

## ENR-3.2.3 "N" 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
				↓	↑	
N37 (RNAV 5)						
▲ IPLED (FIR BDRY)	432348N 0493000E AKT 241.0° 73.9 NM (100 FT)					
	060° 241°	73.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ AKTAU DVOR/ DME (AKT)	435220N 0510352E					
	060° 241°	53.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ GIGRI	441248N 0521256E AKT 060.0° 53.9 NM (100 FT)					
	059° 239°	29.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ DOGEL	442430N 0525059E AKT 060.0° 83.6 NM (100 FT)					
	059° 240°	68.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ BODSI	445034N 0541914E BNU 220.0° 45.3 NM (0 FT)					
	060° 240°	39.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ MASAV	450507N 0551053E BNU 162.0° 15.5 NM (0 FT)					
	053° 234°	108.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ KOMRE	455641N 0572649E BNU 061.0° 104.4 NM (0 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
				↓	↑	
	056° 237°	60.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 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 “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}
△ NINAG	462208N 0584556E ARL 249.0° 121.4 NM (300 FT)					
	057° 240°	222.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 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 “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}
▲ ULRIP (FIR BDRY)	474743N 0634635E ARL 049.0° 105.6 NM (300 FT)					
	064° 245°	68.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 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 “Zhezkazgan Tower” on frequencies 4850 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {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
				↓	↑	
△ INKOL	480633N 0652413E DZG 276.0° 97.8 NM (1300 FT)					
	065° 248°	120.5 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ AKITU	483624N 0681921E DZG 014.0° 57.7 NM (1300 FT)					
	064° 245°	72.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
▲ ALFIL	485654N 0700340E DZG 042.0° 117.9 NM (1300 FT)					
	065° 247°	91.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
△ DOZIN	492040N 0721800E KRG 235.0° 46.8 NM (1800 FT)					
	055° 236°	46.8 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ KARAGANDA TOWER 122.0 MHZ {C}
▲ KARAGANDA DVOR/DME (KRG)	494114N 0732226E					
	070° 251°	43.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ KARAGANDA TOWER 122.0 MHZ {C}
△ SULIB	494914N 0742808E KRG 071.0° 43.4 NM (1800 FT)					
	089° 269°	25.6 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
△ EKTAB	494555N 0750718E KRG 078.0° 68.2 NM (1800 FT)					
	078° 259°	41.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
▲ AGINU (FIR BDRY)	494800N 0761100E KRG 077.0° 109.5 NM (1800 FT)					
	068° 250°	54.6 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 Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
△ ADETA	500015N 0773321E SEM 250.0° 105.7 NM (700 FT)					
	067° 248°	63.0 NM	FL 510 FL 220	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ LUREL	501613N 0790803E SEM 257.0° 42.9 NM (700 FT)					
	075° 257°	42.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
▲ SOMIP	502106N 0801402E SEM 281.0° 0.4 NM (700 FT)					
	060° 241°	68.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
▲ ADARO (FIR BDRY)	504706N 0815242E UKM 325.0° 51.2 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
				↓	↑	
N55 (RNAV 5)						
▲ BALUN (FIR BDRY)		420100N 0512742E AKT 163.0° 112.7 NM (100 FT)				Before, see AIP Azerbaijan
	033° 214°	123.3 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ MEDOL		433425N 0531659E AKT 094.0° 98.2 NM (100 FT)				
	034° 214°	25.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ ATNAL		435307N 0533948E BNU 207.0° 107.4 NM (0 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
				↓	↑	
	034° 215°	62.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ TITIL	443944N 0543810E BNU 199.0° 45.6 NM (0 FT)					
	034° 214°	34.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119,8 MHZ {C}
△ MASAV	450507N 0551053E BNU 162.0° 15.5 NM (0 FT)					
	032° 212°	109.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8MHZ {C}
▲ OGANU	462857N 0565153E BNU 039.0° 100.2 NM (0 FT)					
	038° 219°	71.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ {C}
▲ ARKER	471757N 0580839E ARL 271.0° 145.3 NM (300 FT)					
	039° 221°	228.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
▲ BEKOR (FIR BDRY)	494513N 0623050E ARK 247.0° 177.6 NM (1300 FT)					
	032° 212°	24.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
▲ GEMBO	500256N 0625600E ARK 252.0° 158.5 NM (1300 FT)					
	042° 222°	73.8 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 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 “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}

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 ↓      ↑	
△ ERNEN	504754N 0642731E ARK 277.0° 102.2 NM (1300 FT)				
	042° 222°	4.4 NM	FL 510 FL 120	Odd	Even
ASTANA ACC 133.1 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 “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}					
△ IPNIL	505034N 0643305E ARK 279.0° 99.5 NM (1300 FT)				
	042° 224°	139.1 NM	FL 510 FL 120	Odd	Even
ASTANA ACC 133.1 MHZ {C}					
▲ ATNON	521149N 0673350E KTU 215.0° 102.0 NM (900 FT)				
	043° 226°	210.7 NM	FL 510 FL 150	Odd	Even
ASTANA ACC 132.8 MHZ {C}					
▲ DAKIN (FIR BDRY)	540930N 0722418E KTU 053.0° 110.5 NM (900 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
				↓	↑	
N60 (RNAV 5)						
▲ GASBI (FIR BDRY)	422611N 0502811E AKT 190.0° 90.0 NM (100 FT)					Before, see AIP Azerbaijan

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	↓	↑	
	010° 190°	90.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ AKTAU DVOR/ DME (AKT)	435220N 0510352E					
	003° 182°	56.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
△ PIRIM	444808N 0511741E AKT 002.0° 56.7 NM (100 FT)					
	001° 180°	53.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ {C}
▲ KOLIB	454047N 0512848E ATR 179.0° 88.9 NM (0 FT)					
	360° 180°	45.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ NIKNA	462557N 0513838E ATR 179.0° 43.2 NM (0 FT)					
	360° 180°	43.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ ATYRAU TOWER 118.1 MHZ {C}
▲ ATYRAU DVOR/ DME (ATR)	470838N 0514805E					
	038° 218°	43.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ ATYRAU TOWER 118.1 MHZ {C}
▲ UDEBA	473802N 0523443E ATR 038.0° 43.2 NM (0 FT)					
	038° 218°	74.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ EKPIN	482805N 0535721E ATR 038.0° 118.0 NM (0 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
				↓	↑	
	038° 219°	36.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 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 “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}
▲ MOGTU	485209N 0543832E AKB 218.0° 129.8 NM (700 FT)					
	039° 219°	26.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 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 “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}
△ AGMAN	490942N 0550920E AKB 218.0° 103.0 NM (700 FT)					
	039° 220°	66.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
▲ GULDO	495223N 0562651E AKB 219.0° 36.8 NM (700 FT)					
	040° 221°	36.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 MHZ {C}
▲ AKTOBE DVOR/ DME (AKB)	501548N 0571055E					
	041° 222°	49.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 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 ↓   ↑	Controlling unit {Airspace class} Remarks
▲ ALGAS	504613N 0581203E AKB 042.0° 49.5 NM (700 FT)				
	041° 222°	19.1 NM	FL 510 FL 120	Odd   Even	AKTOBE ACC 129.6 MHZ {C}
▲ NINBU (FIR BDRY)	505748N 0583554E AKB 042.0° 68.5 NM (700 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
<b>N60 (RNAV 5)</b>					
▲ LENTA (FIR BDRY)	514854N 0602236E KST 221.0° 143.0 NM (600 FT)				<b>Before, see AIP Russia</b>
	042° 223°	78.5 NM	FL 510 FL 120	Odd   Even	ASTANA ACC 133.1 MHZ {C}
△ BAMIK	523517N 0620524E KST 223.0° 64.5 NM (600 FT)				
	044° 225°	64.5 NM	FL 510 FL 120	Odd   Even	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ KOSTANAY DVOR/DME (KST)	531113N 0633346E				
	050° 230°	65.0 NM	FL 510 FL 120	Odd   Even	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
△ AKOSO	534140N 0650940E KST 050.0° 65.0 NM (600 FT)				
	052° 233°	48.6 NM	FL 510 FL 120	Odd   Even	ASTANA 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
				↓	↑	
▲ DEPIR	540211N 0662405E PSK 232.0° 108.5 NM (500 FT)					
	052° 232°	47.8 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ KOKAV	542244N 0673738E PSK 233.0° 60.7 NM (500 FT)					
	053° 235°	60.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ PETROPAVLOVSK TOWER 123.7 MHZ {C}
▲ PETROPAVLOV SK DVOR/DME (PSK)	544703N 0691309E					
	072° 254°	62.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ PETROPAVLOVSK TOWER 123.7 MHZ {C}
▲ BARKI (FIR BDRY)	545153N 0710000E PSK 073.0° 62.0 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
				↓	↑	
N73 (RNAV 5)						
▲ BALUN (FIR BDRY)	420100N 0512742E AKT 163.0° 112.7 NM (100 FT)					Before, see AIP Russia
	016° 196°	36.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ ADEDA	423438N 0514628E AKT 151.0° 83.7 NM (100 FT)					
	016° 196°	36.6 NM	FL 510 FL 120	Odd	Even	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
				↓	↑	
△ GIRUL	430826N 0520542E AKT 127.0° 62.9 NM (100 FT)					
	016° 196°	36.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ NEPIL	434133N 0522455E AKT 093.0° 59.7 NM (100 FT)					
	016° 196°	46.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ DOGEL	442430N 0525059E AKT 060.0° 83.6 NM (100 FT)					
	016° 196°	28.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ ALOTO	445010N 0530653E BNU 241.0° 90.5 NM (0 FT)					
	018° 198°	37.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ REPLA	452358N 0533011E BNU 264.0° 68.6 NM (0 FT)					
	018° 198°	8.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ GOLGI	453153N 0533543E BNU 271.0° 65.5 NM (0 FT)					
	018° 198°	91.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ RIKRI	465319N 0543423E BNU 338.0° 95.7 NM (0 FT)					
	018° 198°	37.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ LANIN	472659N 0545937E BNU 349.0° 126.8 NM (0 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
				↓	↑	
	018° 198°	45.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 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 “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}
△ PETEM	480656N 0553022E AKB 196.0° 144.9 NM (700 FT)					
	018° 198°	13.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 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 “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}
▲ ALABA	481845N 0553938E AKB 196.0° 131.5 NM (700 FT)					
	017° 197°	25.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 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 “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}

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
				↓	↑	
△ UGLUK		484125N 0555642E AKB 196.0° 106.1 NM (700 FT)				
	017° 197°	67.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ LURUM		494127N 0564322E AKB 196.0° 38.7 NM (700 FT)				
	017° 197°	38.7 NM	FL 510 FL 120	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>N102</b> (RNAV 5)						
▲ BABUR (FIR BDRY)	452312N 0493000E AKT 315.0° 112.9 NM (100 FT)					<b>Before, see AIP Russia</b>
	097° 279°	117.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ {C}
▲ ADPAK	444919N 0520844E AKT 031.0° 73.6 NM (100 FT)					
	100° 283°	175.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ KORAG (FIR BDRY)	435134N 0560000E BNU 149.0° 96.5 NM (0 FT)					<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	
	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
↓				↑		
N102 (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
				↓	↑	
▲ GILAT (FIR BDRY)	415707N 0660000E TRK 227.0° 140.8 NM (1000 FT)					Before, see AIP Uzbekistan
	074° 254°	48.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
△ ESKIZ	420521N 0670429E TRK 216.0° 99.6 NM (1000 FT)					
	075° 256°	53.2 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
△ TONLA	421334N 0681508E SMK 254.0° 53.7 NM (1400 FT)					
	074° 255°	53.7 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ SHYMKENT DVOR/DME (SMK)	422220N 0692631E					
	041° 222°	22.9 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
△ DONUP	423759N 0694912E SMK 041.0° 22.9 NM (1400 FT)					
	035° 215°	16.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ BARAR	425030N 0700344E SMK 039.0° 39.3 NM (1400 FT)					
	035° 215°	53.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ ARBOL	433055N 0705137E TAR 329.0° 42.9 NM (2200 FT)					
	051° 232°	52.4 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
△ RISAS	435854N 0715247E TAR 016.0° 71.6 NM (2200 FT)					
	052° 232°	36.6 NM	FL 510 FL 120	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	FL series		Controlling unit {Airspace class} Remarks
			Lower limit	↓	↑	
△ RITMU	441806N 0723603E TAR 028.0° 103.3 NM (2200 FT)					
	052° 234°	42.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ EKNIL (FIR BDRY)	444003N 0732651E TAR 036.0° 143.1 NM (2200 FT)					
	053° 233°	39.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
△ TENRO	445953N 0741408E BLH 188.0° 117.4 NM (1400 FT)					
	009° 189°	58.5 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
△ ABMIK	455616N 0743604E BLH 189.0° 58.9 NM (1400 FT)					
	009° 189°	58.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
▲ BALKHASH DVOR/DME (BLH)	465259N 0745902E					
	036° 217°	46.2 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
△ DIBUK	472631N 0754536E BLH 037.0° 46.2 NM (1400 FT)					
	037° 217°	51.2 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
▲ ENONA	480316N 0763820E BLH 037.0° 97.4 NM (1400 FT)					
	037° 218°	54.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ DODEM	484212N 0773614E AGZ 285.0° 123.0 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
				↓	↑	
	038° 218°	26.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ При возможном пропадании ОБЧ радиосвязи на FL120-190. ЭВС рекомендуется: -установить связь через другие ВС; -использовать ВЧ связь для ретрансляции сообщений через «Семей Вышка» - 6645 kHz, с учетом регламента работы ДП; -при отсутствии на борту ВЧ радиостанции планировать полет по альтернативным маршрутам. {C}
△ GITUD	490032N 0780418E AGZ 299.0° 114.8 NM (2200 FT)					
	038° 219°	44.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ NONRI	493111N 0785223E SEM 219.0° 72.9 NM (700 FT)					
	039° 219°	29.5 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ ADLAN	495132N 0792510E SEM 220.0° 43.4 NM (700 FT)					
	039° 220°	43.2 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
▲ SOMIP	502106N 0801402E SEM 281.0° 0.4 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
				↓	↑	
N126 (RNAV 5)						
▲ RULAD (FIR BDRY)	433001N 0804359E JRK 138.0° 55.2 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
				↓	↑	
	311° 130°	50.0 NM	FL 510 FL 210	Even	Odd	ALMATY ACC 131.4 MHZ {C}
▲ LAGUK	440528N 0795517E JRK 185.0° 8.4 NM (2600 FT)					
	310° 129°	38.0 NM	FL 510 FL 210	Even	Odd	ALMATY ACC 131.4 MHZ {C}
▲ BARUR	443207N 0791739E JRK 298.0° 33.9 NM (2600 FT)					
	309° 129°	27.6 NM	FL 510 FL 210	Even	Odd	ALMATY ACC 133.1 MHZ {C}
△ ATPOR	445123N 0784955E TDK 126.0° 22.8 NM (2000 FT)					
	306° 126°	22.8 NM	FL 510 FL 210	Even	Odd	ALMATY ACC 133.1 MHZ {C}
▲ TALDYKORGAN DVOR/DME (TDK)	450622N 0782548E					
	308° 126°	109.0 NM	FL 510 FL 210	Even	Odd	ALMATY ACC 133.1 MHZ {C}
▲ ABREK	462025N 0763143E BLH 111.0° 71.7 NM (1400 FT)					
	306° 122°	160.9 NM	FL 510 FL 210	Even	Odd	ALMATY ACC 125.5 MHZ {C}
▲ AGADI (FIR BDRY)	480559N 0733338E BLH 314.0° 93.2 NM (1400 FT)					
	299° 112°	258.1 NM	FL 510 FL 210	Even	Odd	ASTANA ACC 124.1 MHZ {C}
▲ TUSEP	503136N 0680751E ARK 064.0° 44.4 NM (1300 FT)					
	305° 120°	233.2 NM	FL 510 FL 210	Even	Odd	ASTANA 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
▲ 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
<b>N143</b> (RNAV 5)					
▲ OGOLI		412858N 0663632E SMK 240.0° 137.6 NM (1400 FT)			Before, see AIP Uzbekistan
	059° 239°	29.5 NM	FL 510 4000 FT ALT	Odd   Even	TASHKENT ACC {C}
▲ RITAL (FIR BRDY)		414130N 0671206E SMK 241.0° 108.2 NM (1400 FT)			
	059° 240°	49.2 NM	FL 510 FL 120	Odd   Even	SHYMKENT ACC 132.7 MHZ {C}
▲ MIKNO		420200N 0681200E SMK 243.0° 59.0 NM (1400 FT)			
	064° 245°	59.0 NM	FL 510 FL 120	Odd   Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ SHYMKENT DVOR/DME (SMK)		422220N 0692631E			
	067° 247°	29.4 NM	FL 510 FL 120	Odd   Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
△ TURIK		423108N 0700422E SMK 067.0° 29.4 NM (1400 FT)			
	064° 244°	16.8 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)			

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
				↓	↑	
	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					
	061° 241°	29.3 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TARAZ APPROACH 122.1 MHZ {C}
△ NASIP	430347N 0715332E TAR 061.0° 29.3 NM (2200 FT)					
	059° 240°	89.7 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ TOMGO	434146N 0734454E TAR 060.0° 118.9 NM (2200 FT)					
	040° 220°	54.3 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}
▲ DITSU (FIR BRDY)	441934N 0743855E ATA 294.1° 120.2 NM (2200 FT)					
	040° 221°	44.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
△ ADIRO	445011N 0752356E ATA 315.7° 114.0 NM (2200 FT)					
	040° 220°	7.0 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
				↓	↑	
△ DESER	445502N 0753100E ATA 319.2° 114.7 NM (2200 FT)					
	041° 221°	17.5 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
△ LEKLU	450701N 0754903E TDK 264.0° 111.0 NM (2000 FT)					
	041° 221°	10.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
△ DODOK	451420N 0760011E TDK 268.0° 103.3 NM (2000 FT)					
	041° 222°	57.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
△ UDEKA	455252N 0770006E TDK 302.0° 76.1 NM (2000 FT)					
	042° 222°	35.2 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ GENGA	461625N 0773739E TDK 328.0° 77.8 NM (2000 FT)					
	042° 223°	25.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ ETRAN	463321N 0780521E TDK 345.0° 88.2 NM (2000 FT)					
	042° 223°	57.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ RUDIZ	471122N 0790856E AGZ 223.0° 69.1 NM (2200 FT)					
	043° 224°	69.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ AYAGUZ VOR/ DME (AGZ)	475552N 0802659E					
	044° 224°	138.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ ARHIM	492317N 0830743E UKM 322.3° 45.3 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 ↓      ↑	
	046° 227°	77.4 NM	FL 510 FL 120	Odd	Even
▲ GOMIR (FIR BRDY)	501042N 0844206E UKM 079.0° 85.2 NM (1000 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	FL series		Controlling unit {Airspace class} Remarks
			Lower limit	↓	↑	
N147 (RNAV 5)						
▲ BORIS (FIR BDRY)	425127N 0660533E KZO 161.0° 112.7 NM (500 FT)					Before, see AIP Uzbekistan
	068° 249°	31.4 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ PAVEL	425947N 0664642E TRK 249.0° 81.5 NM (1000 FT)					
	069° 249°	30.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
△ AGERA	430738N 0672650E TRK 250.0° 51.1 NM (1000 FT)					
	069° 249°	15.7 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ KARIM	431136N 0674737E TRK 250.0° 35.4 NM (1000 FT)					
	069° 250°	25.9 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°	9.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ TURKISTAN DVOR/DME (TRK)	431932N 0683446E					

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 ↓      ↑	
	057° 237°	40.8 NM	FL 510 FL 120	Odd	Even
△ MUZEL	433756N 0692447E TRK 057.0° 40.8 NM (1000 FT)				SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
	060° 242°	73.9 NM	FL 510 FL 120	Odd	Even
△ KUGIR	440625N 0705906E TAR 344.0° 75.3 NM (2200 FT)				SHYMKENT ACC 132.7 MHZ {C}
	061° 242°	19.0 NM	FL 510 FL 120	Odd	Even
△ MIHOS	441332N 0712336E TAR 358.0° 81.4 NM (2200 FT)				SHYMKENT ACC 132.7 MHZ {C}
	062° 243°	83.9 NM	FL 510 FL 120	Odd	Even
▲ AKIMU (FIR BDRY)	444353N 0731255E TAR 032.0° 139.7 NM (2200 FT)				ALMATY ACC 125.5 MHZ {C}
	063° 244°	46.4 NM	FL 510 FL 120	Odd	Even
△ TENRO	445953N 0741408E BLH 188.0° 117.4 NM (1400 FT)				ALMATY ACC 125.5 MHZ {C}
	059° 239°	44.0 NM	FL 510 FL 120	Odd	Even
▲ MALOD	451812N 0751037E BLH 168.0° 95.2 NM (1400 FT)				ALMATY ACC 133.1 MHZ {C}
	053° 235°	118.2 NM	FL 510 FL 120	Odd	Even
▲ 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	FL series		Controlling unit {Airspace class} Remarks	
			Lower limit	↓	↑		
N154 (RNAV 5)							
▲ KORAG (FIR BDRY)	435134N 0560000E BNU 149.0° 96.5 NM (0 FT)					Before, see AIP Uzbekistan	
	264° 083°	89.8 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}	
△ RINIT	435305N 0535549E BNU 202.0° 101.2 NM (0 FT)						
	263° 083°	11.6 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}	
△ ATNAL	435307N 0533948E BNU 207.0° 107.4 NM (0 FT)						
	262° 082°	24.1 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}	
△ RELGE	435304N 0530630E AKT 081.0° 88.7 NM (100 FT)						
	262° 081°	33.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}	
▲ ULSON	435244N 0522039E AKT 082.0° 55.5 NM (100 FT)						
	263° 082°	55.5 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}	
▲ AKTAU DVOR/ DME (AKT)	435220N 0510352E						
	263° 082°	67.9 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}	
▲ ITAKA (FIR BDRY)	435224N 0493000E AKT 262.0° 67.9 NM (100 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
				↓	↑	
N161 (RNAV 5)						
▲ GASBI (FIR BDRY)	422611N 0502811E AKT 190.0° 90.0 NM (100 FT)					Before, see AIP Azerbaijan
	045° 226°	121.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ ARLIF	433927N 0524039E AKT 092.0° 71.3 NM (100 FT)					
	046° 226°	23.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ RELGE	435304N 0530630E AKT 081.0° 88.7 NM (100 FT)					
	046° 227°	80.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ TITIL	443944N 0543810E BNU 199.0° 45.6 NM (0 FT)					
	034° 214°	34.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ MASAV	450507N 0551053E BNU 162.0° 15.5 NM (0 FT)					
	061° 242°	112.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ DIVNO	454418N 0574000E BNU 070.0° 109.9 NM (0 FT)					
	062° 244°	90.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 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 “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}



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 ↓      ↑	
▲ ABDUN		461337N 0594316E ARL 236.0° 86.4 NM (300 FT)			
	064° 246°	123.4 NM	FL 510 FL 120	Odd	Even
△ RITET		464937N 0623417E ARL 081.0° 39.3 NM (300 FT)			
	066° 247°	83.7 NM	FL 510 FL 120	Odd	Even
▲ ARKAM (FIR BDRY)		471135N 0643220E ARL 072.0° 121.9 NM (300 FT)			
	067° 247°	19.7 NM	FL 510 FL 120	Odd	Even
△ BAGED		471628N 0650016E DZG 249° 115.2 NM (1300 FT)			
	067° 248°	35.3 NM	FL 510 FL 120	Odd	Even
△ TIROK		472456N 0655037E DZG 247.0° 80.1 NM (1300 FT)			
	067° 248°	36.7 NM	FL 510 FL 120	Odd	Even
△ ABURA		473345N 0664312E DZG 249.4° 43.3 NM (1300 FT)			
	068° 249°	43.3 NM	FL 510 FL 120	Odd	Even
▲ ZHEZKAZGAN DVOR/DME (DZG)		474317N 0674542E			
	073° 254°	43.1 NM	FL 510 FL 120	Odd	Even
△ AMASO		474914N 0684857E DZG 074.0° 43.1 NM (1300 FT)			
	083° 264°	73.6 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
				↓	↑	
△ DERAD	474634N 0703805E DZG 079.0° 116.5 NM (1300 FT)					
	084° 266°	48.3 NM	FL 510 FL 120	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 “Zhezkazgan Tower” on frequencies 4850 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ UNABO (FIR BDRY)	474352N 0714935E KRG 198.0° 132.6 NM (1800 FT)					
	087° 272°	214.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
▲ MADEV	471857N 0770328E BLH 067.0° 88.9 NM (1400 FT)					
	088° 270°	85.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ RUDIZ	471122N 0790856E AGZ 223.0° 69.1 NM (2200 FT)					
	090° 271°	29.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ GOMAL	470809N 0795150E AGZ 200.0° 53.4 NM (2200 FT)					
	090° 272°	47.5 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ BURID	470234N 0810051E AGZ 151.0° 58.1 NM (2200 FT)					
	091° 272°	37.8 NM	FL 510 FL 150	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
▲ GILAK		465738N 081553E AGZ 129.0° 83.7 NM (2200 FT)			
	092° 273°	40.0 NM	FL 510 FL 150	Odd   Even	ALMATY ACC 132.1 MHZ {C}
▲ SARIN (FIR BDRY)		465156N 082531E AGZ 118.0° 118.2 NM (2200 FT)			For continuation, see AIP China

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>N167</b> (RNAV 5)					
▲ KURAB (FIR BDRY)		442311N 061034E ARL 180.0° 148.2 NM (300 FT)			Before, see AIP Uzbekistan
	020° 200°	34.4 NM	FL 510 FL 120	Odd   Even	SHYMKENT ACC 127.3 MHZ {C}
△ LATNU		445345N 061255E ARL 175.0° 116.1 NM (300 FT)			
	020° 200°	63.4 NM	FL 510 FL 120	Odd   Even	SHYMKENT ACC 127.3 MHZ {C}
▲ INKUM		454952N 0620739E ARL 151.0° 63.3 NM (300 FT)			
	009° 189°	38.4 NM	FL 510 FL 120	Odd   Even	SHYMKENT ACC 127.3 MHZ {C}
▲ BAKID (FIR BDRY)		462633N 062235E ARL 117.0° 39.6 NM (300 FT)			
	009° 189°	24.2 NM	FL 510 FL 120	Odd   Even	AKTOBE ACC 119 MHZ {C}
△ RITET		464937N 062341E ARL 081.0° 39.3 NM (300 FT)			
	009° 189°	60.9 NM	FL 510 FL 120	Odd   Even	AKTOBE ACC 119 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
△ ABIGU	474742N 0630108E ARL 036.0° 81.6 NM (300 FT)					
	009° 189°	26.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ {C}
▲ SURAR (FIR BDRY)	481318N 0631317E ARL 030.0° 106.2 NM (300 FT)					
	009° 188°	41.7 NM	FL 510 FL 120	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 “Zhezkazgan Tower” on frequencies 4850 kHz 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)					
	008° 188°	76.9 NM	FL 510 FL 120	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}
▲ BATAD	500554N 0640927E ARK 252.0° 111.2 NM (1300 FT)					
	008° 188°	18.1 NM	FL 510 FL 120	Odd	Even	ASTANA 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
△ ADEKU	502301N 0641824E ARK 261.0° 104.4 NM (1300 FT)				
	008° 188°	29.1 NM	FL 510 FL 120	Odd   Even	ASTANA ACC 133.1 MHZ {C}
△ IPNIL	505034N 0643305E ARK 279.0° 99.5 NM (1300 FT)				
	008° 188°	203.5 NM	FL 510 FL 120	Odd   Even	ASTANA ACC 133.1 MHZ {C}
▲ DEPIR	540211N 0662405E PSK 232.0° 108.5 NM (500 FT)				
	006° 186°	47.0 NM	FL 510 FL 120	Odd   Even	ASTANA ACC 132.8 MHZ {C}
▲ BEBLU (FIR BDRY)	544630N 0665030E PSK 256.0° 82.6 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
<b>N170 (RNAV 5)</b>					
△ IZIMA	432236N 0770503E ATA 332.2° 0.1 NM (2200 FT)				
	313° 132°	17.9 NM	FL 510 FL 120	Even   Odd	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ UNADA	433551N 0764831E ATA 312.8° 18 NM (2200 FT)				
	312° 132°	30.5 NM	FL 510 FL 120	Even   Odd	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
				↓	↑	
▲ ADABA	435820N 0762009E ATA 312.8° 48.5 NM (2200 FT)					
	336° 156°	15.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ RISAD	441324N 0761312E ATA 318.7° 63.3 NM (2200 FT)					
	336° 156°	56.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
△ LEKLU	450701N 0754903E TDK 264.0° 111.0 NM (2000 FT)					
	336° 156°	31.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
▲ MAROR	453720N 0753509E BLH 155.0° 79.7 NM (1400 FT)					
	336° 155°	36.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
△ ABONA	461133N 0751857E BLH 155.0° 43.7 NM (1400 FT)					
	335° 155°	43.7 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
▲ BALKHASH DVOR/DME (BLH)	465259N 0745902E					
	333° 152°	42.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
△ GIREM	473219N 0743709E BLH 332.0° 42.1 NM (1400 FT)					
	332° 151°	38.2 NM	FL 510 FL 120	Even	Odd	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
				↓	↑	
▲ LUKUS (FIR BDRY)	480759N 0741658E BLH 332.0° 80.3 NM (1400 FT)					
	332° 151°	33.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ GONEL	483912N 0735912E KRG 150.0° 66.6 NM (1800 FT)					
	331° 151°	21.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ NEMKU	485904N 0734736E KRG 150.0° 45.3 NM (1800 FT)					
	331° 150°	45.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ KARAGANDA TOWER 122.0 MHZ {C}
▲ KARAGANDA DVOR/DME (KRG)	494114N 0732226E					
	309° 127°	41.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ KARAGANDA TOWER 122.0 MHZ {C}
▲ BANOS	501116N 0723844E KRG 309.0° 40.9 NM (1800 FT)					
	308° 127°	67.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ ASTANA DVOR/ DME (AST)	510006N 0712600E					
	325° 144°	65.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ KOLUR	515901N 0704103E AST 325.0° 65.3 NM (1200 FT)					
	324° 143°	46.9 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
				↓	↑	
△ LULEK		524106N 0700733E KTU 144.0° 44.0 NM (900 FT)				
	324° 144°	44.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ KOKSHETAU TOWER 127.9 MHZ {C}
▲ KOKSHETAU VOR/DME (KTU)		532103N 0693701E				
	300° 118°	42.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ KOKSHETAU TOWER 127.9 MHZ {C}
△ LASPA		534852N 0684219E KTU 298.0° 42.9 NM (900 FT)				
	300° 119°	51.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ KOKAV		542244N 0673738E PSK 233.0° 60.7 NM (500 FT)				
	299° 118°	36.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ BEBLU (FIR BDRY)		544630N 0665030E PSK 256.0° 82.6 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
				↓	↑	
<b>N193</b> (RNAV 5)						
▲ LANOL		411133N 0685506E SMK 192.0° 74.6 NM (1400 FT)				
	272° 091°	44.9 NM	FL 510 4000 FT ALT	Even	Odd	TASHKENT ACC {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 ↓   ↑	
▲ DIBAD	411700N 0675600E SMK 220.0° 94.0 NM (1400 FT)				
	276° 095°	61.0 NM	FL 510 4000 FT ALT	Even	Odd
▲ OGOLI	412858N 0663632E SMK 240.0° 137.6 NM (1400 FT)				Before, 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	FL series		Controlling unit {Airspace class} Remarks
			Lower limit	↓	↑	
N193 (RNAV 5)						
▲ KUNAS (FIR BDRY)	430923N 0560000E BNU 156.0° 136.4 NM (0 FT)					Before, see AIP Uzbekistan
	276° 094°	99.5 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 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 “Aktau Tower” on frequencies 5536 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ BAPER	433011N 0534642E AKT 094.0° 120.2 NM (100 FT)					
	274° 094°	22.0 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}
△ MEDOL	433425N 0531659E AKT 094.0° 98.2 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
				↓	↑	
	273° 093°	26.9 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}
△ ARLIF	433927N 0524039E AKT 092.0° 71.3 NM (100 FT)					
	273° 093°	11.6 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}
▲ NEPIL	434133N 0522455E AKT 093.0° 59.7 NM (100 FT)					
	274° 093°	59.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ AKTAU DVOR/ DME (AKT)	435220N 0510352E					
	317° 136°	66.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
△ ATNUR	444559N 0500948E AKT 316.0° 66.2 NM (100 FT)					
	315° 135°	46.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 134.3 MHZ {C}
▲ BABUR (FIR BDRY)	452312N 0493000E AKT 315.0° 112.9 NM (100 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
				↓	↑	
N985 (RNAV 5)						
▲ 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)					

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 ↓      ↑	
	278° 097°	42.7 NM	FL 510 FL 120	Even	Odd
▲ PAVLODAR DVOR/DME (PVL)	521235N 0770542E				ASTANA ACC 132.8 MHZ PAVLODAR TWR 119.8 MHZ {C}
	277° 094°	76.1 NM	FL 510 FL 120	Even	Odd
△ ADODA	523230N 0750554E PVL 277.0° 76.1 NM (500 FT)				
	272° 087°	163.5 NM	FL 510 FL 120	Even	Odd
△ ADLON	530129N 0704047E KTU 105.0° 43.1 NM (900 FT)				
	267° 084°	138.4 NM	FL 510 FL 150	Even	Odd
▲ BAVAG	531819N 0665235E KTU 256.0° 98.6 NM (900 FT)				
	262° 077°	205.7 NM	FL 510 FL 210	Even	Odd
▲ TITUR (FIR BDRY)	532406N 0610924E KST 268.0° 87.6 NM (600 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
				↓	↑	
N987 (RNAV 5)						
▲ ASLOK	410548N 0671954E SMK 224.0° 121.8 NM (1400 FT)					Before, see AIP Uzbekistan
	357° 177°	34.4 NM	FL 510 4000 FT ALT	Even	Odd	TASHKENT ACC {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
				↓	↑	
▲ UMKAS (FIR BDRY)		414012N 0672149E SMK 239.0° 102.0 NM (1400 FT)				
	357° 176°	54.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ ROSIM		423415N 0672453E TRK 222.0° 68.4 NM (1000 FT)				
	356° 176°	33.4 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ AGERA		430738N 0672650E TRK 250.0° 51.1 NM (1000 FT)				
	356° 176°	18.0 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ POBEK		432534N 0672754E TRK 270.0° 49.1 NM (1000 FT)				
	357° 177°	20.0 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ GIMRI		434530N 0672931E TRK 292.0° 54.1 NM (1000 FT)				
	356° 176°	32.7 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ BIMDO		441809N 0673135E TRK 315.0° 74.3 NM (1000 FT)				
	356° 176°	13.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ LUKUR		443112N 0673226E TRK 321.0° 84.6 NM (1000 FT)				
	356° 175°	94.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 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
				↓	↑	
▲ NONDI (FIR BDRY)	460552N 0673842E DZG 174.0° 97.6 NM M (1300 FT)					
	355° 175°	32.6 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ TUTUL	463825N 0674057E DZG 174.0° 65.0 NM (1300 FT)					
	355° 175°	21.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ LEMDU	470002N 0674228E DZG 174.0° 43.3 NM (1300 FT)					
	355° 175°	43.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
▲ ZHEZKAZGAN DVOR/DME (DZG)	474317N 0674542E					
	340° 160°	43.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
△ BEDOR	482529N 0673251E DZG 340.0° 43.1 NM (1300 FT)					
	339° 158°	24.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ GORIM	484905N 0672456E DZG 339.0° 67.3 NM (1300 FT)					
	342° 161°	70.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
▲ EDETO	495808N 0670732E ARK 159.0° 21.3 NM (1300 FT)					
	339° 159°	21.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ ARKALYK DVOR/ DME (ARK)	501904N 0670118E					

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
				↓	↑	
	017° 197°	70.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
▲ RUDAL	512154N 0675222E ARK 017.0° 70.7 NM (1300 FT)					
	016° 196°	40.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
▲ ATBAN	515824N 0682152E KTU 197.0° 94.6 NM (900 FT)					
	018° 198°	49.8 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ RIMIR	524153N 0690123E KTU 197.0° 44.7 NM (900 FT)					
	017° 198°	44.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ KOKSHETAU TOWER 127.9 MHZ {C}
▲ KOKSHETAU VOR/DME (KTU)	532103N 0693701E					
	338° 157°	40.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ KOKSHETAU TOWER 127.9 MHZ {C}
▲ TETKI	540020N 0692425E KTU 337.0° 40.1 NM (900 FT)					
	340° 160°	47.3 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					
	304° 123°	34.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PETROPAVLOVSK TOWER 123.7 MHZ {C}
▲ LETIK (FIR BDRY)	551200N 0683200E PSK 303.0° 34.4 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
				↓	↑	
N990 (RNAV 5)						
▲ ODIVA (FIR BDRY)	423530N 0640848E KZO 198.0° 140.5 NM (500 FT)					
	019° 199°	75.0 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ ADAZA	434304N 0645326E KZO 199.0° 65.5 NM (500 FT)					
	019° 199°	23.4 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ BUKEN	440406N 0650744E KZO 200.0° 42.0 NM (500 FT)					
	019° 200°	42.0 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
▲ KYZYLORDA DVOR/DME (KZO)	444145N 0653349E					
	020° 200°	44.3 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
△ AMREK	452109N 0660226E KZO 020.0° 44.3 NM (500 FT)					
	018° 198°	70.9 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ GORVA (FIR BDRY)	462455N 0664655E DZG 198.0° 88.1 NM (1300 FT)					
	018° 198°	31.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ ATRUS	465302N 0670715E DZG 199.0° 56.7 NM (1300 FT)					
	021° 201°	13.3 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
				↓	↑	
△ DITSO	470443N 0671637E DZG 198.0° 43.4 NM (1300 FT)					
	019° 199°	43.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
▲ ZHEZKAZGAN DVOR/DME (DZG)	474317N 0674542E					
	015° 194°	43.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
△ RINUR	482255N 0681040E DZG 014.0° 43.1 NM (1300 FT)					
	014° 194°	14.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ AKITU	483624N 0681921E DZG 014.0° 57.7 NM (1300 FT)					
	014° 194°	60.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
▲ KUGUN	493139N 0685550E ARK 113.0° 87.9 NM (1300 FT)					
	014° 194°	39.5 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
△ INRIK	500744N 0692030E ARK 088.0° 90.1 NM (1300 FT)					
	014° 194°	20.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
▲ MIMKA	502620N 0693328E AST 234.0° 79.1 NM (1200 FT)					
	014° 195°	102.1 NM	FL 510 FL 250	Odd	Even	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
				↓	↑	
△ KOLUR	515901N 0704103E AST 325.0° 65.3 NM (1200 FT)					
	014° 195°	144.8 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
▲ DAKIN (FIR BDRY)	540930N 0722418E KTU 053.0° 110.5 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
				↓	↑	
N993 (RNAV 5)						
▲ TALDYKORGAN DVOR/DME (TDK)	450622N 0782548E					
	046° 226°	35.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ TALDYKORGAN TOWER 127.3 MHZ {C}
▲ KEZUT	452811N 0790448E TDK 046.0° 35.1 NM (2000 FT)					
	046° 227°	39.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ RIKPI	455225N 0794910E TDK 047.0° 74.6 NM (2000 FT)					
	060° 240°	21.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ NESUN	460123N 0801738E TDK 050.0° 95.9 NM (2000 FT)					
	060° 241°	24.6 NM	FL 510 FL 150	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ GALSU	461126N 0804952E AGZ 166.0° 105.6 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
				↓	↑	
	003° 183°	8.3 NM	FL 510 FL 150	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ ADRIM	461940N 0805137E AGZ 163.8° 97.7 NM (2200 FT)					
	003° 183°	16.2 NM	FL 510 FL 150	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ AGAKA	463544N 0805503E AGZ 161.0° 82.4 NM (2200 FT)					
	003° 183°	27.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ BURID	470234N 0810051E AGZ 151.0° 58.1 NM (2200 FT)					
	331° 151°	58.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
▲ AYAGUZ VOR/ DME (AGZ)	475552N 0802659E					
	299° 116°	114.9 NM	FL 510 FL 250	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ GITUD	490032N 0780418E AGZ 299.0° 114.8 NM (2200 FT)					
	296° 114°	87.9 NM	FL 510 FL 250	Even	Odd	ALMATY ACC 132.1 MHZ {C}
▲ AGINU (FIR BDRY)	494800N 0761100E KRG 077.0° 109.5 NM (1800 FT)					
	285° 102°	90.7 NM	FL 510 FL 250	Even	Odd	ASTANA ACC 124.1 MHZ {C}
▲ GEDNO	502211N 0740032E KRG 023.0° 48.0 NM (1800 FT)					
	292° 104°	284.7 NM	FL 510 FL 250	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ MONEG	523627N 0671849E KTU 229.0° 94.7 NM (900 FT)					
	289° 103°	189.0 NM	FL 510 FL 250	Even	Odd	ASTANA 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
▲ LANOR (FIR BDRY)		540536N 0624042E KST 318.0° 63.0 NM (600 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
<b>N996</b> (RNAV 5)					
▲ PIKAN (FIR BDRY)		425300N 0493000E AKT 221.0° 90.6 NM (100 FT)			Before, see AIP Russia
	042° 222°	90.6 NM	FL 510 FL 120	Odd   Even	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ AKTAU DVOR/ DME (AKT)		435220N 0510352E			
	025° 205°	67.3 NM	FL 510 FL 120	Odd   Even	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
△ AGILA		444901N 0515422E AKT 025.0° 67.3 NM (100 FT)			
	024° 204°	50.8 NM	FL 510 FL 120	Odd   Even	AKTOBE ACC 134.3 MHZ {C}
▲ GARDU		453219N 0523200E ATR 154.0° 101.0 NM (0 FT)			
	024° 204°	37.7 NM	FL 510 FL 120	Odd   Even	AKTOBE ACC 130.9 MHZ {C}
△ OTMAS		460419N 0530034E ATR 134.0° 81.5 NM (0 FT)			
	024° 204°	63.4 NM	FL 510 FL 120	Odd   Even	AKTOBE ACC 130.9 MHZ {C}
△ LEPSI		465750N 0534950E ATR 089.0° 83.9 NM (0 FT)			
	024° 204°	29.5 NM	FL 510 FL 120	Odd   Even	AKTOBE ACC 130.9 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		Controlling unit {Airspace class} Remarks
				↓	↑	
△ EPOLI	472234N 0541316E ATR 074.0° 99.9 NM (0 FT)					
	024° 204°	39.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ KODUM	475556N 0544537E ATR 061.0° 129.2 NM (0 FT)					
	060° 241°	32.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 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 “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}
△ PETEM	480656N 0553022E AKB 196.0° 144.9 NM (700 FT)					
	061° 241°	11.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 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 “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}
▲ ETELA	481055N 0554657E AKB 192.0° 136.6 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
				↓	↑	
	061° 242°	30.5 NM	FL 510 FL 120	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}
△ EKDAD	482100N 0562959E AKB 183.0° 117.7 NM (700 FT)					
	062° 243°	99.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ RILBA	485158N 0585148E AKB 132.0° 106.6 NM (700 FT)					
	063° 244°	78.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ MANAD	491421N 0604601E ARL 338.0° 148.9 NM (300 FT)					
	064° 245°	72.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
▲ LANUK (FIR BDRY)	493317N 0623239E ARL 004.0° 168.0 NM (300 FT)					
	072° 253°	12.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ DILIR	493452N 0625056E ARK 243.0° 167.6 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
				↓	↑	
	073° 253°	25.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 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 “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)					
	062° 242°	52.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 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 “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}
△ IPKOD	495415N 0644617E ARK 245.0° 90.4 NM (1300 FT)					
	062° 243°	50.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
▲ BULOG	500854N 0660036E ARK 245.0° 40.3 NM (1300 FT)					
	065° 246°	40.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
▲ ARKALYK DVOR/DME (ARK)	501904N 0670118E					
	063° 244°	44.4 NM	FL 510 FL 120	Odd	Even	ASTANA 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	
				↓	↑		
▲ TUSEP	503136N 0680751E ARK 064.0° 44.4 NM (1300 FT)						
	066° 248°	74.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}	
△ OSROL	504818N 0700112E AST 248.0° 55.0 NM (1200 FT)						
	065° 245°	29.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}	
△ APTUS	505558N 0704601E AST 251.0° 25.6 NM (1200 FT)						
	071° 251°	25.6 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}	
▲ ASTANA DVOR/ DME (AST)	510006N 0712600E						
	065° 246°	58.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}	
△ BOLSU	511507N 0725620E AST 066.0° 58.9 NM (1200 FT)						
	066° 248°	88.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}	
▲ ABELI	513524N 0751312E PVL 232.0° 79.0 NM (500 FT)						
	052° 234°	79.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}	
▲ PAVLODAR DVOR/DME (PVL)	521235N 0770542E						

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