

## ENR-3.2.2 “M” 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
				↓	↑	
M34 (RNAV 5)						
▲ BALGO (FIR BDRY)		430234N 0733602E <b>TAR</b> <b>079.0° 102.7 NM</b> <b>(2200 FT)</b>				<b>Before, see AIP Russia and CIS</b>
	004° 184°	39.7 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}
▲ TOMGO		434146N 0734454E <b>TAR</b> <b>060.0° 118.9 NM</b> <b>(2200 FT)</b>				
	009° 189°	39.5 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}
▲ ALAKO		441958N 0735903E <b>ATA</b> <b>289.1° 146.4 NM</b> <b>(2200 FT)</b>				

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	009° 189°	10.3 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}
▲ ABEBA (FIR BDRY)	442957N 0740248E <b>ATA</b> <b>293.0° 148 NM</b> <b>(2200 FT)</b>					
	009° 189°	31.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
△ TENRO	445953N 0741408E <b>BLH</b> <b>188.0° 117.4 NM</b> <b>(1400 FT)</b>					
	009° 189°	58.5 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
△ ABMIK	455616N 0743604E <b>BLH</b> <b>189.0° 58.9 NM</b> <b>(1400 FT)</b>					
	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					
	008° 188°	37.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
△ OBARU	472917N 0751312E <b>BLH</b> <b>008.0° 37.6 NM</b> <b>(1400 FT)</b>					
	008° 188°	72.8 NM	FL 510 FL 120	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
				↓	↑	
▲ AGPIN (FIR BDRY)	483931N 0754146E <b>KRG</b> <b>116.0° 110.3 NM</b> <b>(1800 FT)</b>					
	008° 188°	20.9 NM	<div>FL 510</div> <div>FL 120</div>	Odd	Even	ASTANA ACC 124.1 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 “Karaganda Tower” on frequencies 4728 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ LALAS	485941N 0755014E <b>KRG</b> <b>105.0° 105.2 NM</b> <b>(1800 FT)</b>					
	008° 188°	8.1 NM	<div>FL 510</div> <div>FL 120</div>	Odd	Even	ASTANA ACC 124.1 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 “Karaganda Tower” on frequencies 4728 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ ULKAP	490729N 0755332E <b>KRG</b> <b>101.0° 104.3 NM</b> <b>(1800 FT)</b>					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	008° 188°	42.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 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 “Karaganda Tower” on frequencies 4728 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ AGINU (FIR BDRY)	494800N 0761100E <b>KRG</b> <b>077.0° 109.5 NM</b> <b>(1800 FT)</b>					
	005° 185°	69.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ GOBSO	505523N 0763521E <b>PVL</b> <b>184.0° 79.6 NM</b> <b>(500 FT)</b>					
	005° 184°	48.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
△ EKTUS	514225N 0765305E <b>PVL</b> <b>185.0° 31.2 NM</b> <b>(500 FT)</b>					
	005° 186°	31.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
▲ PAVLODAR DVOR/DME (PVL)	521235N 0770542E					

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
				↓	↑	
M56 (RNAV 5)						
▲ GERLI	495334N 0535254E  URL 120.0° 117.1 NM (200 FT)					
	310° 128°	76.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ {C}
△ VEVIK	505201N 0523529E  URL 102.0° 43.1 NM (200 FT)					
	321° 140°	55.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}
▲ BEKAS (FIR BDRY)	514029N 0515327E  URL 011.0° 34.2 NM (200 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
				↓	↑	
M75 (RNAV 5)						
▲ UBAGU (FIR BDRY)	430228N 0625120E <b>KZO</b> <b>221.0° 153.8 NM</b> <b>(500 FT)</b>					<b>Before, see AIP Uzbekistan</b>

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation			Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	042° 223°	26.4 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 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 “Kyzylorda Tower” on frequencies 5335 kHz and 6672 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}
△ RIMDO	431940N 0631837E <b>KZO</b> <b>222.0° 127.5 NM</b> <b>(500 FT)</b>					
	043° 223°	16.7 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ NITNA	433032N 0633601E <b>KZO</b> <b>222.0° 110.8 NM</b> <b>(500 FT)</b>					
	043° 223°	11.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ MIMRI	433808N 0634822E <b>KZO</b> <b>222.0° 99.0 NM</b> <b>(500 FT)</b>					
	026° 206°	56.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ ADREM	442548N 0643118E <b>KZO</b> <b>243.0° 47.5 NM</b> <b>(500 FT)</b>					
	026° 206°	28.2 NM	FL 510 FL 150	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ GIGUR	444920N 0645300E <b>KZO</b> <b>277.0° 30.1 NM</b> <b>(500 FT)</b>					
	026° 206°	6.9 NM	FL 510 FL 150	Odd	Even	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
				↓	↑	
△ BUDET	445507N 0645824E <b>KZO</b> <b>290.0° 28.5 NM</b> <b>(500 FT)</b>					
	026° 207°	80.3 NM	FL 510 FL 150	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ ANIGO	460143N 0660207E <b>KZO</b> <b>007.0° 82.4 NM</b> <b>(500 FT)</b>					
	027° 207°	35.2 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ BAMET (FIR BDRY)	463042N 0663051E <b>DZG</b> <b>206.0° 88.8 NM</b> <b>(1300 FT)</b>					
	027° 207°	32.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ GISIR	465704N 0665732E <b>DZG</b> <b>206.0° 56.7 NM</b> <b>(1300 FT)</b>					
	027° 207°	13.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ REMTI	470757N 0670843E <b>DZG</b> <b>206.0° 43.4 NM</b> <b>(1300 FT)</b>					
	027° 207°	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					
	027° 207°	43.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
△ DOPAR	481831N 0682229E <b>DZG</b> <b>027.0° 43.0 NM</b> <b>(1300 FT)</b>					
	025° 205°	16.7 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
				↓	↑	
△ MAKUT	483217N 0683632E <b>DZG</b> <b>026.0° 59.7 NM</b> <b>(1300 FT)</b>					
	027° 207°	54.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
▲ AMIGU	491645N 0692517E <b>ARK</b> <b>114.0° 112.2 NM</b> <b>(1300 FT)</b>					
	027° 207°	57.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
△ RELGO	500234N 0701730E <b>AST</b> <b>207.0° 72.3 NM</b> <b>(1200 FT)</b>					
	027° 208°	9.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
△ KOKON	500958N 0702609E <b>AST</b> <b>207.0° 63.0 NM</b> <b>(1200 FT)</b>					
	027° 208°	14.8 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ BASPA	502144N 0704001E <b>AST</b> <b>208.0° 48.3 NM</b> <b>(1200 FT)</b>					
	028° 208°	30.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ LIGMO	504539N 0710837E <b>AST</b> <b>207.0° 18.2 NM</b> <b>(1200 FT)</b>					
	027° 208°	18.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ ASTANA DVOR/ DME (AST)	510006N 0712600E					
	360° 180°	66.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 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
				↓	↑	
△ OLGAS	520510N 0714507E <b>AST</b> <b>001.0° 66.2 NM</b> <b>(1200 FT)</b>					
	001° 181°	34.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ AMOLA	523853N 0715604E <b>KTU</b> <b>106.0° 94.0 NM</b> <b>(900 FT)</b>					
	359° 179°	22.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ ULSET	530027N 0720230E <b>KTU</b> <b>093.0° 89.9 NM</b> <b>(900 FT)</b>					
	359° 179°	38.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ POBUR	533800N 0721400E <b>KTU</b> <b>069.0° 95.3 NM</b> <b>(900 FT)</b>					
	360° 179°	32.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ DAKIN (FIR BDRY)	540930N 0722418E <b>KTU</b> <b>053.0° 110.5 NM</b> <b>(900 FT)</b>					<b>For continuation, see AIP Russia</b>

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
M149 (RNAV 5)						
▲ AGUNA	435906N 0754739E ATA 298.4° 67.1 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
				↓	↑	
	336° 156°	53.8 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
△ ADIRO	445011N 0752356E <b>ATA</b> <b>315.7° 114 NM</b> <b>(2200 FT)</b>					
	335° 155°	29.6 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
▲ MALOD	451812N 0751037E <b>BLH</b> <b>168.0° 95.2 NM</b> <b>(1400 FT)</b>					
	349° 168°	48.5 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
△ KONEK	460631N 0750443E <b>BLH</b> <b>168.0° 46.7 NM</b> <b>(1400 FT)</b>					
	349° 168°	46.7 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
▲ BALKHASH DVOR/DME (BLH)	465259N 0745902E					
	021° 201°	39.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
△ BIKRI	472814N 0752625E <b>BLH</b> <b>021.0° 39.9 NM</b> <b>(1400 FT)</b>					
	021° 201°	75.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
▲ ROSID	483440N 0762005E <b>BLH</b> <b>022.0° 115.5 NM</b> <b>(1400 FT)</b>					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	021° 201°	25.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Semey Tower” on frequencies 6645 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ TAGAL	485638N 0763825E <b>KRG</b> <b>102.0° 135.8 NM</b> <b>(1800 FT)</b>					
	021° 202°	15.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Semey Tower” on frequencies 6645 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ ESUMA	491025N 0765006E <b>KRG</b> <b>095.0° 139.0 NM</b> <b>(1800 FT)</b>					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	021° 202°	57.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Semey Tower” on frequencies 6645 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ ADETA	500015N 0773321E <b>SEM</b> <b>250.0° 105.7 NM</b> <b>(700 FT)</b>					
	022° 202°	47.6 NM	FL 510 FL 220	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ BAMAT (FIR BDRY)	504125N 0781025E <b>SEM</b> <b>276.0° 81.9 NM</b> <b>(700 FT)</b>					
	022° 202°	40.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ MIKSA	511608N 0784241E <b>SEM</b> <b>306.0° 80.3 NM</b> <b>(700 FT)</b>					
	022° 203°	39.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
▲ LAGMO (FIR BDRY)	514954N 0791500E <b>PVL</b> <b>098.0° 83.0 NM</b> <b>(500 FT)</b>					<b>For continuation, see AIP Russia</b>

Route designator		[Route Usage Notes]					
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks	
				↓	↑		
M158 (RNAV 5)							
▲ BODSI		445034N 0541914E  BNU 220.0° 45.3 NM (0 FT)					
	316° 135°	38.5 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}	
▲ ANIGA		452130N 0534647E  BNU 262.0° 56.8 NM (0 FT)					
	315° 135°	13.0 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 130.9 MHZ {C}	
△ GOLGI		453153N 0533543E  BNU 271.0° 65.5 NM (0 FT)					
	315° 134°	40.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 130.9 MHZ {C}	
△ OTMAS		460419N 0530034E  ATR 134.0° 81.5 NM (0 FT)					
	314° 134°	38.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 130.9 MHZ {C}	
△ RENPI		463437N 0522656E  ATR 133.0° 43.2 NM (0 FT)					
	314° 133°	43.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 130.9 MHZ ATYRAU TOWER 118.1 MHZ {C}	
▲ ATYRAU DVOR/ DME (ATR)		470838N 0514805E					
	349° 168°	43.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 130.9 MHZ ATYRAU TOWER 118.1 MHZ {C}	
△ OLAPU		475146N 0514531E  ATR 349.0° 43.2 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
				↓	↑	
	348° 168°	69.9 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 130.9 MHZ {C}
▲ BAGIR	490131N 0514106E <b>ATR</b> <b>348.0° 113.1 NM</b> <b>(0 FT)</b>					
	348° 167°	84.3 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ {C}
△ DOKUS	502539N 0513528E <b>URL</b> <b>166.0° 43.4 NM</b> <b>(200 FT)</b>					
	347° 167°	43.4 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}
▲ URALSK DVOR/ DME (URL)	510855N 0513238E					
	046° 226°	34.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}
△ INRIS	512800N 0521856E <b>URL</b> <b>046.0° 34.8 NM</b> <b>(200 FT)</b>					
	046° 226°	8.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}
▲ EKTEN (FIR BDRY)	513242N 0523030E <b>URL</b> <b>046.0° 43.4 NM</b> <b>(200 FT)</b>					<b>For continuation, see AIP Russia</b>

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
M161 (RNAV 5)		<small>(1) Before, see AIP Uzbekistan (2) For continuation, see AIP Russia</small>				
▲ ODIVA (FIR BDRY)		423530N 0640848E  KZO 198.0° 140.5 NM (500 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 Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	314° 133°	57.5 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 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 “Kyzylorda Tower” on frequencies 5335 kHz and 6672 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}
△ RIMDO	431940N 0631837E <b>KZO</b> <b>222.0° 127.5 NM</b> <b>(500 FT)</b>					
	313° 132°	23.0 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 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 “Kyzylorda Tower” on frequencies 5335 kHz and 6672 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}
▲ BOLNA	433712N 0625812E <b>KZO</b> <b>232.0° 129.3 NM</b> <b>(500 FT)</b>					

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	312° 132°	9.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 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 “Kyzylorda Tower” on frequencies 5335 kHz and 6672 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}
△ ADAKA	434416N 0624955E <b>KZO</b> <b>236.0° 131.1 NM</b> <b>(500 FT)</b>					
	312° 132°	35.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 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 “Kyzylorda Tower” on frequencies 5335 kHz and 6672 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}
△ TOZLI	441054N 0621817E <b>KZO</b> <b>251.0° 143.4 NM</b> <b>(500 FT)</b>					

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	312° 131°	56.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 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 “Kyzylorda Tower” on frequencies 5335 kHz and 6672 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}
△ LATNU	445345N 0612553E <b>ARL</b> <b>175.0° 116.1 NM</b> <b>(300 FT)</b>					
	311° 130°	42.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ MILSO (FIR BDRY)	452519N 0604609E <b>ARL</b> <b>194.0° 91.4 NM</b> <b>(300 FT)</b>					
	310° 129°	65.3 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
▲ ABDUN	461337N 0594316E <b>ARL</b> <b>236.0° 86.4 NM</b> <b>(300 FT)</b>					
	307° 125°	91.5 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
▲ ARKER	471757N 0580839E <b>ARL</b> <b>271.0° 145.3 NM</b> <b>(300 FT)</b>					
	305° 125°	28.9 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ UDATO	473801N 0573755E <b>AKB</b> <b>163.0° 158.9 NM</b> <b>(700 FT)</b>					
	305° 124°	62.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ EKDAD	482100N 0562959E <b>AKB</b> <b>183.0° 117.7 NM</b> <b>(700 FT)</b>					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	304° 123°	16.3 NM	FL 510 FL 120	Even	Odd	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 “Ambarchik” 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}
△ LOGTO	483204N 0561202E <b>AKB</b> <b>189.0° 110.7 NM</b> <b>(700 FT)</b>					
	303° 123°	13.8 NM	FL 510 FL 120	Even	Odd	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 “Ambarchik” 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}
△ UGLUK	484125N 0555642E <b>AKB</b> <b>196.0° 106.1 NM</b> <b>(700 FT)</b>					
	303° 123°	14.2 NM	FL 510 FL 120	Even	Odd	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 “Ambarchik” 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	
				↓	↑		
△ KURUL	485059N 0554051E <b>AKB</b> <b>203.0° 103.2 NM</b> <b>(700 FT)</b>						
	303° 122°	28.0 NM	FL 510 FL 120	Even	Odd	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 “Ambarchik” 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 <b>AKB</b> <b>218.0° 103.0 NM</b> <b>(700 FT)</b>						
	302° 121°	66.4 NM	FL 510 FL 120	Even	Odd	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 “Ambarchik” 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}	
▲ GERLI	495334N 0535254E <b>URL</b> <b>120.0° 117.1 NM</b> <b>(200 FT)</b>						
	301° 119°	73.8 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ {C}	
△ EDAKO	504120N 0522510E <b>URL</b> <b>119.0° 43.2 NM</b> <b>(200 FT)</b>						
	299° 119°	43.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}	
▲ URALSK DVOR/ DME (URL)	510855N 0513238E						

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 ↓   ↑	
	316° 135°	21.5 NM	FL 510 FL 120	Even	Odd
△ OGAPI	512648N 0511336E <b>URL</b> <b>315.0° 21.5 NM</b> <b>(200 FT)</b>				
	316° 135°	16.3 NM	FL 510 FL 120	Even	Odd
▲ GUTAN (FIR BDRY)	514024N 0505912E <b>URL</b> <b>316.0° 37.8 NM</b> <b>(200 FT)</b>				<b>For continuation, see AIP Russia</b>

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
M166 (RNAV 5)		(1) Before, see AIP China (2) For continuation, see AIP Russia				
▲ SARIN (FIR BDRY)		465156N 0825317E <b>AGZ</b> <b>118.0° 118.2 NM</b> <b>(2200 FT)</b>				<b>Before, see AIP China</b>
	298° 117°	40.5 NM	FL 510 FL 150	Even	Odd	ALMATY ACC 132.1 MHZ {C}
▲ AGUSA		471400N 0820338E <b>AGZ</b> <b>117.0° 77.7 NM</b> <b>(2200 FT)</b>				
	297° 116°	37.8 NM	FL 510 FL 150	Even	Odd	ALMATY ACC 132.1 MHZ {C}
▲ TOLKI		473415N 0811640E <b>AGZ</b> <b>117.0° 39.9 NM</b> <b>(2200 FT)</b>				
	297° 117°	22.5 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ BANUM		474633N 0804834E <b>AGZ</b> <b>296.3° 17.3 NM</b> <b>(2200 FT)</b>				
	296° 116°	17.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
▲ AYAGUZ VOR/ DME (AGZ)		475552N 0802659E				

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
				↓	↑	
	287° 105°	67.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ OSNER	482119N 0785409E <b>AGZ</b> <b>286.0° 67.2 NM</b> <b>(2200 FT)</b>					
	286° 104°	55.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ DODEM	484212N 0773614E <b>AGZ</b> <b>285.0° 123.0 NM</b> <b>(2200 FT)</b>					
	284° 103°	40.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Semey Tower” on frequencies 6645 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ TAGAL	485638N 0763825E <b>KRG</b> <b>102.0° 135.8 NM</b> <b>(1800 FT)</b>					
	283° 102°	19.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Semey Tower” on frequencies 6645 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ GORBO (FIR BDRY)	490316N 0761100E <b>KRG</b> <b>099.0° 116.9 NM</b> <b>(1800 FT)</b>					

Route designator	[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓      ↑	
	283° 102°	12.2 NM	FL 510 FL 120	Even	Odd
					ASTANA ACC 124.1 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Karaganda Tower” on frequencies 4728 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ ULKAP	490729N 0755332E <b>KRG</b> <b>101.0° 104.3 NM</b> <b>(1800 FT)</b>				
	282° 100°	60.5 NM	FL 510 FL 120	Even	Odd
△ ARLIH	492724N 0742621E <b>KRG</b> <b>100.0° 43.9 NM</b> <b>(1800 FT)</b>				
	280° 100°	43.9 NM	FL 510 FL 120	Even	Odd
▲ KARAGANDA DVOR/DME (KRG)	494114N 0732226E				
	273° 091°	46.3 NM	FL 510 FL 120	Even	Odd
△ SEHAL	494940N 0721215E <b>KRG</b> <b>271.0° 46.3 NM</b> <b>(1800 FT)</b>				
	271° 090°	39.2 NM	FL 510 FL 120	Even	Odd
▲ GURPI	495618N 0711236E <b>AST</b> <b>178.0° 64.4 NM</b> <b>(1200 FT)</b>				
	271° 090°	36.1 NM	FL 510 FL 120	Even	Odd
△ RELGO	500234N 0701730E <b>AST</b> <b>207.0° 72.3 NM</b> <b>(1200 FT)</b>				

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	269° 088°	37.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ INRIK	500744N 0692030E <b>ARK</b> <b>088.0° 90.1 NM</b> <b>(1300 FT)</b>					
	269° 088°	41.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
▲ VAMRI	501330N 0681645E <b>ARK</b> <b>087.0° 48.7 NM</b> <b>(1300 FT)</b>					
	267° 086°	48.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ ARKALYK DVOR/DME (ARK)	501904N 0670118E					
	263° 082°	45.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ KUSOT	502128N 0655110E <b>ARK</b> <b>262.0° 45.0 NM</b> <b>(1300 FT)</b>					
	262° 081°	59.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ ADEKU	502301N 0641824E <b>ARK</b> <b>261.0° 104.4 NM</b> <b>(1300 FT)</b>					
	261° 080°	50.3 NM	FL 510 FL 120	Even	Odd	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}
△ EMBEK	502333N 0625947E <b>ARK</b> <b>263.0° 154.8 NM</b> <b>(1300 FT)</b>					
	260° 079°	22.3 NM	FL 510 FL 120	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
				↓	↑	
▲ ABIRA (FIR BDRY)	502331N 062245E <b>KST</b> <b>181.0° 173.3 NM</b> <b>(600 FT)</b>					
	259° 078°	50.6 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ BESOL	502254N 0610548E <b>AKB</b> <b>078.0° 150.7 NM</b> <b>(700 FT)</b>					
	258° 076°	104.0 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ LITBA	501849N 0582332E <b>AKB</b> <b>076.0° 46.7 NM</b> <b>(700 FT)</b>					
	256° 075°	46.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 MHZ {C}
▲ AKTOBE DVOR/ DME (AKB)	501548N 0571055E					
	262° 081°	43.1 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 MHZ {C}
△ LARPI	501721N 0560345E <b>AKB</b> <b>261.0° 43.1 NM</b> <b>(700 FT)</b>					
	261° 080°	57.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
▲ SIVKO	501827N 0543349E <b>AKB</b> <b>260.0° 100.8 NM</b> <b>(700 FT)</b>					
	284° 102°	82.6 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ {C}
△ VEVIK	505201N 0523529E <b>URL</b> <b>102.0° 43.1 NM</b> <b>(200 FT)</b>					
	283° 102°	43.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}
▲ URALSK DVOR/ DME (URL)	510855N 0513238E					
	288° 107°	42.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}

Route designator	[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓   ↑	Controlling unit {Airspace class} Remarks
▲ ARISA (FIR BDRY)	512924N 0503254E <b>URL</b> <b>288.0° 42.7 NM</b> <b>(200 FT)</b>				<b>For continuation, see AIP Russia</b>

Route designator	[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓   ↑	Controlling unit {Airspace class} Remarks
<b>M168 (RNAV 5)</b>					
▲ NETAT	403653N 0682413E <b>SMK</b> <b>198.0° 115.3 NM</b> <b>(1400 FT)</b>				<b>Before, see AIP Uzbekistan</b>
	041° 221°	11.1 NM	FL 510 FL 30	Odd   Even	TASHKENT ACC {C}
▲ IPRAR	404431N 0683447E <b>SMK</b> <b>195.0° 105.2 NM</b> <b>(1400 FT)</b>				<b>For continuation, see AIP Uzbekistan</b>

Route designator	[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓   ↑	Controlling unit {Airspace class} Remarks
<b>M168 (RNAV 5)</b>					
▲ ABGEN	405742N 0684248E <b>SMK</b> <b>195.0° 90.7 NM</b> <b>(1400 FT)</b>				<b>Before, see AIP Uzbekistan</b>
	003° 183°	9.5 NM	FL 510 FL 60	Odd   Even	TASHKENT ACC {C}
▲ ABEKA	410705N 0684442E <b>SMK</b> <b>196.0° 81.5 NM</b> <b>(1400 FT)</b>				

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	003° 183°	16.1 NM	FL 510 FL 70	Odd	Even	TASHKENT ACC {C}
▲ DODUR (FIR BDRY)	412300N 0684800E <b>SMK</b> <b>200.0° 65.9 NM</b> <b>(1400 FT)</b>					
	320° 139°	47.4 NM	FL 510 FL 70	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ MIKNO	420200N 0681200E <b>SMK</b> <b>243.0° 59.0 NM</b> <b>(1400 FT)</b>					
	360° 180°	22.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ LUZMI	422426N 0681456E <b>SMK</b> <b>266.0° 53.1 NM</b> <b>(1400 FT)</b>					
	360° 179°	25.1 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
△ RELRU	424925N 0681812E <b>TRK</b> <b>195.0° 32.5 NM</b> <b>(1000 FT)</b>					
	359° 179°	28.7 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ GENDI	431800N 0682200E <b>TRK</b> <b>254.0° 9.4 NM</b> <b>(1000 FT)</b>					
	348° 168°	20.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ GOBOR	433811N 0681918E <b>TRK</b> <b>323.0° 21.8 NM</b> <b>(1000 FT)</b>					
	348° 168°	30.5 NM	FL 510 9000 FT ALT	Even	Odd	SHYMKENT ACC 127.3 MHZ TURKISTAN TOWER 131.3 MHZ {C}

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	
				↓	↑		
△ TIMKA	440832N 0681511E <b>TRK</b> <b>337.0° 51.0 NM</b> <b>(1000 FT)</b>						
	348° 168°	18.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}	
△ REMOL	442704N 0681238E <b>TRK</b> <b>340.0° 69.4 NM</b> <b>(1000 FT)</b>						
	348° 167°	91.4 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}	
▲ BETPU (FIR BDRY)	455758N 0675945E <b>DZG</b> <b>166.0° 105.8 NM</b> <b>(1300 FT)</b>						
	347° 166°	34.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}	
△ ELSEB	463234N 0675439E <b>DZG</b> <b>166.0° 71.0 NM</b> <b>(1300 FT)</b>						
	348° 168°	27.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}	
△ BURIK	470012N 0675152E <b>DZG</b> <b>166.0° 43.3 NM</b> <b>(1300 FT)</b>						
	346° 166°	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 <b>DZG</b> <b>340.0° 43.1 NM</b> <b>(1300 FT)</b>						
	339° 158°	24.2 NM	FL 510 FL 120	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
				↓	↑	
△ GORIM		484905N 0672456E				
		<b>DZG</b> <b>339.0° 67.3 NM</b> <b>(1300 FT)</b>				
	342° 161°	70.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
▲ EDETO		495808N 0670732E				
		<b>ARK</b> <b>159.0° 21.3 NM</b> <b>(1300 FT)</b>				
	339° 159°	21.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ ARKALYK DVOR/ DME (ARK)		501904N 0670118E				
	329° 145°	157.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ GITNA		524459N 0652518E				
		<b>KST</b> <b>100.0° 72.4 NM</b> <b>(600 FT)</b>				
	325° 143°	103.4 NM	FL 510 FL 210	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ NELTI (FIR BDRY)		541942N 0641630E				<b>For continuation, see AIP Russia</b>
		<b>KST</b> <b>008.0° 73.1 NM</b> <b>(600 FT)</b>				

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
<b>M199</b> (RNAV 5)						
▲ MULTA (FIR BDRY)		510442N 0565042E				<b>Before, see AIP Russia</b>
		<b>AKB</b> <b>335.0° 50.6 NM</b> <b>(700 FT)</b>				
	154° 335°	50.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 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
				↓	↑	
	131° 312°	42.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 MHZ {C}
△ ODILA	494259N 0575122E <b>AKB</b> <b>131.0° 41.9 NM</b> <b>(700 FT)</b>					
	132° 312°	27.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ KEKUN	492143N 0581653E <b>AKB</b> <b>131.0° 69.0 NM</b> <b>(700 FT)</b>					
	132° 313°	37.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ RILBA	485158N 0585148E <b>AKB</b> <b>132.0° 106.6 NM</b> <b>(700 FT)</b>					
	133° 314°	69.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
▲ RESDO	475618N 0595446E <b>ARL</b> <b>304.0° 96.4 NM</b> <b>(300 FT)</b>					
	134° 314°	14.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ {C}
△ ARSAN	474436N 0600738E <b>ARL</b> <b>303.0° 82.1 NM</b> <b>(300 FT)</b>					
	134° 317°	114.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ {C}
▲ AVLAK (FIR BDRY)	461214N 0614508E <b>ARL</b> <b>163.0° 37.7 NM</b> <b>(300 FT)</b>					
	137° 317°	27.3 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ INKUM	454952N 0620739E <b>ARL</b> <b>151.0° 63.3 NM</b> <b>(300 FT)</b>					

Route designator		[Route Usage Notes]					
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks	
				↓	↑		
M610 (RNAV 5)							
▲ AZABI (FIR BDRY)		444424N 0493000E <b>AKT</b> <b>301.0° 85.2 NM</b> <b>(100 FT)</b>					<b>Before, see AIP Russia</b>
	069° 251°	123.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ {C}	
▲ LAROS		451010N 0521956E <b>AKT</b> <b>027.0° 95.0 NM</b> <b>(100 FT)</b>					
	071° 252°	62.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}	
▲ ANIGA		452130N 0534647E <b>BNU</b> <b>262.0° 56.8 NM</b> <b>(0 FT)</b>					
	073° 255°	165.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}	
▲ DIVNO		454418N 0574000E <b>BNU</b> <b>070.0° 109.9 NM</b> <b>(0 FT)</b>					
	089° 271°	132.1 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 “Ambarchik” 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}	
▲ MILSO (FIR BDRY)		452519N 0604609E <b>ARL</b> <b>194.0° 91.4 NM</b> <b>(300 FT)</b>					
	092° 273°	47.0 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}	
△ OLINA		451645N 0615140E <b>ARL</b> <b>165.0° 93.4 NM</b> <b>(300 FT)</b>					
	093° 274°	29.9 NM	FL 510 FL 120	Odd	Even	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 ↓      ↑	
▲ TUKNA	451058N 0623308E <b>ARL</b> <b>150.0° 106.1 NM</b> <b>(300 FT)</b>				
	094° 275°	41.0 NM	FL 510 FL 120	Odd	Even SHYMKENT ACC 127.3 MHZ {C}
▲ UNITO	450238N 0632952E <b>KZO</b> <b>275.0° 90.6 NM</b> <b>(500 FT)</b>				
	095° 275°	48.7 NM	FL 510 FL 120	Odd	Even SHYMKENT ACC 127.3 MHZ {C}
△ NATUS	445208N 0643650E <b>KZO</b> <b>277.0° 41.9 NM</b> <b>(500 FT)</b>				
	096° 276°	11.8 NM	FL 510 FL 120	Odd	Even SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
△ GIGUR	444920N 0645300E <b>KZO</b> <b>277.0° 30.1 NM</b> <b>(500 FT)</b>				
	097° 278°	30.1 NM	FL 510 FL 120	Odd	Even SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
▲ KYZYLORDA DVOR/DME (KZO)	444145N 0653349E				
	097° 278°	44.5 NM	FL 510 FL 120	Odd	Even SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
△ RINET	443026N 0663402E <b>KZO</b> <b>098.0° 44.5 NM</b> <b>(500 FT)</b>				
	099° 280°	43.1 NM	FL 510 FL 120	Odd	Even SHYMKENT ACC 127.3 MHZ {C}
△ BIMDO	441809N 0673135E <b>TRK</b> <b>315.0° 74.3 NM</b> <b>(1000 FT)</b>				
	100° 281°	32.8 NM	FL 510 FL 120	Odd	Even SHYMKENT ACC 127.3 MHZ {C}
△ TIMKA	440832N 0681511E <b>TRK</b> <b>337.0° 51.0 NM</b> <b>(1000 FT)</b>				
	101° 281°	22.8 NM	FL 510 FL 120	Odd	Even 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
▲ LIMTO	440138N 0684518E <b>TRK</b> <b>004.0° 42.8 NM</b> <b>(1000 FT)</b>					
	101° 283°	96.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ ARBOL	433055N 0705137E <b>TAR</b> <b>329.0° 42.9 NM</b> <b>(2200 FT)</b>					
	078° 260°	126.4 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ TOMGO	434146N 0734454E <b>TAR</b> <b>060.0° 118.9 NM</b> <b>(2200 FT)</b>					
	086° 267°	19.6 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 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 “Approach” on frequencies 4744 kHz. - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ BERV (FIR BDRY)	434059N 0741156E <b>ATA</b> <b>274.2° 127.3 NM</b> <b>(2200 FT)</b>					
	087° 268°	58.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
△ TIPSA	433809N 0753149E <b>ATA</b> <b>278.4° 69.7 NM</b> <b>(2200 FT)</b>					
	088° 268°	34.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
▲ USUGA	433600N 0761934E <b>ATA</b> <b>287.3° 35.8 NM</b> <b>(2200 FT)</b>					
	085° 265°	21.0 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
△ UNADA	433551N 0764831E <b>ATA</b> <b>312.8° 18.0 NM</b> <b>(2200 FT)</b>				
	085° 266°	6.6 NM	FL 510 FL 120	Odd   Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ BEDUR	433546N 0765739E <b>ATA</b> <b>332.7° 14.3 NM</b> <b>(2200 FT)</b>				
	085° 266°	8.6 NM	FL 510 FL 120	Odd   Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ PEKIR	433539N 0770931E <b>ATA</b> <b>008.5° 13.5 NM</b> <b>(2200 FT)</b>				
	087° 268°	15.3 NM	FL 510 FL 120	Odd   Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ TIRBA	433456N 0773031E <b>ATA</b> <b>050.8° 22.3 NM</b> <b>(2200 FT)</b>				
	086° 266°	24.3 NM	FL 510 FL 120	Odd   Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ PIGAL	433428N 0780356E <b>ATA</b> <b>068.9° 44.5 NM</b> <b>(2200 FT)</b>				
	086° 267°	51.7 NM	FL 510 FL 120	Odd   Even	ALMATY ACC 131.4 MHZ {C}
▲ BASPI	433257N 0791501E <b>JRK</b> <b>212.0° 51.0 NM</b> <b>(2600 FT)</b>				
	087° 268°	24.3 NM	FL 510 FL 120	Odd   Even	ALMATY ACC 131.4 MHZ {C}
▲ BERTO	433159N 0794824E <b>JRK</b> <b>184.0° 42.2 NM</b> <b>(2600 FT)</b>				
	088° 269°	40.5 NM	FL 510 FL 140	Odd   Even	ALMATY ACC 131.4 MHZ {C}
▲ RULAD (FIR BDRY)	433001N 0804359E <b>JRK</b> <b>138.0° 55.2 NM</b> <b>(2600 FT)</b>				<b>For continuation, see AIP China</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>M618</b> (RNAV 5)	For Continuation, see AIP Russia					
▲ UML0D	432218N 0750715E <b>ATA</b> <b>265.4° 85.9 NM</b> <b>(2200 FT)</b>					
	033° 213°	47.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
▲ AGUNA	435906N 0754739E <b>ATA</b> <b>298.4° 67.1 NM</b> <b>(2200 FT)</b>					
	035° 216°	185.0 NM	FL 510 FL 210	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ LIPSI	461808N 0784001E <b>TDK</b> <b>002.0° 72.5 NM</b> <b>(2000 FT)</b>					
	038° 219°	70.3 NM	FL 510 FL 210	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ GOMAL	470809N 0795150E <b>AGZ</b> <b>200.0° 53.4 NM</b> <b>(2200 FT)</b>					
	039° 220°	54.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ BANUM	474633N 0804834E <b>AGZ</b> <b>296.3° 17.3 NM</b> <b>(2200 FT)</b>					
	039° 221°	132.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ NEMEG	491804N 0831242E <b>UKM</b> <b>332.4° 51.4 NM</b> <b>(1000 FT)</b>					
	042° 223°	78.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ GOMIR (FIR BDRY)	501042N 0844206E <b>UKM</b> <b>079.0° 85.2 NM</b> <b>(1000 FT)</b>					<b>For Continuation, see AIP Russia</b>

Route designator		[Route Usage Notes]					
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks	
				↓	↑		
M741 (RNAV 5)		(2) Before, see AIP Uzbekistan (3) For continuation, see AIP Route					
▲ ASLOK		410548N 0671954E <b>SMK</b> <b>224.0° 121.8 NM</b> <b>(1400 FT)</b>					<b>Before, see AIP Uzbekistan</b>
	345° 165°	36.2 NM	FL 510 FL 210	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}	
▲ RITAL (FIR BDRY)		414130N 0671206E <b>SMK</b> <b>241.0° 108.2 NM</b> <b>(1400 FT)</b>					
	341° 160°	24.5 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}	
△ ESKIZ		420521N 0670429E <b>TRK</b> <b>216.0° 99.6 NM</b> <b>(1000 FT)</b>					
	340° 160°	55.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}	
▲ PAVEL		425947N 0664642E <b>TRK</b> <b>249.0° 81.5 NM</b> <b>(1000 FT)</b>					
	343° 163°	16.2 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}	
▲ GEKSO		431544N 0664228E <b>TRK</b> <b>260.0° 82.1 NM</b> <b>(1000 FT)</b>					
	343° 162°	63.3 NM	FL 510 FL 150	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}	
△ GITIM		441752N 0662540E <b>KZO</b> <b>116.0° 44.1 NM</b> <b>(500 FT)</b>					
	344° 163°	105.2 NM	FL 510 FL 150	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}	
△ ANIGO		460143N 0660207E <b>KZO</b> <b>007.0° 82.4 NM</b> <b>(500 FT)</b>					
	343° 162°	43.3 NM	FL 510 FL 150	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}	
▲ LUGER (FIR BDRY)		464426N 0655200E <b>DZG</b> <b>223.0° 97.3 NM</b> <b>(1300 FT)</b>					

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	339° 158°	84.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ INKOL	480633N 0652413E <b>DZG</b> <b>276.0° 97.8 NM</b> <b>(1300 FT)</b>					
	338° 157°	19.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ EKLOP	482530N 0651734E <b>DZG</b> <b>285.0° 107.9 NM</b> <b>(1300 FT)</b>					
	337° 157°	31.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ REGPI	485632N 0650629E <b>ARK</b> <b>213.0° 111.5 NM</b> <b>(1300 FT)</b>					
	337° 157°	24.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ ARBIM	492045N 0645739E <b>ARK</b> <b>223.0° 99.1 NM</b> <b>(1300 FT)</b>					
	338° 157°	34.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ IPKOD	495415N 0644617E <b>ARK</b> <b>245.0° 90.4 NM</b> <b>(1300 FT)</b>					
	337° 157°	13.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ LAMGI	500657N 0644154E <b>ARK</b> <b>251.0° 90.3 NM</b> <b>(1300 FT)</b>					
	337° 156°	42.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ ERNEN	504754N 0642731E <b>ARK</b> <b>277.0° 102.2 NM</b> <b>(1300 FT)</b>					
	336° 156°	45.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ NARUR	513200N 0641130E <b>KST</b> <b>155.0° 102.0 NM</b> <b>(600 FT)</b>					

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	336° 155°	43.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ BALOK	521416N 0635540E <b>KST</b> <b>155.0° 58.6 NM</b> <b>(600 FT)</b>					
	335° 155°	58.6 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ KOSTANAY DVOR/DME (KST)	531113N 0633346E					
	318° 137°	63.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ LANOR (FIR BDRY)	540536N 0624042E <b>KST</b> <b>318.0° 63.0 NM</b> <b>(600 FT)</b>					<b>For continuation, see AIP Russia</b>

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
M875 (RNAV 5)						
▲ TIGTA (FIR BDRY)		432728N 0620446E <b>KZO</b> <b>235.0° 168.0 NM</b> <b>(500 FT)</b>				
	328° 147°	46.2 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 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 “Kyzylorda Tower” on frequencies 5335 kHz and 6672 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		Controlling unit {Airspace class} Remarks		
				↓	↑			
△ FAZUL	440916N 0613731E <b>ARL</b> <b>171.0° 160.3 NM</b> <b>(300 FT)</b>							
	327° 146°	84.4 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}		
▲ MILSO (FIR BDRY)	452519N 0604609E <b>ARL</b> <b>194.0° 91.4 NM</b> <b>(300 FT)</b>							
	327° 145°	152.0 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}		
▲ RUGUS	474250N 0591219E <b>ARL</b> <b>289.0° 112.1 NM</b> <b>(300 FT)</b>							
	327° 145°	131.6 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}		
△ ODILA	494259N 0575122E <b>AKB</b> <b>131.0° 41.9 NM</b> <b>(700 FT)</b>							
	325° 143°	90.5 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 MHZ {C}		
▲ MULTA (FIR BDRY)	510442N 0565042E <b>AKB</b> <b>335.0° 50.6 NM</b> <b>(700 FT)</b>							

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation			Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
M993 (RNAV 5)		ⓘ Before, see AIP Russia				
▲ GOMIR (FIR BDRY)		501042N 0844206E  UKM 079.0° 85.2 NM (1000 FT)				Before, see AIP Russia
	259° 078°	42.5 NM	FL 510 FL 130	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ DEVNA		500647N 0833619E  UKM 078.0° 42.7 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
				↓	↑	
	258° 077°	42.7 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ UST-KAMENOGORSK TOWER 130.1 MHZ {C}
▲ UST-KAMENOGORSK DVOR/DME (UKM)	500158N 0823031E					
	253° 071°	51.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ UST-KAMENOGORSK TOWER 130.1 MHZ {C}
▲ NOKNA	495154N 0811139E <b>SEM</b> <b>122.0° 46.9 NM</b> <b>(700 FT)</b>					
	251° 070°	36.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
△ ROKOD	494408N 0801719E <b>SEM</b> <b>170.0° 36.9 NM</b> <b>(700 FT)</b>					
	250° 070°	21.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
△ UVTOK	493924N 0794524E <b>SEM</b> <b>197.0° 45.7 NM</b> <b>(700 FT)</b>					
	250° 069°	35.5 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ NONRI	493111N 0785223E <b>SEM</b> <b>219.0° 72.9 NM</b> <b>(700 FT)</b>					
	249° 068°	52.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ AKASA	491819N 0773455E <b>SEM</b> <b>231.0° 120.9 NM</b> <b>(700 FT)</b>					

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
				↓	↑	
	248° 067°	30.4 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Semey Tower” on frequencies 6645 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ ESUMA	491025N 0765006E <b>KRG</b> <b>095.0° 139.0 NM</b> <b>(1800 FT)</b>					
	247° 066°	26.7 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Semey Tower” on frequencies 6645 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ GORBO (FIR BDRY)	490316N 0761100E <b>KRG</b> <b>099.0° 116.9 NM</b> <b>(1800 FT)</b>					
	248° 067°	14.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Karaganda Tower” on frequencies 4728 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
△ LALAS	485941N 0755014E <b>KRG</b> <b>105.0° 105.2 NM</b> <b>(1800 FT)</b>					
	249° 068°	31.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ IRGIT	485220N 0750436E <b>KRG</b> <b>118.0° 82.9 NM</b> <b>(1800 FT)</b>					
	246° 065°	45.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ GONEL	483912N 0735912E <b>KRG</b> <b>150.0° 66.6 NM</b> <b>(1800 FT)</b>					
	246° 066°	37.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ LUTEK	482853N 0730459E <b>KRG</b> <b>180.0° 73.3 NM</b> <b>(1800 FT)</b>					
	245° 063°	64.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 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 “Karaganda Tower” on frequencies 4728 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ ALEGA	480900N 0713249E <b>KRG</b> <b>209.0° 117.2 NM</b> <b>(1800 FT)</b>					

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	244° 063°	31.7 NM	FL 510 FL 120	Even	Odd	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}
▲ KUROL	475900N 0704800E <b>DZG</b> <b>075.0° 123.8 NM</b> <b>(1300 FT)</b>					
	256° 074°	80.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ AMASO	474914N 0684857E <b>DZG</b> <b>074.0° 43.1 NM</b> <b>(1300 FT)</b>					
	254° 073°	43.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
▲ ZHEZKAZGAN DVOR/DME (DZG)	474317N 0674542E					
	286° 104°	43.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
△ DINBO	480029N 0664647E <b>DZG</b> <b>284.0° 43.2 NM</b> <b>(1300 FT)</b>					
	285° 103°	64.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ EKLOP	482530N 0651734E <b>DZG</b> <b>285.0° 107.9 NM</b> <b>(1300 FT)</b>					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	283° 101°	74.8 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 “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 <b>ARL</b> <b>024.0° 145.9 NM</b> <b>(300 FT)</b>					
	281° 100°	39.3 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}
▲ BEDRU (FIR BDRY)	490642N 0623638E <b>ARL</b> <b>008.0° 143.0 NM</b> <b>(300 FT)</b>					
	280° 096°	179.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ ADRAT	500334N 0581528E <b>AKB</b> <b>096.0° 43.3 NM</b> <b>(700 FT)</b>					
	276° 096°	43.3 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 MHZ {C}
▲ AKTOBE DVOR/ DME (AKB)	501548N 0571055E					

THIS PAGE INTENTIONALLY LEFT BLANK