

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 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	<u>Upper limits</u> <u>Lower limits</u> 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) ▲ 135337N 1003546E IGONI ▲ 142633N 0995430E NUNLI ▲ 145127N 0992304E LUDVI ▲ 152849N 0983530E	 310° 130° 52.0 NM 310° 130° 39.0 NM 310° 130° 59.0 NM	 <u>FL 460</u> 9 500 FT Class A 10 000 FT <u>FL 460</u> <u>FL 145</u> 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>	 154° 334° 66.0 NM 154° 334° 30.0 NM 154° 334° 30.0 NM	 FL 460 10 500 FT Class A 11 000 FT/FL 110 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
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 or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels 5		Remarks Controlling unit Frequency 6
				Odd	Even	
M502						
▲ <u>BANGKOK DVOR/DME (BKK)</u> 135337N 1003546E	260° 079°	FL 460 10 000 FT			↓	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)
▲ <u>BONVO</u> 134410N 0994607E	49.0 NM	Class A 11 000 FT/FL 110				
▲ <u>AKATO</u> 133716N 0991019E	259° 079°				↑	
	36.0 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
<p>M626 (RNAV 2) [GNSS]</p> <p>▲ <u>EKAVO</u> 113737N 0993025E</p> <p>▲ <u>MENEX</u> 110831N 0994543E</p> <p>▲ <u>NONEL</u> 105301N 0995337E</p> <p>△ <u>APUSA</u> 100057N 1002007E</p> <p>▲ <u>SORTO</u> 095353N 1002342E</p> <p>▲ <u>UPNEP</u> 094213N 1002936E</p> <p>▲ <u>VALSI</u> 093108N 1003518E</p> <p>△ <u>SUPIN</u> 083435N 1010419E</p> <p>▲ <u>IKOGA</u> 073935N 1013235E</p> <p>▲ <u>KADAX</u> 061602N 1021542E</p>	<p>153° 333°</p> <p>33.0 NM</p> <p>154° 334°</p> <p>17.0 NM</p> <p>154° 334°</p> <p>58.0 NM</p> <p>154° 334°</p> <p>8.0 NM</p> <p>154° 334°</p> <p>13.0 NM</p> <p>153° 333°</p> <p>12.0 NM</p> <p>153° 333°</p> <p>63.0 NM</p> <p>153° 333°</p> <p>61.0 NM</p> <p>153° 333°</p> <p>94.0 NM</p>	<p>FL 460 9 500 FT</p> <p>Class A 10 000 FT</p>		<p>↓</p> <p>↑</p>	<p>For continuation, see AIP Ma- laysia.</p>
<p>For flight planning procedure, see ENR 1.10.</p>					

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 RAYONG DVOR/DME (RYN) ▲ 124648N 1014042E ALUMO ▲ 104554N 1015123E TONIK △ 091736N 1015907E DUGON △ 080125N 1020549E ABTOK ▲ 061818N 1021744E	 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 or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
M770 PADET ▲ 100007N 0981719E RANONG DVOR/DME (RAN) ▲ 094643N 0983502E GOLUD ▲ 061706N 1021639E	 128° 308° 22.0 NM 134° 314° 303.0 NM	 FL 460 FL 275 Class A FL 280		 ↑	Available as follow: 1. Saturday and Sunday between 0000 - 2300 UTC 2. Monday to Friday between 1630 - 2300 UTC 3. Only the direction from GOLUD to PADET
For flight planning procedure, see ENR 1.10.					

Route designator (RNP type) Name of significant points Coordinates	Track MAG (GEO) VOR RDL DIST (COP)	Upper limits Lower limits or Airspace classification Minimum flight altitude	Lateral limits NM	Direction of cruising levels		Remarks Controlling unit Frequency		
				Odd	Even			
1	2	3	4	5		6		
M904 (RNAV 2) [GNSS]								
BANGKOK DVOR/DME (BKK) ▲ 135337N 1003546E	163° 343°	FL 460 6 500 FT		↓		Between BKK and BUT, aircraft shall keep within the lateral limit for the route and close to the centreline as much as possible to avoid entering VT P7. When VT D71 is activated, M904 is not available for flight planning.		
KIGOB ▲ 130646N 1005106E	49.0 NM 162° 342°	Class A 7 000 FT						
U-TAPAO DVOR/DME (BUT) ▲ 124000N 1010002E	28.0 NM 165° 345°	FL 460 FL 145						
PIDEL ▲ 122143N 1010514E	17.0 NM 164° 344°	Class A FL 150						
DIPUN △ 120457N 1011011E	164° 344°	FL 250						
SIRAT △ 103450N 1013640E	93.0 NM 164° 344°							
TONIK △ 091736N 1015907E	80.0 NM 161° 341°							
TIDAR ▲ 065230N 1025000E	153.0 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
N891 BANGKOK DVOR/DME (BKK) ▲ 135337N 1003546E DOLNI ▲ 131740N 1011048E RAYONG DVORDME (RYN) ▲ 124648N 1014042E ANOBO △ 110323N 1021442E BENSA ▲ 102631N 1022630E	 137° 317° 50.0 NM 137° 317° 42.0 NM 163° 343° 108.0 NM 163° 343° 39.0 NM	FL 460 7 000 FT Class A 8 000 FT FL 460 FL 160 Class A FL 170		 ↓ ↑	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
P627 <u>PHUKET DVOR/DME (PUT)</u> ▲ 080655N 0981823E <u>ANPUB</u> ▲ 075141N 0975216E <u>RUSET</u> ▲ 074616N 0974257E	 240° 060° 30.0 NM 240° 060° 11.0 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
P646 BANGKOK DVOR/DME (BKK) ▲ 135337N 1003546E TARED ▲ 142620N 0993129E BETNO ▲ 150554N 0981231E	 298° 118° 70.0 NM 298° 118° 86.0 NM	 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
Y2 (RNAV 2) [GNSS] KHON KAEN DVOR/DME (KKN) ▲ 162815N 1024716E UBLOD ▲ 143715N 1012612E PIPOB ▲ 142236N 1011914E	 216° 036° 135.0 NM 205° 025° 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.					

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
Y5 (RNAV 2) [GNSS]						
▲ PHUKET DVOR/DME (PUT) 080655N 0981823E	010° 190° 30.0 NM	FL 460 6 500 FT Class A 7 000 FT		↓		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
▲ IGEVI 083640N 0982320E	024° 204° 31.0 NM					
△ ANDAX 090441N 0983545E	024° 204° 32.0 NM	FL 460 12 500 FT/FL 125 Class A				
▲ NOMEK 093404N 0984835E	026° 206° 76.0 NM	13 000 FT/FL 130				
▲ CHUM PHON DVOR/DME (CPN) 104240N 0992156E	043° 223° 35.0 NM					
▲ MENEX 110831N 0994543E	044° 224° 28.0 NM					
▲ EGUBO 112838N 1000450E	044° 224° 14.0 NM					
▲ UPVIL 113836N 1001421E	044° 224° 18.0 NM					
▲ SURMA 115122N 1002633E						
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		
Y6 (RNAV 2) [GNSS] BANGKOK DVOR/DME (BKK) ▲ <u>135337N 1003546E</u> TANGO ▲ <u>144022N 1001433E</u> DUKEN △ <u>150006N 1000808E</u> BORNO ▲ <u>162057N 0994139E</u> SANAL △ <u>163705N 0993619E</u> RINKA △ <u>173746N 0991609E</u> MARNI ▲ <u>180836N 0990549E</u> CHIANG MAI DVOR/DME (CMA) ▲ <u>184558N 0985740E</u>							
		337° 157°	FL 460 12 500 FT/FL 125			↓	
		51.0 NM	Class A				
		343° 163°	13 000 FT/FL 130				
		21.0 NM					
		343° 163°	FL 460 FL 245				
		84.0 NM	Class A				
		343° 163°	FL 250				
		17.0 NM					
		343° 163°	FL 460 12 500 FT/FL 125				
		63.0 NM	Class A				
		343° 163°	FL 460 6 500 FT				
	32.0 NM	Class A					
	349° 169°	7 000 FT					
	38.0 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
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.

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
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 5		Remarks Controlling unit Frequency 6
				Odd	Even	
Y11 (RNAV 2) [GNSS] ▲ KIGOB 130646N 1005106E ▲ U-TAPAO DVOR/DME (BUT) 124000N 1010002E ▲ PIDEL 122143N 1010514E △ NOMEP 113830N 1010454E ▲ RILVI 102334N 1012142E ▲ TENUM 090229N 1013948E ▲ GOLUD 061706N 1021639E	 $\frac{162^\circ}{342^\circ}$ 28.0 NM $\frac{165^\circ}{345^\circ}$ 19.0 NM $\frac{181^\circ}{001^\circ}$ 43.0 NM $\frac{168^\circ}{348^\circ}$ 76.0 NM $\frac{168^\circ}{348^\circ}$ 83.0 NM $\frac{168^\circ}{348^\circ}$ 169.0 NM	 $\frac{FL 460}{FL 155}$ Class A FL 160 $\frac{FL 460}{FL 245}$ Class A FL 250		↓	When VTD71 is activated, Y11 is not available for flight planning. Between KIGOB and BUT, aircraft shall fly on the centerline of the route as much as possible to avoid entering VTP7.	
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 ▲ 131740N 1011048E ALEMI ▲ 123626N 1012600E ALUMO ▲ 104554N 1015123E	 $\frac{161^\circ}{341^\circ}$ 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
Y13 (RNAV 2) [GNSS] BANGKOK DVOR/DME (BKK) ▲ <u>135337N 1003546E</u> PIPOB ▲ <u>142236N 1011914E</u> RUKSA ▲ <u>143351N 1015512E</u> PAKRI ▲ <u>145202N 1025409E</u> GRASO ▲ <u>150917N 1034714E</u>	 056° — 236° 51.0 NM 073° — 253° 37.0 NM 073° — 253° 60.0 NM 072° — 252° 54.0 NM	 FL 460 — 6 500 FT Class A 7 000 FT FL 460 — FL 205 Class A FL 210		 ↑	 Available for aircraft with VTBS as destination 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 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
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 or Airspace classification Minimum flight altitude 3	Lateral limits NM 4	Direction of cruising levels Odd Even 5	Remarks Controlling unit Frequency 6
Y17 (RNAV 2) [GNSS] SAMUI DVORDME (SMU) ▲ <u>093249N 1000342E</u> OLBAG ▲ <u>095849N 1001852E</u> APUSA △ <u>100057N 1002007E</u> DONSI ▲ <u>100738N 1002401E</u>	 030° — 210° 30.0 NM 030° — 210° 2.0 NM 031° — 211° 8.0 NM	 FL 460 — 4 500 FT 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 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	142° 322°	FL 460 4 500 FT		↓		
<u>RUMVA</u> ▲ 091717N 1001600E	20.0 NM 142° 322°	Class A 5 000 FT				
<u>PAGLU</u> △ 091549N 1001709E	2.0 NM 142° 322°	FL 460 6 500 FT				
<u>RIPMU</u> ▲ 090852N 1002238E	9.0 NM 142° 322°	Class A 7 000 FT				
<u>APOBI</u> ▲ 090147N 1002814E	9.0 NM 142° 322°					
<u>LOSDA</u> ▲ 085356N 1003425E	10.0 NM 142° 322°					
<u>IDRUK</u> ▲ 082724N 1005513E	34.0 NM 142° 322°	FL 460 9 500 FT				
<u>IKOGA</u> ▲ 073935N 1013235E	60.0 NM 142° 322°	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 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 ▲ 111815N 1002544E OLSEL ▲ 113411N 1001649E UPVIL ▲ 113836N 1001421E EMTIX ▲ 114931N 1000814E	 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.					

INTENTIONALLY BLANK