

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 7000 FT ALT	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 7000 FT ALT	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 7000 FT ALT	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 SMK 316.0° 30.0 NM (1400 FT)					
	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 TRK 148.0° 28.7 NM (1000 FT)					
	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 TRK 323.0° 21.8 NM (1000 FT)					
	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 TRK 337.0° 51.0 NM (1000 FT)					
	002° 181°	96.9 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ ADONU (FIR BDRY)	454418N 0683532E DZG 155.0° 123.9 NM (1300 FT)					
	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 ARK 114.0° 112.2 NM (1300 FT)				

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
P179 (RNAV 5)	<small>(1) Before, see AIP Russia (2) For continuation, see AIP Russia</small>				
▲ LAGMO (FIR BDRY)	514954N 0791500E PVL 098.0° 83.0 NM (500 FT)				Before, see AIP Russia
	278° 096°	40.4 NM	FL 510 FL 120	Even Odd	ASTANA ACC 132.8 MHZ {C}
△ DOSAK	520044N 0781212E PVL 097.0° 42.7 NM (500 FT)				
	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 PVL 287.0° 75.8 NM (500 FT)				
	287° 105°	41.6 NM	FL 510 FL 120	Even Odd	ASTANA ACC 132.8 MHZ {C}
△ OLKUM	530441N 0741300E PVL 288.0° 117.3 NM (500 FT)				

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
				↓	↑	
	285° 104°	55.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Pavlodar Tower” on frequencies 5720 kHz or “Kokshetau Tower” on frequencies 4760 kHz and 6528 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ LEPRA	532811N 0725005E KTU 074.0° 115.7 NM (900 FT)					
	284° 103°	23.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ POBUR	533800N 0721400E KTU 069.0° 95.3 NM (900 FT)					
	292° 111°	30.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ PETOR	535420N 0713136E KTU 053.0° 75.9 NM (900 FT)					
	292° 111°	32.6 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ BEDMU	541215N 0704523E PSK 111.0° 64.1 NM (500 FT)					
	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}

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
▲ IKANA (FIR BDRY)	545924N 0681200E PSK 276.0° 37.4 NM (500 FT)				For continuation, see AIP Russia

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)					
▲ ABEVO	405000N 0683442E SMK 197.0° 100.1 NM (1400 FT)				Before, see AIP Uzbekistan
	277° 097°	23.1 NM	FL 510 7000 FT ALT	Even Odd	TASHKENT ACC {C}
▲ OGRIP	405454N 0680500E SMK 209.0° 106.6 NM (1400 FT)				

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 SMK 228.0° 126.9 NM (1400 FT)				
	283° 102°	22.4 NM	FL 510 7000 FT ALT	Even Odd	TASHKENT ACC {C}
▲ MOMUL	411524N 0664024E SMK 235.0° 141.1 NM (1400 FT)				For continuation, see AIP Uzbekistan

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
				↓	↑	

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)						
▲ MIMRI	433808N 0634822E KZO 222.0° 99.0 NM (500 FT)					
	043° 223°	57.3 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ DILNA	441450N 0644911E KZO 222.0° 41.8 NM (500 FT)					
	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
				↓	↑	
P574 (RNAV 5)						
▲ RUTIL (FIR BDRY)		421053N 0510433E AKT 172.0° 101.4 NM (100 FT)				Before, see AIP Azerbaijan
	354° 174°	39.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 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 ↓ ↑	
▲ AKUKU	425036N 0510509E AKT 171.0° 61.7 NM (100 FT)				
	352° 172°	61.7 NM	FL 510 FL 120	Even	Odd
▲ AKTAU DVOR/ DME (AKT)	435220N 0510352E				
	050° 230°	55.9 NM	FL 510 FL 120	Odd	Even
▲ RIBMO	442238N 0520908E AKT 050.0° 55.9 NM (100 FT)				
	048° 229°	49.6 NM	FL 510 FL 120	Odd	Even
△ ALOTO	445010N 0530653E BNU 241.0° 90.5 NM (0 FT)				
	049° 229°	41.5 NM	FL 510 FL 120	Odd	Even
△ UTORI	451248N 0535555E BNU 253.0° 51.0 NM (0 FT)				
	049° 230°	36.3 NM	FL 510 FL 120	Odd	Even
△ AGNIM	453221N 0543918E BNU 293.0° 23.1 NM (0 FT)				
	050° 231°	108.4 NM	FL 510 FL 120	Odd	Even
▲ OGANU	462857N 0565153E BNU 039.0° 100.2 NM (0 FT)				
	050° 232°	153.6 NM	FL 510 FL 120	Odd	Even
△ ARSAN	474436N 0600738E ARL 303.0° 82.1 NM (300 FT)				
	053° 234°	115.5 NM	FL 510 FL 120	Odd	Even

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	
				↓	↑		
▲ GEDSA (FIR BDRY)		483738N 0624054E ARL 013.0° 116.4 NM (300 FT)					
	056° 237°	37.5 NM	<div>FL 510</div> <div>FL 120</div>	Odd	Even	ASTANA ACC 132.5 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Kostanay Sector” on frequencies 4680 kHz and 4815 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}	
△ GOSPA		485256N 0633233E ARL 024.0° 145.9 NM (300 FT)					
	053° 234°	62.5 NM	<div>FL 510</div> <div>FL 120</div>	Odd	Even	ASTANA ACC 132.5 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Kostanay Sector” on frequencies 4680 kHz and 4815 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}	
△ ARBIM		492045N 0645739E ARK 223.0° 99.1 NM (1300 FT)					
	056° 237°	58.6 NM	<div>FL 510</div> <div>FL 120</div>	Odd	Even	ASTANA ACC 132.5 MHZ {C}	
△ SUKUR		494431N 0661957E ARK 207.0° 43.7 NM (1300 FT)					
	056° 237°	33.7 NM	<div>FL 510</div> <div>FL 120</div>	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
				↓	↑	
▲ EDETO		495808N 0670732E				
		ARK 159.0° 21.3 NM (1300 FT)				
	061° 242°	47.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
▲ VAMRI		501330N 0681645E				
		ARK 087.0° 48.7 NM (1300 FT)				
	059° 240°	39.6 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
△ ASTIK		502734N 0691434E				
		ARK 075.0° 85.7 NM (1300 FT)				
	060° 240°	39.5 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ VETUB		504107N 0701250E				
		AST 238.0° 50.1 NM (1200 FT)				
	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
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P984 (RNAV 5)						
▲ MAMIR (FIR BDRY)		425438N 0763642E				
		ATA 211.8° 34.8 NM (2200 FT)				
	032° 212°	22.0 NM	FL 510 FL 200	Odd	Even	ALMATY ACC 131.4 MHZ {C}
△ LAKEL		431216N 0765439E				
		ATA 211.7° 12.8 NM (2200 FT)				
	031° 211°	12.8 NM	FL 510 FL 190	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 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
				↓	↑	
△ IZIMA	432236N 0770503E ATA 332.2° 0.1 NM (2200 FT)					
	009° 189°	13.5 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ PEKIR	433539N 0770931E ATA 008.5° 13.5 NM (2200 FT)					
	008° 188°	5.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ NIGET	434124N 0771126E ATA 008.5° 19.5 NM (2200 FT)					
	008° 188°	22.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
▲ APSEN	440338N 0771854E ATA 008.4° 42.3 NM (2200 FT)					
	008° 188°	22.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ GOGDO	442524N 0772618E TDK 220.0° 59.0 NM (2000 FT)					
	008° 188°	37.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
△ FINON	450211N 0773900E TDK 258.0° 33.4 NM (2000 FT)					
	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 TDK 304.0° 34.2 NM (2000 FT)					
	346° 165°	49.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
▲ GENGA	461625N 0773739E TDK 328.0° 77.8 NM (2000 FT)					

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
				↓	↑	
	353° 173°	29.0 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
▲ RISUL	464525N 0773723E TDK 335.0° 104.7 NM (2000 FT)					
	353° 173°	40.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ OBAPI	472530N 0773700E BLH 065.0° 112.7 NM (1400 FT)					
	353° 172°	76.8 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Semey Tower” on frequencies 6645 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ DODEM	484212N 0773614E AGZ 285.0° 123.0 NM (2200 FT)					
	351° 171°	36.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Semey Tower” on frequencies 6645 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ AKASA	491819N 0773455E SEM 231.0° 120.9 NM (700 FT)					

Route designator		[Route Usage Notes]				
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(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	351° 171°	42.0 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Semey Tower” on frequencies 6645 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ ADETA	500015N 0773321E SEM 250.0° 105.7 NM (700 FT)					
	344° 164°	23.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
▲ BALOL (FIR BDRY)	502308N 0772831E SEM 263.0° 106.4 NM (700 FT)					
	344° 164°	25.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ DILGI	504833N 0772303E PVL 164.0° 84.8 NM (500 FT)					
	344° 164°	22.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ GALKI	511035N 0771814E PVL 164.0° 62.6 NM (500 FT)					
	344° 163°	12.6 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ KEKAM	512300N 0771529E PVL 164.0° 50.0 NM (500 FT)					
	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 PVL 165.0° 29.3 NM (500 FT)					

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 ↓ ↑	
	345° 165°	29.3 NM	FL 510 FL 120	Even	Odd
▲ PAVLODAR DVOR/DME (PVL)	521235N 0770542E				ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
	313° 131°	70.4 NM	FL 510 FL 120	Even	Odd
△ BAGNU	530720N 0755304E PVL 311.0° 70.4 NM (500 FT)				
	311° 130°	53.9 NM	FL 510 FL 120	Even	Odd
▲ SOMOL (FIR BDRY)	534918N 0745629E PVL 311.0° 124.4 NM (500 FT)				For continuation, see AIP Russia and CIS

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