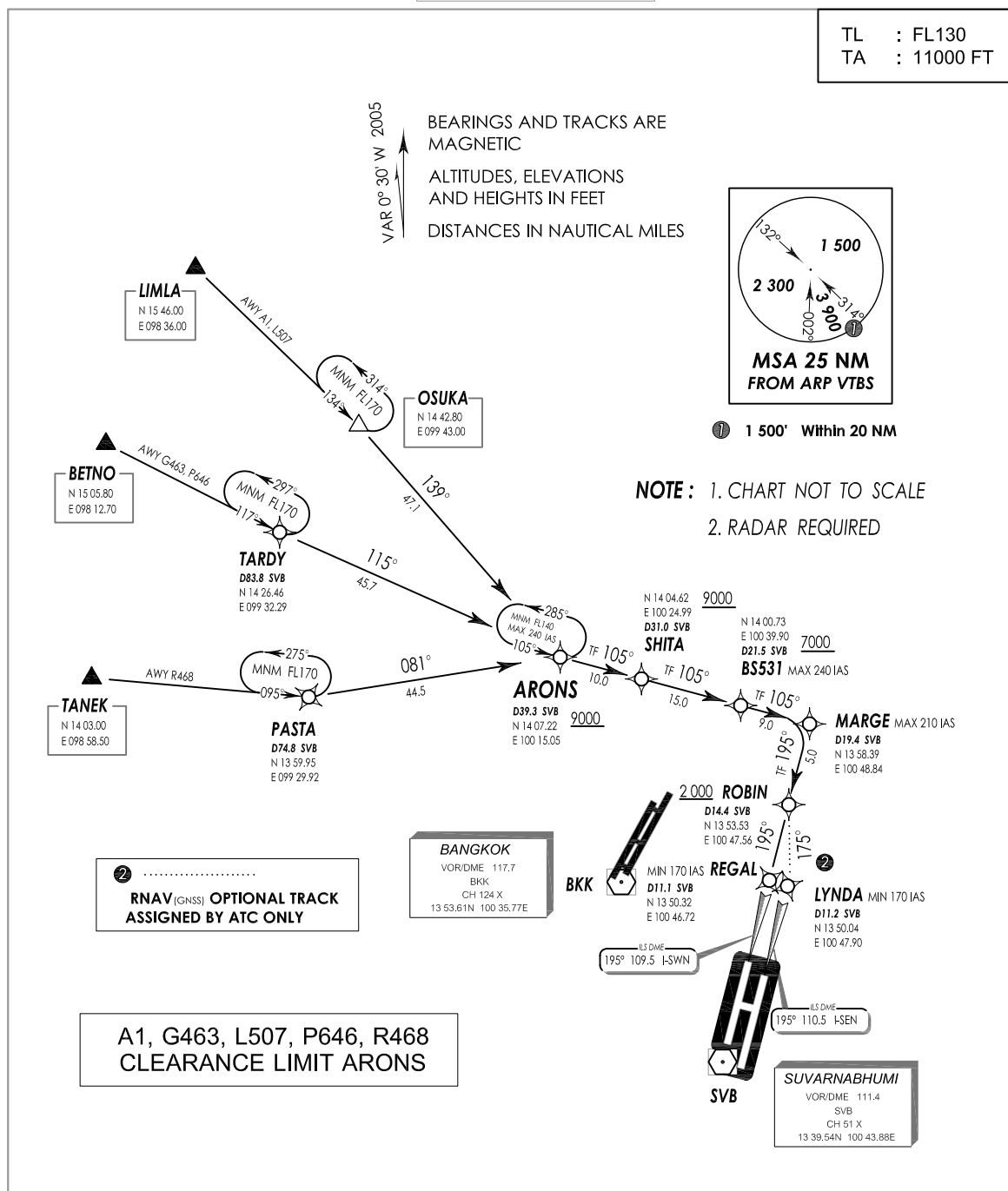
Path Descriptor	Fix Identifier (Waypoint name)	Fly Over	Course °M(°T)	Turn Direction	Altitude	Speed Limit	Magnetic Variation	Vertical Angle	Navigation Performance
IF	NAUTY	-	-	-	+ 9 000	-240	-	-	B-RNAV
TF	BS532	-	195	R	+ 8 000	-240	-	-	B-RNAV
TF	MARGE	-	195	-	-	-210	-	-	B-RNAV
TF	ROBIN	-	175	L	+ 2 000	-	-	-	B-RNAV
TF	LYNDA	-	195	R	+ 2 000	+170	-	-	B-RNAV

RNAV_(GNSS) STARS

APP : 122.35 , 257.6
: 124.35 , 262.5
: 125.2 , 259.6
ARR : 124.7
TWR : 118.2 , 119.0, 274.5
ATIS : 127.8 , 278.6

BANGKOK / Suvarnabhumi Intl
RWY 19L / 19R
ARONS 1B

TL : FL130
TA : 11000 FT

**General Information**

1. Aircraft will be cleared for the appropriate RNAV_(GNSS) STAR by ATC.
2. Non - GNSS equipped aircraft shall inform ATC and request for radar vectoring.
3. En-route holding : during periods of congestion in Bangkok TMA, the arriving aircraft may be required to hold at PASTA, TARDY, OSUKA, as directed by ATC. The holding speeds will be in accordance with standard ICAO holding speeds

Lost Communication Procedures

- Squawk A7600
- Continue on cleared transition to final approach, comply the vertical constraints depicted on the procedure, then make a straight in approach to the nominated runway.

Clearance phraseology

1. "Cleared ARONS 1B Arrival" : Authorization to fly the lateral RNAV_(GNSS) STAR - Route; altitude and speed assignment will be issued by ATC.
2. "Cleared ARONS 1B Arrival and Profile" : Authorization to fly the RNAV_(GNSS) STAR - Route as published, including the vertical constraints depicted on the procedure.
3. "Cleared ... (Type) ... Approach" : Authorization to execute the instrument approach via the particular RNAV_(GNSS) STAR - Route.

RNAV (GNSS) **STARs**

BANGKOK / Suvarnabhumi Intl

FMC DATABASE CODING REFERENCE FOR RNAV (GNSS) **STARs****ARONS 1B****Runway 19R**

Path Descriptor	Fix Identifier (Waypoint name)	Fly Over	Course °M(°T)	Turn Direction	Altitude	Speed Limit	Magnetic Variation	Vertical Angle	Navigation Performance
IF	ARONS	-	-	-	+ 9 000	-240	-	-	B-RNAV
TF	SHITA	-	105	-	+ 9 000	-240	-	-	B-RNAV
TF	BS531	-	105	-	+ 7 000	-240	-	-	B-RNAV
TF	MARGE	-	195	R	-	-210	-	-	B-RNAV
TF	ROBIN	-	195	-	+ 2 000	-	-	-	B-RNAV
TF	REGAL	-	195	-	+ 2 000	+170	-	-	B-RNAV

Runway 19L

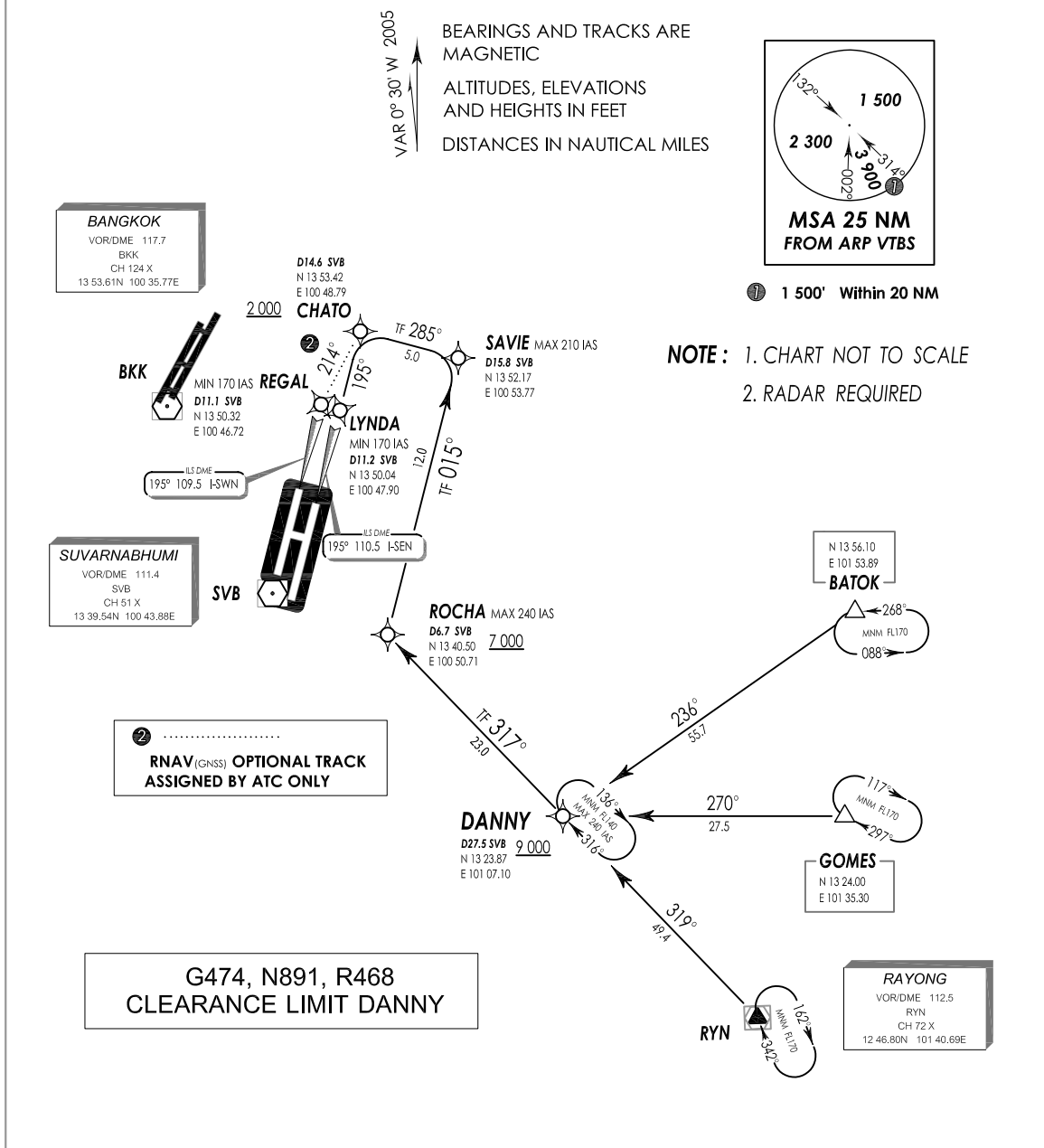
Path Descriptor	Fix Identifier (Waypoint name)	Fly Over	Course °M(°T)	Turn Direction	Altitude	Speed Limit	Magnetic Variation	Vertical Angle	Navigation Performance
IF	ARONS	-	-	-	+ 9 000	-240	-	-	B-RNAV
TF	SHITA	-	105	-	+ 9 000	-240	-	-	B-RNAV
TF	BS531	-	105	-	+ 7 000	-240	-	-	B-RNAV
TF	MARGE	-	195	R	-	-210	-	-	B-RNAV
TF	ROBIN	-	175	L	+ 2 000	-	-	-	B-RNAV
TF	LYNDA	-	195	R	+ 2 000	+170	-	-	B-RNAV

RNAV_(GNSS) STARs

APP : 122.35 , 257.6
: 124.35 , 262.5
: 125.2 , 259.6
ARR : 124.7
TWR : 118.2 , 119.0, 274.5
ATIS : 127.8 , 278.6

BANGKOK / Suvarnabhumi Intl
RWY 19L / 19R
DANNY 1B

TL : FL130
TA : 11000 FT

**General Information**

1. Aircraft will be cleared for the appropriate RNAV_(GNSS) STAR by ATC.
2. Non - GNSS equipped aircraft shall inform ATC and request for radar vectoring.
3. En-route holding : during periods of congestion in Bangkok TMA, the arriving aircraft may be required to hold at BATOK, GOMES, RYN, as directed by ATC. The holding speeds will be in accordance with standard ICAO holding speeds

Lost Communication Procedures

- Squawk A7600
- Continue on cleared transition to final approach, comply the vertical constraints depicted on the procedure, then make a straight in approach to the nominated runway.

Clearance phraseology

1. "Cleared DANNY 1B " : Authorization to fly the lateral RNAV_(GNSS) STAR - Route; altitude and speed assignment will be issued by ATC.
2. "Cleared DANNY 1B and Profile " : Authorization to fly the RNAV_(GNSS) STAR - Route as published, including the vertical constraints depicted on the procedure.
3. "Cleared ... (Type) ... Approach " : Authorization to execute the instrument approach via the particular RNAV_(GNSS) STAR - Route.

RNAV (GNSS) **STARs**

BANGKOK / Suvarnabhumi Intl

FMC DATABASE CODING REFERENCE FOR RNAV (GNSS) **STARs****DANNY 1B****Runway 19R**

Path Descriptor	Fix Identifier (Waypoint name)	Fly Over	Course °M(°T)	Turn Direction	Altitude	Speed Limit	Magnetic Variation	Vertical Angle	Navigation Performance
IF	DANNY	-	-	-	+ 9 000	-240	-	-	B-RNAV
TF	ROCHA	-	015	R	+ 7 000	-240	-	-	B-RNAV
TF	SAVIE	-	285	L	-	-210	-	-	B-RNAV
TF	CHATO	-	214	L	+ 2 000	-	-	-	B-RNAV
TF	REGAL	-	195	L	+ 2 000	+170	-	-	B-RNAV

Runway 19L

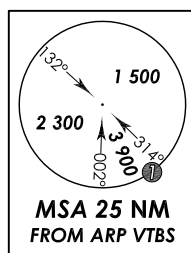
Path Descriptor	Fix Identifier (Waypoint name)	Fly Over	Course °M(°T)	Turn Direction	Altitude	Speed Limit	Magnetic Variation	Vertical Angle	Navigation Performance
IF	DANNY	-	-	-	+ 9 000	-240	-	-	B-RNAV
TF	ROCHA	-	015	R	+ 7 000	-240	-	-	B-RNAV
TF	SAVIE	-	285	L	-	-210	-	-	B-RNAV
TF	CHATO	-	195	L	+ 2 000	-	-	-	B-RNAV
TF	LYNDA	-	195	-	+ 2 000	+170	-	-	B-RNAV

APP	: 122.35 , 257.6
	: 124.35 , 262.5
	: 125.2 , 259.6
ARR	: 124.7
TWR	: 118.2 , 119.0, 274.5
ATIS	: 127.8 , 278.6

BANGKOK / Suvarnabhumi Intl
RWY 19L / 19R
SILVA 1B

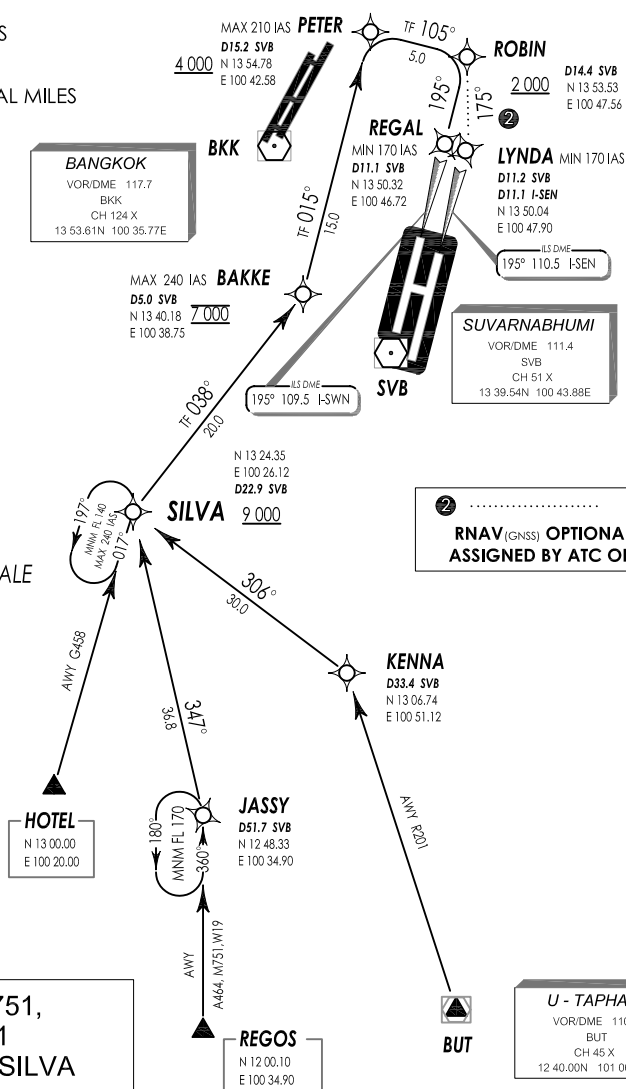
TL : FL130
TA : 11000 FT

BEARINGS AND TRACKS ARE
 MAGNETIC
 ALTITUDES, ELEVATIONS
 AND HEIGHTS IN FEET
 DISTANCES IN NAUTICAL MILES



① 1 500' Within 20 NM

NOTE: 1. CHART NOT TO SCALE
2. RADAR REQUIRED



A464, G458, M751,
R201, W19, W31
CLEARANCE LIMIT SILVA

2
RNAV_(GNSS) OPTIONAL TRACK
ASSIGNED BY ATC ONLY

U - TAPHAO
VOR/DME 110.8
BUT
CH 45 X
12 40.00N 101 00.00E

Clearance phraseology

1. Aircraft will be cleared for the appropriate RNAV_(GNSS) STAR by ATC.
2. Non - GNSS equipped aircraft shall inform ATC and request for radar vectoring.
3. En-route holding : during periods of congestion in Bangkok TMA, the arriving aircraft may be required to hold at JASSY, as directed by ATC. The holding speeds will be in accordance with standard ICAO holding speeds
 - Traffic from MENEX to HOTEL may be required to route from MENEX to hold at JASSY and then join SILVA 1B

1. "Cleared SILVA 1B ": Authorization to fly the lateral RNAV_(GNSS) STAR - Route; altitude and speed assignment will be issued by ATC.
2. "Cleared SILVA 1B and Profile ": Authorization to fly the RNAV_(GNSS) STAR - Route as published, including the vertical constraints depicted on the procedure.
3. "Cleared ... (Type) ... Approach ": Authorization to execute the instrument approach via the particular RNAV_(GNSS) STAR - Route.

Lost Communication Procedures

- Squawk A7600
- Continue on cleared transition to final approach, comply the vertical constraints depicted on the procedure, then make a straight in approach to the nominated runway.

RNAV (GNSS) **STARs**

BANGKOK / Suvarnabhumi Intl

FMC DATABASE CODING REFERENCE FOR RNAV (GNSS) **STARs****SILVA 1B****Runway 19R**

Path Descriptor	Fix Identifier (Waypoint name)	Fly Over	Course °M(°T)	Turn Direction	Altitude	Speed Limit	Magnetic Variation	Vertical Angle	Navigation Performance
IF	SILVA	-	-	-	+ 9 000	-240	-	-	B-RNAV
TF	BAKKE	-	015	L	7 000	-240	-	-	B-RNAV
TF	PETER	-	105	R	+ 4 000	-210	-	-	B-RNAV
TF	ROBIN	-	195	R	+ 2 000	-	-	-	B-RNAV
TF	REGAL	-	195	-	+ 2 000	+170	-	-	B-RNAV

Runway 19L

Path Descriptor	Fix Identifier (Waypoint name)	Fly Over	Course °M(°T)	Turn Direction	Altitude	Speed Limit	Magnetic Variation	Vertical Angle	Navigation Performance
IF	SILVA	-	-	-	+ 9 000	-240	-	-	B-RNAV
TF	BAKKE	-	015	L	7 000	-240	-	-	B-RNAV
TF	PETER	-	105	R	+ 4 000	-210	-	-	B-RNAV
TF	ROBIN	-	175	R	+ 2 000	-	-	-	B-RNAV
TF	LYNDA	-	195	R	+ 2 000	+170	-	-	B-RNAV

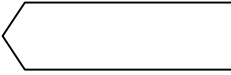
RNAV (GNSS) **STARs**BANGKOK / Suvarnabhumi Intl
RWY 19L / 19R

COORDINATES OF STAR WAY POINTS (WGS 84 DATUM)

IDENT	SVB		Degrees, Minutes		Degrees, Minutes and Seconds		REMARK
	RADIAL	DME	LAT	LONG	LAT	LONG	
BS531	350	21.5	N14 00.73	E100 39.90	N14 00 44.08	E100 39 54.11	
BS532	015	40.4	N14 18.82	E100 54.22	N14 18 49.52	E100 54 13.38	
BS533	024	38.4	N14 14.81	E100 59.85	N14 14 48.73	E100 59 51.47	
BAKKE	278	5.0	N13 40.18	E100 38.75	N13 40 11.37	E100 38 45.26	
CHATO	019	14.6	N13 53.42	E100 48.79	N13 53 25.54	E100 48 47.83	
COACH	018	19.6	N13 58.28	E100 50.07	N13 58 17.38	E100 50 04.55	
JASSY	190	51.7	N12 48.33	E100 34.90	N12 48 20.04	E100 34 54.19	
KENNA	168	33.4	N13 06.74	E100 51.12	N13 06 44.49	E100 51 07.35	
LYNDA	021	11.2	N13 50.04	E100 47.90	N13 50 02.42	E100 47 54.44	
MARGE	015	19.4	N13 58.39	E100 48.84	N13 58 23.88	E100 48 50.64	
MOCHI	044	78.1	N14 36.05	E101 39.58	N14 36 03.26	E101 39 34.93	
PASTA	286	74.8	N13 59.95	E099 29.92	N13 59 57.33	E099 29 55.20	
PETER	356	15.2	N13 54.78	E100 42.58	N13 54 46.92	E100 42 35.15	
REGAL	015	11.1	N13 50.32	E100 46.72	N13 50 19.43	E100 46 43.29	
ROBIN	015	14.2	N13 53.53	E100 47.56	N13 53 32.04	E100 47 33.91	
ROCHA	082	6.7	N13 40.50	E100 50.71	N13 40 30.12	E100 50 42.62	
SAVIE	038	15.8	N13 52.17	E100 53.77	N13 52 10.56	E100 53 46.53	
SHITA	324	31.0	N14 04.62	E100 24.99	N14 04 37.58	E100 24 59.65	
TARDY	304	83.8	N14 26.46	E099 32.29	N14 26 27.87	E099 32 17.79	
TEREX	340	85.8	N15 00.53	E100 13.63	N15 00 31.91	E100 13 38.21	
ARONS	315	39.3	N14 07.22	E100 15.05	N14 07 13.33	E100 15 03.23	
CAROS	031	52.3	N14 24.51	E101 11.74	N14 24 31.14	E101 11 44.99	
DANNY	125	27.5	N13 23.87	E101 07.10	N13 23 52.54	E101 07 06.12	
NAUTY	003	52.2	N14 31.86	E100 46.49	N14 31 52.17	E100 46 29.44	
SILVA	229	23.0	N13 24.35	E100 26.12	N13 24 21.29	E100 26 07.27	

Department of Civil Aviation

RNAV (GNSS) **STARs**BANGKOK / Suvarnabhumi Intl
RWY 19L / 19RROUTE DESCRIPTION

ARONS 1B	Transition : ARONS - SHITA - BS531 - MARGE - ROBIN		LYNDA	(RWY 19L) - FINAL APCH
			REGAL	(RWY 19R) - FINAL APCH
CAROS 1B	Transition : CAROS - BS533 - COACH - CHATO		LYNDA	(RWY 19L) - FINAL APCH
			REGAL	(RWY 19R) - FINAL APCH
DANNY 1B	Transition : DANNY - ROCHA - SAVIE - CHATO		LYNDA	(RWY 19L) - FINAL APCH
			REGAL	(RWY 19R) - FINAL APCH
NAUTY 1B	Transition : NAUTY - BS532 - MARGE - ROBIN		LYNDA	(RWY 19L) - FINAL APCH
			REGAL	(RWY 19R) - FINAL APCH
SILVA 1B	Transition : SILVA - BAKKE - PETER - ROBIN		LYNDA	(RWY 19L) - FINAL APCH
			REGAL	(RWY 19R) - FINAL APCH

REMARK**1. TRANSITION TO FINAL APPROACH :**

- RWY 19R : From CHATO track 214° to REGAL and intercept the I - SWN Localizer.
Make straight - in ILS Approach to RWY 19R.
: From ROBIN track 195° to REGAL and intercept the I - SWN Localizer.
Make straight - in ILS Approach to RWY 19R.
- RWY 19L : From CHATO track 195° to LYNDA and intercept the I - SEN Localizer.
Make straight - in ILS Approach to RWY 19L.
: From ROBIN track 175° to LYNDA and intercept the I - SEN Localizer.
Make straight - in ILS Approach to RWY 19L.

2. TRANSITION TO IAWP :

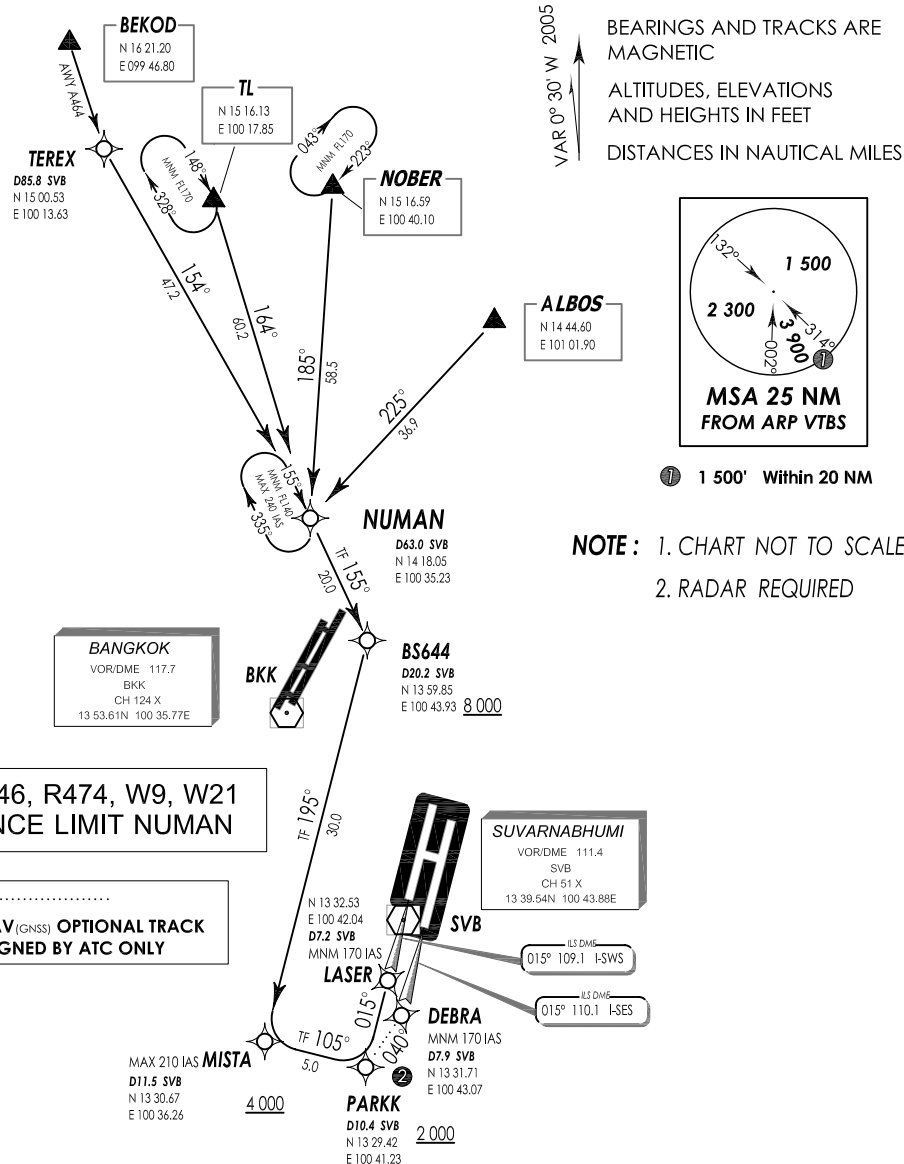
- KRT (A202, W1)** : Track 236° to MOCHI, track 248° to CAROS.
- BATOK (G474)** : Track 236° to DANNY.
GOMES (R468) : Track 270° to DANNY.
RYN (N891) : Track 319° to DANNY.
- BUT (R201)** : Track 342° to KENNA, track 306° to SILVA.
REGOS (A464, M751, W19) : Track 360° to JASSY, track 347° to SILVA.
HOTEL (G458, W31) : Track 014° to SILVA.
- TANEK (R468)** : Track 095° to PASTA, track 081° to ARONS.
BETNO (G463, P646) : Track 117° to TARDY, track 115° to ARONS.
LIMLA (A1, L507) : Track 134° to OSUKA, track 139° to ARONS.
- BEKOD (A464)** : Track 162° to TEREK, track 132° to NAUTY.
TL (W9) : Track 148° to NAUTY.
NOBER (B346, W21) : Track 173° to NAUTY.
ALBOS (R474) : Track 230° to NAUTY.

RNAV_(GNSS) STARs

APP : 122.35 , 257.6
: 124.35 , 262.5
: 125.2 , 259.6
ARR : 124.7
TWR : 118.2 , 119.0, 274.5
ATIS : 127.8 , 278.6

BANGKOK / Suvarnabhumi Intl
RWY 01L / 01R
NUMAN 1B

TL : FL130
TA : 11000 FT

**General Information**

1. Aircraft will be cleared for the appropriate RNAV_(GNSS) STAR by ATC.
2. Non - GNSS equipped aircraft shall inform ATC and request for radar vectoring.
3. En-route holding : during periods of congestion in Bangkok TMA, the arriving aircraft may be required to hold at TL, NOBER, as directed by ATC. The holding speeds will be in accordance with standard ICAO holding speeds
 - Traffic from BEKOD to TEREX may be required to route from BEKOD to hold at TL and then join NUMAN 1B
 - Traffic from CMP to ALBOS may be required to route from CMP to hold at NOBER and then join NUMAN 1B

Lost Communication Procedures

- Squawk A7600
- Continue on cleared transition to final approach, comply the vertical constraints depicted on the procedure, then make a straight in approach to the nominated runway.

Clearance phraseology

1. "Cleared NUMAN 1B Arrival " : Authorization to fly the lateral RNAV_(GNSS) STAR - Route; altitude and speed assignment will be issued by ATC.
2. "Cleared NUMAN 1B Arrival and Profile " : Authorization to fly the RNAV_(GNSS) STAR - Route as published, including the vertical constraints depicted on the procedure.
3. "Cleared ... (Type) ... Approach " : Authorization to execute the instrument approach via the particular RNAV_(GNSS) STAR - Route.

RNAV (GNSS) **STARs**

BANGKOK / Suvarnabhumi Intl

FMC DATABASE CODING REFERENCE FOR RNAV (GNSS) **STARs****NUMAN 1B****Runway 01R**

Path Descriptor	Fix Identifier (Waypoint name)	Fly Over	Course °M	Turn Direction	Altitude	Speed Limit	Magnetic Variation	Vertical Angle	Navigation Performance
IF	NUMAN	-	-	-	+ 9 000	-240	-	-	B-RNAV
TF	BS644	-	195	R	+ 8 000	-240	-	-	B-RNAV
TF	MISTA	-	105	L	+ 4 000	-210	-	-	B-RNAV
TF	PARKK	-	004	L	+ 2 000	-	-	-	B-RNAV
TF	DEBRA	-	015	L	+ 2 000	+170	-	-	B-RNAV

Runway 01L

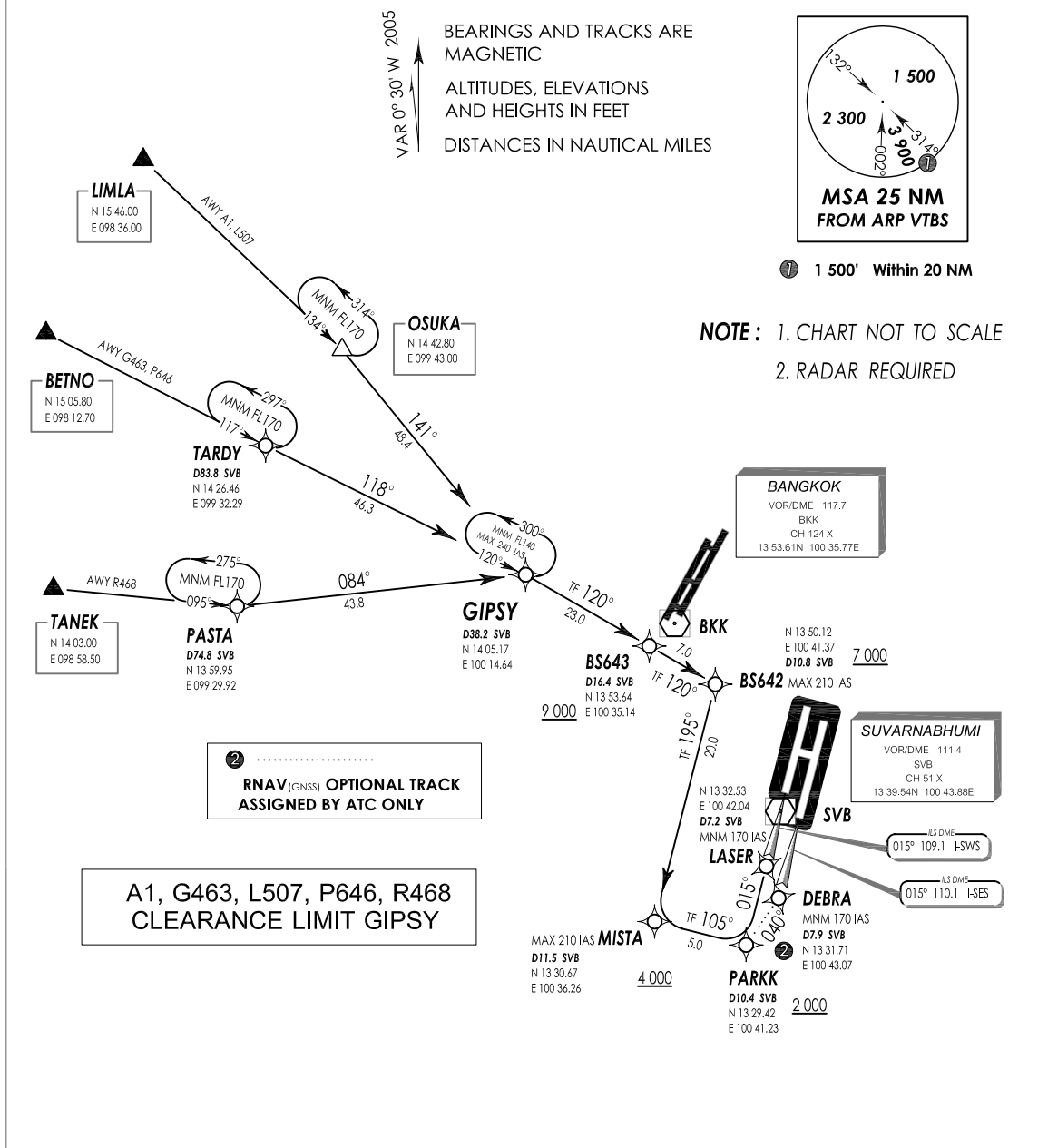
Path Descriptor	Fix Identifier (Waypoint name)	Fly Over	Course °M	Turn Direction	Altitude	Speed Limit	Magnetic Variation	Vertical Angle	Navigation Performance
IF	NUMAN	-	-	-	+ 9 000	-240	-	-	B-RNAV
TF	BS644	-	195	R	+ 8 000	-240	-	-	B-RNAV
TF	MISTA	-	105	L	+ 4 000	-210	-	-	B-RNAV
TF	PARKK	-	015	L	+ 2 000	-	-	-	B-RNAV
TF	LASER	-	015	L	+ 2 000	+170	-	-	B-RNAV

RNAV_(GNSS) STARs

APP : 122.35 , 257.6
: 124.35 , 262.5
: 125.2 , 259.6
ARR : 124.7
TWR : 118.2 , 119.0 , 274.5
ATIS : 127.8 , 278.6

BANGKOK / Suvarnabhumi Intl
RWY 01L / 01R
GIpsy 1B

TL : FL130
TA : 11000 FT

**General Information**

1. Aircraft will be cleared for the appropriate RNAV_(GNSS) STAR by ATC.
2. Non - GNSS equipped aircraft shall inform ATC and request for radar vectoring.
3. En-route holding : during periods of congestion in Bangkok TMA, the arriving aircraft may be required to hold at PASTA, TARDY, OSUKA, as directed by ATC. The holding speeds will be in accordance with standard ICAO holding speeds

Lost Communication Procedures

- Squawk A7600
- Continue on cleared transition to final approach, comply the vertical constraints depicted on the procedure, then make a straight in approach to the nominated runway.

Clearance phraseology

1. "Cleared GIPSY 1B Arrival " : Authorization to fly the lateral RNAV_(GNSS) STAR - Route; altitude and speed assignment will be issued by ATC.
2. "Cleared GIPSY 1B Arrival and Profile " : Authorization to fly the RNAV_(GNSS) STAR - Route as published, including the vertical constraints depicted on the procedure.
3. "Cleared ... (Type) ... Approach " : Authorization to execute the instrument approach via the particular RNAV_(GNSS) STAR - Route.

RNAV (GNSS) **STARs**

BANGKOK / Suvarnabhumi Intl

FMC DATABASE CODING REFERENCE FOR RNAV (GNSS) **STARs****GIPSY 1B****Runway 01R**

Path Descriptor	Fix Identifier (Waypoint name)	Fly Over	Course °M	Turn Direction	Altitude	Speed Limit	Magnetic Variation	Vertical Angle	Navigation Performance
IF	GIPSY	-	-	-	+ 9 000	-240	-	-	B-RNAV
TF	BS643	-	120	-	+ 9 000	-240	-	-	B-RNAV
TF	BS642	-	195	-	+ 7 000	-210	-	-	B-RNAV
TF	MISTA	-	105	L	+ 4 000	-210	-	-	B-RNAV
TF	PARKK	-	004	L	+ 2 000	-	-	-	B-RNAV
TF	DEBRA	-	015	L	+ 2 000	+170	-	-	B-RNAV

Runway 01L

Path Descriptor	Fix Identifier (Waypoint name)	Fly Over	Course °M	Turn Direction	Altitude	Speed Limit	Magnetic Variation	Vertical Angle	Navigation Performance
IF	GIPSY	-	-	-	+ 9 000	-240	-	-	B-RNAV
TF	BS643	-	120	-	+ 9 000	-240	-	-	B-RNAV
TF	BS642	-	195	-	+ 7 000	-210	-	-	B-RNAV
TF	MISTA	-	105	L	+ 4 000	-210	-	-	B-RNAV
TF	PARKK	-	015	L	+ 2 000	-	-	-	B-RNAV
TF	LASER	-	015	L	+ 2 000	+170	-	-	B-RNAV

RNAV_(GNSS) STARs

APP : 122.35 , 257.6
: 124.35 , 262.5
: 125.2 , 259.6
ARR : 124.7
TWR : 118.2 , 119.0, 274.5
ATIS : 127.8 , 278.6

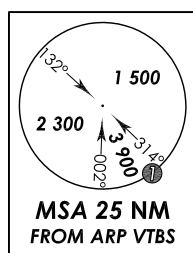
BANGKOK / Suvarnabhumi Intl
RWY 01L / 01R
DAREN 1B

TL : FL130
TA : 11000 FT

VAR 0° 30' W 2005
BEARINGS AND TRACKS ARE
MAGNETIC
ALTITUDES, ELEVATIONS
AND HEIGHTS IN FEET
DISTANCES IN NAUTICAL MILES

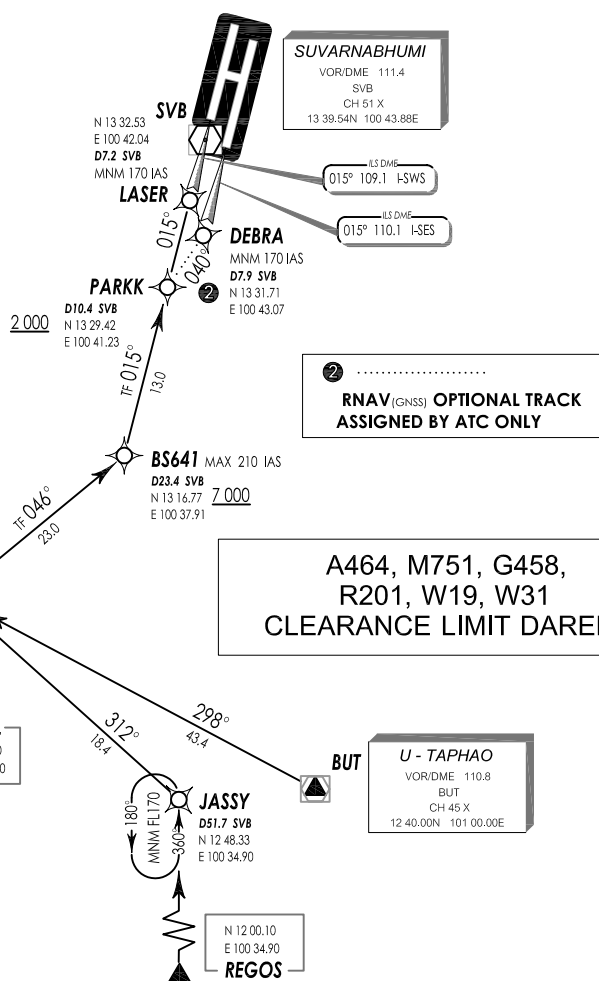


BANGKOK
VOR/DME 117.7
BKK
CH 124 X
13 53.61N 100 35.77E



① 1 500' Within 20 NM

NOTE : 1. CHART NOT TO SCALE
2. RADAR REQUIRED

**General Information**

1. Aircraft will be cleared for the appropriate RNAV_(GNSS) STAR by ATC.
2. Non - GNSS equipped aircraft shall inform ATC and request for radar vectoring.
3. En-route holding : during periods of congestion in Bangkok TMA, the arriving aircraft may be required to hold at JASSY, as directed by ATC. The holding speeds will be in accordance with standard ICAO holding speeds
 - Traffic from MENEX to HOTEL may be required to route from MENEX to hold at JASSY and then joint DAREN 1B

Lost Communication Procedures

- Squawk A7600
- Continue on cleared transition to final approach, comply the vertical constraints depicted on the procedure, then make a straight in approach to the nominated runway.

Clearance phraseology

1. "Cleared DAREN 1B" : Authorization to fly the lateral RNAV_(GNSS) STAR - Route; altitude and speed assignment will be issued by ATC.
2. "Cleared DAREN 1B and Profile" : Authorization to fly the RNAV_(GNSS) STAR - Route as published, including the vertical constraints depicted on the procedure.
3. "Cleared ... (Type) ... Approach" : Authorization to execute the instrument approach via the particular RNAV_(GNSS) STAR - Route.

RNAV (GNSS) **STARs**

BANGKOK / Suvarnabhumi Intl

FMC DATABASE CODING REFERENCE FOR RNAV (GNSS) **STARs****DAREN 1B****Runway 01R**

Path Descriptor	Fix Identifier (Waypoint name)	Fly Over	Course °M	Turn Direction	Altitude	Speed Limit	Magnetic Variation	Vertical Angle	Navigation Performance
IF	DAREN	-	-	-	+ 9 000	-240	-	-	B-RNAV
TF	BS641	-	015	L	+ 7 000	-210	-	-	B-RNAV
TF	PARKK	-	040	R	+ 2 000	-	-	-	B-RNAV
TF	DEBRA	-	015	R	+ 2 000	+170	-	-	B-RNAV

Runway 01L

Path Descriptor	Fix Identifier (Waypoint name)	Fly Over	Course °M	Turn Direction	Altitude	Speed Limit	Magnetic Variation	Vertical Angle	Navigation Performance
IF	DAREN	-	-	-	+ 9 000	-240	-	-	B-RNAV
TF	BS641	-	015	L	+ 7 000	-210	-	-	B-RNAV
TF	PARKK	-	015	-	+ 2 000	-	-	-	B-RNAV
TF	LASER	-	015	-	+ 2 000	+170	-	-	B-RNAV

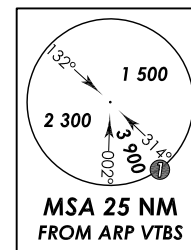
RNAV_(GNSS) STARS

APP : 122.35 , 257.6
: 124.35 , 262.5
: 125.2 , 259.6
ARR : 124.7
TWR : 118.2 , 119.0, 274.5
ATIS : 127.8 , 278.6

BANGKOK / Suvarnabhumi Intl
RWY 01L / 01R
CABIN 1B

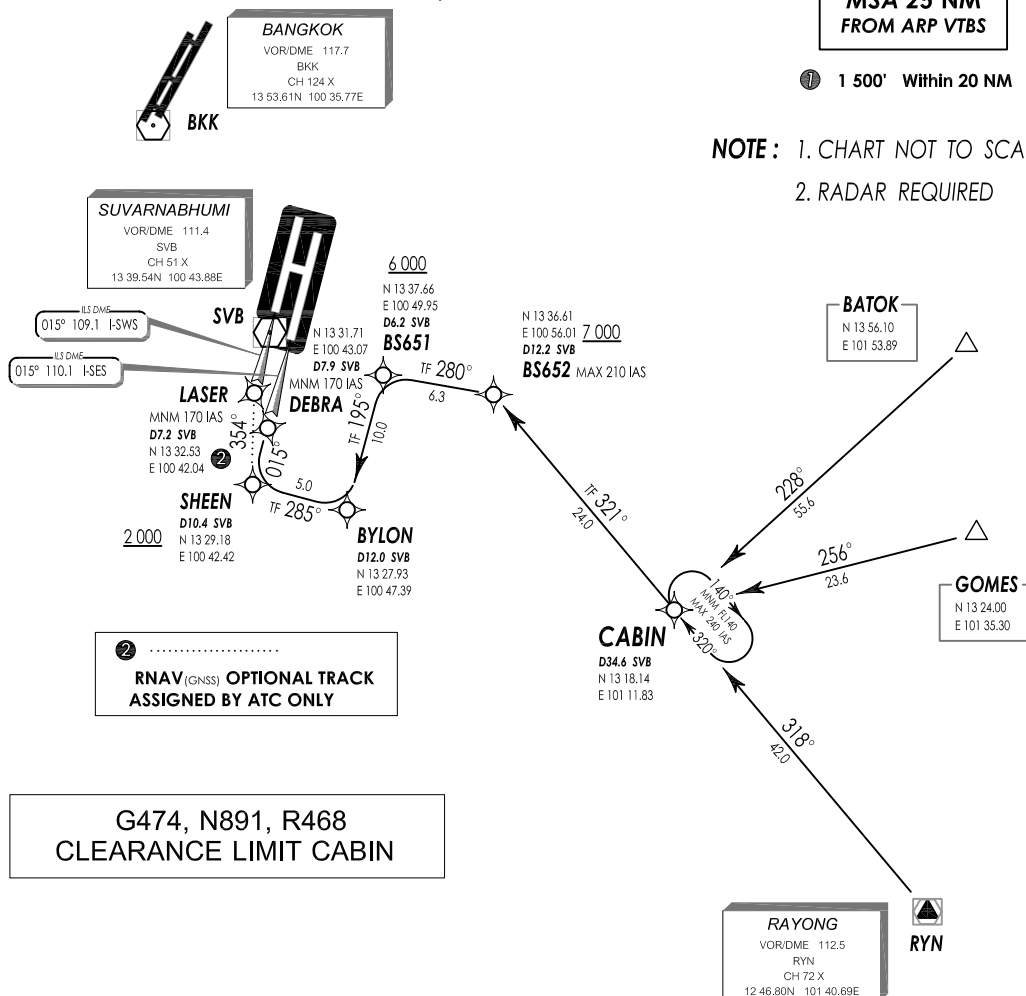
TL : FL130
TA : 11000 FT

VAR 0° 30' W 2005
BEARINGS AND TRACKS ARE
MAGNETIC
ALTITUDES, ELEVATIONS
AND HEIGHTS IN FEET
DISTANCES IN NAUTICAL MILES



① 1 500' Within 20 NM

NOTE : 1. CHART NOT TO SCALE
2. RADAR REQUIRED

**General Information**

1. Aircraft will be cleared for the appropriate RNAV_(GNSS) STAR by ATC.
2. Non - GNSS equipped aircraft shall inform ATC and request for radar vectoring.
3. En-route holding : during periods of congestion in Bangkok TMA, the arriving aircraft may be required to hold at BATOK, GOMES, RYN, as directed by ATC. The holding speeds will be in accordance with standard ICAO holding speeds

Lost Communication Procedures

- Squawk A7600
- Continue on cleared transition to final approach, comply the vertical constraints depicted on the procedure, then make a straight in approach to the nominated runway.

Clearance phraseology

1. "Cleared CABIN 1B " : Authorization to fly the lateral RNAV_(GNSS) STAR - Route; altitude and speed assignment will be issued by ATC.
2. "Cleared CABIN 1B and Profile " : Authorization to fly the RNAV_(GNSS) STAR - Route as published, including the vertical constraints depicted on the procedure.
3. "Cleared ... (Type) ... Approach " : Authorization to execute the instrument approach via the particular RNAV_(GNSS) STAR - Route.

RNAV (GNSS) **STARs**

BANGKOK / Suvarnabhumi Intl

FMC DATABASE CODING REFERENCE FOR RNAV (GNSS) **STARs****CABIN 1B****Runway 01R**

Path Descriptor	Fix Identifier (Waypoint name)	Fly Over	Course °M	Turn Direction	Altitude	Speed Limit	Magnetic Variation	Vertical Angle	Navigation Performance
IF	CABIN	-	-	-	+ 9 000	-240	-	-	B-RNAV
TF	BS652	-	280	L	+ 7 000	-210	-	-	B-RNAV
TF	BS651	-	195	-	+ 6 000	-	-	-	B-RNAV
TF	BYLON	-	285	R	+ 4 000	-	-	-	B-RNAV
TF	SHEEN	-	015	R	+ 2 000	-	-	-	B-RNAV
TF	DEBRA	-	015	R	+ 2 000	+170	-	-	B-RNAV

Runway 01L

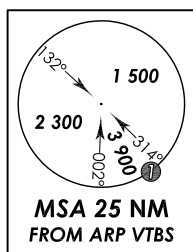
Path Descriptor	Fix Identifier (Waypoint name)	Fly Over	Course °M	Turn Direction	Altitude	Speed Limit	Magnetic Variation	Vertical Angle	Navigation Performance
IF	CABIN	-	-	-	+ 9 000	-240	-	-	B-RNAV
TF	BS652	-	280	L	+ 7 000	-210	-	-	B-RNAV
TF	BS651	-	195	-	+ 6 000	-	-	-	B-RNAV
TF	BYLON	-	285	R	+ 4 000	-	-	-	B-RNAV
TF	SHEEN	-	354	R	+ 2 000	-	-	-	B-RNAV
TF	LASER	-	015	R	+ 2 000	+170	-	-	B-RNAV

RNAV_(GNSS) STARs

APP : 122.35 , 257.6
: 124.35 , 262.5
: 125.2 , 259.6
ARR : 124.7
TWR : 118.2 , 119.0 , 274.5
ATIS : 127.8 , 278.6

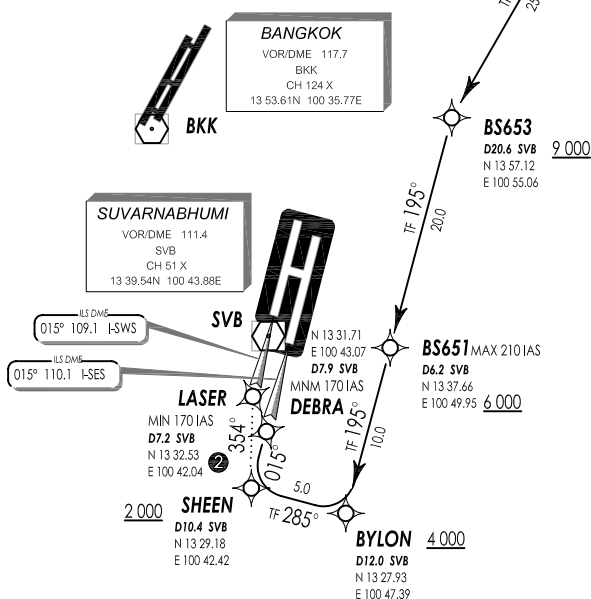
BANGKOK / Suvarnabhumi Intl
RWY 01L / 01R
TERRY 1B

TL : FL130
TA : 11000 FT



1 500' Within 20 NM

NOTE: 1. CHART NOT TO SCALE
2. RADAR REQUIRED

**General Information**

1. Aircraft will be cleared for the appropriate RNAV_(GNSS) STAR by ATC.
2. Non - GNSS equipped aircraft shall inform ATC and request for radar vectoring.
3. En-route holding : during periods of congestion in Bangkok TMA, the arriving aircraft may be required to hold at MOCHI, as directed by ATC. The holding speeds will be in accordance with standard ICAO holding speeds.

Lost Communication Procedures

- Squawk A7600
- Continue on cleared transition to final approach, comply the vertical constraints depicted on the procedure, then make a straight in approach to the nominated runway.

Clearance phraseology

1. "Cleared TERRY 1B Arrival " : Authorization to fly the lateral RNAV_(GNSS) STAR - Route; altitude and speed assignment will be issued by ATC.
2. "Cleared TERRY 1B Arrival and Profile " : Authorization to fly the RNAV_(GNSS) STAR - Route as published, including the vertical constraints depicted on the procedure.
3. "Cleared ... (Type) ... Approach " : Authorization to execute the instrument approach via the particular RNAV_(GNSS) STAR - Route.

RNAV (GNSS) **STARs**

BANGKOK / Suvarnabhumi Intl

FMC DATABASE CODING REFERENCE FOR RNAV (GNSS) **STARs****TERRY 1B****Runway 01R**

Path Descriptor	Fix Identifier (Waypoint name)	Fly Over	Course °M	Turn Direction	Altitude	Speed Limit	Magnetic Variation	Vertical Angle	Navigation Performance
IF	TERRY	-	-	-	+ 9 000	-240	-	-	B-RNAV
TF	BS653	-	195	L	+ 9 000	-240	-	-	B-RNAV
TF	BS651	-	195	-	+ 6 000	-210	-	-	B-RNAV
TF	BYLON	-	285	R	+ 4 000	-210	-	-	B-RNAV
TF	SHEEN	-	015	R	+ 2 000	-	-	-	B-RNAV
TF	DEBRA	-	015	R	+ 2 000	+170	-	-	B-RNAV

Runway 01L

Path Descriptor	Fix Identifier (Waypoint name)	Fly Over	Course °M	Turn Direction	Altitude	Speed Limit	Magnetic Variation	Vertical Angle	Navigation Performance
IF	TERRY	-	-	-	+ 9 000	-240	-	-	B-RNAV
TF	BS653	-	195	L	+ 9 000	-240	-	-	B-RNAV
TF	BS651	-	195	-	+ 7 000	-210	-	-	B-RNAV
TF	BYLON	-	285	R	+ 4 000	-210	-	-	B-RNAV
TF	SHEEN	-	354	R	+ 2 000	-	-	-	B-RNAV
TF	LASER	-	015	R	+ 2 000	+170	-	-	B-RNAV

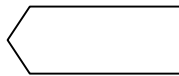
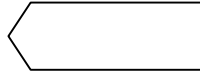
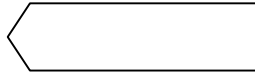
RNAV (GNSS) **STARs**BANGKOK / Suvarnabhumi Intl
RWY 01L / 01R

COORDINATES OF STAR WAY POINTS (WGS 84 DATUM)

IDENT	SVB		Degrees,Minutes		Degrees,Minutes and Seconds		REMARK
	RADIAL	DME	LAT	LONG	LAT	LONG	
BS641	195	23.4	N13 16.77	E100 37.91	N13 16 46.58	E100 37 55.05	
BS642	347	10.8	N13 50.12	E100 41.37	N13 50 07.63	E100 41 22.44	
BS643	329	16.4	N13 53.64	E100 35.14	N13 53 38.46	E100 35 08.49	
BS644	001	20.2	N13 59.85	E100 43.93	N13 59 51.24	E100 43 56.13	
BS651	108	6.2	N13 37.66	E100 49.95	N13 37 39.95	E100 49 57.09	
BS652	104	12.2	N13 36.61	E100 56.01	N13 36 37.09	E100 56 01.14	
BS653	032	20.6	N13 57.12	E100 55.06	N13 57 07.26	E100 55 03.97	
BYLON	164	12.0	N13 27.93	E100 47.39	N13 27 56.26	E100 47 23.85	
DEBRA	186	7.9	N13 31.71	E100 43.07	N13 31 38.79	E100 43 04.54	
JASSY	190	51.7	N12 48.33	E100 34.90	N12 48 20.04	E100 34 54.19	
LASER	195	7.2	N13 32.53	E100 42.04	N13 32 32.20	E100 42 02.95	
MISTA	220	11.5	N13 30.67	E100 36.26	N13 30 40.30	E100 36 15.71	
MOCHI	044	78.1	N14 36.05	E101 39.58	N14 36 03.26	E101 39 34.93	
PARKK	195	10.4	N13 29.42	E100 41.23	N13 29 25.41	E100 41 13.96	
PASTA	286	74.8	N13 59.95	E099 29.92	N13 59 57.33	E099 29 55.20	
SHEEN	188	10.4	N13 29.18	E100 42.42	N13 29 11.25	E100 42 25.65	
TARDY	304	83.8	N14 26.46	E099 32.29	N14 26 27.87	E099 32 17.79	
TEREX	340	85.8	N15 00.53	E100 13.63	N15 00 31.91	E100 13 38.21	
CABIN	128	34.6	N13 18.14	E101 11.83	N13 18 08.64	E101 11 50.39	
DAREN	210	44.6	N13 00.71	E100 20.97	N13 00 43.16	E100 20 58.20	
GIPSY	312	38.2	N14 05.17	E100 14.64	N14 05 10.60	E100 14 38.78	
NUMAN	348	63.0	N14 18.05	E100 35.23	N14 18 03.36	E100 35 13.81	
TERRY	031	45.6	N14 19.07	E101 07.55	N14 19 04.56	E101 07 33.00	

Department of Civil Aviation

RNAV (GNSS) **STARs**BANGKOK / Suvarnabhumi Intl
RWY 01L / 01RROUTE DESCRIPTION

CABIN 1B	Transition : CABIN - BS652 - BS651 - BYLON - SHEEN		LASER	(RWY 01L) - FINAL APCH
			DEBRA	(RWY 01R) - FINAL APCH
DAREN 1B	Transition : DAREN - BS641 - PARKK		LASER	(RWY 01L) - FINAL APCH
			DEBRA	(RWY 01R) - FINAL APCH
GIPSY 1B	Transition : GIPSY - BS643 - BS642 - MISTA - PARKK		LASER	(RWY 01L) - FINAL APCH
			DEBRA	(RWY 01R) - FINAL APCH
NUMAN 1B	Transition : NUMAN - BS644 - MISTA - PARKK		LASER	(RWY 01L) - FINAL APCH
			DEBRA	(RWY 01R) - FINAL APCH
TERRY 1B	Transition : TERRY - BS653 - BS651 - BYLON - SHEEN		LASER	(RWY 01L) - FINAL APCH
			DEBRA	(RWY 01R) - FINAL APCH

REMARK**1. TRANSITION TO FINAL APPROACH :**

- RWY 01R : From PARKK track 040° to DEBRA and intercept the I - SES Localizer.
Make straight - in ILS Approach to RWY 01R.
: From SHEEN track 015° to DEBRA and intercept the I - SES Localizer.
Make straight - in ILS Approach to RWY 01R.
- RWY 01L : From PARKK track 015° to LASER and intercept the I - SWS Localizer.
Make straight - in ILS Approach to RWY 01L.
: From SHEEN track 354° to LASER and intercept the I - SWS Localizer.
Make straight - in ILS Approach to RWY 01L.

2. TRANSITION TO IAWP :

- KRT (A202, W1)** : Track 236° to MOCHI, track 242° to TERRY.
- BATOK (G474)** : Track 228° to CABIN.
GOMES (R468) : Track 256° to CABIN.
RYN (N891) : Track 318° to CABIN.
- BUT (R201)** : Track 298° to DAREN.
REGOS (A464, M751, W19) : Track 360° to JASSY, track 312° to DAREN.
HOTEL (G458, W31) : Track 017° to DAREN.
- TANEK (R468)** : Track 095° to PASTA, track 084° to GIPSY.
BETNO (G463, P646) : Track 117° to TARDY, track 118° to GIPSY.
LIMLA (A1, L507) : Track 134° to OSUKA, track 141° to GIPSY.
- BEKOD (A464)** : Track 162° to TEREX, track 154° to NUMAN.
TL (W9) : Track 164° to NUMAN.
NOBER (B346, W21) : Track 185° to NUMAN.
ALBOS (R474) : Track 225° to NUMAN.

AIP
THAILAND

1 SEP 06

INSTRUMENT
APPROACH
CHART - ICAO

AERODROME ELEV 5 FT

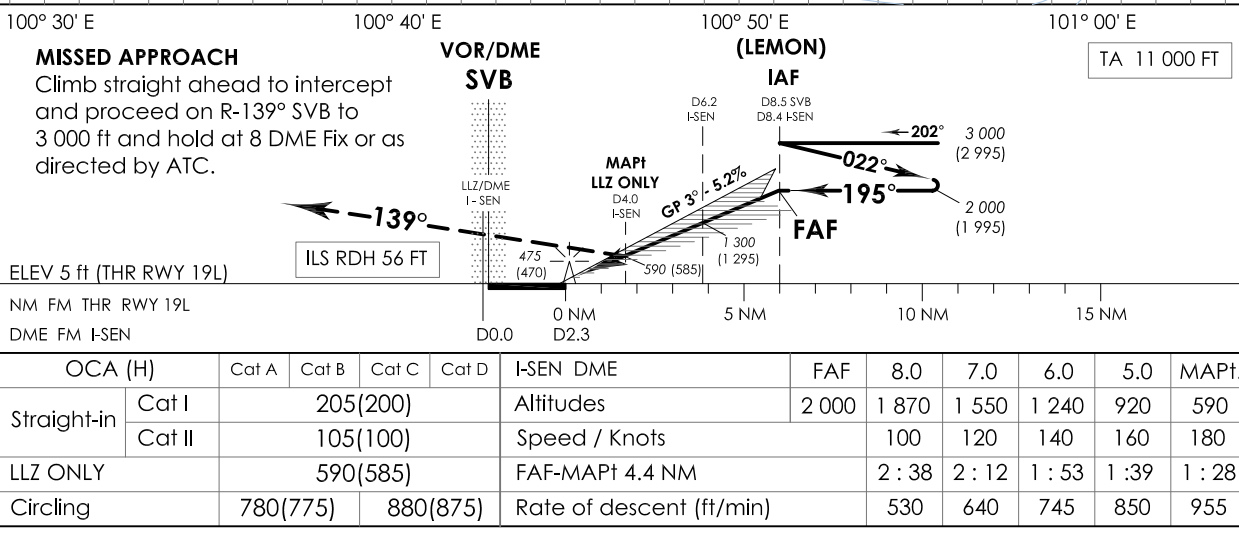
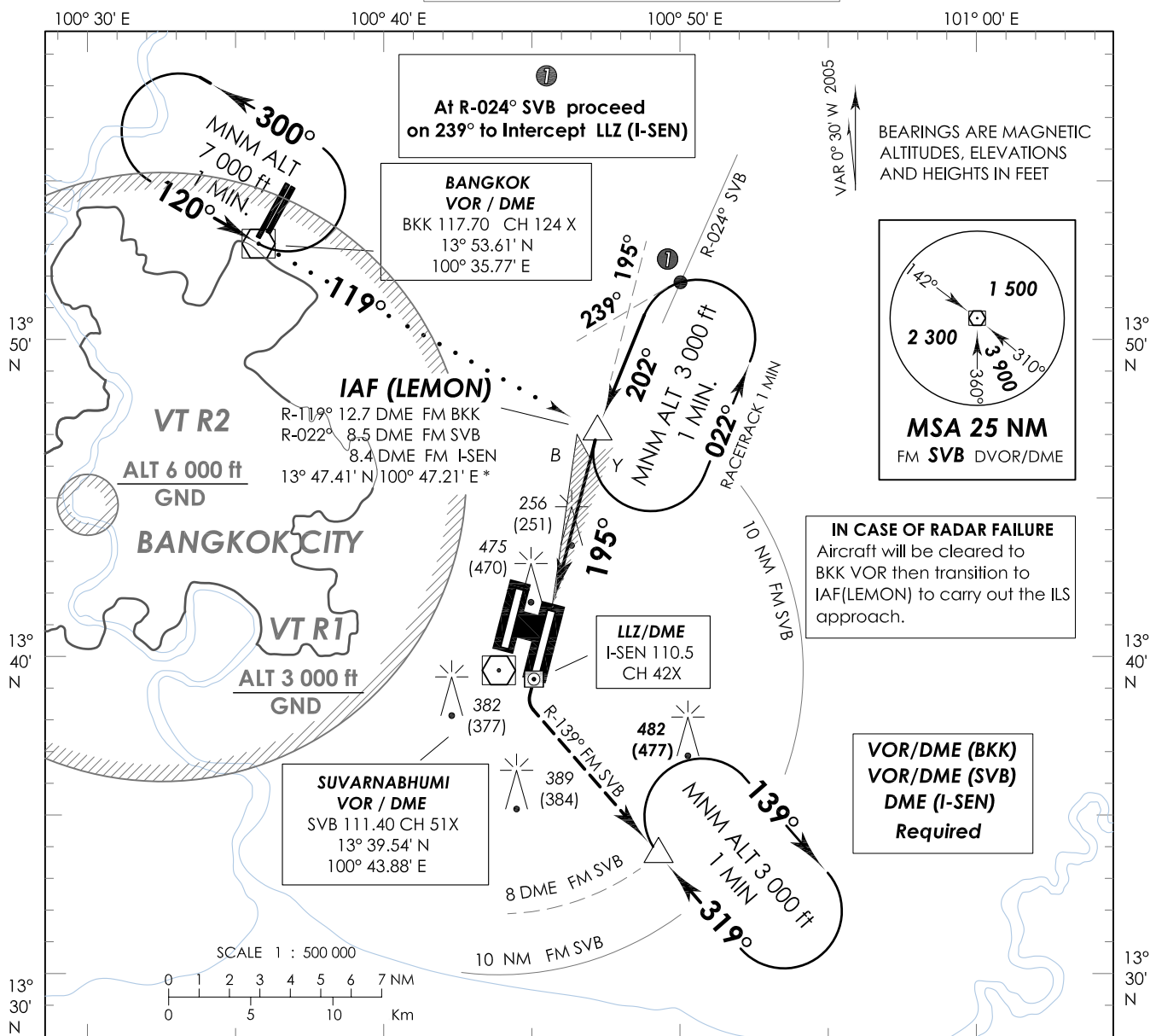
HEIGHT RELATED TO
THR RWY 19L - ELEV 5 FT

BANGKOK / Suvarnabhumi Intl

ILS or LLZ RWY 19L

CAT II

APP : 122.35, 257.6, 124.35, 262.5, 125.2, 259.6
ARR : 124.7, TWR : 118.2, 119.0, ATIS : 127.8, 278.6



AIP
THAILAND

1 SEP 06

INSTRUMENT
APPROACH
CHART - ICAO

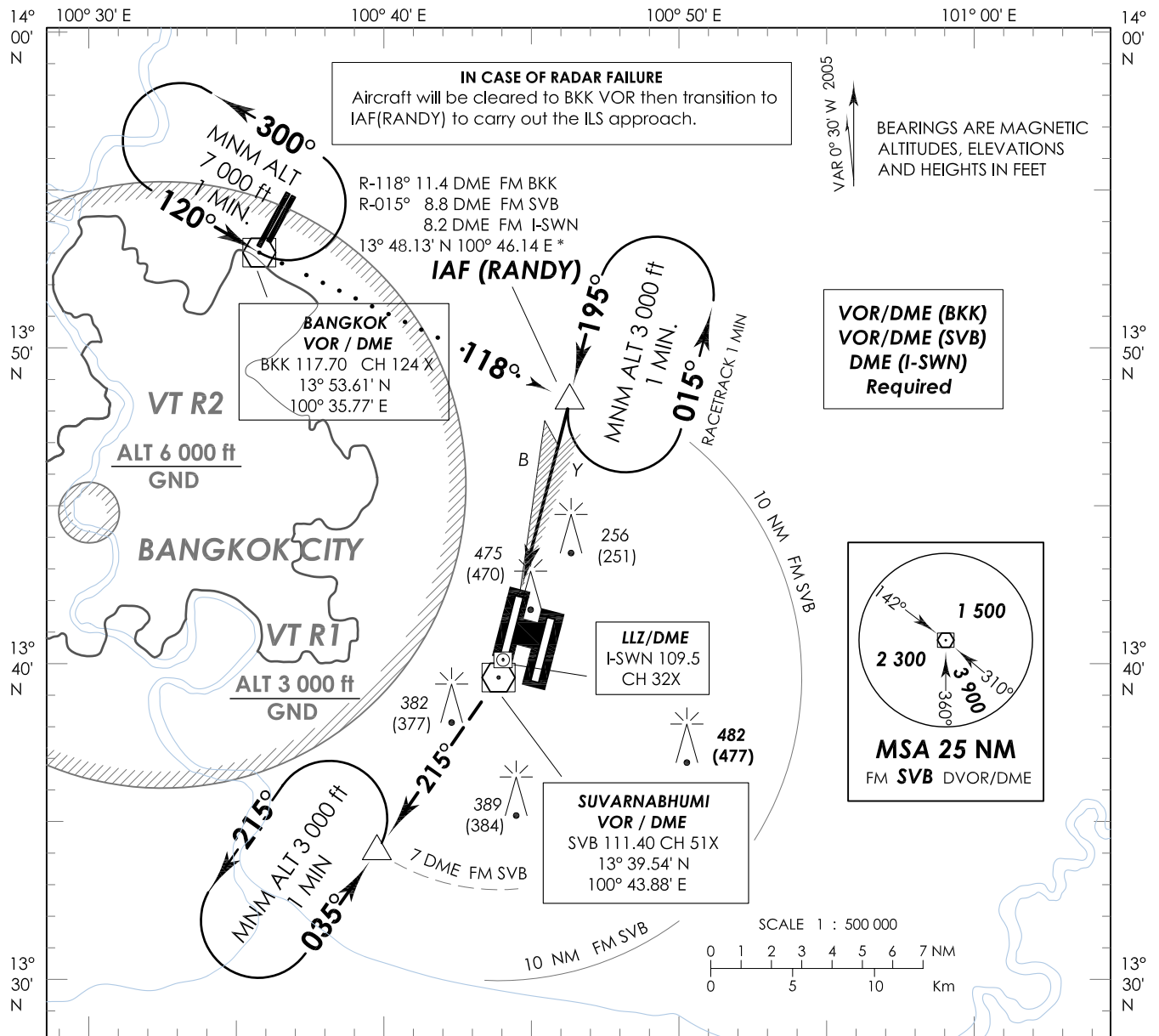
AERODROME ELEV 5 FT
HEIGHT RELATED TO
THR RWY 19R - ELEV 5 FT

BANGKOK / Suvarnabhumi Intl

ILS or LLZ RWY 19R

CAT II

APP : 122.35, 257.6, 124.35, 262.5, 125.2, 259.6
ARR : 124.7, TWR : 118.2, 119.0, ATIS : 127.8, 278.6



MISSED APPROACH

Climb straight ahead to SVB,
then turn right on R-215° SVB
to 3 000 ft and hold at 7 DME Fix
or as directed by ATC.

ELEV 5 ft (THR RWY 19R)

NM FM THR RWY 19R
DME FM I-SWN

OCA (H)		Cat A	Cat B	Cat C	Cat D	I-SWN DME	FAF	8.0	7.0	6.0	5.0	4.0	MAPt.
Straight-in	Cat I	205(200)				Altitudes	2 000	1 920	1 610	1 290	970	650	540
	Cat II	105(100)				Speed / Knots			100	120	140	160	180
LLZ ONLY		540(535)				FAF-MAPt 4.6 NM			2 : 45	2 : 18	1 : 58	1 : 43	1 : 32
Circling		780(775)	880(875)			Rate of descent (ft/min)			530	640	745	850	955

AIP
THAILAND

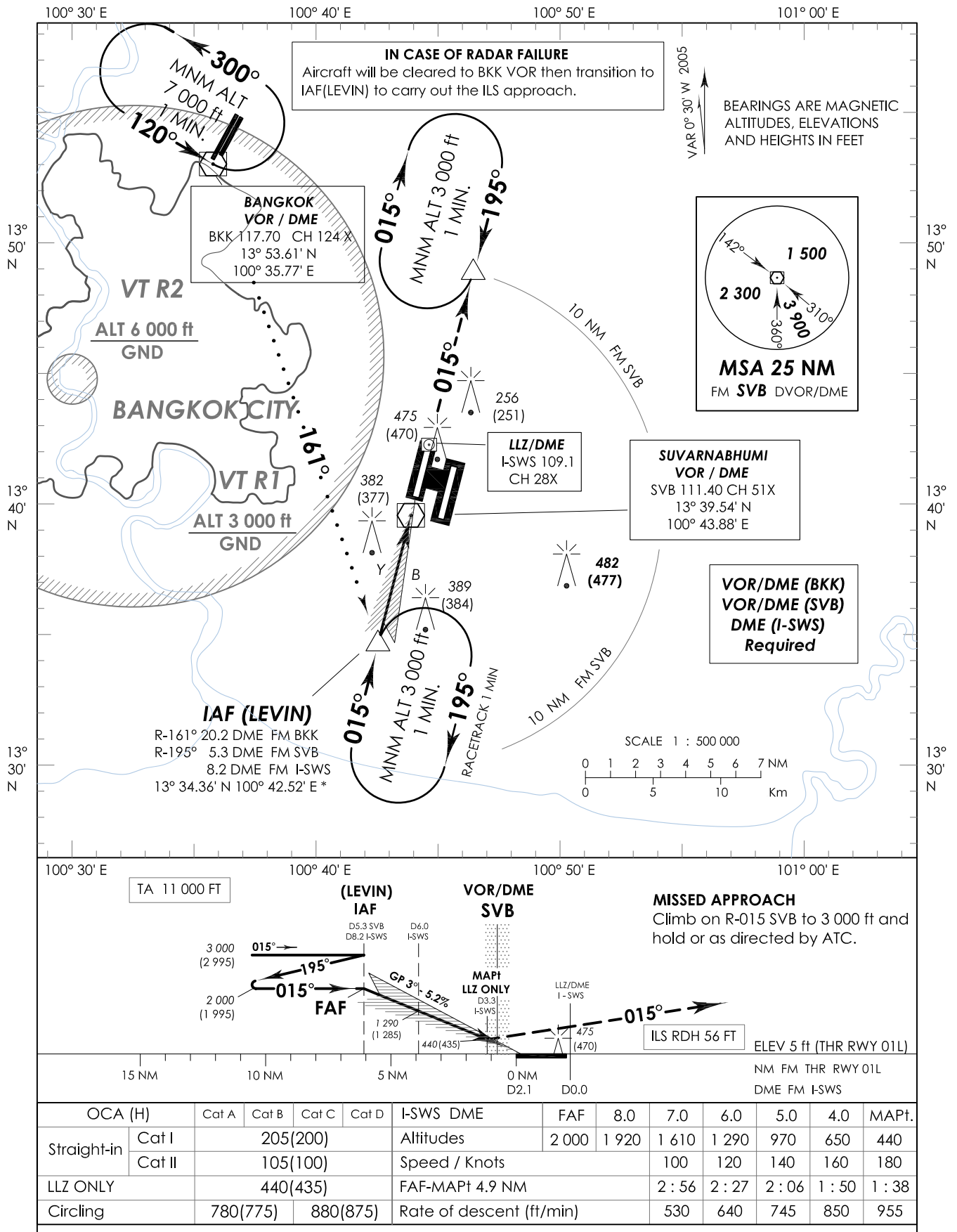
1 SEP 06

INSTRUMENT
APPROACH
CHART - ICAO

AERODROME ELEV 5 FT
HEIGHT RELATED TO
THR RWY 01L - ELEV 5 FT

BANGKOK / Suvarnabhumi Intl
ILS or LLZ RWY 01L
CAT II

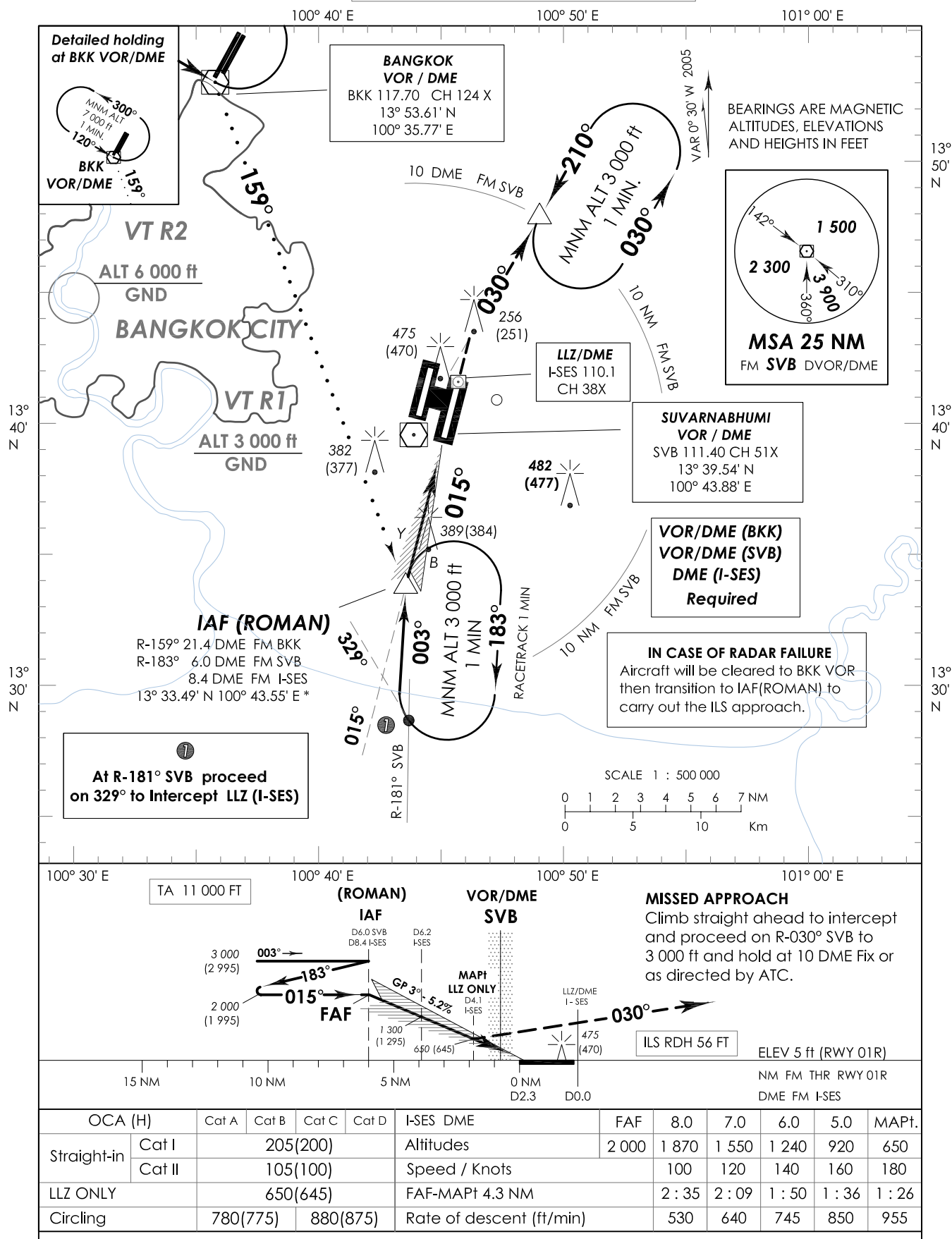
APP : 122.35, 257.6, 124.35, 262.5, 125.2, 259.6
ARR : 124.7, TWR : 118.2, 119.0, ATIS : 127.8, 278.6



INSTRUMENT
APPROACH
CHART - ICAO**AERODROME ELEV 5 FT**HEIGHT RELATED TO
THR RWY 01R - ELEV 5 FTAPP : 122.35, 257.6, 124.35, 262.5, 125.2, 259.6
ARR : 124.7, TWR : 118.2, 119.0, ATIS : 127.8, 278.6**BANGKOK / Suvarnabhumi Intl**

ILS or LLZ RWY 01R

CAT II

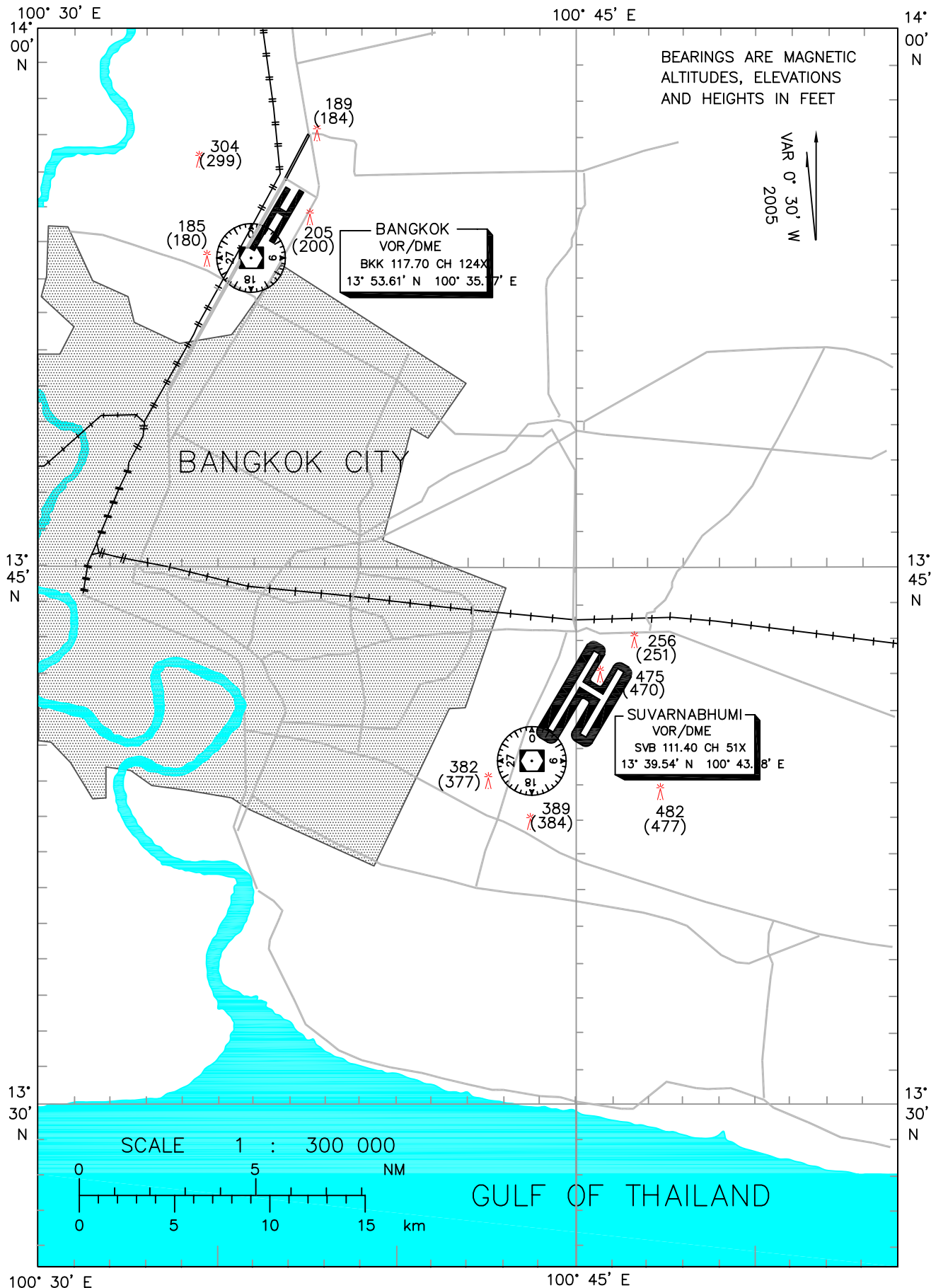


VISUAL
APPROACH
CHART-ICAO

AD ELEV 5 FT (1.4 M)
HEIGHTS RELATED
TO AD ELEV

APP	: 122.35 , 257.6
	: 124.35 , 262.5
	: 125.2 , 259.6
ARR	: 124.7
TWR	: 118.2 , 119.0, 274.5
ATIS	: 127.8 , 278.6

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BIRD CONCENTRATIONS – BANGKOK/SUARNABHUMI INTERNATIONAL

