

UAKD AD 2

Note: The following sections in this chapter are intentionally left blank: AD-2.10, AD-2.16, AD-2.21

UAKD AD 2.1 Aerodrome Location Indicator And Name

UAKD - ZHEZKAZGAN

UAKD AD 2.2 Aerodrome Geographical And Administrative Data

1	ARP coordinates and site at AD	474233N 0674418E At the centre of RWY
2	Direction and distance from (city)	170°, 5.9 NM of Zhezkazgan center
3	Elevation/Reference temperature	1251 FT/30° C
4	Geoid undulation at AD ELEV PSN	-115 FT
5	MAG VAR/Annual Change	8° E (2013) / 0,03°
6	AD Administration, address, telephone, telefax, telex, AFS	Post: Authority of Airport 100600 Zhezkazgan, JSC Aircompany "Zhezkazgan Air" Republic of Kazakhstan Phone: +7 (7102) 745750 AFS: UAKDKOXX Email: zhezair3@mail.ru
7	Types of traffic permitted (IFR/VFR)	IFR-VFR
8	Remarks	Nil

UAKD AD 2.3 Operational Hours

1	AD Operator	See NOTAM Phone: +7 (7102) 745750
2	Customs and immigration	ANY 02:00 - 14:00 UTC
3	Health and sanitation	ANY 02:00 - 14:00 UTC
4	AIS Briefing Office	ANY 02:00 - 14:00 UTC
5	ATS Reporting Office (ARO)	ANY 02:00 - 14:00 UTC
6	MET Briefing Office	HO
7	ATS	See NOTAM
8	Fuelling	ANY 02:00 - 14:00 UTC Phone: +7 (7102) 745750
9	Handling	ANY 02:00 - 14:00 UTC Phone: +7 (7102) 745750
10	Security	H24 Phone: +7 (7102) 745761
11	De-icing	ANY 02:00 - 14:00 UTC Phone: +7 (7102) 745750
12	Remarks	Nil

UAKD AD 2.4 Handling Services And Facilities

1	Cargo-handling facilities	Handling up to 5 tonnes weight
2	Fuel/oil types	TS-1
3	Fuelling facilities/capacity	1 truck 20000 litres
4	De-icing facilities	AVBL de-icing fluid Type 1, Type 4
5	Hangar space for visiting aircraft	Not available for visiting aircraft
6	Repair facilities for visiting aircraft	Minor repairs in the aviation engineering service
7	Remarks	Nil

UAKD AD 2.5 Passenger Facilities

1	Hotels	City hotel
2	Restaurants	In the airport
3	Transportation	Buses, taxis
4	Medical facilities	Aid post at Airport Terminal, ambulance service, hospitals in Zhezkazgan
5	Bank and Post Office	In the city Zhezkazgan
6	Tourist Office	In the city Zhezkazgan
7	Remarks	Nil

UAKD AD 2.6 Rescue And Fire Fighting Services

1	AD category for fire fighting	CAT A5
2	Rescue equipment	2 fire engines with a total volume extinguishing agent 15 000 liter.
3	Capability for removal of disabled aircraft	Tractor K-700, towbar
4	Remarks	Out of regulations - CAT A3

UAKD AD 2.7 Seasonal Availability - Clearing

1	Types of clearing equipment	1 rotor, 1 tractor K-700, 1 runway cleaning truck
2	Clearance priorities	1. RWY 2. TWY 3. Stands
3	Remarks	(Seasonal availability: All seasons, caution advised in winter during snow conditions) The granulated deicing reagent used is NKMM CJSC "RHZ" "NORDIX"

UAKD AD 2.8 Aprons, Taxiways And Check Locations/Positions Data

1	Apron surface and strength	STANDS		SURFACE	STRENGTH
		1-2		CONC+ASPH	PCN 33/R/B/X/T
		3-7		CONC+ASPH	PCN 22/F/C/X/T
2	Taxiway width, surface and strength	TWY	WIDTH (M)	SURFACE	STRENGTH
		A	18	CONC+ASPH	PCN 33/R/B/X/T
		C	13	ASPH	PCN 9/F/C/Y/T
3	Altimeter checkpoint location and elevation	Nil			
4	VOR checkpoints	Nil			
5	INS checkpoints	Nil			
6	Remarks	Turning of CAT C, D ACFT on RWY turning bays № 2 and № 3 is prohibited CAT C, D ACFT taxiing along centerline marking at the reduced speed with the crew's good look-out TWY-A taxiing for ACFT IL-76T use only inner engines			

UAKD AD 2.9 Surface Movement Guidance And Control System And Markings

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	Guidance sign board at entrance of RWYs, guidance sign designating taxiways and apron
2	RWY and TWY markings and LGT	Markings of thresholds, touchdown zones, centre line, fixed distance markers, RWY edges, RWY designations, taxi holding positions, taxiway centre lines
3	Stop bars	Nil
4	Other runway protection measures	Nil
5	Remarks	Nil

UAKD AD 2.10 Aerodrome Obstacles

NIL

UAKD AD 2.11 Meteorological Information Provided

1	Associated MET Office	Meteorological Service at Zhezkazgan aerodrome
2	Hours of service MET Office outside hour	HO
3	Office responsible for TAF preparation: Periods of validity	Meteorological Service at Zhezkazgan aerodrome, 9HR (0009, 0312, 0615, 0918, 1221, 1524, 1803, 2106)
4	Trend forecast Interval of issuance	TREND 30 min
5	Briefing/consultation provided	Personal consultation (Russian)
6	Flight documentation/languages used	TAF, METAR, SPECI, SIGMET, GAMET, AIRMET English
7	Charts and other information AVBL for briefing or consultation	S, U85, U70, U50, U40, U30, U25, U20, prognostic charts of wind and temperature at flight levels (FL), max wind, T, prognostic charts P85, P70, P50, P40, P30, P25, P20, SWH, SWM of WAFC, SWL of Kazakhstan;

8	Supplementary equipment AVBL for providing information	Nil
9	ATS units provided with information	TWR
10	Additional information	Nil

UAKD AD 2.12 Runway Physical Characteristics

Designation s RWY NR	TRUE BRG	Dimensions of RWY (M)	Strength (PCN) and surface of RWY and SWY	THR coordinates RWY end coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY	Slope of RWY-SWY
1	2	3	4	5	6	7
04	51.73°	2601 X 42	34/R/B/X/T CONC+ASPH	474206.51N 0674329.14E - -115.2 FT	THR 1251.3 FT	0.36%
22	231.75°	2601 X 42	34/R/B/X/T CONC+ASPH	474258.68N 0674507.14E - -115.2 FT	THR 1233.9 FT	0.36%

SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RESA dimensions (M)	Location and description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
Nil	400 X 160	2901 X 300	240 X 150	Nil	AVBL	Nil
Nil	400 X 160	2901 X 300	240 X 150	Nil	AVBL	Nil

UAKD AD 2.13 Declared Distances

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
04	2601	3001	2601	2601	Nil
22	2601	3001	2601	2601	Nil

UAKD AD 2.14 Approach And Runway Lighting

RWY Designator	APCH LGT type, LEN, INTST	THR LGT colour, WBAR	VASIS, (MEHT), PAPI	TDZ, LGT LEN	RWY Centre Line LGT Length, spacing, colour, INTST	RWY edge LGT LEN, spacing, colour, INTST	RWY End LGT colour, WBAR	SWY LGT LEN, colour	Remarks
1	2	3	4	5	6	7	8	9	10
04	CAT I (PALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	2600m, spacing 60m, 0-2000m white, last 600m yellow LIH	RED Nil	Nil	Turn pad: yellow
22	CAT I (PALS) 870 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	2600m, spacing 60m, 0-2000m white, last 600m yellow LIH	RED Nil	Nil	Turn pad: yellow

UAKD AD 2.15 Other Lighting, Secondary Power Supply

1	ABN/IBN location, characteristics and hours of operation	ABN: Nil IBN: Nil
2	LDI location and LGT Anemometer location and LGT	LDI: Nil
3	TWY edge and centre line lighting	TWY A EDGE: BLU
4	Secondary power supply/switch-over time	AVBL, 15 SEC
5	Remarks	Nil

UAKD AD 2.16 Helicopter Landing Area

NIL

UAKD AD 2.17 ATS Airspace

1	Designation and lateral limits	ZHEZKAZGAN CTR A circle radius 25 NM centered on 474317N 0674542E
2	Vertical limits	4000 FT ALT / GND
3	Airspace classification	C
4	ATS unit call sign Language(s)	ZHEZKAZGAN TOWER EN ZHEZKAZGAN VYSHKA RU
5	Transition altitude	10000 FT
6	Hours of applicability	See NOTAM
7	Remarks	Nil

UAKD AD 2.18 ATS Communication Facilities

Service designation	Call sign	Frequency	SATVOICE number(s)	Logon address	Hours of operation	Remarks
1	2	3	4	5	6	7
APP	ZHEZKAZGAN TOWER (EN) ZHEZKAZGAN VYSHKA (RU)	127,1 MHz	Nil	Nil	See NOTAM	Nil
SMC			Nil	Nil		
TWR			Nil	Nil		
Production and dispatcher service	ZHEZKAZGAN TRANZIT (EN) ZHEZKAZGAN TRANZIT (RU)	131.6 MHz	Nil	Nil	As AD	Nil
ATIS	ZHEZKAZGAN ATIS (EN) ZHEZKAZGAN ATIS (RU)	131,4 MHz 122,4 MHz	Nil	Nil	As AD	ATIS information is being updated during AD working hours. Outside AD working hours ATIS information is not updated.

UAKD AD 2.19 Radio Navigation And Landing Aids

Type of aid, MAG VAR, ILS Classification, Type of supported OP (for VOR/ILS/MLS, give declination)	ID	Frequency, Channel number	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Service volume radius from the GBAS reference point	Remarks
1	2	3	4	5	6	7	8
NDB LMM 04	ZN	355 KHZ	H24	474148.7N 0674256.9E	Nil	Nil	Nil
NDB LOM 04	ZKN	435 KHZ	H24	474048.7N 0674104.5E	Nil	Nil	Nil
DVOR/DME (8°E/2013)	DZG	113,3 MHz CH 80X	H24	474317.1N 0674541.7E	1300 FT	Nil	Nil
ILS LOC 22 I/D/2	IGN	110.7 MHz	H24	474150.6N 0674259.2E	1200 FT	Nil	Nil
GP 22 I/C/2		330.2 MHz		474248.6N 0674502.2E			
DME 22	IGN	CH 44X		474248.6N 0674502.2E			

UAKD AD 2.20 Local Aerodrome Regulations

1. Movement procedure

Movement of aircraft on the aerodrome is carried out under its own power and (or) towing with special vehicles via fixed marking of center lines.

Under any conditions at the aerodrome, according to the request of the crew, the aircraft leading is provided by follow-me vehicle:

- at departure of aircraft from the beginning of taxiing from the parking place to the line of holding take-off position on the taxiway – A;
- at landing of aircraft since the vacating of ILS critical area on the taxiway-A to parking place at the apron.

Taxiing and towing should be carried out after clearance of Tower and information about taxiing route on the aerodrome are obtained. Taxiing at night as well as during the day when visibility is less than 2000m is carried out with the switched on air navigation lights and headlights.

2. Safety precautions

Essential information for safety of taxiing or towing the crew receives from the air traffic controller of the control point "Tower".

Taxiing on the apron and taxiway is carried out behind follow-me vehicle in the cases:

- meteorological visibility (RVR visibility) of 400 m or less;
- difficulties of determining the center line of aircraft taxiing on the apron and taxiway due to the presence of precipitation as snow, slush, etc.;
- on the request of the crew.

The towing safety is provided by person managing the towing. Communication between towing managing person and the crew of the aircraft should be carried out using special signals. Towing is performed with air navigation lights and flash beacons turned on.

3. The procedure of taxiing-in to the parking places.

Taxiing-in to parking stands should be carried out via fixed marking of center lines under its own power by the signals of meeting person.

4. The procedure of taxiing out from the parking places.

Taxiing out from parking stands should be carried out via fixed markings of center lines under its own power by signals of person providing aircraft taxiing out, and in his absence - by decision of pilot-in-command (PIC)

5. The places of aircraft processing by de-icing fluid

De-icing procedure should be carried out at the parking stands

Crew should notify "Zhezkazgan-transit" on 131.6 MHz about necessity of deicing at least 30 minutes before departure.

6. The movement procedures of aircraft and vehicles in ILS critical areas.

In order to protect critical areas of ILS during flight operations on minimum height of clouds - 60m, meteorological visibility (RVR visibility) -800m and takeoffs in conditions of low visibility it is prohibited:

- Aircraft taxiing out from the parking places for take-off before landing of arriving aircraft.
- The entry of vehicles in the ILS critical area

7. Restrictions in the operation of large aircraft

The turn of CAT C and D aircraft on extensions №2 and №3 of artificial runways 04/22 is forbidden. Taxiing of aircraft on taxiway-A with four engines is carried out strictly by a fixed marking of center line at an increased attention of the crew under the internal power.

Four engines aircraft taxiing-in and taxiing out to (from) the parking stands 1-3 should be carried out under internal power

Parking of an aircraft of category C at the parking lot 2 is prohibited, during the parking of an aircraft of category D at the parking lot 1.

UAKD AD 2.21 Noise Abatement Procedures

NIL

UAKD AD 2.22 Flight procedures

1. Low Visibility Procedures on the Zhezkazgan aerodrome.

Low Visibility Procedures (LVP) are effected when RVR is less than 550 m. Low Visibility Procedures are cancelled when RVR is greater than 550 m.

Low Visibility Procedures are initiated by executive controller of "Zhezkazgan Tower" control centre; in case of his absence – by "Tower" controller. The status of LVP shall be reported by ATC phrase: "LOW VISIBILITY PROCEDURES IN OPERATION" to:

- meteorological specialist of primary observation station;
- shift personnel of Radiotechnical Department;
- lightning system maintenance engineer of aerodrome power, lighting, and technical service;
- controller of Production and dispatcher service;
- person responsible for the preparation of the airfield.

Tower ATC, received information about the beginning of the (termination) procedures in low visibility conditions inform adjacent control towers.

The status of LVP shall be reported to flight crew by ATC phrase: "LOW VISIBILITY PROCEDURES IN OPERATION".

Tower ATC reports value of RVR on the runway and in the TDZ. Flight crew shall be informed by Tower ATC about all changes to the operational status of radio and lighting equipment.

Tower ATC restricts the movement of vehicles airport services on the apron and manoeuvring area during LVP procedures. Taxiing of departing aircraft shall be carried out after follow-me car from stands to holding position. Taxiing to stand (apron) after RWY vacation shall be carried out after follow-me car.

2. VFR procedures within the aerodrome control zone (CTR)

Air traffic service in the control zone of the aerodrome is carried out by the controller of the "Tower" ATC unit. Flight altitudes are calculated by the aircraft crew in accordance with the Civil Aviation Flight Rules of the Republic of Kazakhstan. The functions of Air traffic service does not include ground collision avoidance. The aircraft crew shall ensure that the clearance issued by the ATS unit in this regard is safe. VFR flights at altitudes below 3000 feet in the control zone are performed at the altitudes indicated in the flight plan or requested by the aircraft crew.

Flights must not be performed over populated areas within the control zone.

For VFR flights, the aerodrome has a flight circle (left / right) at an altitude of 3000 feet. The air traffic controller of the "Tower" ATC unit is determine and report which flight circle is in use.

Entering the flight circle, crossing the runway alignment is made only with the permission of the air traffic controller of the "Tower" ATC unit.

The aircraft crew preliminarily agrees with the ATS unit the flight area and altitude range during aerial work in the control zone at absolute altitudes.

When entering the control zone (CTR) from uncontrolled airspace, the aircraft crew must obtain an air traffic control clearance 5 minutes before the estimated time of entering the controlled airspace.

Entry / exit of aircraft of category A and helicopters flying in VFR to / from the control zone (CTR) is carried out at the shortest distance through the corresponding point.

If the air situation requires the holding procedure, the air traffic controller of the "Tower" ATC unit gives the instructions to the aircraft crew to follow to one of the holding points.

№	Waypoint name (visual reference)	Geographical coordinates	Radial (mag.) and distance from NAVAID (ARP)	Remarks
1	ALPHA (Itauz minery)	N480738 E0673715	339° 25.0 nm DZG DVOR/DME	Entry/exit
2	BRAVO	N480739 E0675358	004° 25.0 nm DZG DVOR/DME	Entry/exit
3	DELTA (abeam lake Kopa)	N480019 E0681253	039° 25.0 nm DZG DVOR/DME	Entry/exit
4	HOTEL (abeam lake Kopa)	N475137 E0682039	062° 25.0 nm DZG DVOR/DME	Entry/exit
5	TANGO (abeam junction of Sary Su –Kengir rivers)	N473123 E0681812	110° 25.0 nm DZG DVOR/DME	Entry/exit
6	OSCAR	N471818 E0674500	173° 25.0 nm DZG DVOR/DME	Entry/exit
7	ROMEO	N472554 E0671910	218° 25.0 nm DZG DVOR/DME	Entry/exit
8	OZERO (Southern coast of Zhezdinskoe water basin)	N473622 E0673915	204° 8.2 nm DZG DVOR/DME (201° 7.1 nm ARP)	Holding
9	TALAP (NE outskirts of Talap)	N474025 E0675106	120° 4.6 nm DZG DVOR/DME (107° 5.1 nm ARP)	Holding

UAKD AD 2.23 Additional Information

1. Accepted exceptions, exemptions and restrictions in aerodrome certificate.

Regulatory reference	Requirement of regulations	Description of exceptions, exemptions and restrictions	Measures taken and validity period
Section 2. Point 23. Standards of Aerodromes (Heliports) Operation Civil Aviation Republic Kazakhstan	Runway width	Runway width is less than the required for the aerodrome code designation	An equivalent level of safety has been approved 18.07.2016
Section 2. Point 40. Standards of Aerodromes (Heliports) Operation Civil Aviation Republic Kazakhstan	Width of the TWY and shoulders	The total width of the TWY and shoulders is less than the required The total width of the TWY and shoulders is less than required for the installed code letter of the aircraft	An equivalent level of safety has been approved 18.07.2016

2. Ornithological situation

The ornithological situation in the aerodrome area is due to the seasonal and daily migration of birds. The presence of reservoirs and closely spaced summer arrays contributes to the concentration in the aerodrome area of different kinds of birds (crows, rooks, gulls, starlings, pigeons, etc.)

During the whole spring-summer navigation, individual birds fly over the runway and approach area of runway 22 and runway 04 in the morning from 00.00 to 04.00 and evening hours from 11.00 to 14.00. The flight altitude of the birds is changing from 0 to 100 m above ground level.

The most dangerous are the spring-autumn migrations of birds from the north-west to the south-east of the airport, which pose a serious danger to the flights of aircraft during specified periods of time.

In order to prevent aircraft collisions with birds, measures to prevent of bird aggregations are being taken at the aerodrome, which include:

- elimination of conditions conducive to the bird aggregations, and carrying out measures for scaring them;
- conducting visual observations to ensure control over the ornithological situation;
- prohibition of the use of the aerodrome territory for crops;
- installation of bird scaring items on the airfield.

UAKD AD 2.24 Charts Related To An Aerodrome

Name	Page
Aerodrome Chart ICAO	UAKD AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UAKD AD 2.24.3-1
Aerodrome Obstacle Chart – ICAO – Type A	UAKD AD 2.24.4-1
Standard Departure Chart Instrument (SID) RWY 04 ICAO	UAKD AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 22 ICAO	UAKD AD 2.24.7-2-1
Standard Departure Chart Instrument (SID) RWY 04 ICAO	UAKD AD 2.24.7-3-1
Standard Departure Chart Instrument (SID) RWY 22 ICAO	UAKD AD 2.24.7-4-1
Standard Arrival Chart Instrument (STAR) RWY 04 ICAO	UAKD AD 2.24.9-1-1
Standard Arrival Chart Instrument (STAR) RWY 22 ICAO	UAKD AD 2.24.9-2-1
Standard Arrival Chart Instrument (STAR) RWY 04 ICAO	UAKD AD 2.24.9-3-1
Standard Arrival Chart Instrument (STAR) RWY 22 ICAO	UAKD AD 2.24.9-4-1
ATC Surveillance Minimum Altitude Chart ICAO	UAKD AD 2.24.10-1
Instrument Approach Chart – ILS/DME - RWY 22 ICAO	UAKD AD 2.24.11-1-1
Instrument Approach Chart – VOR/DME - Y RWY 04 ICAO	UAKD AD 2.24.11-2-1
Instrument Approach Chart – VOR/DME - Y RWY 22 ICAO	UAKD AD 2.24.11-3-1
Instrument Approach Chart – VOR/DME - Z RWY 04 ICAO	UAKD AD 2.24.11-4-1
Instrument Approach Chart – VOR/DME - Z RWY 22 ICAO	UAKD AD 2.24.11-5-1
Instrument Approach Chart – 2 NDB RWY 04	UAKD AD 2.24.11-6-1
Instrument Approach Chart – NDB RWY 04 ICAO	UAKD AD 2.24.11-7-1
Instrument Approach Chart – BC NDB RWY 22 ICAO	UAKD AD 2.24.11-8-1
Visual Approach chart – ICAO	UAKD AD 2.24.12-1
VFR Departure/Arrival Chart	UAKD AD 2.24.14-1