

## ENR 3 ATS ROUTES

## ENR 3.1 CONVENTIONAL NAVIGATION ROUTES

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
A80									
▲ PIKAN (FIR BDRY)	425300N 0493000E								Before, see AIP Russia
	042° 222°	90.6 NM		10000 FT ALT 6000 FT ALT	1300 FT ALT		Odd	Even	AKTAU TWR 120.7 MHZ {C}
▲ AKTAU DVOR/ DME (AKT)	435220N 0510352E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
A87									
▲ AKTAU DVOR/ DME (AKT)	435220N 0510352E								
	301° 119°	85.2 NM		<u>10000 FT ALT</u> 6000 FT ALT	1300 FT ALT		Even	Odd	AKTAU TWR 120.7 MHZ {C}
▲ AZABI (FIR BDRY)	444424N 0493000E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
A122									
▲ URALSK DVOR/DME (URL)	510855N 0513238E								
	046° 226°	34.8 NM		10000 FT ALT 5000 FT ALT	1700 FT ALT		Odd	Even	URALSK TWR 119.7 MHZ {C}

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
△ INRIS	512800N 0521856E								
	046° 226°	8.6 NM		10000 FT ALT 5000 FT ALT	1300 FT ALT		Odd	Even	URALSK TWR 119.7 MHZ {C}
▲ EKTEN (FIR BDRY)	513242N 0523030E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
A303									
▲ PETROPAVLO VSK DVOR/ DME (PSK)	544703N 0691309E								
	304° 123°	34.5 NM		<div>10000 FT ALT</div> <div>5000 FT ALT</div>	2100 FT ALT		Even	Odd	PETROPAVLOVSK TWR 123.7 MHZ {C}
▲ LETIK (FIR BDRY)	551200N 0683200E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
A357									
▲ GASBI (FIR BDRY)	422611N 0502811E								Before, see AIP Azerbaijan
	010° 190°	90.0 NM		10000 FT ALT 6000 FT ALT	1400 FT ALT		Odd	Even	AKTAU TWR 120.7 MHZ {C}
▲ AKTAU DVOR/ DME (AKT)	435220N 0510352E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
A357									
▲ AKTOBE DVOR/DME (AKB)	501548N 0571055E								
	041° 222°	49.5 NM		10000 FT ALT 5000 FT ALT	2700 FT ALT		Odd	Even	AKTOBE TWR 120.9 MHZ {C}
▲ ALGAS	504613N 0581203E								
	041° 222°	19.1 NM		10000 FT ALT 5000 FT ALT	3700 FT ALT		Odd	Even	AKTOBE TWR 120.9 MHZ {C}
▲ NINBU (FIR BDRY)	505748N 0583554E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
A357									
▲ PETROPAVLO VSK DVOR/ DME (PSK)	544703N 0691309E								
	072° 254°	62.0 NM		<div>10000 FT ALT</div> <div>5000 FT ALT</div>	1600 FT ALT		Odd	Even	PETROPAVLOVSK TWR 123.7 MHZ {C}
▲ BARKI (FIR BDRY)	545153N 0710000E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
A359									
▲ PETROPAVLO VSK DVOR/ DME (PSK)	544703N 0691309E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
	277° 096°	37.4 NM		10000 FT ALT 5000 FT ALT	2100 FT ALT		Even	Odd	PETROPAVLOVSK TWR 123.7 MHZ {C}
▲ IKANA (FIR BDRY)	545924N 0681200E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
A360									
▲ AKTOBE DVOR/DME (AKB)	501548N 0571055E								
	335° 154°	50.6 NM		10000 FT ALT 5000 FT ALT	3500 FT ALT		Even	Odd	AKTOBE TWR 120.9 MHZ {C}
▲ MULTA (FIR BDRY)	510442N 0565042E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
A368									
▲ URALSK DVOR/DME (URL)	510855N 0513238E								
	316° 135°	21.5 NM		<div>10000 FT ALT</div> <div>5000 FT ALT</div>	1700 FT ALT		Even	Odd	URALSK TWR 119.7 MHZ {C}
△ OGAPI	512648N 0511336E								
	316° 135°	16.3 NM		<div>10000 FT ALT</div> <div>5000 FT ALT</div>	1600 FT ALT		Even	Odd	URALSK TWR 119.7 MHZ {C}
▲ GUTAN (FIR BDRY)	514024N 0505912E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates							Remarks	
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
A924									
▲ AKTAU DVOR/ DME (AKT)	435220N 0510352E								
	277° 095°	69.6 NM		10000 FT ALT 6000 FT ALT	1300 FT ALT		Even	Odd	AKTAU TWR 120.7 MHZ {C}
▲ RALAN (FIR BDRY)	440812N 0493000E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
B833									
▲ UST-KAMENOGOR SKDVOR/DME (UKM)	500158N 0823031E								
	326° 145°	51.2 NM		10000 FT ALT 6000 FT ALT	4400 FT ALT		Even	Odd	UST-KAMENOGORSK TOWER 130.1 MHZ {C}
▲ ADARO (FIR BDRY)	504706N 0815242E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
G3									
▲ URALSK DVOR/DME (URL)	510855N 0513238E								
	288° 107°	42.7 NM		10000 FT ALT 5000 FT ALT	1700 FT ALT		Even	Odd	URALSK TWR 119.7 MHZ {C}
▲ ARISA (FIR BDRY)	512924N 0503254E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
G96									
▲ IPLED (FIR BDRY)	432348N 0493000E								Before, see AIP Russia
	060° 241°	73.9 NM		10000 FT ALT 6000 FT ALT	1300 FT ALT		Odd	Even	AKTAU TWR 120.7 MHZ {C}
▲ AKTAU DVOR/ DME (AKT)	435220N 0510352E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
G96									
▲ SOMIP	502106N 0801402E								
	060° 241°	68.1 NM		<div>10000 FT ALT</div> <div>5000 FT ALT</div>	4400 FT ALT		Odd	Even	SEMEY TWR 128 MHZ {C}
▲ ADARO (FIR BDRY)	504706N 0815242E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
G111									
▲ KOSTANAY DVOR/DME (KST)	531113N 0633346E								
	268° 086°	38.7 NM		<div>10000 FT ALT</div> <div>5000 FT ALT</div>	3200 FT ALT		Even	Odd	KOSTANAY TWR 129.3 MHZ {C}
△ LODEZ	531715N 0623004E								
	266° 085°	48.8 NM		<div>10000 FT ALT</div> <div>5000 FT ALT</div>	1900 FT ALT		Even	Odd	KOSTANAY TWR 129.3 MHZ {C}
▲ TITUR (FIR BDRY)	532406N 0610924E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
G121	(S) For continuation, see AIP Russia								
▲ SOMIP	502106N 0801402E								
	019° 199°	58.8 NM		10000 FT ALT 5000 FT ALT	3500 FT ALT		Odd	Even	SEMEY TWR 128 MHZ {C}
▲ ELSUT (FIR BDRY)	511342N 0805506E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates							Remarks	
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
G552	✈ 100								
▲ AKTOBE DVOR/DME (AKB)	501548N 0571055E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
	008° 187°	38.6 NM		10000 FT ALT 5000 FT ALT	3500 FT ALT		Odd	Even	AKTOBE TWR 120.9 MHZ {C}
▲ SANIR (FIR BDRY)	505230N 0572942E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
R227									
▲ AKTAU DVOR/ DME (AKT)	435220N 0510352E								
	263° 082°	67.9 NM		10000 FT ALT 6000 FT ALT	2300 FT ALT		Even	Odd	AKTAU TWR 120.7 MHZ {C}
▲ ITAKA (FIR BDRY)	435224N 0493000E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
R482									
▲ KOSTANAY DVOR/DME (KST)	531113N 0633346E								
	318° 137°	63.0 NM		10000 FT ALT 5000 FT ALT	3100 FT ALT		Even	Odd	KOSTANAY TWR 129.3 MHZ {C}
▲ LANOR (FIR BDRY)	540536N 0624042E								For continuation, see AIP Russia



Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
W324									
▲ AKTAU DVOR/DME (AKT)	435220N 0510352E								
	003° 182°	56.7 NM		FL 510 FL 120	2900 FT ALT		Odd	Even	AKTOBE ACC 134,3 MHZ AKTAU TOWER 120.7 MHZ {C}
△ PIRIM	444808N 0511741E								
	001° 180°	53.2 NM		FL 510 FL 120	1100 FT ALT		Odd	Even	AKTOBE ACC 134,3 MHZ {C}
▲ KOLIB	454047N 0512848E								
	360° 180°	45.7 NM		FL 510 FL 120	1000 FT ALT		Odd	Even	AKTOBE ACC 130,9 MHZ {C}
△ NIKNA	462557N 0513838E								
	360° 180°	43.2 NM		FL 510 FL 120	1400 FT ALT		Odd	Even	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	1600 FT ALT		Even	Odd	AKTOBE ACC 130,9 MHZ ATYRAU TOWER 118.1 MHZ {C}
△ OLAPU	475146N 0514531E								
	348° 168°	69.9 NM		FL 510 FL 120	1700 FT ALT		Even	Odd	AKTOBE ACC 130,9 MHZ {C}
▲ BAGIR	490131N 0514106E								
	348° 167°	84.3 NM		FL 510 FL 120	1400 FT ALT		Even	Odd	AKTOBE ACC 131.4 MHZ {C}
△ DOKUS	502539N 0513528E								
	347° 167°	43.4 NM		FL 510 FL 120	1400 FT ALT		Even	Odd	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}
▲ URALSK DVOR/DME (URL)	510855N 0513238E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates							Remarks	
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
W332									

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	{COP}	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
▲ KYZYLORDA DVOR/DME (KZO)	444145N 0653349E								
	020° 200°	44.3 NM		FL 510 FL 120	1700 FT ALT		Odd	Even	SHYMKENT ACC 127,3MHZ KYZYLORDA TOWER 120.9 {C}
△ AMREK	452109N 0660226E								
	018° 198°	70.9 NM		FL 510 FL 120	2200 FT ALT		Odd	Even	SHYMKENT ACC 127,3MHZ {C}
▲ GORVA (FIR BDRY)	462455N 0664655E								
	019° 199°	44.7 NM		FL 510 FL 120	2300 FT ALT		Odd	Even	ASTANA ACC 132.5MHZ {C}
△ DITSO	470443N 0671637E								
	019° 199°	43.4 NM		FL 510 FL 120	3000 FT ALT		Odd	Even	ASTANA ACC 132.5MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
▲ ZHEZKAZGAN DVOR/DME (DZG)	474317N 0674542E								
	340° 160°	43.1 NM		FL 510 FL 120	4200 FT ALT		Even	Odd	ASTANA ACC 132.5MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
△ BEDOR	482529N 0673251E								
	341° 160°	94.2 NM		FL 510 FL 120	5500 FT ALT		Even	Odd	ASTANA ACC 132.5MHZ {C}
▲ EDETO	495808N 0670732E								
	339° 159°	21.3 NM		FL 510 FL 120	2500 FT ALT		Even	Odd	ASTANA ACC 133.1MHZ {C}
▲ ARKALYK DVOR/DME (ARK)	501904N 0670118E								
	315° 131°	154.7 NM		FL 510 FL 140	2500 FT ALT		Even	Odd	ASTANA ACC 133.1MHZ {C}
△ UNIBE	522328N 0643445E								
	311° 130°	60.5 NM		FL 510 FL 120	2100 FT ALT		Even	Odd	ASTANA ACC 133.1MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ KOSTANAY DVOR/DME (KST)	531113N 0633346E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑							↓	
W333									
▲ ALMATY DVOR/DME (ATA)	432229N 0770507E								
	333° 152°	41.1 NM		FL 510 FL 120	9000 FT ALT		Even	Odd	ALMATY ACC 131,4MHZ ALMATY APPROACH 124.8 MHZ {C}
▲ BAKIS	440031N 0764333E								
	332° 152°	21.5 NM		FL 510 FL 120	4500 FT ALT		Even	Odd	ALMATY ACC 133.1MHZ ALMATY APPROACH 124.8 MHZ {C}
▲ ETEDA	442024N 0763206E								
	332° 150°	89.9 NM		FL 510 FL 140	4000 FT ALT		Even	Odd	ALMATY ACC 133.1MHZ {C}
▲ RITAB	454308N 0754239E								
	330° 150°	32.9 NM		FL 510 FL 120	3000 FT ALT		Even	Odd	ALMATY ACC 125,5MHZ {C}
△ TULPI	461318N 0752358E								
	330° 150°	43.3 NM		FL 510 FL 120	3000 FT ALT		Even	Odd	ALMATY ACC 125,5MHZ BALKHASH TOWER 128.0 MHZ {C}
▲ BALKHASH DVOR/DME (BLH)	465259N 0745902E								
	333° 152°	42.1 NM		FL 510 FL 120	6400 FT ALT		Even	Odd	ALMATY ACC 125,5MHZ BALKHASH TOWER 128.0 MHZ {C}
△ GIREM	473219N 0743709E								
	332° 151°	38.2 NM		FL 510 FL 120	5000 FT ALT		Even	Odd	ALMATY ACC 125,5MHZ {C}
▲ LUKUS (FIR BDRY)	480759N 0741658E								
	332° 151°	54.7 NM		FL 510 FL 150	5800 FT ALT		Even	Odd	ASTANA ACC 124.1MHZ {C}
△ NEMKU	485904N 0734736E								
	331° 150°	45.3 NM		FL 510 FL 120	5200 FT ALT		Even	Odd	ASTANA ACC 124.1MHZ KARAGANDA TOWER 122.0 MHZ {C}
▲ KARAGANDA DVOR/DME (KRG)	494114N 0732226E								
	309° 127°	41.2 NM		FL 510 FL 120	5100 FT ALT		Even	Odd	ASTANA ACC 124.1MHZ KARAGANDA TOWER 122.0 MHZ {C}
▲ BANOS	501116N 0723844E								
	308° 127°	67.4 NM		FL 510 FL 120	4300 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ ASTANA APPROACH 124.6 MHZ {C}

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
▲ ASTANA DVOR/DME (AST)	510006N 0712600E								
	325° 144°	65.3 NM		FL 510 FL 120	2900 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ ASTANA APPROACH 124.6 MHZ {C}
△ KOLUR	515901N 0704103E								
	324° 143°	46.9 NM		FL 510 FL 120	2700 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ {C}
△ LULEK	524106N 0700733E								
	324° 144°	44.0 NM		FL 510 FL 120	4800 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ KOKSHETAU TOWER 127.9 MHZ {C}
▲ KOKSHETAU VOR/DME (KTU)	532103N 0693701E								
	338° 157°	40.1 NM		FL 510 FL 120	3100 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ KOKSHETAU TOWER 127.9 MHZ {C}
▲ TETKI	540020N 0692425E								
	340° 160°	47.3 NM		FL 510 FL 120	2100 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ PETROPAVLOVSK TOWER 123.7 MHZ {C}
▲ PETROPAVLO VSK DVOR/DME (PSK)	544703N 0691309E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
W336									
▲ BALKHASH DVOR/DME (BLH)	465259N 0745902E								
	066° 246°	44.2 NM		FL 510 FL 120	4000 FT ALT		Odd	Even	ALMATY ACC 125,5MHZ BALKHASH TOWER 128.0 MHZ {C}
△ ESADO	470607N 0760037E								
	066° 247°	44.7 NM		FL 510 FL 120	5000 FT ALT		Odd	Even	ALMATY ACC 125,5MHZ {C}
▲ MADEV	471857N 0770328E								
	067° 250°	142.5 NM		FL 510 FL 200	6000 FT ALT		Odd	Even	ALMATY ACC 132,1MHZ {C}

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates							Remarks	
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
▲ AYAGUZ VOR/DME (AGZ)	475552N 0802659E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates							Remarks	
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
W348									
▲ KARAGANDA DVOR/DME (KRG)	494114N 0732226E								
	100° 280°	43.9 NM		FL 510 FL 120	4900 FT ALT		Odd	Even	ASTANA ACC 124.1MHZ KARAGANDA TOWER 122.0 MHZ {C}
△ ARLIH	492724N 0742621E								
	100° 282°	72.7 NM		FL 510 FL 200	8200 FT ALT		Odd	Even	ASTANA ACC 124.1MHZ {C}
▲ GORBO (FIR BDRY)	490316N 0761100E								
	102° 284°	60.1 NM		FL 510 FL 270	8200 FT ALT		Odd	Even	ALMATY ACC 132,1MHZ {C}
△ DODEM	484212N 0773614E								
	104° 287°	123.0 NM		FL 510 FL 200	7200 FT ALT		Odd	Even	ALMATY ACC 132,1MHZ {C}
▲ AYAGUZ VOR/ DME (AGZ)	475552N 0802659E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑							↓	
W351									
▲ ZHEZKAZGAN DVOR/DME (DZG)	474317N 0674542E								
	052° 232°	43.0 NM		FL 510 FL 120	3000 FT ALT		Odd	Even	ASTANA ACC 132.5MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
△ ADRIK	480432N 0684119E								
	052° 233°	81.6 NM		FL 510 FL 180	4100 FT ALT		Odd	Even	ASTANA ACC 132.5MHZ {C}

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
▲ INTAL	484345N 0702839E								
	053° 235°	80.9 NM		FL 510 FL 180	4700 FT ALT		Odd	Even	ASTANA ACC 124.1MHZ {C}
△ DOZIN	492040N 0721800E								
	055° 236°	46.8 NM		FL 510 FL 120	5500 FT ALT		Odd	Even	ASTANA ACC 124.1MHZ KARAGANDA TOWER 122.0 MHZ {C}
▲ KARAGANDA DVOR/DME (KRG)	494114N 0732226E								
	033° 213°	44.6 NM		FL 510 FL 120	4500 FT ALT		Odd	Even	ASTANA ACC 124.1MHZ KARAGANDA TOWER 122.0 MHZ {C}
△ UNLOM	501425N 0740834E								
	033° 213°	14.4 NM		FL 510 FL 120	4500 FT ALT		Odd	Even	ASTANA ACC 124.1MHZ {C}
▲ KANZI	502504N 0742336E								
	033° 214°	71.7 NM		FL 510 FL 120	5600 FT ALT		Odd	Even	ASTANA ACC 132.8MHZ {C}
△ ROHIL	511738N 0754034E								
	034° 215°	76.3 NM		FL 510 FL 120	2400 FT ALT		Odd	Even	ASTANA ACC 132.8MHZ PAVLODAR TOWER 119.8 MHZ {C}
▲ PAVLODAR DVOR/DME (PVL)	521235N 0770542E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
W352									
▲ KARAGANDA DVOR/DME (KRG)	494114N 0732226E								
	070° 251°	43.4 NM		FL 510 FL 120	4500 FT ALT		Odd	Even	ASTANA ACC 124.1MHZ KARAGANDA TOWER 122.0 MHZ {C}
△ SULIB	494914N 0742808E								
	071° 253°	61.6 NM		FL 510 FL 160	5100 FT ALT		Odd	Even	ASTANA ACC 124.1MHZ {C}
▲ LUMUD	495933N 0760202E								
	073° 253°	28.5 NM		FL 510 FL 200	7500 FT ALT		Odd	Even	ASTANA ACC 132.8MHZ {C}

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
▲ TULFA (FIR BDRY)	500354N 0764539E								
	073° 256°	92.4 NM		FL 510 FL 220	6600 FT ALT		Odd	Even	ALMATY ACC 132,1MHZ {C}
△ LUREL	501613N 0790803E								
	076° 257°	42.9 NM		FL 510 FL 120	4000 FT ALT		Odd	Even	ALMATY ACC 132,1MHZ SEMEY TOWER 128.0 MHZ {C}
▲ SEMEY DVOR/ DME (SEM)	502058.7N 0801437.5E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
W355									
▲ KOSTANAY DVOR/DME (KST)	531113N 0633346E								
	050° 230°	65.0 NM		FL 510 FL 120	2200 FT ALT		Odd	Even	ASTANA ACC 133.1MHZ KOSTANAY TOWER 129.3 MHZ {C}
△ AKOSO	534140N 0650940E								
	052° 233°	48.6 NM		FL 510 FL 150	1800 FT ALT		Odd	Even	ASTANA ACC 133.1MHZ {C}
▲ DEPIR	540211N 0662405E								
	052° 232°	47.8 NM		FL 510 FL 150	1700 FT ALT		Odd	Even	ASTANA ACC 132.8MHZ {C}
△ KOKAV	542244N 0673738E								
	053° 235°	60.7 NM		FL 510 FL 120	1700 FT ALT		Odd	Even	ASTANA ACC 132.8MHZ PETROPAVLOVSK TOWER 123.7 MHZ {C}
▲ PETROPAVLO VSK DVOR/ DME (PSK)	544703N 0691309E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates							Remarks	
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
W358									

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	{COP}	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
▲ PAVLODAR DVOR/DME (PVL)	521235N 0770542E								
	234° 052°	79.0 NM		FL 510 FL 120	3400 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ PAVLODAR TOWER 119.8 MHZ {C}
▲ ABELI	513524N 0751312E								
	248° 066°	88.0 NM		FL 510 FL 140	5000 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ {C}
△ BOLSU	511507N 0725620E								
	246° 065°	58.9 NM		FL 510 FL 120	4400 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ ASTANA DVOR/DME (AST)	510006N 0712600E								
	249° 067°	55.0 NM		FL 510 FL 120	2500 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ ASTANA APPROACH 124.6 MHZ {C}
△ OSROL	504818N 0700112E								
	248° 066°	74.0 NM		FL 510 FL 120	2400 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ {C}
▲ TUSEP	503136N 0680751E								
	244° 063°	44.4 NM		FL 510 FL 120	2400 FT ALT		Even	Odd	ASTANA ACC 133.1MHZ {C}
▲ ARKALYK DVOR/DME (ARK)	501904N 0670118E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	{COP}	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
W360									
▲ SEMEY DVOR/ DME (SEM)	502058.7N 0801437.5E								
	170° 350°	43.1 NM		FL 510 FL 120	3800 FT ALT		Odd	Even	ALMATY ACC 132,1MHZ SEMEY TOWER 128.0 MHZ {C}
△ LUNOV	493800N 0801801E								
	170° 351°	102.4 NM		FL 510 FL 150	6400 FT ALT		Odd	Even	ALMATY ACC 132,1MHZ {C}
▲ AYAGUZ VOR/ DME (AGZ)	475552N 0802659E								



Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
W361									
▲ UST-KAMENOGOR SKDVOR/DME (UKM)	500158N 0823031E								
	277° 095°	45.2 NM		FL 510 FL 120	4800 FT ALT		Even	Odd	ALMATY ACC 132,1MHZ UST-KAMENOGORSK TOWER 130.1 MHZ {C}
▲ LIRNA	501159N 0812203E								
	275° 094°	44.2 NM		FL 510 FL 120	4800 FT ALT		Even	Odd	ALMATY ACC 132,1MHZ SEMEY TOWER 128.0 MHZ {C}
▲ SEMEY DVOR/DME (SEM)	502058.7N 0801437.5E								
	307° 125°	49.7 NM		FL 510 FL 120	3400 FT ALT		Even	Odd	ALMATY ACC 132,1MHZ SEMEY TOWER 128.0 MHZ {C}
▲ OBUNA (FIR BDRY)	505513N 0791803E								
	305° 123°	74.5 NM		FL 510 FL 120	2100 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ {C}
△ PIVAL	514549N 0775050E								
	305° 125°	38.7 NM		FL 510 FL 120	2400 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ PAVLODAR TOWER 119.8 MHZ {C}
▲ PAVLODAR DVOR/DME (PVL)	521235N 0770542E								
	277° 094°	76.1 NM		FL 510 FL 120	2400 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ PAVLODAR TOWER 119.8 MHZ {C}
△ ADODA	523230N 0750554E								
	275° 092°	114.8 NM		FL 510 FL 200	2000 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ {C}
△ ULSET	530027N 0720230E								
	273° 091°	47.2 NM		FL 510 FL 120	3200 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ {C}
△ BALMI	531107N 0704613E								
	273° 092°	42.7 NM		FL 510 FL 120	4200 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ KOKSHETAU TOWER 127.9 MHZ {C}
▲ KOKSHETAU VOR/DME (KTU)	532103N 0693701E								
	257° 076°	44.0 NM		FL 510 FL 120	3500 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ KOKSHETAU TOWER 127.9 MHZ {C}
△ ROGUN	531944N 0682341E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit {Airspace class} Remarks
	↓ / ↑						↓	↑	
	257° 076°	54.7 NM		FL 510 FL 120	3400 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ {C}
▲ BAVAG	531819N 0665235E								
	257° 075°	55.2 NM		FL 510 FL 140	1900 FT ALT		Even	Odd	ASTANA ACC 133.1MHZ {C}
△ BIMSO	531631N 0652038E								
	254° 073°	64.4 NM		FL 510 FL 120	2200 FT ALT		Even	Odd	ASTANA ACC 133.1MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ KOSTANAY DVOR/DME (KST)	531113N 0633346E								