

**ENR 3 ATS ROUTES**

**ENR 3.1 CONVENTIONAL NAVIGATION ROUTES**

Route Designator {RNP Type}		[Route Usage Notes]								Remarks
Significant Point Name		Significant Point Coordinates			Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels		
{RNP Type}	Track MAG ↓ ↑	Dist NM	(COP)							↓
1	2	3	4	5	6	7	8	9	10	
<b>A224</b>		Route availability: (1) H24								
▲	JOHOR BAHRU DVOR/DME (VJB)	013950N 1033939E								
		196° 016°	45.3NM		FL 460 5500 FT ALT	6000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]
▼	MERSING DVOR/ DME (VMR) (58 DME PU)	022318N 1035218E								
<u>Route remarks:</u> -										
<u>Point/Segment Remarks:</u> -										

Route Designator {RNP Type}		[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates							Remarks		
{RNP Type}	Track MAG ↓ ↑	Dist NM	(COP)	Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels ↓   ↑		Controlling unit Frequency {Airspace class} Remarks	
1	2	3	4	5	6	7	8	9	10	
<b>A457</b>		Route availability: (1) H24								
▲	JOHOR BAHRU DVOR/DME (VJB)	013950N 1033939E								
		$\frac{296^\circ}{116^\circ}$	25.0NM		FL 460 4500 FT ALT	5000 FT	20	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]	
△	SABKA	015051N 1031713E								
		$\frac{296^\circ}{116^\circ}$	27.1NM		FL 460 4500 FT ALT	5000 FT	20	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]	
△	MASBO	020248N 1025251E								
<u>Route remarks:</u>  Flight Planning: Northbound flights landing at WMKK and WMSA are to flight plan via A457. Flights departing from Singapore FIR to destinations north of WMKK and WMSA, refer to Y339. Flights overflying Singapore FIR to destinations north of WMKK and WMSA, refer to Y342. Tolerances of airway infringe WMD222 ASAHAN (activated by NOTAM) – Military activities										

Route Designator {RNP Type}		[Route Usage Notes]								Remarks
Significant Point Name		Significant Point Coordinates							Controlling unit Frequency {Airspace class} Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	(COP)	Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels ↓      ↑			
1	2	3	4	5	6	7	8	9	10	
<b>A464</b>		Route availability: (1) H24								
▲	ARAMA (Delegated Airspace BDRY)	013654N 1030712E								
		$\frac{117^\circ}{-}$	14.9NM		<u>FL 460</u> 3500 FT ALT	5500 FT	10	Odd <sup>(1)</sup>		[Class A - ABV FL150] [Class B - BLW FL150]
△	35DME SJ	012954N 1032024E								
		$\frac{118^\circ}{-}$	5.0NM		<u>FL 460</u> 3000 FT ALT	5500 FT	10	Odd <sup>(1)</sup>		[Class A - ABV FL150] [Class B - BLW FL150]
△	LELIB	012729N 1032450E								
		$\frac{117^\circ}{-}$	14.6NM		<u>FL 460</u> 3000 FT ALT	5500 FT	10	Odd <sup>(1)</sup>		[Class A - ABV FL150] [Class B - BLW FL150]
▲	MASNI (WSJC/MMFC FIR BDRY)	012037N 1033746E								
		$\frac{118^\circ}{-}$	15.3NM		<u>FL 460</u> 3000 FT ALT	5500 FT	10	Odd <sup>(1)</sup>		[Class A - ABV FL150] [Class B - BLW FL150]
▲	SINJON DVOR/DME (SJ)	011321N 1035115E								
		$\frac{116^\circ}{294^\circ}$	2.8NM		<u>FL 460</u> 2000 FT ALT	6000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]
▲	AVPIV (WSJC/WIIF FIR BDRY) (Delegated Airspace BDRY)	011207N 1035349E								
		$\frac{115^\circ}{295^\circ}$	20.0NM		<u>FL 600</u> 2000 FT ALT	5500 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]
▲	IRTAD	010326N 1041147E								
		$\frac{115^\circ}{295^\circ}$	21.2NM		<u>FL 600</u> 2000 FT ALT	5500 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]
▲	TANJUNGPINANG VOR/DME (TPG)	005413N 1043052E								
<b>Route remarks:</b>										
Singapore ACC FREQ: P133.25 MHz S135.8 MHz Flight Planning Instructions: Arrivals into Changi on A464 to flight plan via A464 – ARAMA – TEBUN. After TEBUN, to join the TEBUN STAR. When traffic permits, ATC will offer LELIB 3B for WSSS RWY 20. Arrivals into Batam and Tanjungpinang on A464 to flight plan via A464 – ARAMA – GUNAN. After GUNAN to join the GUNAN STAR (refer to Indonesia AIP WIDD AD 2.24 or WIDN AD 2.24 respectively). Flights above FL370 between AVPIV and TPG VOR/DME, see AIP Indonesia ENR2.1.										
<b>Point/Segment Remarks:</b>										
-										

Route Designator {RNP Type}		[Route Usage Notes]								
Significant Point Name		Significant Point Coordinates							Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	(COP)	Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels		Controlling unit Frequency {Airspace class} Remarks	
							↓	↑		
1	2	3	4	5	6	7	8	9	10	
<b>A576</b>		Route availability: (1) H24								
▲	REKOP (50 DME SJ) (Delegated airspace BDRY)	013306N 1030521E								
		112° 292°	16.1NM		FL 460 6500 FT ALT	7000 FT		Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(2)</sup>
△	PIMOK	012648N 1032008E								
		113° 293°	18.6NM		FL 460 6500 FT ALT	7000 FT		Odd <sup>(1)</sup>		[Class A - ABV FL150] [Class B - BLW FL150] <sup>(2)</sup>
▲	BONSU (FIR BDRY)	011928N 1033710E								
		113° 293°	15.4NM		FL 460 6500 FT ALT	7000 FT		Odd <sup>(1)</sup>		[Class A - ABV FL150] [Class B - BLW FL150] <sup>(2)</sup>
▲	SINJON DVOR/DME (SJ)	011321N 1035115E								
<u>Route remarks:</u>										
15 min longitudinal separation. RMK: AVBL for southbound FLT only BTN PIMOK and SJ DVOR/DME. Southbound FLT landing at WSSS are to flight plan via ATS Route A464. Singapore ACC FREQ: P133.25MHz S135.8MHz (westbound) P134.4MHz S128.1MHz (southbound)										
<u>Point/Segment Remarks:</u>										
(2) 5NM either side of a rhumb line joining MDN and SJ, funnelling out at 7.5° to a width of 15NM either side of track										

Route Designator {RNP Type}		[Route Usage Notes]								Remarks
Significant Point Name		Significant Point Coordinates			Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels		
{RNP Type}		Track MAG	Dist NM	(COP)				↓	↑	
1	2	3	4	5	6	7	8	9	10	
<b>B338</b>		Route availability: (1) H24								
▲	MERSING DVOR/ DME (VMR)	022318N 1035218E								
		171° 351°	38.1NM		FL 460 3500 FT ALT	4000 FT		Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(2)</sup>
△	20DME PU	014530N 1035812E								
		171° 351°	20.7NM		FL 460 3500 FT ALT	4000 FT		Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(2)</sup>
▲	TEKONG DVOR/DME (VTK)	012455N 1040120E								
		154° 334°	10.3NM		FL 460 3500 FT ALT	4000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(2)(3)(4)</sup>
▲	ENVUM (WSJC/WIIF FIR BDRY) (Delegated airspace BDRY)	011535N 1040552E								
		154° 334°	13.5NM		FL 600 3500 FT ALT	4000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(4)</sup>
▲	IRTAD	010326N 1041147E								
		154° 334°	7.9NM		FL 600 3500 FT ALT	4000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(4)</sup>
▲	AKVOM	005620N 1041514E								
		154° 334°	8.1NM		FL 600 3500 FT ALT	4000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(4)</sup>
▲	IDMAS	004900N 1041848E								
		153° 333°	73.6NM		FL 600 3500 FT ALT	4000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(4)</sup>
▲	ANITO	001700S 1045200E								
<p><u>Route remarks:</u> Flights above FL370 between ENVUM and ANITO, see AIP Indonesia ENR2.1.</p> <p><u>Point/Segment Remarks:</u> (2) Segment from MERSING to VTK use: P133.8MHz S127.3MHz (3) Kuala Lumpur/Singapore FIR boundary approximately 1.2NM north of VTK (4) Segment from VTK to ANITO use: P134.4MHz S128.1MHz</p>										

Route Designator {RNP Type}		[Route Usage Notes]							
Significant Point Name		Significant Point Coordinates						Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	(COP)	Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels		Controlling unit {Airspace class} Remarks
							↓	↑	
1	2	3	4	5	6	7	8	9	10
<b>B469</b>		Route availability: (1) H24							
▲ PEKAN DVOR/DME (VPK)	032259N 1032524E			FL 460 7500 FT ALT	8000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(2)</sup>
△ PADLI	030918N 1033133E			FL 460 7500 FT ALT	8000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(2)</sup>
▲ 90DME PU (Delegated Airspace BDRY)	025341N 1033836E			FL 460 7500 FT ALT	8000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(2)</sup>
▲ BIKTA	024337N 1034308E			FL 460 7500 FT ALT	8000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(2)</sup>
▲ MERSING DVOR/ DME (VMR)	022318N 1035218E			FL 460 3000 FT ALT	4000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(2)</sup>
△ 30DME PU	015520N 1035405E			FL 460 2000 FT ALT	4000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(2)</sup>
△ AKOMA	014522N 1035443E			FL 460 2000 FT ALT	4000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(2)(3)</sup>
△ 10DME PU	013523N 1035522E			FL 460 GND	4000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(3)</sup>
▲ PAPA UNIFORM DVOR/DME (PU)	012524N 1035600E			FL 460 3000 FT ALT	4000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(3)</sup>
▲ SINJON DVOR/DME (SJ)	011321N 1035115E			FL 460 2000 FT ALT	4000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(3)</sup>
▲ ATLIR (WSJC/WIIF FIR BDRY) (Delegated Airspace BDRY)	011120N 1035208E			FL 600 2000 FT ALT	4000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(3)</sup>
▲ OMDUD	005847N 1035714E								

Route Designator {RNP Type}		[Route Usage Notes]								Remarks
Significant Point Name	Significant Point Coordinates			Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels		Controlling unit Frequency {Airspace class} Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	(COP)				↓	↑		
1	2	3	4	5	6	7	8	9	10	
	158° 338°	14.5NM		FL 600 2000 FT ALT	4000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(3)</sup>	
▲	BAVAL	004518N 1040242E								
	156° 336°	27.0NM		FL 600 2000 FT ALT	5000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(3)</sup>	
▲	POSOG	002024N 1041323E								
	156° 336°	53.5NM		FL 600 2000 FT ALT	4000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(3)</sup>	
▲	ENPUX	002859S 1043434E								
<p><u>Route remarks:</u> Flight Planning Instructions: Flights overflying Singapore FIR to destinations in Jakarta FIR and beyond to flight plan via B470 ANITO.</p> <p><u>Point/Segment Remarks:</u> (2) Segment from VPK to AKOMA use: P133.8MHz S127.3MHz (3) Segment from AKOMA to ENPUX use: P134.4MHz S128.1MHz</p>										

Route Designator {RNP Type}		[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates							Remarks		
{RNP Type}	Track MAG ↓ ↑	Dist NM	(COP)	Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels ↓   ↑		Controlling unit Frequency {Airspace class} Remarks	
1	2	3	4	5	6	7	8	9	10	
<b>B470</b>		Route availability: (1) H24								
▲ SINJON DVOR/DME (SJ)	011321N 1035115E									
	145° -	2.2NM		FL 460 2000 FT ALT	3000 FT	10	Odd <sup>(1)</sup>		[Class A - ABV FL150] [Class B - BLW FL150]	
▲ VEPGA (WSJC/WIIF FIR BDRY) (Delegated airspace BDRY)	011131N 1035232E									
	146° -	16.0NM		FL 600 2000 FT ALT	3000 FT	10	Odd <sup>(1)</sup>		[Class A - ABV FL150] [Class B - BLW FL150]	
▲ IRPUG	005813N 1040127E									
	146° -	11.9NM		FL 600 2000 FT ALT	3000 FT	10	Odd <sup>(1)</sup>		[Class A - ABV FL150] [Class B - BLW FL150]	
▲ UDONI	004818N 1040806E									
	146° -	78.5NM		FL 600 2000 FT ALT	5000 FT	10	Odd <sup>(1)</sup>		[Class A - ABV FL150] [Class B - BLW FL150]	
▲ ANITO	001700S 1045200E									
<p><u>Route remarks:</u> Unidirectional route (southbound) for flights from Singapore FIR to Jakarta FIR and beyond. For flights to these destination aerodromes: WICC, WIHH, WIIL, WAHH, WAHS - FL300, FL320, FL340, FL360, FL380 and FL400 are available. Flight Planning Instructions: All departures from WIDD and WIDN to WIKK, WIIL, WIHH, WICA, WAHH, WAHI to flight plan via KIRDA W26 PKP B470 or ANITO B470. Singapore ACC FREQ: P134.4MHz S128.1MHz Flights above FL370 from VEPGA to ANITO, see AIP Indonesia ENR 2.1.</p> <p><u>Point/Segment Remarks:</u> -</p>										

Route Designator {RNP Type}		[Route Usage Notes]								Remarks
Significant Point Name		Significant Point Coordinates							Controlling unit Frequency {Airspace class} Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	(COP)	Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels ↓      ↑			
1	2	3	4	5	6	7	8	9	10	
<b>G219</b>		Route availability: (1) H24								
▲	NIVAM	023650N 1040228E								
		180° 000°	41.7NM		FL 460 10500 FT ALT	11000 FT		Even <sup>(1)</sup>	Odd <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(2)</sup>
△	30VTK (30 DME VTK)	015454N 1040159E								
		181° 001°	29.8NM		FL 460 3000 FT ALT	4000 FT		Even <sup>(1)</sup>	Odd <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(2)</sup>
▲	TEKONG DVOR/DME (VTK)	012455N 1040120E								<sup>(3)</sup>
<p><u>Route remarks:</u> Singapore ACC FREQ: P123.7 MHz, S127.3 MHz</p> <p><u>Point/Segment Remarks:</u> (2) Lateral Limits: The eastern and western airway sectors are enclosed by a line joining 023705N 1041200E 015610N 1041200E 015100N 1041442E 012454N 1041442E 012454N 1035620E 023705N 1035729E 023705N 1041200E. (3) Singapore/Kuala Lumpur FIR boundary approximately 1.2NM north of VTK.</p>										

Route Designator {RNP Type}		[Route Usage Notes]									
Significant Point Name		Significant Point Coordinates							Remarks		
{RNP Type}		Track MAG	Dist NM	(COP)	Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels		Controlling unit Frequency {Airspace class} Remarks	
		↓ ↑						↓	↑		
1		2	3	4	5	6	7	8	9	10	
<b>G334</b>		Route availability: (1) H24									
△	IDEMO	025431N 1040603E									
		095° 275°	22.4NM		FL 285 FL 240	FL 250	20	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A]	
▲	KIBOL (WMFC/WSJC FIR BDRY)	025224N 1042818E									
		097° 277°	42.5NM		FL 285 FL 240	FL 250	20	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A]	
▲	EMSUX (WSJC/WIIF FIR BDRY) (Delegated Airspace BDRY)	024647N 1051026E									
		095° 275°	33.7NM		FL 285 FL 240	FL 250	20	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150]	
▲	IRSAB (Delegated Airspace BDRY)	024349N 1054359E									
<p><u>Route remarks:</u>            10 min longitudinal separation between RNAV-equipped aircraft applying Mach Number Technique.            15 min longitudinal separation between other aircraft.            Singapore ACC FREQ:            P134.7MHz S134.15MHz            Flight Planning Instructions:            Non-PBN and Non-RVSM equipped aircraft on ATS route G334:            1. To destinations other than WMKK to flight plan via G334-KIBOL-VPK.            Alternative route to G334 for non-PBN equipped aircraft to destinations within WMFC may flight plan via G580-HOSBA-VJB-A457.            2. For departure from WMFC to flight plan via VPK-KIBOL-G334.            Alternative route to G334 for non-PBN equipped aircraft for departure from WMFC may flight plan via A464-TOPOR-W534-VJB-HOSBA-G580.</p>											
<p><u>Point/Segment Remarks:</u>            -</p>											

Route Designator {RNP Type}		[Route Usage Notes]								Remarks
Significant Point Name		Significant Point Coordinates							Controlling unit Frequency {Airspace class} Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	(COP)	Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels ↓      ↑			
1	2	3	4	5	6	7	8	9	10	
<b>G579</b>		Route availability: (1) H24								
▲	JOHOR BAHRU DVOR/DME (VJB)	013950N 1033939E								
		162° 342°	10.3NM		FL 460 6500 FT ALT	7000 FT	3	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(2)</sup>
▲	GUMPU	013000N 1034243E								
		152° 332°	4.1NM		FL 460 2000 FT ALT	7000 FT	3	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(2)(3)</sup>
△	LAPOL	012622N 1034435E								
		153° 333°	6.1NM		FL 460 2000 FT ALT	11000 FT	3	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(2)</sup>
△	LEGOL	012053N 1034723E								
		152° 332°	8.4NM		FL 460 2000 FT ALT	3000 FT	3	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(2)</sup>
▲	SINJON DVOR/DME (SJ)	011321N 1035115E								
		- 346°	2.2NM		FL 460 2000 FT ALT	4000 FT	10		Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(2)(4)</sup>
▲	OLNUB (WSJC/WIIF FIR BDRY) (Delegated airspace BDRY)	011110N 1035147E								
		- 348°	12.2NM		FL 600 2000 FT ALT	4000 FT	10		Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(4)</sup>
▲	EMSIB	005911N 1035419E								
		- 348°	15.8NM		FL 600 2000 FT ALT	5000 FT	10		Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(4)</sup>
▲	REMES	004342N 1035735E								
		- 349°	10.0NM		FL 600 2000 FT ALT	5000 FT	10		Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(4)</sup>
▲	UXATI	003348N 1035933E								
		- 349°	17.7NM		FL 600 2000 FT ALT	5000 FT	10		Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(4)</sup>
▲	REPOV	001623N 1040300E								
		- 348°	51.1NM		FL 600 2000 FT	5000 FT	10		Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] <sup>(4)</sup>
▲	PARDI	003400S 1041300E								

Route Designator {RNP Type}		[Route Usage Notes]							
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓ ↑	Dist NM	(COP)	Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels ↓      ↑		Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7	8	9	10

Route remarks:

Unidirectional route (Northbound) for flights from Jakarta FIR to Singapore FIR and beyond. FL310, FL330, FL350, FL370, FL390, FL410 can be assigned as flight levels for inbounds to Singapore.

Flight Planning Instructions for Direct Routing Operations (DRO):

All aircraft operating at FL290 to FL600 (both inclusive) via PARDI should flight plan using the direct route PARDI DCT PU.

Singapore ACC FREQ:

P134.4MHz S128.1MHz

Flights above FL370 from PARDI to OLNUB, see AIP Indonesia ENR2.1

Point/Segment Remarks:

(2) Bidirectional route between SJ and VJB.

(3) Kuala Lumpur/Singapore FIR boundary is approximately 2NM south of GUMPU.

(4) Unidirectional route from PARDI to SJ.

Route Designator {RNP Type}		[Route Usage Notes]								Remarks
Significant Point Name		Significant Point Coordinates							Controlling unit Frequency {Airspace class} Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	(COP)	Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels ↓      ↑			10
1	2	3	4	5	6	7	8	9		
<b>G580</b>		Route availability: (1) H24								
▲	SINJON DVOR/DME (SJ)	011321N 1035115E								
		079° 259°	33.7NM		FL 460 2000 FT ALT	3000 FT	10	Odd <sup>(1)</sup> Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]	
▲	HOSBA	011948N 1042417E								
		088° 268°	6.5NM		FL 460 6500 FT ALT	7000 FT	10	Odd <sup>(1)</sup> Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]	
▲	DOWON (WSJC/WIIF FIR BDRY)	011957N 1043048E								
		088° 268°	76.6NM		FL 600 6500 FT ALT	7000 FT	10	Odd <sup>(1)</sup> Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]	
▲	TOMAN	012147N 1054717E								
		088° 268°	26.8NM		FL 600 6500 FT ALT	7000 FT	10	Odd <sup>(1)</sup> Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]	
▲	DODSO (Delegated Airspace BDRY)	012225N 1061402E								
<p><u>Route remarks:</u> Singapore ACC FREQ: P134.2MHz S133.35MHz Flights above FL370 between DOWON and DODSO, see AIP Indonesia ENR2.1.</p> <p><u>Point/Segment Remarks:</u> -</p>										

Route Designator {RNP Type}		[Route Usage Notes]							
Significant Point Name	Significant Point Coordinates							Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	(COP)	Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels ↓      ↑		Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7	8	9	10
<b>R208</b>	Route availability: (1) H24								
▲ IGARI	065612N 1033506E								
	$\frac{197^\circ}{017^\circ}$	73.9NM		$\frac{FL 460}{FL 240}$	FL 250	20	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A]
▲ IKUKO (FIR BDRY)	054512N 1031324E								
<p><u>Route remarks:</u> Portion of R208 within the Singapore FIR to be released to Lumpur ACC daily subject to coordination BTN Singapore ACC and Lumpur ACC. 15 min longitudinal separation. Singapore ACC FREQ: P127.3MHz, S123.7MHz Lumpur ACC FREQ: P132.6MHz</p> <p><u>Point/Segment Remarks:</u> -</p>									

Route Designator {RNP Type}		[Route Usage Notes]								Remarks
Significant Point Name		Significant Point Coordinates			Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels		
{RNP Type}		Track MAG	Dist NM	(COP)				↓	↑	
1	2	3	4	5	6	7	8	9	10	
<b>R469</b>		Route availability: (1) H24								
▲	TAROS	004200N 1021612E								
		$\frac{072^\circ}{252^\circ}$	56.6NM		$\frac{FL\ 600}{9500\ FT\ ALT}$	10000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]
▲	ASUNA	005948N 1030954E								
		$\frac{082^\circ}{262^\circ}$	20.2NM		$\frac{FL\ 600}{5500\ FT\ ALT}$	6000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]
▲	BOBAG	010230N 1032954E								
		$\frac{082^\circ}{262^\circ}$	23.2NM		$\frac{FL\ 600}{5500\ FT\ ALT}$	6000 FT	10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]
▲	SAMKO	010530N 1035255E								
<u>Route remarks:</u> Singapore ACC FREQ: P133.25MHz S135.8MHz Flights above FL370 between TAROS and SAMKO, see AIP Indonesia ENR2.1.										
<u>Point/Segment Remarks:</u> -										

Route Designator {RNP Type}		[Route Usage Notes]								
Significant Point Name		Significant Point Coordinates							Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	(COP)	Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels		Controlling unit Frequency {Airspace class} Remarks	
							↓	↑		
1	2	3	4	5	6	7	8	9	10	
<b>W22</b>		Route availability: (1) H24								
▲	TUSNU	003403N 1022109E								
		081° 261°	131.5NM		FL 600 6000 FT ALT		10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]
▲	TANJUNGPINANG VOR/DME (TPG)	005413N 1043052E								
<u>Route remarks:</u> Singapore ACC FREQ: P133.25MHz S135.8MHz Flights above FL370 between TUSNU and TPG VOR/DME, see AIP Indonesia ENR 2.1.										
<u>Point/Segment Remarks:</u> -										

Route Designator {RNP Type}		[Route Usage Notes]								Remarks
Significant Point Name		Significant Point Coordinates							Controlling unit Frequency {Airspace class} Remarks	
{RNP Type}		Track MAG ↓ ↑	Dist NM	(COP)	Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels ↓      ↑		
1		2	3	4	5	6	7	8	9	10
<b>W24</b>		Route availability: (1) H24								
▲	ENPUX	002859S 1043434E								
		357° 177°	82.9NM		FL 600 6000 FT ALT		10	Even <sup>(1)</sup>	Odd <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]
▲	TANJUNGPINANG VOR/DME (TPG)	005413N 1043052E								
<p><u>Route remarks:</u> Singapore ACC FREQ: P134.4MHz S128.1MHz Flight Planning Instructions: All departures from WIDD and WIDN to WIPP to flight plan via ENPUX W24 NIPES PLB. All departures from WIDD and WIDN to WILL to flight plan via ENPUX W24 PLB W21 TERKA. All departures from WIDD and WIDN to WIJJ to flight plan via ENPUX W24 NIPES JMB. Flights above FL370 between ENPUX and TPG VOR/DME, see AIP Indonesia ENR 2.1.</p> <p><u>Point/Segment Remarks:</u> -</p>										

Route Designator {RNP Type}		[Route Usage Notes]							
Significant Point Name	Significant Point Coordinates							Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	(COP)	Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels ↓      ↑		Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7	8	9	10
<b>W26</b>		Route availability: (1) H24							
▲ TANJUNGPINANG VOR/DME (TPG)	005413N 1043052E								
	152° 332°	61.0NM		FL 600 6000 FT ALT		10	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]
▲ KIRDA	000009N 1045934E								
<u>Route remarks:</u> Singapore ACC FREQ: P134.4MHz S128.1MHz Flight Planning Instructions: All departures from WIDD and WIDN to WIKK to flight plan via KIRDA W26 PKP. All departures from WIDD and WIDN to WIII, WIHH, WICA, WAHH, WAHI to flight plan via KIRDA W26 PKP B470. Flights above FL370 between TPG VOR/DME and KIRDA, see AIP Indonesia ENR 2.1.									
<u>Point/Segment Remarks:</u> -									

Route Designator {RNP Type}		[Route Usage Notes]								Remarks
Significant Point Name		Significant Point Coordinates							Controlling unit Frequency {Airspace class} Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	(COP)	Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels ↓      ↑			10
1	2	3	4	5	6	7	8	9		
<b>W401</b>		Route availability: (1) H24								
▲	HOSBA (R079/34 DME SJ) (R103/24 DME VTK)	011948N 1042417E								
		294° 114°	27.6NM		FL 245 2000 FT ALT	7000 FT	5	Even <sup>(1)</sup> Odd <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]	
▲	OMKOM	013112N 1035910E								
		266° 086°	9.5NM		FL 245 2000 FT ALT	3000 FT	3	Even <sup>(1)</sup> Odd <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]	
△	ALFA	013033N 1034942E								
		265° 085°	7.0NM		FL 245 3000 FT ALT	6000 FT	3	Even <sup>(1)</sup> Odd <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]	
▲	GUMPU	013000N 1034243E								
		262° 082°	18.1NM		FL 245 3000 FT ALT	6000 FT	3	Even <sup>(1)</sup> Odd <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]	
△	LELIB	012729N 1032450E								
		262° 082°	4.8NM		FL 245 3000 FT ALT	6000 FT	3	Even <sup>(1)</sup> Odd <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]	
△	PIMOK	012648N 1032008E								
<p><u>Route remarks:</u> Controlling Authority: Singapore ACC Airspace below airway controlled by Johor Approach.</p> <p><u>Point/Segment Remarks:</u> -</p>										

Route Designator {RNP Type}		[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates							Remarks		
{RNP Type}	Track MAG ↓ ↑	Dist NM	(COP)	Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels ↓      ↑		Controlling unit Frequency {Airspace class} Remarks	
1	2	3	4	5	6	7	8	9	10	
<b>W407</b>		Route availability: (1) H24								
▲ TEKONG DVOR/DME (VTK)	012455N 1040120E									
	203° 023°	12.7NM		FL 250 3000 FT ALT	4000 FT	3	Even <sup>(1)</sup>	Odd <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]	
▲ SAPEX (WSJC/WIIF FIR BDRY) (Delegated Airspace BDRY)	011316N 1035617E									
	203° 023°	8.4NM		FL 250 3000 FT ALT	4000 FT	3	Even <sup>(1)</sup>	Odd <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150] [Class C]	
▲ SAMKO	010530N 1035255E									
<u>Route remarks:</u> Singapore APP FREQ: P124.6MHz S132.15MHz  <u>Point/Segment Remarks:</u> -										

Route Designator {RNP Type}		[Route Usage Notes]								Remarks
Significant Point Name	Significant Point Coordinates			Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels			
{RNP Type}	Track MAG ↓ ↑	Dist NM	(COP)				↓	↑	Controlling unit Frequency {Airspace class} Remarks	
1	2	3	4	5	6	7	8	9	10	
<b>W534</b>		Route availability: (1) H24								
△	TOPOR	014412N 1025330E								
		275° 095°	46.5NM		FL 460 4500 FT ALT	5000 FT	8	Odd <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]	
▲	JOHOR BAHRU DVOR/DME (VJB)	013950N 1033939E								
<u>Route remarks:</u> -										
<u>Point/Segment Remarks:</u> -										

Route Designator {RNP Type}		[Route Usage Notes]								
Significant Point Name		Significant Point Coordinates							Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	(COP)	Upper limit Lower limit	MNM FLT ALT	Lateral limits NM	Direction of cruising levels ↓      ↑		Controlling unit Frequency {Airspace class} Remarks	
1	2	3	4	5	6	7	8	9	10	
<b>W651</b>		Route availability: (1) H24								
▲	JOHOR BAHRU DVOR/DME (VJB)	013950N 1033939E								
		114° 294°	21.3NM		FL 200 2500 FT ALT	3000 FT	3	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	[Class A - ABV FL150] [Class B - BLW FL150]
▲	OMKOM	013112N 1035910E								
<u>Route remarks:</u> -										
<u>Point/Segment Remarks:</u> -										