

### ENR 3.3 AREA NAVIGATION (RNAV) ROUTES

Route designator (RNP/RNAV <sup>1</sup> ) Name of significant points Coordinates	Track DEG MAG	Geodesic DIST NM	Upper Limit Lower Limit  Airspace classification	Direction of cruising levels		Remarks Controlling unit Frequency
				Odd	Even	
1	2	3	4	5		6
<b>UL307</b> <b>(RNAV 5)<sup>2,3</sup></b>  <b>▲ AVOGU</b> 200107.67S 021000.88E  <b>▲ EVESO</b> 181700.72S 0192801.37E  <b>▲ ABAPU</b> 174938.36S 0190201.59E						For continuation see AIP Botswana  Bidirectional  ACC Windhoek 124.7 MHZ
	329° 148°	135.7	FL460 FL245  Class A	↓	↑	
	326° 145°	37.0				
1. RNP = Required Navigation Performance; RNAV = area navigation specification 2. RNAV 5 represents aircraft and operating requirements, including a 5NM lateral performance as detailed in the <i>Performance Based Navigation (PBN) Manual</i> (Doc 9613) 3. GNSS Required 4. Except in an emergency or due to weather, when flight plan on RNAV 5 route within FYWH FIR, request for direct track not permitted. When deviating for weather, aircraft can expect clearance direct to next en-route waypoint once clear of weather.						

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<b>UL316</b> <b>(RNAV 5)<sup>2,3</sup></b>  <b>▲ UTANI</b> 271346.73S0210034.80E  <b>▲ IBTOP</b> 270522.14S0202349.99E  <b>▲ KTV</b> 263214.69S 0180649.09E  <b>▲ ETBIR</b> 262256.93S0173845.31E  <b>▲ UTVUM</b> 253944.37S0153204.15E  <b>▲ DULGO</b> 250000.00S0135908.00E						For continuation see AIP Botswana
	<u>302°</u> 122°	33.9	<u>FL460</u> FL245			Bidirectional
	<u>302°</u> 123°	127.4	Class A	↑	↓	ACC Windhoek 124.7 MHZ
	<u>307°</u> 127°	26.9				
	<u>307°</u> 127°	122.4				
	<u>311°</u> 131°	93.4				For continuation see AIP South Africa

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<b>UN559</b> <b>(RNAV 5)<sup>2,3</sup></b>  <b>▲ APDOV</b> 244218.80S0195959.18E  <b>▲ OKLAV</b> 243535.91S0184824.59E  <b>▲ DUTPU</b> 242936.04S0174805.10E  <b>▲ EPSAG</b> 242639.91S0172001.25E  <b>▲ UNPIN</b> 241054.35S0150229.10E  <b>▲ ANTEP</b> 240000.00S0133604.00E						For continuation see AIP South Africa  Bidirectional  ACC Windhoek 124.7 MHz  For continuation see AIP South Africa
	<u>290°</u> 111°	65.7	<u>FL460</u> <u>FL245</u>	↑	↓	
	<u>291°</u> 111°	55.5	Class A			
	<u>291°</u> 111°	25.8				
	<u>291°</u> 112°	127.0				
	<u>292°</u> 113°	80.1				
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<b>UP301</b> <b>(RNAV 5)<sup>2,3</sup></b> <b>▲ WHV</b> 222838.52S 0172814.07E <b>△ EGMAS</b> 225947.23S0181007.55E <b>▲ USUNO</b> 232906.00S0200000.00E	   142°   119°	   49.6   105.7	   <u>FL460</u> FL245   Class A	   ↓	      Unidirectional East bound   Windhoek ACC 124.7 MHz   For continuation see AIP Botswana	
<ol style="list-style-type: none"> <li>1. RNP = Required Navigation Performance; RNAV = area navigation specification</li> <li>2. RNAV 5 represents aircraft and operating requirements, including a 5NM lateral performance as detailed in the <i>Performance Based Navigation (PBN) Manual</i> (Doc 9613)</li> <li>3. GNSS Required</li> <li>4. Except in an emergency or due to weather, when flight plan on RNAV 5 route within FYWH FIR, request for direct track not permitted. When deviating for weather, aircraft can expect clearance direct to next en-route waypoint once clear of weather.</li> <li>5. Aircraft planning FYWH to FBSK FL245 to FL460 must plan the following route: FYWH DCT EGMAS UP301 GENU DCT ETBED DCT GBV DCT FBSK</li> </ol>						

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<b>UZ445</b> <b>(RNAV 5)<sup>2,3</sup></b>  <b>▲ FYWE</b> 223627.00S 0170445.00E  <b>▲ IMGON</b> 214530.00S 0182348.00E  <b>▲ APRET</b> 205342.00S 0194212.00E  <b>▲ AVOGU</b> 200107.67S 0210000.88E  <b>▲ GENIX</b> 181224.00S 0232542.00E  <b>▲ IMDIP</b> 175400.00S 0234942.00E  <b>▲ FYKM</b> 173803.01S 0241035.99E						Bidirectional          ACC Windhoek 124.7 MHZ          For continuation see AIP Botswana	
		068° 246°	89.7	<u>FL460</u> <u>FL245</u> Class A	↓      ↑		
		066° 245°	90				
		064° 243°	90.9				
		062° 239°	175.8				
		059° 238°	29.5				
	059° 238°	25.6					
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<b>UZ438</b> <b>(RNAV 5)<sup>2,3</sup></b>  <b>▲ KTV</b> 263214.69S 0180649.09E  <b>▲ APGAS</b> 263300.90S0155000.70E  <b>▲ NIGAM</b> 263356.20S0143710.00E	<u>286°</u> 107°	123.0	<u>FL460</u> <u>FL245</u>  Class A	↑	↓	Bidirectional  ACC Windhoek 124.7 MHZ  For continuation see AIP South Africa
		<u>286°</u> 106°				
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