

**AD 2 AERODROMES****UATE AD 2**

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

**UATE AD 2.1 Aerodrome Location Indicator And Name**

UATE - AKTAU

**UATE AD 2.2 Aerodrome Geographical And Administrative Data**

1	ARP coordinates and site at AD	435136N 0510527E At the centre of RWY
2	Direction and distance from (city)	348°, 12.4 NM from Aktau
3	Elevation/Reference temperature	75 FT/32.5° C
4	Geoid undulation at AD ELEV PSN	-39 FT
5	MAG VAR/Annual Change	8° E ( 2021 ) / 0.06° increasing
6	AD Administration, address, telephone, telefax, telex, AFS	Post: Airport 130000 Mangystau region, JSC "Aktau International Airport" Republic of Kazakhstan Phone: +7 (7292) 609746 Fax: +7 (7292) 609745 AFS: UATEAPBF SITA: SCOBFXH Email: office@aktau-airport.kz Email: info@aktau-airport.kz URL: www.aktau-airport.kz
7	Types of traffic permitted (IFR/VFR)	IFR-VFR
8	Remarks	Changeable Head AD Phone: +7 (7292) 609777 Phone: +7 (777) 5557710

**UATE AD 2.3 Operational Hours**

1	AD Operator	H24 Phone: +7 (7292) 609746
2	Customs and immigration	H24 Phone: +7 (7292) 609641 Phone: +7 (7292) 609642
3	Health and sanitation	H24 Phone: +7 (7292) 609603
4	AIS Briefing Office	H24
5	ATS Reporting Office (ARO)	H24 Phone: +7 (7292) 420032 Phone: +7 (7292) 463141
6	MET Briefing Office	H24 Phone: +7 (7292) 463178
7	ATS	H24

8	Fuelling	H24 Phone: +7 (7292) 609609 Phone: +7 (7292) 609667
9	Handling	H24 Phone: +7 (7292) 609775
10	Security	H24 Phone: +7 (7292) 609610
11	De-icing	H24 Phone: +7 (7292) 609621 Phone: +7 (7292) 609647
12	Remarks	Nil

#### UATE AD 2.4 Handling Services And Facilities

1	Cargo-handling facilities	Handling up to 35 tonnes weight
2	Fuel/oil types	TS-1 OIL: Nil
3	Fuelling facilities/capacity	4 Trucks (22m³)/ 400 L/min
4	De-icing facilities	Combined watering and washing machine
5	Hangar space for visiting aircraft	Not available for visiting aircraft
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Nil

#### UATE AD 2.5 Passenger Facilities

1	Hotels	In the city Aktau
2	Restaurants	In the Airport
3	Transportation	Taxis
4	Medical facilities	Aid post at Airport Terminal, ambulance service, hospitals in Aktau
5	Bank and Post Office	Bank ATM, currency exchange
6	Tourist Office	In the airport, +7 (771) 7620283, +7 (7292) 609752
7	Remarks	Nil

#### UATE AD 2.6 Rescue And Fire Fighting Services

1	AD category for fire fighting	CAT A7
2	Rescue equipment	4 fire trucks Σ = 34800l. (water) + 2550l. (foamer) Technical and medical kit

3	Capability for removal of disabled aircraft	Equipment necessary for evacuation on a contractual basis: trawl and crane, with a lifting capacity of 100 tons, capability for removal aircraft weighing up to 50 tons. Equipment delivery takes at least 3 hours Phone: +7 (7292) 609621 Phone: +7 771 3335656 Email: uate@aktau-airport.kz
4	Remarks	The possibility of increasing the required level of fire protection up to 8 categories on request.

**UATE AD 2.7 Seasonal Availability - Clearing**

1	Types of clearing equipment	3 plunger brush cars, 1 rotor
2	Clearance priorities	1. RWY 2. TWY 3. Stands
3	Remarks	Nil

**UATE AD 2.8 Aprons, Taxiways And Check Locations/Positions Data**

1	Apron surface and strength	APRON		SURFACE	STRENGTH
		APRON		CONC+ASPH	PCN 52/F/C/W/T
		STANDS		SURFACE	STRENGTH
		107-114		CONC+ASPH	PCN 52/F/C/W/T
		199-208		CONC+ASPH	PCN 52/F/C/W/T
		HELICOPTER STANDS		SURFACE	STRENGTH
		20-24		CONC+ASPH	PCN 52/F/C/W/T
2	Taxiway width, surface and strength	TWY	WIDTH (M)	SURFACE	STRENGTH
		B	24 M	CONC+ASPH	PCN 53/F/C/X/T
		C	24 M	CONC+ASPH	PCN 52/F/C/W/T
3	Altimeter checkpoint location and elevation	APRON/21m (69ft)			
4	VOR checkpoints	Nil			
5	INS checkpoints	Nil			
6	Remarks	TWY-A - MIL			

**UATE 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
2	RWY and TWY markings and LGT	Designation of threshold, touchdown, centre line, fixed distance, RWY edges, RWY designation, zones before the runway threshold, taxi holding position, taxiway centre line, side RWY lights, TWY «B» and «C»
3	Stop bars	TWY C, RED
4	Other runway protection measures	Nil
5	Remarks	TWY-A - MIL

## UATE AD 2.10 Aerodrome Obstacles

NIL

## UATE AD 2.11 Meteorological Information Provided

1	Associated MET Office	AMS Aktau +7 (7292) 463178
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation: Periods of validity	AMSC Aktau, 24HR (0024, 0606, 1212, 1818)
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, SWM+SWH, SWL of Kazakhstan;
8	Supplementary equipment AVBL for providing information	Doppler weather radar (METEOR-635C)
9	ATS units provided with information	Briefing, TWR, APP
10	Additional information	Nil

## UATE 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
11	122.63°	3048 X 45	52/F/C/W/T CONC+ASPH	435203.01N 0510429.51E - -38.7 FT	THR 70.5 FT	See AOC type A
29	302.65°	3048 X 45	52/F/C/W/T CONC+ASPH	435109.72N 0510624.49E - -38.7 FT	THR 53.1 FT	

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	250 X 150	3288 X 300	90 X 160	Nil	AVBL	Turn Pad LEN 130 m, the total width of the turn pad and runway 90 m. REF AD 2.24.1
Nil	250 X 150	3288 X 300	90 X 160	Nil	AVBL	Turn Pad LEN 130 m, the total width of the turn pad and runway 90 m. REF AD 2.24.1

**UATE AD 2.13 Declared Distances**

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
11	3048	3298	3048	3048	Nil
29	3048	3298	3048	3048	Nil
TWY B - 11	1524	1774	1524	-	only for helicopters and aircrafts class 3 and 4
TWY C - 11	1160	1410	1160	-	only for helicopters and aircrafts class 3 and 4
TWY C - 29	1888	2138	1888	-	only for helicopters and aircrafts class 3 and 4
TWY B - 29	1524	1774	1524	-	only for helicopters and aircrafts class 3 and 4

**UATE 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
11	CAT I (PALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	3048m, spacing 60m, 0-2452 white, last 600m yellow	RED Nil	Nil	Nil

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
29	CAT I (PALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	3048m, spacing 60m, 0-2452 white, last 600m yellow	RED Nil	Nil	Nil

#### UATE AD 2.15 Other Lighting, Secondary Power Supply

1	ABN/IBN location, characteristics and hours of operation	Nil
2	LDI location and LGT Anemometer location and LGT	LDI: 420m from THR RWY 11 LGT 340m from THR RWY 29 LGT Anemometer: from THR 11 - 450,5m; THR 29 - 450,5m
3	TWY edge and centre line lighting	TWY B EDGE: BLU TWY C EDGE: BLU
4	Secondary power supply/switch-over time	AVBL, 1 SEC
5	Remarks	Nil

#### UATE AD 2.16 Helicopter Landing Area

NIL

#### UATE AD 2.17 ATS Airspace

1	Designation and lateral limits	AKTAU CTR A circle radius 25 NM centered on 435220N 0510352E
2	Vertical limits	4000 FT ALT / GND
3	Airspace classification	C
4	ATS unit call sign Language(s)	AKTAU VYSHKA RU AKTAU TOWER EN
5	Transition altitude	10000 FT
6	Hours of applicability	H24
7	Remarks	NIL

#### UATE 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
ATIS	AKTAU ATIS (EN) AKTAU ATIS (RU)	130,1 MHZ 126,2 MHZ	Nil	Nil	H24	EN, RU

Service designation	Call sign	Frequency	SATVOICE number(s)	Logon address	Hours of operation	Remarks
1	2	3	4	5	6	7
Production and dispatcher service	AKTAU TRANZIT (EN) AKTAU TRANZIT (RU)	131.9 MHZ	Nil	Nil	As AD	Nil
TWR	AKTAU TOWER (EN) AKTAU VYSHKA (RU)	120,7 MHZ	Nil	Nil	H24	VDF AVBL

**UATE 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
ILS LOC 11	IAU	109.5 MHZ	H24	435053.5N 0510659.5E		Nil	Nil
GP 11		332.6 MHZ		435201.6N 0510444.7E			
DME 11	IAU	CH 32X		435201.6N 0510444.7E	100 FT		
ILS LOC 29 I/D/2	ITA	111.1 MHZ	H24	435218.6N 0510355.5E		Nil	Nil
GP 29 I/C/2		331.7 MHZ		435118.8N 0510616.6E			
DME 29	ITA	CH 48X		435118.8N 0510616.6E	100 FT		
NDB	T	326 KHZ	H24	435052.6N 0510701.8E	Nil	Nil	Nil
DVOR/DME (8°E /2021)	AKT	113.3 MHZ CH 80X	H24	435220.3N 0510351.9E	100 FT	Nil	Nil

**UATE AD 2.20 Local Aerodrome Regulations****1. Airport regulations**

The movement of aircraft around the airfield is carried out under the power of its own engines and towing by tractors.

Taxiing and towing are carried out according to the established markings. Occupying the runway for taxiing (towing) and for aircraft takeoff is carried out with the permission of the Aktau Tower air traffic controller.

On the apron stands it is allowed to start and test engines in low throttle modes upon request from the Aktau Tower air traffic controller, taking into account safety measures.

If the APU is faulty, starting one engine before towing to the engine launch site is carried out with the permission of the Aktau Tower air traffic controller.

Testing (checking) of aircraft engines at modes exceeding "idle throttle" is carried out on stand 208.

It is prohibited to start the engines while the aircraft is being towed.

Towing an aircraft with a running engine (started during towing) on a snowy, ice-covered (slippery) apron is

prohibited.

Replace aircraft wheels using a jack only on hard surfaces (concrete, concrete pads).

The crew notifies the Aktau Tower air traffic controller about the need for anti-icing treatment.

Coordination of processing is carried out by Aktau Transit at a frequency of 131.900 MHz.

Aircraft processing is provided in two stages Type – 1 (SAE AMS1424 Type I Qualified Fluids) Aerodynamic and Anti-icing Endurance Performance and Type - 4 (SAE AMS1428 Type IV Qualified Fluids) Fluids Qualified at AMIL for Aerodynamic and Anti-icing Endurance Performance Treatment with anti-icing liquids is carried out:

- on the center line of apron without running engines

The number of stands, procedure for placing the aircraft on the stand is assigned by the Aktau airport Production and dispatcher service, based on the actual situation on the apron, the presence of short-term restrictions and prohibitions on parking and movement of aircraft on the maneuvering area of the airfield.

The aircraft launch location on the apron is determined by the Aktau Tower air traffic controller.

In case of operational necessity, the service of draining fuel from the aircraft on the stand is provided according to the procedure.

Access to the Aktau Aerodrome Manual of third-party organizations is provided upon request by e-mail "office@aktau-airport.kz"

## **2. Taxiing to/from aircraft stands.**

Towing, engine starting and taxiing of aircraft to and from the stands is carried out with the permission of the Aktau Tower air traffic controller.

Before starting the engines, the crew must listen to the ATIS information, before launching (towing) establish contact with the Aktau Tower air traffic controller on the frequency 120.700 MHz, report the index of the current ATIS information, the stand number and receive ATC clearance for departure.

Depending on the ground and air situation, runway operational direction the Tower air traffic controller enters "holding procedure of start-up clearance" with the timing and start-up sequence of aircraft or informs the crew about the expected delay and gives permission to start the engines at the discretion of the crew.

Escorting (leading) of the aircraft is carried out regardless of the time of day by the escort vehicle when the low visibility procedures are in progress, in the absence of visibility of the markings of the aircraft intended for movement, or by the request of the aircraft crew.

The order of taxiing in and out at (from) the stand:

- Taxiing to all stands is carried out under the power of its own engines.
- The aircraft is taxied by towing.
- If the aircraft is not parked according to the parking lot markings, the aircraft is taxied under the power of its own engines under the guidance of the greeter or escort vehicle.

## **3. Limitations during taxiing**

After landing on Runway 11/29, aircraft turns are carried out at the turn pads at the end of Runway 11/29, with the exception of class 3, 4 aircraft and helicopters.

Aircraft located on taxiway-B (bravo), taxiway-C (charli) are prohibited from crossing the marked holding position at runway 11/29 without permission from the Aktau Tower air traffic controller.

## **4. Take-off and landing**

When taking a line-up position on Runway 11/29, the aircraft crew reports its readiness for takeoff to the Aktau Tower air traffic controller.

After receiving a report from the aircraft crew about readiness for takeoff, the Aktau Tower controller, depending on the air



situation, may allow the aircraft crew to take a line-up position and take off immediately. The aircraft crew is obliged to inform the Aktau Tower air traffic controller if it cannot take off immediately. If the runway is busy or there are no acceptable separation, the Aktau Tower air traffic controller allows the aircraft crew only to take the line-up position. At the same time, the aircraft crews comply with all taxiing procedures in accordance with the requirements of the aircraft type manual and other regulatory documents, including taxi speed:

- under normal environmental conditions and runway conditions, no more than 30 knots (55 km/h) on long runway distances and no more than 20 knots (37 km/h) on short runway distances;
- in conditions of low visibility procedures and meteorological conditions that contribute to the deterioration of the runway condition by no more than 10 knots (18 km/h).

Pre-flight checks by the crew in the cockpit must be completed before the line-up position. Checks required while on the runway should be kept to a minimum.

The aircraft crew takes off immediately after receiving take-off clearance.

If the aircraft crew cannot fulfill the above requirement, they must inform the Aktau Tower air traffic controller about this before taxiing onto the runway and inform him of the required delay time.

Depending on the air or ground situation, it is permitted to take off from the intersection of taxiway-B (bravo), taxiway-C(charli) of the Runway 11/29 at the request of the crew of a class 3, 4 aircraft or at the initiative of the Aktau Tower air traffic controller. The aircraft takes off from a point on the runway where the available characteristics of the runway from the start of the take-off run correspond to those required for the actual take-off weight of the aircraft and take-off conditions. The final decision on takeoff from the intersection of the taxiway and the runway is made by the aircraft pilot-in-command.

Engines are warmed up and tested before takeoff on the runway or taxiway with the permission of the Aktau Tower air traffic controller after a request from the aircraft crew.

Take-off and landing of aircraft with a tailwind is permitted in order to speed up the flow of aircraft at the request of the aircraft crew or on the initiative of the air traffic control unit. Responsibility for making a decision on such a takeoff or landing rests with the aircraft pilot-in-command.

In order to reduce the runway occupancy time, the Aktau Tower air traffic controller can issue a command to accelerate the release of Runway 11/29. If it is impossible to perform the required operation, the crew immediately informs the air traffic controller.

The final decision on whether to take off or land under weather conditions that do not meet the airfield operating minimum is made by the aircraft pilot-in-command. In this case, the air traffic control clearance for takeoff or landing is not a force on the aircraft pilot-in-command to carry it out, and responsibility for the decision made and the outcome of the takeoff or landing rests with the aircraft pilot-in-command. The designation of a runway is made by the ATS unit, taking into account the aircraft landing or taking off into the wind, unless safety considerations, runway configuration, meteorological conditions and applicable approach procedures or air traffic conditions make another direction preferable.

## **5. Training and practice flights, check-test and check flights (flyover)**

Educational and training flights, control and test flights (overflights) of aircraft are carried out in accordance with the requirements established by the Rules for Flight Operations in Civil Aviation.

An IFR flight is carried out according to established procedures for instrumental takeoff and approach. After takeoff, the crew maintains the conditions specified by the air traffic controller for fitting into the approach pattern. The VFR flight is carried out along a route agreed with the ATS unit. The number of aircraft performing educational, training, control, test and control flights (overflights) within TMA 1, TMA 2 and CTR of the Aktau airfield is determined by the Aktau Tower supervisor, based on the presence of prohibited zones and flight restriction zones, air and meteorological conditions. Depending on the intensity of flights and the restrictions imposed, the Aktau Tower supervisor is given the right to limit the number of training aircraft, suspend or prohibit training flights.

Control and test flights of aircraft are carried out during the day for all types of aircraft.

## **6. Procedures in low visibility conditions**

LVP are introduced when RVR is less than 550 m.

The start of LVP actions is announced via the ATIS channel or by the ATS unit with the message "Low visibility procedures are in progress."

Runway 11/29 are equipped for takeoff in LVP conditions.

Runway 11/29 are equipped for precision approach and landing under category I.

Crossing the "STOP" line lights that are on is prohibited. The aircraft crew is informed by the ATS unit about changes in the operational status of radio, lighting, and meteorological equipment.

## 7. Helicopter flights

Taxiing on helicopters is carried out taking into account wind restrictions, according to the Flight Manual, with constant visibility of landmarks ahead. The air movement of a helicopter with a skid type landing gear from the parking area to the take-off location and back is carried out along the route assigned by the Aktau Tower air traffic controller to the PMU under the responsibility of the helicopter pilot-in-command. The helicopter engines are started at stands 20-24 for warming up and testing only at low throttle.

Control hovering is permitted only over runway 11/29, taxiway-B(bravo), taxiway-C(charli).

Take-off/landing is permitted by helicopter in the daytime, from (on) taxiway-B(bravo), taxiway-C(charli), in compliance with the established intervals between aircraft take-offs and landings, subject to the established minimum weather conditions for flights under VFR (special VFR).

Responsibility for the takeoff (landing) in this case rests with the helicopter pilot-in-command.

Helicopters take off from the airfield after:

- crew report on readiness for takeoff (by plane, by helicopter), and obtaining permission for takeoff from the Aktau Tower air traffic controller.

For a takeoff by helicopter, landing the helicopter after a control hover is not necessary. The height of the control hover is determined by the helicopter pilot-in-command, but the helicopter performing the control hover must not interfere with the takeoff and landing of other aircraft. If there are weather conditions or smoke on a part of the runway that impairs visibility to values below the established weather minimum for flights under VFR (special VFR), it is permitted to land on that part of the runway where the weather conditions correspond to the minimum (beginning/middle/end). Responsibility for making such a landing rests with the helicopter pilot-in-command.

Take-off and landing with a run, take-off and landing of a helicopter at night and when flying under IFR are performed from/to the runway.

## 8. Removal of all those who have lost the ability to move

Reflected in the "Emergency Plan" of Aktau International Airport. Access to the "Emergency Plan" of third-party organizations is provided upon request by e-mail "office@aktau-airport.kz"

## UATE AD 2.21 Noise Abatement Procedures

NIL

## UATE AD 2.22 Flight Procedures

### 1. General

RWY 11/29 approved for CAT I operations.

### 2. Low Visibility Procedures.

Low Visibility Procedures (LVP) are effected when RVR is less than 550 m. Low Visibility Procedures are cancelled when RVR is 550 m. and greater. The start of LVP procedures is reported to flight crew by ATC with the following phrase:: "LOW VISIBILITY PROCEDURES IN OPERATION".

Control of obstacles presence on RWY and in ILS critical zones is carried out by air traffic controller according to the reports of flight crew or aerodrome service specialist reports.

The ATC informs flight crew about:

- any changes in the operational status of radio and lighting equipment;
- changes of surface wind;
- changes of RVR;
- changes of ceiling (vertical visibility).

### 3. Arriving Aircraft

Vacation of runway shall be reported on TWY only when passing of critical zone.

Aircraft parking shall be carried out by signals of marshalling person.

### 4. Departing Aircraft

Aircraft shall stop at the holding position before the light sign of runway designation.

### 5. 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 500 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.

No	Waypoint name (visual reference)	Geographical coordinates	Radial (mag.) and distance from NAVAID (ARP)	Remarks
1	SAURA (Coastline NW of AKT)	N441433 E0504757	326° 25.0 nm AKT DVOR/DME	Entry/exit
2	TATIK (Highway NE from AKT)	N441348 E0512126	023° 25.0 nm AKT DVOR/DME	Entry/exit
3	KARAG (Railroad eastbound from AKT)	N435635 E0513758	073° 25.0 nm AKT DVOR/DME	Entry/exit
4	OZERO (Dry bed east of AKT)	N434713 E0513741	094° 25.0 nm AKT DVOR/DME	Entry/exit
5	OZENI (Road SE from AKT)	N433633 E0513038	122° 25.0 nm AKT DVOR/DME	Entry/exit

№	Waypoint name (visual reference)	Geographical coordinates	Radial (mag.) and distance from NAVAID (ARP)	Remarks
6	OIMAS (Road SE from AKT)	N433227 E0512447	135° 25.0 nm AKT DVOR/DME	Entry/exit
7	ZALIV (Settling ponds SE of AKT)	N434252 E0511858	124° 14.5 nm AKT DVOR/DME	Holding
8	KARER (Quarry east of AKT)	N435039 E0512304	090° 14.0 nm AKT DVOR/DME	Holding
9	DUNGA (Oil fields north of AKT)	N440014 E0510412	355° 7.9 nm AKT DVOR/DME	Holding

## 6. Continuous Descent Operation

CDOs are performed during periods of low traffic density at ATC discretion.

CDOs are executed only by ACFT that use standard arrival procedures RNAV1 based on GNSS.

Although these procedures are designed as a closed path, they permit distance planning for CDO, allowing the ACFT Flight Management System/Computer (FMS/FMC) to accurately execute automated optimized descents when:

- ACFT is cleared to proceed to a waypoint or via a combination of waypoints in order to provide an optimum lateral flight path up to and including the FAP and thus the exact distance to the RWY is known prior to start of the continuous descent operation; or
- the pilots of the ACFT that to be vectored to final are provided with distance-to-go information.

CDOs are authorized only when following conditions are respected:

- ILS of RWY intended for landing is in operation;
- no adverse weather conditions that may affect CDO;
- no system degradations that may affect GNSS or ILS operation.

After receiving "WHEN READY DESCEND TO (LEVEL)" or "DESCEND TO (LEVEL) AT PILOTS DISCRETION" clearance the pilot is allowed to plan/optimize vertical profile in order to apply CDO to FAP.

Depending on traffic, CDO may start from TOD or lower levels.

In accordance with appropriate ATC clearances, CDO can start from the TOD when ACFT is cleared to a waypoint or via a combination of waypoints for direct routing/shortcut and the horizontal trajectory is defined up to and including the FAP. Thus, the exact distance to RWY is known and the descent profile can be readily calculated by the appropriate on board system (FMS) prior to start of the CDO.

After clearance "WHEN READY DESCEND TO (LEVEL) " or "DESCEND TO (LEVEL) AT PILOTS DISCRETION" pilot should maintain the cruising/last assigned level until the optimal descent point/TOD that is determined by pilot or FMS, then start descent with no extra requests unless other ATC instructions are issued.

If necessary ATC may issue additional instructions: "WHEN READY DESCEND TO (LEVEL), REPORT LEAVING (or REPORT TOP-OF-DESCENT)"

Considering airspace structure, ATC issues an instruction to descend to level(s) above level of FAP. Wherein ATC issues further descent instruction prior to CDO flight reaching 3000 feet (900 m) above last assigned level.

It is preferable if CDO is commenced from top of descent. If it is not feasible due to traffic, CDO may be initiated from any lower level.

As a portion of the procedure consists of vectoring, the specific distance to RWY threshold is not known to a pilot prior to start of the CDO. In such cases, ATC will provide the pilot with an estimate of the flight track-miles to the RWY threshold as distance-to-go information. The pilot will use this information to determine the optimum descent rate to achieve a CDO.

ACFT not exceed IAS 220 knots closer 15 n.m. to RW threshold.

**7. Continuous Climb Operation**

Continuous Climb Operations (CCO) are conducted along standard instrument departure routes (SID RNAV1) using GNSS. The feasibility of CCO is determined by the ATC based on the current air traffic situation and operational traffic density.

**UATE 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
Nil	Nil	Nil	Nil

**2. The bird aggregations in the vicinity of the airport.**

Intensive flights of flocks of pigeons, sparrows and gulls occur periodically within 1-2 hours before and after sunrise, when birds fly from their resting place (from the sea west of the runway) across the runway through the approach zone of runway 11 and runway 29 to the feeding areas. The altitude of the bird flights is changing within from 0 to 400 m. above ground level. The main directions of migration are from south to north and in the opposite direction. In winter, a small number of crow flocks gather around the aerodrome and at the aerodrome, representing a danger to flights from sunrise to sunset.

As required, the aerodrome control unit informs pilots of such migrations of birds. Upon receipt of such information, pilots are recommended, if the calculated characteristics of the onboard equipment allow, to switch on landing lights when flying around the aerodrome, during take-off, approach, as well as climbing and descending.

Measures for reducing the bird aggregations include: periodic scaring of birds (noise gun, bioacoustic equipments), effective measures against the garbage dumps, removal of grass cover, as well as the termination of agricultural activities within the airport.

## UATE AD 2.24 Charts Related To An Aerodrome

Name	Page
Aerodrome Chart ICAO	UATE AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UATE AD 2.24.3-1
Aerodrome Obstacle Chart – ICAO Type A	UATE AD 2.24.4-1
Standard Departure Chart Instrument (SID) RWY 11 ICAO	UATE AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 11 ICAO	UATE AD 2.24.7-2-1
Standard Departure Chart Instrument (SID) RWY 29 ICAO	UATE AD 2.24.7-3-1
Standard Departure Chart Instrument (SID) RNAV RWY 11 ICAO	UATE AD 2.24.7-4-1
Standard Departure Chart Instrument (SID) RNAV RWY 29 ICAO	UATE AD 2.24.7-5-1
Standard Arrival Chart Instrument (STAR) RWY 11 ICAO	UATE AD 2.24.9-1-1
Standard Arrival Chart Instrument (STAR) RWY 29 ICAO	UATE AD 2.24.9-2-1
Standard Arrival Chart Instrument (STAR) RWY 11 ICAO	UATE AD 2.24.9-3-1
Standard Arrival Chart Instrument (STAR) RWY 29 ICAO	UATE AD 2.24.9-4-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 11 ICAO	UATE AD 2.24.9-5-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 29 ICAO	UATE AD 2.24.9-6-1
ATC Surveillance Minimum Altitude Chart ICAO	UATE AD 2.24.10-1
Instrument Approach Chart – ILS/DME RWY 11 ICAO	UATE AD 2.24.11-1-1
Instrument Approach Chart – ILS/DME RWY 29 ICAO	UATE AD 2.24.11-2-1
Instrument Approach Chart – VOR/DME - Y RWY 11 ICAO	UATE AD 2.24.11-3-1
Instrument Approach Chart – VOR/DME - Y RWY 29 ICAO	UATE AD 2.24.11-4-1
Instrument Approach Chart – VOR/DME - Z RWY 11 ICAO	UATE AD 2.24.11-5-1
Instrument Approach Chart – VOR/DME - Z RWY 29 ICAO	UATE AD 2.24.11-6-1
Instrument Approach Chart – NDB RWY 29 ICAO	UATE AD 2.24.11-7-1
Instrument Approach Chart – NDB BC RWY 11 ICAO	UATE AD 2.24.11-8-1
Instrument Approach Chart – RNP RWY 11 ICAO	UATE AD 2.24.11-9-1
Instrument Approach Chart – RNP RWY 29 ICAO	UATE AD 2.24.11-10-1
Visual Approach chart – ICAO	UATE AD 2.24.12-1
VFR Departure/Arrival Chart	UATE AD 2.24.14-1