

ENR 3.3 AREA NAVIGATION (RNAV) ROUTES

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
L301 (RNAV 2) [GNSS] BANGKOK DVOR/DME (BKK) ▲ <u>135337N 1003546E</u> PASTO ▲ <u>140005N 0993007E</u> TANEK ▲ <u>140306N 0985819E</u>	 $\frac{276^\circ}{096^\circ}$ 64.0 NM $\frac{276^\circ}{096^\circ}$ 31.0 NM	 $\frac{\text{FL 460}}{7\,500\text{ FT}}$ Class A 8 000 FT	 ↑	 ↓ ↑	 Longitudinal separation between aircraft 10 min or 80 NM. Route segment between DWI and BKK available for overfly BKK (Bi-directional) and departing from VTBD or VTBS (Westbound).
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
L507 (RNAV 2) [GNSS] BANGKOK DVOR/DME (BKK) ▲ <u>135337N 1003546E</u> IGONI ▲ <u>142633N 0995430E</u> NUNLI ▲ <u>145127N 0992304E</u> LUDVI ▲ <u>152849N 0983530E</u>	 310° — 130° 52.0 NM 310° — 130° 39.0 NM 310° — 130° 59.0 NM	 FL 460 — 9 500 FT Class A 10 000 FT FL 460 — FL 145 Class A FL 150	 ↑	 ↓	 Longitudinal separation between aircraft 10 min.
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
L515 (RNAV 2) [GNSS] IKULA ▲ <u>100007N 0972114E</u> MUDMA ▲ <u>090050N 0975115E</u> UPSAB ▲ <u>083348N 0980452E</u> PHUKET DVOR/DME (PUT) ▲ <u>080655N 0981823E</u>	 $\frac{154^\circ}{334^\circ}$ 66.0 NM $\frac{154^\circ}{334^\circ}$ 30.0 NM $\frac{154^\circ}{334^\circ}$ 30.0 NM	 $\frac{\text{FL 460}}{10\ 500\ \text{FT}}$ Class A 11 000 FT/FL 110 $\frac{\text{FL 460}}{6\ 500\ \text{FT}}$ Class A 7 000 FT		 ↓ ↑	
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
L524 (RNAV 2) [GNSS] BANGKOK DVOR/DME (BKK) ▲ <u>135337N 1003546E</u> IBETO ▲ <u>141036N 0992946E</u> MIGAR ▲ <u>141823N 0985907E</u> NURDA ▲ <u>142451N 0983322E</u>	 286° 105° 66.0 NM 285° 105° 31.0 NM 285° 105° 26.0 NM	 FL 460 9 500 FT Class A 10 000 FT	 	 ↑	
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
L645 (RNAV 2) [GNSS] PHUKET DVORDME (PUT) ▲ <u>080655N 0981823E</u> UBZEN ▲ <u>080520N 0974812E</u> SAPAM ▲ <u>080434N 0973300E</u>	 268° — 087° 30.0 NM 268° — 088° 15.0 NM	 FL 460 — 6 500 FT Class A 7 000 FT	 	 ↓ ↑	
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
L759 (RNAV 2) [GNSS] <u>PHUKET DVOR/DME (PUT)</u> ▲ 080655N 0981823E <u>SATVA</u> ▲ 082902N 0975756E <u>ANPAN</u> ▲ 085116N 0973720E <u>TAVUN</u> ▲ 100000N 0963312E	 $\frac{318^\circ}{138^\circ}$ 30.0 NM $\frac{318^\circ}{138^\circ}$ 30.0 NM $\frac{318^\circ}{138^\circ}$ 93.0 NM	 $\frac{\text{FL 460}}{6\ 500\ \text{FT}}$ Class A 7\ 000\ \text{FT} $\frac{\text{FL 460}}{10\ 500\ \text{FT}}$ Class A 11\ 000\ \text{FT/FL 110}		 ↓ ↑	Longitudinal separation between aircraft 10 min.
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
L877 (RNAV 2) [GNSS] MIGAR ▲ 141823N 0985907E PUMOR ▲ 141420N 0984348E	 256° 075° 15.0 NM	 FL 460 9 500 FT Class A 10 000 FT	 ↑	 ↑	 Available for aircraft destination VTBD or VTBS only
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type)* Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits Airspace Classification 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
L880 (RNAV 2) [GNSS] BANGKOK DVOR/DME (BKK) ▲ <u>135337N 1003546E</u> ANKOS ▲ <u>135300N 1012742E</u> DOSBU ▲ <u>135240N 1015002E</u> ANREN ▲ <u>135212N 1021838E</u> OMURO ▲ <u>135143N 1024559E</u>	 091° 271° 51.0 NM 091° 272° 22.0 NM 092° 272° 28.0 NM 092° 272° 27.0 NM 	 FL 460 10 500 FT Class A 11 000 FT FL 460 FL 145 Class A FL 150 	 	 ↓ 	
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
M502 (RNAV 2) [GNSS] <u>BANGKOK DVOR/DME (BKK)</u> ▲ 135337N 1003546E <u>BONVO</u> ▲ 134410N 0994607E <u>AKATO</u> ▲ 133716N 0991019E	 $\frac{260^\circ}{079^\circ}$ 49.0 NM $\frac{259^\circ}{079^\circ}$ 36.0 NM	 $\frac{\text{FL 460}}{10\ 000\ \text{FT}}$ Class A 11 000 FT/FL 110	 ↑	 ↓ ↑	 Activate Monday to Friday 1500-2300 UTC and Saturday to Sunday H24 Route segment between AKATO and BKK available for overfly BKK (Bi-directional) and departing from VTBD or VTBS (Westbound)
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
M644 (RNAV 2) [GNSS] RAYONG DVOR/DME (RYN) ▲ <u>124648N 1014042E</u> ALUMO ▲ <u>104554N 1015123E</u> TONIK △ <u>091736N 1015907E</u> DUGON △ <u>080125N 1020549E</u> ABTOK ▲ <u>061818N 1021744E</u>	 176° — 355° 121.0 NM 175° — 355° 88.0 NM 175° — 355° 76.0 NM 174° — 354° 103.0 NM	 FL 460 — FL 285 Class A FL 290		 ↓ ↑	 Longitudinal separation between aircraft 10 min.
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type)* Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits Airspace Classification 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
M648 (RNAV 2) [GNSS] UDON DVOR/DME (UDN) ▲ <u>172304N 1024630E</u> MUGNO ▲ <u>175107N 1025753E</u> BOPNU ▲ <u>175826N 1030052E</u>	 $\frac{022^\circ}{202^\circ}$ 30.0 NM $\frac{022^\circ}{202^\circ}$ 8.0 NM	 $\frac{\text{FL 460}}{6\ 500\ \text{FT}}$ Class A 7 000 FT		 ↑	 Uni-directional route southbound Conditional Route (CDR) Availability: <u>CDR1</u> 1. Weekdays, Monday to Friday from 1701-2159 UTC 2. From Friday 1701 UTC to Sunday 2159 UTC 3. Public holidays <u>CDR2</u> Other periods, Availability shall be notified by Airspace use plan (AUP) published in www.thaicmac.aerothai.aero BOPNU (BKK-VTN FIR BDRY)
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
M751 (RNAV 2) [GNSS] BANGKOK DVOR/DME (BKK) ▲ <u>135337N 1003546E</u> POLAK △ <u>132106N 1003454E</u> GUTSO ▲ <u>124820N 1003454E</u> REGOS ▲ <u>120007N 1003454E</u> IDAGA △ <u>110007N 1005348E</u> EMELA ▲ <u>101249N 1010729E</u> MUBAN △ <u>085441N 1012952E</u> TIKAL ▲ <u>080220N 1014448E</u> GOLUD ▲ <u>061706N 1021639E</u>	 182° 002° 32.0 NM 181° 001° 33.0 NM 181° 001° 48.0 NM 163° 343° 63.0 NM 164° 344° 49.0 NM 164° 344° 81.0 NM 164° 344° 54.0 NM 163° 343° 109.0 NM	 FL 460 6 500 FT Class A 7 000 FT		 ↓ ↑	 Longitudinal separation between aircraft 10 min. For continuation, see AIP Malaysia.
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels 5		Remarks Controlling unit Frequency 6	
				Odd	Even		
M769 (RNAV 2) [GNSS]							
▲ BANGKOK DVOR/DME (BKK) 135337N 1003546E	189° 009° 49.0 NM	FL 460 FL 155 Class A FL 160				Uni-directional route (northbound)	
▲ LEBIM 130515N 1002825E	182° 002° 74.0 NM						
▲ SURMA 115122N 1002633E	182° 002° 33.0 NM						
▲ GOKEX 111815N 1002544E	182° 002° 70.0 NM						
▲ DONSI 100738N 1002401E	182° 002° 14.0 NM						
▲ SORTO 095353N 1002342E	182° 002° 25.0 NM	FL 460 FL 125 Class A FL 130					
▲ PINUN 092825N 1002306E	182° 002° 19.0 NM						
▲ RIPMU 090852N 1002238E	182° 002° 22.0 NM						
▲ DOXAS 084657N 1002208E	182° 002° 76.0 NM						
▲ DANDO 073054N 1002024E	187° 007° 48.0 NM						
▲ RIGTO 064228N 1001504E					↑		
For flight planning procedure, see ENR 1.10.							

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N891 (RNAV 2) [GNSS] <u>BANGKOK DVOR/DME (BKK)</u> ▲ 135337N 1003546E <u>DOLNI</u> ▲ 131740N 1011048E <u>RAYONG DVORDME (RYN)</u> ▲ 124648N 1014042E <u>ANOBO</u> △ 110323N 1021442E <u>BENSA</u> ▲ 102631N 1022630E	 $\frac{137^\circ}{317^\circ}$ 49.0 NM $\frac{137^\circ}{317^\circ}$ 42.0 NM $\frac{163^\circ}{343^\circ}$ 108.0 NM $\frac{163^\circ}{343^\circ}$ 38.0 NM	 $\frac{\text{FL 460}}{7\ 000\ \text{FT}}$ Class A 8\ 000\ \text{FT} $\frac{\text{FL 460}}{\text{FL 160}}$ Class A FL 170		 ↓ ↑	Longitudinal separation between aircraft 10 min.
For flight planning procedure, see ENR 1.10.					

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P627 (RNAV 2) [GNSS] <u>PHUKET DVOR/DME (PUT)</u> ▲ 080655N 0981823E <u>ANPUB</u> ▲ 075141N 0975216E <u>RUSET</u> ▲ 074616N 0974257E	 $\frac{240^\circ}{060^\circ}$ 30.0 NM $\frac{240^\circ}{060^\circ}$ 11.0 NM	 $\frac{\text{FL 460}}{6\ 500\ \text{FT}}$ Class A 7 000 FT		 ↓ ↑	
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
P646 (RNAV 2) [GNSS] <u>BANGKOK DVOR/DME (BKK)</u> ▲ <u>135337N 1003546E</u> <u>TARED</u> ▲ <u>142620N 0993129E</u> <u>BETNO</u> ▲ <u>150554N 0981231E</u>	 $\frac{298^\circ}{118^\circ}$ 70.0 NM $\frac{298^\circ}{118^\circ}$ 86.0 NM	 $\frac{FL\ 460}{9\ 500\ FT}$ Class A 10 000 FT	 ↑	 ↓	 Longitudinal separation between aircraft 10 min.
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
Y1 (RNAV 2) [GNSS] UDON DVOR/DME (UDN) ▲ <u>172304N 1024630E</u> TERCO ▲ <u>165550N 1023308E</u> UBLOD ▲ <u>143715N 1012612E</u> PIPOB ▲ <u>142236N 1011914E</u>	 <u>206°</u> <u>026°</u> 30.0 NM <u>206°</u> <u>026°</u> 152.0 NM <u>206°</u> <u>026°</u> 16.0 NM	 <u>FL 460</u> <u>12 000 FT</u> Class A 13 000 FT <u>FL 460</u> <u>6 500 FT</u> Class A 7 000 FT	 	 ↓	 Activate Monday to Friday 1000-2300 UTC and Saturday-Sunday H24 Expect ATC clearance transition to Initial waypoint STAR
For flight planning procedure, see ENR 1.10.					

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Y2 (RNAV 2) [GNSS] KHON KAEN DVOR/DME (KKN) ▲ <u>162815N 1024716E</u> NEMTE ▲ <u>160345N 1022913E</u> UBLOD ▲ <u>143715N 1012612E</u> PIPOB ▲ <u>142236N 1011914E</u>	 216° — 036° 30.0 NM 216° — 036° 105.0 NM 206° — 026° 16.0 NM	 FL 460 — 12 000 FT/FL 120 Class A 13 000 FT/FL 130 FL 460 — 6 500 FT Class A 7 000 FT		 ↓	 Activate Monday to Friday 1000-2300 UTC and Saturday-Sunday H24 Expect ATC clearance transition to Initial waypoint STAR
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
Y3 (RNAV 2) [GNSS] MENEX ▲ <u>110831N 0994543E</u> DORNA ▲ <u>092459N 0994614E</u> TEDOS ▲ <u>084834N 0990507E</u> MONBU ▲ <u>082659N 0984056E</u> PHUKET DVOR/DME (PUT) ▲ <u>080655N 0981823E</u>	 180° 000° 103.0 NM 229° 049° 55.0 NM 229° 049° 32.0 NM 229° 049° 30.0 NM	 FL 460 7 000 FT Class A 8 000 FT		 ↓	Uni-directional route 1. Y3 (southbound) and Y4 (northbound) available when VTD58 is activated. 2. Aircraft shall keep within the lateral limit 5 NM either side of the route and close to the centreline as much as possible to avoid entering VTD58
For flight planning procedure, see ENR 1.10.					

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Y5 (RNAV 2) [GNSS] PHUKET DVOR/DME (PUT) ▲ 080655N 0981823E IGEVI ▲ 083640N 0982320E ANDAX △ 090441N 0983545E NOMEK ▲ 093404N 0984835E CHUM PHON DVOR/DME (CPN) ▲ 104240N 0992156E MENEX ▲ 110831N 0994543E EGUBO ▲ 112838N 1000450E UPVIL ▲ 113836N 1001421E SURMA ▲ 115122N 1002633E						Uni-directional route (northbound) Conditional Route (CDR) 1. Available on weekdays (Monday to Friday) from 1700- 2200 UTC. 2. Available from Friday 1700 UTC to Sunday 2200 UTC and public holiday. 3. Other periods, Availability shall be notified by NOTAM or Airspace use plan (ASU) in www.thaicmac.aerothai.aero
	010° 190°	FL 460 6 500 FT		↓		
	30.0 NM	Class A 7 000 FT				
	024° 204°					
	31.0 NM					
	024° 204°	FL 460 12 500 FT/FL 125				
	32.0 NM	Class A				
	026° 206°	13 000 FT/FL 130				
	76.0 NM					
	043° 223°					
	35.0 NM					
	044° 224°					
	28.0 NM					
	044° 224°					
	14.0 NM					
	044° 224°					
	18.0 NM					
For flight planning procedure, see ENR 1.10.						

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5		Remarks Controlling unit Frequency 6
Y6 (RNAV 2) [GNSS]						
BANGKOK DVOR/DME (BKK) ▲ <u>135337N 1003546E</u>	<u>337°</u> 157°	<u>FL 460</u> 12 500 FT/FL 125			↓	
TANGO ▲ <u>144022N 1001433E</u>	51.0 NM <u>343°</u> 163°	Class A 13 000 FT/FL 130				
DUKEN △ <u>150006N 1000808E</u>	21.0 NM <u>343°</u> 163°	<u>FL 460</u> <u>FL 245</u>				
BORNO ▲ <u>162057N 0994139E</u>	84.0 NM <u>343°</u> 163°	Class A FL 250				
SANAL △ <u>163705N 0993619E</u>	17.0 NM <u>343°</u> 163°	<u>FL 460</u> 12 500 FT/FL 125				
RINKA △ <u>173746N 0991609E</u>	63.0 NM <u>343°</u> 163°	Class A 13 000 FT/FL 130				
MARNI ▲ <u>180836N 0990549E</u>	32.0 NM <u>349°</u> 169°	Class A 7 000 FT				
CHIANG MAI DVOR/DME (CMA) ▲ <u>184558N 0985740E</u>	38.0 NM					
For flight planning procedure, see ENR 1.10.						

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Y7 (RNAV 2) [GNSS] PANTA ▲ 181351N 0991917E KEXIL △ 174204N 0992954E PAKMO ▲ 162013N 0995656E TAKHLI NDB (TL) ▲ 151633N 1001751E	 163° 343° 33.0 NM 163° 343° 86.0 NM 163° 343° 67.0 NM	 FL 460 6 500 FT Class A 7 000 FT FL 460 12 500 FT/FL 125 Class A 13 000 FT/FL 130	 	 ↓ 	
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits	Lateral limits NM 4	Direction of cruising levels Odd Even 5		Remarks Controlling unit Frequency 6	
		Lower limits or Airspace classification Minimum flight altitude 3					
Y8 (RNAV 2) [GNSS]							
▲ <u>BANGKOK DVOR/DME (BKK)</u> 135337N 1003546E	197° 017° 44.0 NM	FL 460 12 500 FT/FL 125 Class A			↓ Uni-directional route (southbound)		
▲ <u>MOTNA</u> 131110N 1002306E	226° 046° 16.0 NM	13 000 FT/FL 130					
▲ <u>SABIS</u> 125959N 1001125E	226° 046° 35.0 NM						
▲ <u>VANKO</u> 123511N 0994538E	180° 000° 51.0 NM						
▲ <u>BUXEL</u> 114342N 0994540E	180° 000° 35.0 NM						
▲ <u>MENEX</u> 110831N 0994543E	198° 018° 101.0 NM	FL 460 7 500 FT Class A					
▲ <u>IKERA</u> 093146N 0991532E	198° 018° 25.0 NM	8 000 FT					
▲ <u>SURAT THANI DVOR/DME (STN)</u> 090746N 0990805E	220° 040° 25.0 NM	FL 460 6 500 FT Class A					
▲ <u>LAMUL</u> 084818N 0985208E	219° 039° 23.0 NM	7 000 FT					
▲ <u>SAVSA</u> 083016N 0983729E	220° 040° 30.0 NM						
▲ <u>PHUKET DVOR/DME (PUT)</u> 080655N 0981823E							
For flight planning procedure, see ENR 1.10.							

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Y9 (RNAV 2) [GNSS] DANDO ▲ 073054N 1002024E HAT YAI DVOR/DME (HTY) ▲ 065603N 1002316E	 176° — 356° 35.0 NM	 FL 460 — 6 500 FT Class A 7 000 FT		 ↑	
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
Y10 (RNAV 2) [GNSS] OBLEX ▲ 072948N 1003228E HAT YAI DVOR/DME (HTY) ▲ 065603N 1002316E	 196° 015° 35.0 NM	 FL 460 6 500 FT Class A 7 000 FT		 ↓	
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
Y12 (RNAV 2) [GNSS] DOLNI ▲ <u>131740N 1011048E</u> ALEMI ▲ <u>123626N 1012600E</u> ALUMO ▲ <u>104554N 1015123E</u>	 $\frac{161^\circ}{341^\circ}$ 44.0 NM $\frac{168^\circ}{348^\circ}$ 113.0 NM	 $\frac{FL\ 460}{FL\ 155}$ Class A FL 160		 ↑	 When VTR13 is activated, Y12 is not available for flight planning.
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
Y14 (RNAV 2) [GNSS] SELKA ▲ 142020N 1015311E KHORAT DVOR/DME (KRT) ▲ 145502N 1020823E	 024° 204° 38.0 NM	 FL 460 FL 205 Class A FL 210	 	 ↓	
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
Y15 (RNAV 2) [GNSS] SANOT △ 145134N 1032548E GRASO ▲ 150917N 1034714E GUROK ▲ 160329N 1041106E	 050° 230° 27.0 NM 024° 204° 59.0 NM	 FL 460 FL 205 Class A FL 210		 ↓	
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
Y16 (RNAV 2) [GNSS] BANGKOK DVOR/DME (BKK) ▲ <u>135337N 1003546E</u> UPKUP ▲ <u>140353N 1012655E</u> LIPLI ▲ <u>141028N 1015756E</u> XIKMA ▲ <u>142236N 1023626E</u> PEKBA ▲ <u>144808N 1034733E</u> BUTRA ▲ <u>152506N 1053546E</u>	 079° — 259° 51.0 NM 078° — 258° 31.0 NM 073° — 253° 39.0 NM 070° — 251° 73.0 NM 071° — 252° 111.0 NM	 FL 460 — 7 500 FT Class A 8 000 FT FL 460 — FL 205 Class A FL 210		 ↓	
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type)* Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits Airspace Classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
Y18 (RNAV 2) [GNSS] <u>HAT YAI DVOR/DME (HTY)</u> ▲ 065603N 1002316E TONUUV ▲ 062319N 1011127E PETAC ▲ 061740N 1011945E <u>BETONG DVOR/DME (BET)</u> ▲ 054708N 1010839E	 124° 304° 58.0 NM 124° 304° 10.0 NM 200° 020° 32.0 NM	 FL 460 6 500 FT Class A 7 000 FT	 	 ↓ ↑	Conditional Route (CDR) 1. Available on weekdays, Monday to Friday 1100-2300 UTC. 2. Available from Friday 1100 UTC to Sunday 2300 UTC and public holiday. 3. Other period, Availability shall be notified by NOTAM or Airspace use plan (AUP) in www.thaicmac.aerothai.aero

Route designator (RNP type)* Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits Airspace Classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
Y19 (RNAV 2) [GNSS] PATTANI NDB (PT) ▲ 064718N 1010853E LERNI ▲ 062706N 1011618E PETAC ▲ 061740N 1011945E BETONG DVOR/DME (BET) ▲ 054708N 1010839E	 160° 340° 21.0 NM 160° 340° 10.0 NM 200° 020° 32.0 NM 	 FL 460 6 500 FT Class A 7 000 FT 	 	 ↓ ↑	Conditional Route (CDR) 1. Available on weekdays, Monday to Friday 1100-2300 UTC. 2. Available from Friday 1100 UTC to Sunday 2300 UTC and public holiday. 3. Other period, Availability shall be notified by NOTAM or Airspace use plan (AUP) in www.thaicmac.aerothai.aero

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits Airspace Classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
Y93 (RNAV 2) [GNSS] ▲ <u>AKVUG</u> 090349N 0992219E △ <u>OTGOL</u> 091306N 0993248E ▲ <u>DORNA</u> 092459N 0994614E ▲ <u>SAMUI DVOR/DME (SMU)</u> 093249N 1000342E	 <u>049°</u> <u>229°</u> 14.0 NM <u>049°</u> <u>229°</u> 18.0 NM <u>066°</u> <u>246°</u> 19.0 NM	 <u>FL 460</u> <u>7 500 FT</u> Class A 8 000 FT <u>FL 460</u> <u>4 500 FT</u> Class A 5 000 FT	 	 ↓ 	 Uni-directional route (northbound)
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits	Lateral limits NM 4	Direction of cruising levels		Remarks Controlling unit Frequency 6
		Lower limits Airspace Classification Minimum flight altitude 3		Odd	Even	
Y95 (RNAV 2) [GNSS]						
<u>SAMUI DVOR/DME (SMU)</u> ▲ 093249N 1000342E	<u>142°</u> 322° 20.0 NM	<u>FL 460</u> 4 500 FT Class A			↓	
<u>RUMVA</u> ▲ 091717N 1001600E	<u>142°</u> 322° 2.0 NM	5 000 FT				
<u>PAGLU</u> △ 091549N 1001709E	<u>142°</u> 322° 9.0 NM	<u>FL 460</u> 6 500 FT Class A				
<u>RIPMU</u> ▲ 090852N 1002238E	<u>142°</u> 322° 9.0 NM	7 000 FT				
<u>APOBI</u> ▲ 090147N 1002814E	<u>142°</u> 322° 10.0 NM					
<u>LOSDA</u> ▲ 085356N 1003425E	<u>142°</u> 322° 34.0 NM					
<u>IDRUK</u> ▲ 082724N 1005513E	<u>142°</u> 322° 60.0 NM	<u>FL 460</u> 9 500 FT Class A				
<u>IKOGA</u> ▲ 073935N 1013235E		10 000 FT			↑	
For flight planning procedure, see ENR 1.10.						

Route designator (RNP type)* Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits Airspace Classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
Y96 (RNAV 2) [GNSS] GOKEX ▲ <u>111815N 1002544E</u> OLSEL ▲ <u>113411N 1001649E</u> UPVIL ▲ <u>113836N 1001421E</u> EMTIX ▲ <u>114931N 1000814E</u>	 332° 152° 18.0 NM 332° 152° 5.0 NM 332° 152° 12.0 NM	 FL 460 7 500 FT Class A 8 000 FT		 ↓	 Uni-directional route (northbound)
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type)* Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits Airspace Classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
Y98 (RNAV 2) [GNSS] NONEL ▲ <u>105301N 0995337E</u> OLSEL ▲ <u>113411N 1001649E</u> SURMA ▲ <u>115122N 1002633E</u> LEBIM ▲ <u>130515N 1002825E</u> BANGKOK DVOR/DME (BKK) ▲ <u>135337N 1003546E</u>	 <u>030°</u> <u>210°</u> 47.0 NM <u>030°</u> <u>210°</u> 20.0 NM <u>002°</u> <u>182°</u> 74.0 NM <u>009°</u> <u>189°</u> 49.0 NM	 <u>FL 460</u> <u>7 500 FT</u> Class A 8 000 FT	 	 ↓ 	 Uni-directional route (northbound)
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type)* Name of significant points Coordinates 1	Track MAG (GEO) VOR RDL DIST (COP) 2	Upper limits Lower limits Airspace Classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
Y99 (RNAV 2) [GNSS] PHUKET DVOR/DME (PUT) ▲ <u>080655N 0981823E</u> EMRIT ▲ <u>080621N 0984840E</u> KRABI DVORDME (KBI) ▲ <u>080627N 0985839E</u> OSPEX ▲ <u>082015N 0991319E</u> BITEN ▲ <u>082659N 0992029E</u> EMVEL ▲ <u>084438N 0992122E</u> AKVUG ▲ <u>090349N 0992219E</u> VEGNA ▲ <u>091427N 0992251E</u> NIXET ▲ <u>092517N 0992613E</u> NONEL ▲ <u>105301N 0995337E</u> EGUBO ▲ <u>112838N 1000450E</u> EMTIX ▲ <u>114931N 1000814E</u> HOTEL ▲ <u>130006N 1001948E</u> MOTNA ▲ <u>131110N 1002306E</u> BANGKOK DVOR/DME (BKK) ▲ <u>135337N 1003546E</u>	 092° 272° 30.0 NM 090° 270° 10.0 NM 047° 227° 20.0 NM 047° 227° 10.0 NM 003° 183° 18.0 NM 003° 183° 19.0 NM 003° 183° 11.0 NM 018° 198° 11.0 NM 018° 198° 91.0 NM 018° 198° 37.0 NM 010° 190° 21.0 NM 010° 190° 71.0 NM 017° 197° 12.0 NM 017° 197° 44.0 NM	 FL 460 6 500 FT Class A 7 000 FT FL 460 7 500 FT Class A 8 000 FT		 ↓	 Uni-directional route (northbound)
For flight planning procedure, see ENR 1.10.					

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