

## ENR-3.2.4 "P" ROUTES

## 1. NAVIGATION SPECIFICATION

RNAV routes in Republic of Kazakhstan require RNAV 5 capability. Supported sensors are VOR/DME, INS/IRS, GNSS or their combination.

Route designator		[Route Usage Notes]					
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks	
				↓	↑		
P178 (RNAV 5)							
▲ OGRIP		405454N 0680500E  SMK 209.0° 106.6 NM (1400 FT)					Before, see AIP Uzbekistan
	044° 224°	42.9 NM	FL 510 FL 70	Odd	Even	TASHKENT ACC {C}	
▲ DODUR (FIR BDRY)		412300N 0684800E  SMK 200.0° 65.9 NM (1400 FT)					
	023° 203°	27.4 NM	FL 510 FL 70	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}	
△ REBDA		414708N 0690515E  SMK 198.0° 38.6 NM (1400 FT)					
	023° 203°	11.3 NM	FL 510 FL 70	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}	
▲ DOSOR		415702N 0691225E  SMK 196.0° 27.4 NM (1400 FT)					
	023° 203°	6.3 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}	
△ BOMKA		420232N 0691624E  SMK 195.0° 21.2 NM (1400 FT)					
	015° 195°	21.2 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}	
▲ SHYMKENT DVOR/DME (SMK)		422220N 0692631E					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	316° 135°	30.0 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
△ RUSEK	424549N 0690116E <b>SMK</b> <b>316.0° 30.0 NM</b> <b>(1400 FT)</b>					
	312° 132°	10.5 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ MAGOL	425338N 0685144E <b>TRK</b> <b>148.0° 28.7 NM</b> <b>(1000 FT)</b>					
	328° 148°	28.7 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ TURKISTAN DVOR/DME (TRK)	431932N 0683446E					
	323° 142°	21.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ GOBOR	433811N 0681918E <b>TRK</b> <b>323.0° 21.8 NM</b> <b>(1000 FT)</b>					
	348° 168°	30.5 NM	FL 510 9000 FT ALT	Even	Odd	SHYMKENT ACC 127.3 MHZ TURKISTAN TOWER 131.3 MHZ {C}
△ TIMKA	440832N 0681511E <b>TRK</b> <b>337.0° 51.0 NM</b> <b>(1000 FT)</b>					
	002° 181°	96.9 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ ADONU (FIR BDRY)	454418N 0683532E <b>DZG</b> <b>155.0° 123.9 NM</b> <b>(1300 FT)</b>					
	001° 180°	215.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}

Route designator	[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓   ↑	Controlling unit {Airspace class} Remarks
▲ AMIGU	491645N 0692517E <b>ARK</b> <b>114.0° 112.2 NM</b> <b>(1300 FT)</b>				

Route designator	[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓   ↑	Controlling unit {Airspace class} Remarks
<b>P179</b> (RNAV 5)					
▲ LAGMO (FIR BDRY)	514954N 0791500E <b>PVL</b> <b>098.0° 83.0 NM</b> <b>(500 FT)</b>				<b>Before, see AIP Russia</b>
	278° 096°	40.4 NM	FL 510 FL 120	Even   Odd	ASTANA ACC 132.8 MHZ {C}
△ DOSAK	520044N 0781212E <b>PVL</b> <b>097.0° 42.7 NM</b> <b>(500 FT)</b>				
	278° 097°	42.7 NM	FL 510 FL 120	Even   Odd	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
▲ PAVLODAR DVOR/DME (PVL)	521235N 0770542E				
	288° 106°	75.8 NM	FL 510 FL 120	Even   Odd	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
△ ADASA	524618N 0751436E <b>PVL</b> <b>287.0° 75.8 NM</b> <b>(500 FT)</b>				
	287° 105°	41.6 NM	FL 510 FL 120	Even   Odd	ASTANA ACC 132.8 MHZ {C}
△ OLKUM	530441N 0741300E <b>PVL</b> <b>288.0° 117.3 NM</b> <b>(500 FT)</b>				
	285° 104°	55.1 NM	FL 510 FL 120	Even   Odd	ASTANA ACC 132.8 MHZ {C}

Route designator		[Route Usage Notes]						
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks		
				↓	↑			
△ LEPRA	532811N 0725005E <b>KTU</b> <b>074.0° 115.7 NM</b> <b>(900 FT)</b>							
	284° 103°	23.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}		
▲ POBUR	533800N 0721400E <b>KTU</b> <b>069.0° 95.3 NM</b> <b>(900 FT)</b>							
	292° 111°	30.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}		
△ PETOR	535420N 0713136E <b>KTU</b> <b>053.0° 75.9 NM</b> <b>(900 FT)</b>							
	292° 111°	32.6 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}		
△ BEDMU	541215N 0704523E <b>PSK</b> <b>111.0° 64.1 NM</b> <b>(500 FT)</b>							
	292° 110°	64.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PETROPAVLOVSK TOWER 123.7 MHZ {C}		
▲ PETROPAVLOV SK DVOR/DME (PSK)	544703N 0691309E							
	277° 096°	37.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PETROPAVLOVSK TOWER 123.7 MHZ {C}		
▲ IKANA (FIR BDRY)	545924N 0681200E <b>PSK</b> <b>276.0° 37.4 NM</b> <b>(500 FT)</b>					<b>For continuation, see AIP Russia</b>		

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
P180 (RNAV 5)						

Route designator		[Route Usage Notes]					
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks	
				↓	↑		
▲ ABEVO	405000N 0683442E <b>SMK</b> <b>197.0° 100.1 NM</b> <b>(1400 FT)</b>					<b>Before, see AIP Uzbekistan</b>	
	277° 097°	23.1 NM	FL 510 FL 70	Even	Odd	TASHKENT ACC {C}	
▲ OGRIP	405454N 0680500E <b>SMK</b> <b>209.0° 106.6 NM</b> <b>(1400 FT)</b>						

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
P180 (RNAV 5)						
▲ BUGEB	410824N 0670836E <b>SMK</b> <b>228.0° 126.9 NM</b> <b>(1400 FT)</b>					
	283° 102°	22.4 NM	FL 510 FL 70	Even	Odd	TASHKENT ACC {C}
▲ MOMUL	411524N 0664024E <b>SMK</b> <b>235.0° 141.1 NM</b> <b>(1400 FT)</b>					<b>For continuation, see AIP Uzbekistan</b>

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
P184 (RNAV 5)						

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓      ↑		Controlling unit {Airspace class} Remarks
▲ MIMRI	433808N 0634822E <b>KZO</b> <b>222.0° 99.0 NM</b> <b>(500 FT)</b>					
	043° 223°	57.3 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ DILNA	441450N 0644911E <b>KZO</b> <b>222.0° 41.8 NM</b> <b>(500 FT)</b>					
	043° 223°	41.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
▲ KYZYLORDA DVOR/DME (KZO)	444145N 0653349E					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
<b>P574</b> (RNAV 5)						
▲ RUTIL (FIR BDRY)	421053N 0510433E <b>AKT</b> <b>172.0° 101.4 NM</b> <b>(100 FT)</b>					<b>Before, see AIP Azerbaijan</b>
	354° 174°	39.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}
▲ AKUKU	425036N 0510509E <b>AKT</b> <b>171.0° 61.7 NM</b> <b>(100 FT)</b>					
	352° 172°	61.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ AKTAU DVOR/ DME (AKT)	435220N 0510352E					
	050° 230°	55.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}

Route designator		[Route Usage Notes]					
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit	FL series		Controlling unit {Airspace class} Remarks	
			Lower limit	↓	↑		
▲ RIBMO	442238N 0520908E <b>AKT</b> <b>050.0° 55.9 NM</b> <b>(100 FT)</b>						
	048° 229°	49.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}	
△ ALOTO	445010N 0530653E <b>BNU</b> <b>241.0° 90.5 NM</b> <b>(0 FT)</b>						
	049° 229°	41.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}	
△ UTORI	451248N 0535555E <b>BNU</b> <b>253.0° 51.0 NM</b> <b>(0 FT)</b>						
	049° 230°	36.3 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}	
△ AGNIM	453221N 0543918E <b>BNU</b> <b>293.0° 23.1 NM</b> <b>(0 FT)</b>						
	050° 231°	108.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}	
▲ OGANU	462857N 0565153E <b>BNU</b> <b>039.0° 100.2 NM</b> <b>(0 FT)</b>						
	050° 232°	153.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ {C}	
△ ARSAN	474436N 0600738E <b>ARL</b> <b>303.0° 82.1 NM</b> <b>(300 FT)</b>						
	053° 234°	115.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ {C}	
▲ GEDSA (FIR BDRY)	483738N 0624054E <b>ARL</b> <b>013.0° 116.4 NM</b> <b>(300 FT)</b>						
	056° 237°	37.5 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}	
△ GOSPA	485256N 0633233E <b>ARL</b> <b>024.0° 145.9 NM</b> <b>(300 FT)</b>						
	053° 234°	62.5 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}	

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
△ ARBIM	492045N 0645739E <b>ARK</b> <b>223.0° 99.1 NM</b> <b>(1300 FT)</b>					
	056° 237°	58.6 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ SUKUR	494431N 0661957E <b>ARK</b> <b>207.0° 43.7 NM</b> <b>(1300 FT)</b>					
	056° 237°	33.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
▲ EDETO	495808N 0670732E <b>ARK</b> <b>159.0° 21.3 NM</b> <b>(1300 FT)</b>					
	061° 242°	47.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
▲ VAMRI	501330N 0681645E <b>ARK</b> <b>087.0° 48.7 NM</b> <b>(1300 FT)</b>					
	059° 240°	39.6 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
△ ASTIK	502734N 0691434E <b>ARK</b> <b>075.0° 85.7 NM</b> <b>(1300 FT)</b>					
	060° 240°	39.5 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ VETUB	504107N 0701250E <b>AST</b> <b>238.0° 50.1 NM</b> <b>(1200 FT)</b>					
	057° 238°	50.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ ASTANA DVOR/ DME (AST)	510006N 0712600E					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
P984 (RNAV 5)						



Route designator	[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓      ↑	
▲ MAMIR (FIR BDRY)	425438N 0763642E <b>ATA</b> <b>211.8° 34.8 NM</b> <b>(2200 FT)</b>				
	032° 212°	22.0 NM	FL 510 FL 200	Odd	Even
△ LAKEL	431216N 0765439E <b>ATA</b> <b>211.7° 12.8 NM</b> <b>(2200 FT)</b>				ALMATY ACC 131.4 MHZ {C}
	031° 211°	12.8 NM	FL 510 FL 190	Odd	Even
△ IZIMA	432236N 0770503E <b>ATA</b> <b>332.2° 0.1 NM</b> <b>(2200 FT)</b>				ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
	009° 189°	13.5 NM	FL 510 FL 120	Odd	Even
△ PEKIR	433539N 0770931E <b>ATA</b> <b>008.5° 13.5 NM</b> <b>(2200 FT)</b>				
	008° 188°	5.9 NM	FL 510 FL 120	Odd	Even
△ NIGET	434124N 0771126E <b>ATA</b> <b>008.5° 19.5 NM</b> <b>(2200 FT)</b>				
	008° 188°	22.9 NM	FL 510 FL 120	Odd	Even
▲ APSEN	440338N 0771854E <b>ATA</b> <b>008.4° 42.3 NM</b> <b>(2200 FT)</b>				
	008° 188°	22.4 NM	FL 510 FL 120	Odd	Even
△ GOGDO	442524N 0772618E <b>TDK</b> <b>220.0° 59.0 NM</b> <b>(2000 FT)</b>				
	008° 188°	37.9 NM	FL 510 FL 120	Odd	Even
△ FINON	450211N 0773900E <b>TDK</b> <b>258.0° 33.4 NM</b> <b>(2000 FT)</b>				

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	008° 188°	26.5 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ TALDYKORGAN TOWER 127.3 MHZ {C}
▲ KONAT	452754N 0774805E <b>TDK</b> <b>304.0° 34.2 NM</b> <b>(2000 FT)</b>					
	346° 165°	49.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
▲ GENGA	461625N 0773739E <b>TDK</b> <b>328.0° 77.8 NM</b> <b>(2000 FT)</b>					
	353° 173°	29.0 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
▲ RISUL	464525N 0773723E <b>TDK</b> <b>335.0° 104.7 NM</b> <b>(2000 FT)</b>					
	353° 173°	40.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ OBAPI	472530N 0773700E <b>BLH</b> <b>065.0° 112.7 NM</b> <b>(1400 FT)</b>					
	353° 172°	76.8 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ DODEM	484212N 0773614E <b>AGZ</b> <b>285.0° 123.0 NM</b> <b>(2200 FT)</b>					
	351° 171°	36.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ AKASA	491819N 0773455E <b>SEM</b> <b>231.0° 120.9 NM</b> <b>(700 FT)</b>					
	351° 171°	42.0 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ ADETA	500015N 0773321E <b>SEM</b> <b>250.0° 105.7 NM</b> <b>(700 FT)</b>					
	344° 164°	23.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
▲ BALOL (FIR BDRY)	502308N 0772831E <b>SEM</b> <b>263.0° 106.4 NM</b> <b>(700 FT)</b>					

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit	FL series		Controlling unit {Airspace class} Remarks
			Lower limit	↓	↑	
	344° 164°	25.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ DILGI	504833N 0772303E <b>PVL</b> <b>164.0° 84.8 NM</b> <b>(500 FT)</b>					
	344° 164°	22.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ GALKI	511035N 0771814E <b>PVL</b> <b>164.0° 62.6 NM</b> <b>(500 FT)</b>					
	344° 163°	12.6 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ KEKAM	512300N 0771529E <b>PVL</b> <b>164.0° 50.0 NM</b> <b>(500 FT)</b>					
	343° 163°	20.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
△ ABRAS	514331N 0771053E <b>PVL</b> <b>165.0° 29.3 NM</b> <b>(500 FT)</b>					
	345° 165°	29.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
▲ PAVLODAR DVOR/DME (PVL)	521235N 0770542E					
	313° 131°	70.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
△ BAGNU	530720N 0755304E <b>PVL</b> <b>311.0° 70.4 NM</b> <b>(500 FT)</b>					
	311° 130°	53.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ SOMOL (FIR BDRY)	534918N 0745629E <b>PVL</b> <b>311.0° 124.4 NM</b> <b>(500 FT)</b>					<b>For continuation, see AIP Russia and CIS</b>

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