

## ENR-3.2.7 "Z" 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	FL series		Controlling unit {Airspace class} Remarks
			Lower limit	↓	↑	
Z102 (RNAV 5)						
▲ EKTEN (FIR BDRY)	513242N 0523030E URL 046.0° 43.4 NM (200 FT)					
	164° 344°	40.9 NM	FL 510 FL 210	Odd	Even	AKTOBE ACC 131.4 MHZ {C}
△ VEVIK	505201N 0523529E URL 102.0° 43.1 NM (200 FT)					
	172° 352°	112.7 NM	FL 510 FL 210	Odd	Even	AKTOBE ACC 131.4 MHZ {C}
▲ LULKE	485932N 0522700E ATR 004.0° 114.0 NM (0 FT)					
	166° 347°	81.7 NM	FL 510 FL 210	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
▲ UDEBA	473802N 0523443E ATR 038.0° 43.2 NM (0 FT)					
	175° 356°	63.7 NM	FL 510 FL 210	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ RENPI	463437N 0522656E ATR 133.0° 43.2 NM (0 FT)					
	168° 348°	62.4 NM	FL 510 FL 210	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
▲ GARDU	453219N 0523200E ATR 154.0° 101.0 NM (0 FT)					
	174° 355°	110.9 NM	FL 510 FL 210	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ NEPIL	434133N 0522455E AKT 093.0° 59.7 NM (100 FT)					
	206° 026°	108.2 NM	FL 510 FL 220	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 ↓      ↑	Controlling unit {Airspace class} Remarks
▲ RUTIL (FIR BDRY)	421053N 0510433E AKT 172.0° 101.4 NM (100 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
<b>Z160</b> (RNAV 5)					
△ DOTAL	440745N 0780904E TDK 186.0° 59.8 NM (2000 FT)				
	006° 186°	26.8 NM	FL 510 FL 120	Odd      Even	ALMATY ACC 133.1 MHZ {C}
△ NONKE	443400N 0781634E TDK 186.0° 33.0 NM (2000 FT)				
	006° 186°	33.0 NM	FL 510 FL 120	Odd      Even	ALMATY ACC 133.1 MHZ TALDYKORGAN TOWER 127.3 MHZ {C}
▲ TALDYKORGAN DVOR/DME (TDK)	450622N 0782548E				
	304° 123°	34.2 NM	FL 510 FL 120	Even      Odd	ALMATY ACC 133.1 MHZ TALDYKORGAN TOWER 127.3 MHZ {C}
▲ KONAT	452754N 0774805E TDK 304.0° 34.2 NM (2000 FT)				
	301° 120°	25.9 NM	FL 510 FL 120	Even      Odd	ALMATY ACC 133.1 MHZ {C}
△ AKIRA	454323N 0771829E TDK 302.0° 60.2 NM (2000 FT)				
	301° 120°	16.0 NM	FL 510 FL 120	Even      Odd	ALMATY ACC 133.1 MHZ {C}
△ UDEKA	455252N 0770006E TDK 302.0° 76.1 NM (2000 FT)				
	300° 119°	33.5 NM	FL 510 FL 120	Even      Odd	ALMATY ACC 133.1 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
				↓	↑	
▲ EROMI	461234N 0762117E BLH 119.0° 69.7 NM (1400 FT)					
	299° 119°	20.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
△ LASDO	462443N 0755651E BLH 119.0° 48.9 NM (1400 FT)					
	299° 118°	48.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
▲ BALKHASH DVOR/DME (BLH)	465259N 0745902E					
	355° 174°	37.4 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
△ DONUR	473022N 0750038E BLH 355.0° 37.4 NM (1400 FT)					
	355° 174°	55.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
▲ TOKNA (FIR BDRY)	482525N 0750316E BLH 355.0° 92.5 NM (1400 FT)					
	354° 174°	27.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ IRGIT	485220N 0750436E KRG 118.0° 82.9 NM (1800 FT)					
	354° 173°	53.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ EKTAB	494555N 0750718E KRG 078.0° 68.2 NM (1800 FT)					
	354° 173°	37.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ BODNU	502346N 0750918E KRG 050.0° 81.0 NM (1800 FT)					
	353° 173°	6.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 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
				↓	↑	
▲ APTOK	503035N 0750940E KRG 046.0° 84.9 NM (1800 FT)					
	353° 173°	64.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ ABELI	513524N 0751312E PVL 232.0° 79.0 NM (500 FT)					
	290° 106°	137.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ AMOLA	523853N 0715604E KTU 106.0° 94.0 NM (900 FT)					
	286° 105°	51.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ ADLON	530129N 0704047E KTU 105.0° 43.1 NM (900 FT)					
	286° 105°	43.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ KOKSHETAU TOWER 127.9 MHZ {C}
▲ KOKSHETAU VOR/DME (KTU)	532103N 0693701E					

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>Z164</b> (RNAV 5)						
▲ ZHEZKAZGAN DVOR/DME (DZG)	474317N 0674542E					
	297° 116°	43.2 NM	<div>FL 510</div> <div>FL 120</div>	Even	Odd	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
△ BETIK	480807N 0665309E DZG 296.0° 43.2 NM (1300 FT)					
	296° 114°	85.9 NM	<div>FL 510</div> <div>FL 120</div>	Even	Odd	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
△ REGPI	485632N 0650629E ARK 213.0° 111.5 NM (1300 FT)				
	294° 112°	76.1 NM	FL 510 FL 120	Even   Odd	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}
△ TIBDA	493800N 0632900E ARK 242.0° 143.1 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
<b>Z208 (RNAV 5)</b>					
▲ URDZHAR L (UGN)	470534N 0813933E				
	295° 114°	24.6 NM	FL 300 FL 120	Even   Odd	ALMATY ACC 132.1 MHZ URDZHAR VYSHKA 123.0 MHZ {C}
△ NINKO	471748N 0810819E AGZ 137.3° 47.2 NM (2200 FT)				
	013° 193°	17.4 NM	FL 300 FL 120	Odd   Even	ALMATY ACC 132.1 MHZ {C}
▲ TOLKI	473415N 0811640E AGZ 117.0° 39.9 NM (2200 FT)				
	057° 240°	100.3 NM	FL 300 FL 120	Odd   Even	ALMATY ACC 132.1 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
				↓	↑	
△ BONZU	481815N 0833043E UKM 152.5° 111.1 NM (1000 FT)					
	116° 298°	48.9 NM	<div>FL 300</div> <div>FL 120</div>	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ LATRI	475217N 0843229E UKM 141.2° 152.7 NM (1000 FT)					
	144° 324°	27.1 NM	<div>FL 300</div> <div>FL 120</div>	Odd	Even	ALMATY ACC 132.1 MHZ ZAISAN VYSHKA 118.7 MHZ {C}
▲ ZAISAN L (ZSN)	472906N 0845308E					

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
				↓	↑	
Z210 (RNAV 5)						
△ KODUM		475556N 0544537E ATR 061.0° 129.2 NM (0 FT)				
	024° 204°	46.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 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 “Atyrau Tower” on frequencies 4688 kHz and 4830 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}
▲ BILGA		483452N 0552426E AKB 203.0° 122.6 NM (700 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
				↓	↑	
	024° 204°	19.5 NM	<div>FL 510</div> <div>FL 120</div>	Odd	Even	AKTOBE ACC 129.6 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 “Aktobe Tower” on frequencies 4656 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ KURUL	485059N 0554051E AKB 203.0° 103.2 NM (700 FT)					
	024° 204°	63.1 NM	<div>FL 510</div> <div>FL 120</div>	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ BOLGO	494300N 0563525E AKB 204.0° 40.0 NM (700 FT)					
	024° 205°	40.0 NM	<div>FL 510</div> <div>FL 120</div>	Odd	Even	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 128.0 MHZ {C}
▲ AKTOBE DVOR/ DME (AKB)	501548N 0571055E					

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>Z243</b> (RNAV 5)						
▲ BALKHASH DVOR/DME (BLH)	465259N 0745902E					
	066° 246°	44.2 NM	<div>FL 510 FL 120</div>	Odd	Even	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
△ ESADO	470607N 0760037E BLH 066.0° 44.2 NM (1400 FT)					
	066° 247°	44.7 NM	<div>FL 510 FL 120</div>	Odd	Even	ALMATY ACC 125.5 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
				↓	↑	
▲ MADEV	471857N 0770328E BLH 067.0° 88.9 NM (1400 FT)					
	067° 248°	23.7 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ OBAPI	472530N 0773700E BLH 065.0° 112.7 NM (1400 FT)					
	068° 249°	33.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ IBDAS	473412N 0782432E AGZ 248.0° 85.4 NM (2200 FT)					
	068° 250°	85.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ AYAGUZ VOR/ DME (AGZ)	475552N 0802659E					
	137° 318°	47.2 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ NINKO	471748N 0810819E AGZ 137.3° 47.2 NM (2200 FT)					
	114° 295°	24.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ URDZHAR VYSHKA 123.0 MHZ {C}
▲ URDZHAR L (UGN)	470534N 0813933E					

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
				↓	↑	
Z315 (RNAV 5)						
△ IZIMA	432236N 0770503E ATA 332.2° 0.1 NM (2200 FT)					
	051° 231°	22.3 NM	FL 510 FL 120	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
				↓	↑	
△ TIRBA	433456N 0773031E ATA 050.8° 22.3 NM (2200 FT)					
	051° 231°	23.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ BAGNA	434754N 0775719E ATA 050.8° 45.7 NM (2200 FT)					
	086° 266°	7.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ ALUGI	434745N 0780816E ATA 055.7° 52.4 NM (2200 FT)					
	086° 267°	48.7 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
▲ GASBU	434640N 0791528E JRK 223.0° 40.5 NM (2600 FT)					
	116° 297°	28.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
▲ BERTO	433159N 0794824E JRK 184.0° 42.2 NM (2600 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
				↓	↑	
Z370 (RNAV 5)						
△ RISAS		435854N 0715247E TAR 016.0° 71.6 NM (2200 FT)				
	095° 277°	82.9 NM	FL 510 FL 150	Odd	Even	SHYMKENT ACC 132.7 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 ↓      ↑	
▲ TOMGO		434146N 073445E TAR 060.0° 118.9 NM (2200 FT)			
	097° 278°	21.1 NM	FL 510 FL 120	Odd	Even
					SHYMKENT ACC 132.7 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 “Approach” on frequencies 4744 kHz. - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ DEKED (FIR BDRY)		433653N 0741306E ATA 272.4° 126.0 NM (2200 FT)			
	098° 278°	25.9 NM	FL 510 FL 120	Odd	Even
					ALMATY ACC 131.4 MHZ {C}
△ AGLEK		433045N 0744744E ATA 270.4° 100.4 NM (2200 FT)			
	098° 279°	19.1 NM	FL 510 FL 140	Odd	Even
					ALMATY ACC 131.4 MHZ {C}
△ BINRI		432607N 0751309E ATA 268.1° 81.7 NM (2200 FT)			
	099° 279°	14.6 NM	FL 510 FL 150	Odd	Even
					ALMATY ACC 131.4 MHZ {C}
△ EKLAT		432230N 0753237E ATA 265.4° 67.5 NM (2200 FT)			
	084° 265°	67.4 NM	FL 510 FL 120	Odd	Even
					ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ IZIMA		432236N 0770503E ATA 332.2° 0.1 NM (2200 FT)			
	051° 231°	22.3 NM	FL 510 FL 120	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
△ TIRBA	433456N 0773031E ATA 050.8° 22.3 NM (2200 FT)				
	051° 231°	23.4 NM	FL 510 FL 120	Odd      Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ BAGNA	434754N 0775719E ATA 050.8° 45.7 NM (2200 FT)				
	018° 198°	21.6 NM	FL 510 FL 140	Odd      Even	ALMATY ACC 131.4 MHZ {C}
△ DOTAL	440745N 0780904E TDK 186.0° 59.8 NM (2000 FT)				
	028° 209°	52.5 NM	FL 510 FL 160	Odd      Even	ALMATY ACC 133.1 MHZ {C}
△ ATPOR	445123N 0784955E TDK 126.0° 22.8 NM (2000 FT)				
	029° 209°	74.0 NM	FL 510 FL 160	Odd      Even	ALMATY ACC 133.1 MHZ {C}
▲ RIKPI	455225N 0794910E TDK 047.0° 74.6 NM (2000 FT)				
	029° 210°	33.3 NM	FL 510 FL 120	Odd      Even	ALMATY ACC 133.1 MHZ {C}
▲ GIGDA	461942N 0801638E AGZ 178.0° 96.5 NM (2200 FT)				
	030° 210°	21.8 NM	FL 510 FL 150	Odd      Even	ALMATY ACC 132.1 MHZ {C}
△ INLUL	463730N 0803449E AGZ 170.0° 78.6 NM (2200 FT)				
	030° 210°	30.8 NM	FL 510 FL 120	Odd      Even	ALMATY ACC 132.1 MHZ {C}
▲ BURID	470234N 0810051E AGZ 151.0° 58.1 NM (2200 FT)				
	078° 258°	26.6 NM	FL 510 FL 120	Odd      Even	ALMATY ACC 132.1 MHZ URDZHAR VYSHKA 123.0 MHZ {C}
▲ URDZHAR L (UGN)	470534N 0813933E				

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

<b>Z380</b> (RNAV 5)					
▲ SHYMKENT DVOR/DME (SMK)	422220N 0692631E				
	272° 092°	27.3 NM	FL 510 FL 120	Even   Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ ARSUL	422600N 0685000E SMK 271.0° 27.3 NM (1400 FT)				
	309° 129°	27.3 NM	FL 510 FL 120	Even   Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
△ EDIBA	424519N 0682349E TRK 187.0° 35.1 NM (1000 FT)				
	309° 129°	5.8 NM	FL 510 FL 120	Even   Odd	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
△ RELRU	424925N 0681812E TRK 195.0° 32.5 NM (1000 FT)				
	309° 128°	31.6 NM	FL 510 FL 120	Even   Odd	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ KARIM	431136N 0674737E TRK 250.0° 35.4 NM (1000 FT)				
	308° 128°	20.1 NM	FL 510 FL 120	Even   Odd	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 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
				↓	↑	
▲ POBEK		432534N 0672754E TRK 270.0° 49.1 NM (1000 FT)				
	308° 126°	68.2 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ ERMEK		441245N 0661954E KZO 124.0° 43.9 NM (500 FT)				
	305° 124°	43.9 NM	FL 510 FL 120	Even	Odd	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
				↓	↑	
Z553 (RNAV 5)						
▲ KARAGANDA DVOR/DME (KRG)		494114N 0732226E				
	341° 161°	35.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ KARAGANDA TOWER 122.0 MHZ {C}
▲ DETOV		501555N 0731235E KRG 341.0° 35.3 NM (1800 FT)				
	341° 160°	53.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ EDANO		510858N 0725804E AST 072.0° 58.7 NM (1200 FT)				
	340° 160°	6.3 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 ↓      ↑	
△ BOLSU	511507N 0725620E AST 066.0° 58.9 NM (1200 FT)				
	340° 158°	145.4 NM	FL 510 FL 120	Even	Odd
▲ POBUR	533800N 0721400E KTU 069.0° 95.3 NM (900 FT)				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
				↓	↑	
Z554 (RNAV 5)						
▲ OKESO	411051N 0673608E SMK 223.0° 109.2 NM (1400 FT)					Before, see AIP Uzbekistan
	062° 242°	16.2 NM	FL 510 4000 FT ALT	Odd	Even	TASHKENT ACC {C}
▲ DIBAD	411700N 0675600E SMK 220.0° 94.0 NM (1400 FT)					
	076° 256°	39.6 NM	FL 510 7000 FT ALT	Odd	Even	TASHKENT ACC {C}
▲ DODUR (FIR BDRY)	412300N 0684800E SMK 200.0° 65.9 NM (1400 FT)					
	039° 219°	39.6 NM	FL 510 8000 FT ALT	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ BAMUT	415121N 0692445E SMK 176.0° 31.0 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
				↓	↑	
	002° 182°	8.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
△ BEDNU		420007N 0692621E SMK 174.0° 22.2 NM (1400 FT)				
	355° 175°	22.2 NM	FL 510 FL 120	Even	Odd	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
				↓	↑	
Z578 (RNAV 5)						
▲ LANOL	411133N 0685506E SMK 192.0° 74.6 NM (1400 FT)					
	330° 149°	12.6 NM	FL 510 7000 FT ALT	Even	Odd	TASHKENT ACC {C}
▲ DODUR (FIR BDRY)	412300N 0684800E SMK 200.0° 65.9 NM (1400 FT)					
	356° 175°	36.0 NM	FL 510 7000 FT ALT	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ ODORI	415901N 0684908E SMK 224.0° 36.3 NM (1400 FT)					
	355° 175°	27.0 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 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	
				↓	↑
▲ ARSUL		422600N 0685000E SMK 271.0° 27.3 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	
				↓	↑
<b>Z579</b> (RNAV 5)					
▲ MIKNO		420200N 0681200E SMK 243.0° 59.0 NM (1400 FT)			
	340° 159°	37.8 NM	FL 510 FL 120	Even	Odd
△ ZUSLA		423838N 0675917E TRK 206.0° 48.5 NM (1000 FT)			
	339° 159°	34.1 NM	FL 510 FL 120	Even	Odd
▲ KARIM		431136N 0674737E TRK 250.0° 35.4 NM (1000 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	
				↓	↑
<b>Z580</b> (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	
				↓	↑		
▲ OGRIP	405454N 0680500E SMK 209.0° 106.6 NM (1400 FT)						
	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)						
	039° 219°	39.6 NM	FL 510 8000 FT ALT	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}	
▲ BAMUT	415121N 0692445E SMK 176.0° 31.0 NM (1400 FT)						
	039° 219°	25.6 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}	
△ ADESA	420940N 0694854E SMK 121.0° 20.9 NM (1400 FT)						
	039° 219°	38.6 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}	
▲ KOLAM	423702N 0702540E TAR 242.0° 40.7 NM (2200 FT)						
	064° 244°	8.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TARAZ APPROACH 122.1 MHZ {C}	
△ ANESA	424006N 0703654E TAR 241.0° 31.9 NM (2200 FT)						
	062° 242°	31.9 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TARAZ APPROACH 122.1 MHZ {C}	
▲ TARAZ DVOR/ DME (TAR)	425214N 0711654E						
	088° 268°	21.3 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TARAZ APPROACH 122.1 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
				↓	↑	
△ MIKDO		425058N 0714551E TAR 088.0° 21.3 NM (2200 FT)				
	085° 266°	76.7 NM	FL 510 FL 150	Odd	Even	SHYMKENT ACC 132.7 MHZ In case of possible VHF radio communication failure at FL150–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Approach” on frequencies 4744 kHz. - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ OGTOL (FIR BDRY)		424905N 0733002E TAR 087.0° 98.0 NM (2200 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
				↓	↑	
<b>Z581</b> (RNAV 5)		(D) (S) For continuation, see AIP Russia				
▲ KERUL (FIR BDRY)		415128N 0520821E AKT 151.0° 129.8 NM (100 FT)			Before, see AIP Russia and CIS	
	333° 152°	46.1 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}
△ ADEDA		423438N 0514628E AKT 151.0° 83.7 NM (100 FT)				
	332° 152°	34.3 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}
▲ LUMUR		430639N 0512953E AKT 150.0° 49.5 NM (100 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
				↓	↑	
	331° 150°	49.5 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ AKTAU DVOR/ DME (AKT)	435220N 0510352E					
	277° 095°	69.6 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ RALAN (FIR BDRY)	440812N 0493000E AKT 275.0° 69.6 NM (100 FT)					<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
				↓	↑	
Z582 (RNAV 5)						
▲ KOSTANAY DVOR/DME (KST)		531113N 0633346E				
	191° 010°	63.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
△ DOPAN		521213N 0625401E KST 190.0° 63.8 NM (600 FT)				
	190° 010°	98.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ RAVNI (FIR BDRY)		504030N 0615807E KST 188.0° 162.1 NM (600 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		
				↓	↑			
Z583 (RNAV 5)								
▲ USUGA		433600N 0761934E ATA 287.3° 35.8 NM (2200 FT)						
	356° 176°	22.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}		
▲ ADABA		435820N 0762009E ATA 312.8° 48.5 NM (2200 FT)						
	322° 142°	15.7 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ ALMATY APPROACH 124.8 MHZ {C}		
△ TUKTO		441136N 0760830E ATA 315.3° 64 NM (2200 FT)						
	323° 142°	51.0 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}		
△ DESER		445502N 0753100E ATA 319.2° 114.7 NM (2200 FT)						
	322° 142°	27.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}		
▲ MALOD		451812N 0751037E BLH 168.0° 95.2 NM (1400 FT)						
	321° 141°	45.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}		
△ ABMIK		455616N 0743604E BLH 189.0° 58.9 NM (1400 FT)						
	321° 139°	102.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}		
▲ TOGDI		472143N 0731457E BLH 284.0° 76.7 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
				↓	↑	
	308° 126°	56.8 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
▲ AZORI (FIR BDRY)	480139N 0721512E KRG 196.0° 109.1 NM (1800 FT)					
	306° 121°	220.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
▲ TUSEP	503136N 0680751E ARK 064.0° 44.4 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	FL series		Controlling unit {Airspace class} Remarks
			Lower limit	↓	↑	
<b>Z584</b> (RNAV 5)						
▲ ADABA	435820N 0762009E ATA 312.8° 48.5 NM (2200 FT)					
	029° 209°	19.5 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ UMIRO	441421N 0763537E ATA 332.7° 56.1 NM (2200 FT)					
	029° 209°	8.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ BIOTA	442124N 0764224E ATA 339.0° 61.2 NM (2200 FT)					
	029° 210°	81.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ KONAT	452754N 0774805E TDK 304.0° 34.2 NM (2000 FT)					
	030° 210°	62.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 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
▲ LIPSI	461808N 0784001E TDK 002.0° 72.5 NM (2000 FT)					
	030° 211°	122.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ AYAGUZ VOR/ DME (AGZ)	475552N 0802659E					
	351° 170°	102.4 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ LUNOV	493800N 0801801E SEM 170.0° 43.1 NM (700 FT)					
	349° 169°	6.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
△ ROKOD	494408N 0801719E SEM 170.0° 36.9 NM (700 FT)					
	350° 169°	37.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
▲ SOMIP	502106N 0801402E SEM 281.0° 0.4 NM (700 FT)					
	307° 126°	49.4 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
▲ OBUNA (FIR BDRY)	505513N 0791803E SEM 307.0° 49.7 NM (700 FT)					
	306° 125°	30.6 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ MIKSA	511608N 0784241E SEM 306.0° 80.3 NM (700 FT)					
	305° 124°	21.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ ABDAM	513051N 0781707E PVL 125.0° 60.9 NM (500 FT)					
	304° 124°	22.2 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
				↓	↑	
△ PIVAL	514549N 0775050E PVL 125.0° 38.7 NM (500 FT)					
	305° 125°	38.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
▲ PAVLODAR DVOR/DME (PVL)	521235N 0770542E					
	277° 094°	76.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
△ ADODA	523230N 0750554E PVL 277.0° 76.1 NM (500 FT)					
	275° 094°	41.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ INRUM	524302N 0740047E PVL 277.0° 117.2 NM (500 FT)					
	274° 093°	48.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 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 “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}
△ UNKAB	525439N 0724332E KTU 090.0° 115.3 NM (900 FT)					
	273° 092°	25.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ ULSET	530027N 0720230E KTU 093.0° 89.9 NM (900 FT)					
	273° 091°	47.2 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
				↓	↑	
△ BALMI	531107N 0704613E KTU 092.0° 42.7 NM (900 FT)					
	273° 092°	42.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ KOKSHETAU TOWER 127.9 MHZ {C}
▲ KOKSHETAU VOR/DME (KTU)	532103N 0693701E					
	257° 076°	44.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ KOKSHETAU TOWER 127.9 MHZ {C}
△ ROGUN	531944N 0682341E KTU 257.0° 44.0 NM (900 FT)					
	257° 076°	54.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ BAVAG	531819N 0665235E KTU 256.0° 98.6 NM (900 FT)					
	257° 075°	55.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ BIMSO	531631N 0652038E KST 073.0° 64.4 NM (600 FT)					
	254° 073°	64.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ KOSTANAY DVOR/DME (KST)	531113N 0633346E					

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
				↓	↑	
Z586 (RNAV 5)						
▲ 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
				↓	↑	
	051° 232°	80.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
▲ GURPI	495618N 0711236E AST 178.0° 64.4 NM (1200 FT)					
	358° 178°	22.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ SUTUR	501837N 0711714E AST 178.0° 41.9 NM (1200 FT)					
	358° 178°	41.9 NM	FL 510 FL 120	Even	Odd	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
				↓	↑	
Z588 (RNAV 5)						
▲ KARAGANDA DVOR/DME (KRG)	494114N 0732226E					
	320° 139°	37.6 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ KARAGANDA TOWER 122.0 MHZ {C}
▲ LESNA	501302N 0725127E KRG 319.0° 37.6 NM (1800 FT)					
	319° 136°	129.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ VAGEM	520159N 0710114E AST 336.0° 63.9 NM (1200 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
				↓	↑	
	316° 135°	50.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ RENPA	524400N 0701548E KTU 136.0° 43.9 NM (900 FT)					
	317° 136°	43.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ KOKSHETAU TOWER 127.9 MHZ {C}
▲ KOKSHETAU VOR/DME (KTU)	532103N 0693701E					

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
				↓	↑	
Z589 (RNAV 5)						
▲ USUGA	433600N 0761934E ATA 287.3° 35.8 NM (2200 FT)					
	310° 129°	19.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ REGMU	435005N 0760012E ATA 295.6° 54.6 NM (2200 FT)					
	309° 129°	12.8 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
▲ AGUNA	435906N 0754739E ATA 297° 67.1 NM (2200 FT)					
	309° 128°	72.7 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 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
▲ ANELI		444956N 0743510E BLH 181.0° 124.2 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
<b>Z621 (RNAV 5)</b>					
▲ ATRAN (FIR BDRY)		422321N 0660522E TRK 236.0° 123.4 NM (1000 FT)			<b>Before, see AIP Uzbekistan</b>
	055° 235°	75.9 NM	FL 510 FL 120	Odd      Even	SHYMKENT ACC 132.7 MHZ {C}
△ RAZBI		425954N 0673533E TRK 239.0° 47.6 NM (1000 FT)			
	055° 236°	38.5 NM	FL 510 FL 120	Odd      Even	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ GENDI		431800N 0682200E TRK 254.0° 9.4 NM (1000 FT)			
	074° 254°	9.4 NM	FL 510 FL 120	Odd      Even	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ TURKISTAN DVOR/DME (TRK)		431932N 0683446E			
	077° 257°	26.2 NM	FL 510 FL 120	Odd      Even	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ ARVAR		432233N 0691027E TRK 077.0° 26.2 NM (1000 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
				↓	↑	
	077° 257°	25.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ POKAT	432530N 0694508E TRK 077.0° 51.7 NM (1000 FT)					
	077° 258°	48.7 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ ARBOL	433055N 0705137E TAR 329.0° 42.9 NM (2200 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
				↓	↑	
Z624 (RNAV 5)						
▲ AGADI (FIR BDRY)		480559N 0733338E BLH 314.0° 93.2 NM (1400 FT)				
	312° 132°	29.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ LUTEK		482853N 0730459E KRG 180.0° 73.3 NM (1800 FT)				
	312° 130°	114.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
▲ GURPI		495618N 0711236E AST 178.0° 64.4 NM (1200 FT)				
	312° 131°	33.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ BASPA		502144N 0704001E AST 208.0° 48.3 NM (1200 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
				↓	↑	
	309° 128°	26.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ VETUB	504107N 0701250E AST 238.0° 50.1 NM (1200 FT)					
	304° 124°	10.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ OSROL	504818N 0700112E AST 248.0° 55.0 NM (1200 FT)					
	309° 127°	93.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ ATBAN	515824N 0682152E KTU 197.0° 94.6 NM (900 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
				↓	↑	
Z632 (RNAV 5)						
△ REBDA	414708N 0690515E SMK 198.0° 38.6 NM (1400 FT)					
	338° 158°	11.3 NM	FL 510 6000 FT ALT	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ NIMAG	415801N 0690101E SMK 212° 30.8 NM (1400 FT)					
	338° 158°	29.2 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ ARSUL	422600N 0685000E SMK 271.0° 27.3 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
				↓	↑	
	333° 152°	25.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ LARBA	424922N 0683725E TRK 170.0° 30.2 NM (1000 FT)					
	333° 152°	30.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ GENDI	431800N 0682200E TRK 254.0° 9.4 NM (1000 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
				↓	↑	
Z727 (RNAV 5)						
▲ ADARO (FIR BDRY)		504706N 0815242E UKM 325.0° 51.2 NM (1000 FT)				
	145° 326°	51.2 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ UST-KAMENOGORSK TOWER 130.1 MHZ {C}
▲ UST- KAMENOGORS K DVOR/DME (UKM)		500158N 0823031E				
	142° 322°	42.7 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ UST-KAMENOGORSK TOWER 130.1 MHZ {C}
△ ABOTO		492544N 0830521E UKM 142.0° 42.7 NM (1000 FT)				
	142° 322°	2.7 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 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	↓	↑	
▲ ARHIM	492317N 0830743E UKM 322.3° 45.3 NM (1000 FT)					
	142° 322°	6.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ NEMEG	491804N 0831242E UKM 332.4° 51.4 NM (1000 FT)					
	142° 324°	100.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ LATRI	475217N 0843229E UKM 141.2° 152.7 NM (1000 FT)					
	144° 324°	27.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ ZAISAN VYSHKA 118.7 MHZ {C}
▲ ZAISAN L (ZSN)	472906N 0845308E					

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
				↓	↑	
Z746 (RNAV 5)						
▲ TUSEP	503136N 0680751E ARK 064.0° 44.4 NM (1300 FT)					
	072° 254°	80.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ VETUB	504107N 0701250E AST 238.0° 50.1 NM (1200 FT)					
	073° 253°	35.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ LIGMO	504539N 0710837E AST 207.0° 18.2 NM (1200 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
				↓	↑	
	061° 242°	73.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ EDANO	510858N 0725804E AST 072.0° 58.7 NM (1200 FT)					
	062° 244°	88.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
▲ ABELI	513524N 0751312E PVL 232.0° 79.0 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
				↓	↑	
Z753 (RNAV 5)						
▲ OSBOR		410054N 0683059E SMK 201.0° 91.4 NM (1400 FT)				Before, see AIP Uzbekistan
	322° 141°	40.1 NM	FL 510 6000 FT ALT	Even	Odd	TASHKENT ACC {C}
▲ IBMOB (FIR BDRY)		413436N 0680213E SMK 226.0° 78.9 NM (1400 FT)				
	321° 140°	101.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ PAVEL		425947N 0664642E TRK 249.0° 81.5 NM (1000 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	
				↓	↑		
Z817 (RNAV 5)							
▲ TARAZ DVOR/ DME (TAR)		425214N 0711654E					
	072° 252°	24.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TARAZ APPROACH 122.1 MHZ {C}	
△ GERPU		425739N 0714951E TAR 072.0° 24.8 NM (2200 FT)					
	069° 250°	56.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}	
△ KULHI		431211N 0730422E TAR 070.0° 81.3 NM (2200 FT)					
	070° 251°	54.2 NM	FL 510 FL 210	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}	
▲ BOGDI (FIR BDRY)		432517N 0741622E ATA 267.1° 123.1 NM (2200 FT)					
	071° 251°	23.5 NM	FL 510 FL 210	Odd	Even	ALMATY ACC 131.4 MHZ {C}	
△ AGLEK		433045N 0744744E ATA 270.4° 100.4 NM (2200 FT)					
	071° 252°	32.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}	
△ TIPSA		433809N 0753149E ATA 278.4° 69.7 NM (2200 FT)					

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