

UATG AD 2

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

UATG AD 2.1 Aerodrome Location Indicator And Name

UATG - ATYRAU

UATG AD 2.2 Aerodrome Geographical And Administrative Data

1	ARP coordinates and site at AD	470719N 0514912E At the centre of RWY
2	Direction and distance from (city)	4.3NM NW of Center of Atyrau city
3	Elevation/Reference temperature	-72 FT/24° C
4	Geoid undulation at AD ELEV PSN	-49 FT
5	MAG VAR/Annual Change	9° E (2013) / 0,07°
6	AD Administration, address, telephone, telefax, telex, AFS	Post: Authority of Airport 060011 Atyrau, avenue Abulkhayr Khan 2 JSC "Atyrau International Airport" Republic of Kazakhstan Phone: +7 (7122) 209251 Fax: +7 (7122) 558398 AFS: UATGAPDU Email: port@iaa-jsc.kz
7	Types of traffic permitted (IFR/VFR)	IFR-VFR
8	Remarks	Nil

UATG AD 2.3 Operational Hours

1	AD Operator	H24 Phone: +7 (7122) 209254 Fax: +7 (7122) 209424 AFS: UATGAPBF Email: cda@iaa-jsc.kz
2	Customs and immigration	H24 Phone: +7 (7122) 209336 Phone: +7 (7122) 209507
3	Health and sanitation	H24
4	AIS Briefing Office	H24
5	ATS Reporting Office (ARO)	H24 Phone: +7 (7122) 209403, 983141 Fax: +7 (7122) 209403 AFS: UATGZTZX, UATGZTZA Email: atr-briffing@ans.kz
6	MET Briefing Office	H24 Phone: +7 (7122) 983178 Fax: +7 (7122) 209402 AFS: UATGYMYX Email: meteo_uatg@ans.kz
7	ATS	H24
8	Fuelling	H24

9	Handling	H24
10	Security	H24
11	De-icing	H24
12	Remarks	Nil

UATG AD 2.4 Handling Services And Facilities

1	Cargo-handling facilities	Handling up to 20 tonnes weight
2	Fuel/oil types	TS-1, RT (equivalent to Jet A-1)
3	Fuelling facilities/capacity	AVBL without limitation
4	De-icing facilities	AVBL, 2 anti-icing equipment for RWY, 50 t, anti-icing. Reagent brands SKYWAY and GREENWAY. For aircraft: anti-icing equipment based Mercedes.
5	Hangar space for visiting aircraft	NOT AVBL for visiting aircraft
6	Repair facilities for visiting aircraft	Minor repairs at aircraft repair base
7	Remarks	Nil

UATG AD 2.5 Passenger Facilities

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

UATG AD 2.6 Rescue And Fire Fighting Services

1	AD category for fire fighting	CAT A8
2	Rescue equipment	AVBL Airport fire trucks – 4. (AA-8.5-70-50/3 “KamAZ-43118-3, AA-8.5-60 KamAZ-43118-1), total capacity OTC- 34.000 kg, including foaming agent 3.500 kg and total capacity 270 kg/ sec; All-terrain vehicle – rescue vehicle-mobile command post (ASA-PKP) on a UAZ-390945 chassis -1.
3	Capability for removal of disabled aircraft	Aircraft up to 100 tons, that have lost it capability to move, can be removed without destroying the landing gear. Necessary equipment for evacuation based on contractual base: ladder and lifting capacity 100 tons. Delivery equipment and crew takes not more 8 hours. Phone: +7 (7122) 764545 Email: cda@iaa-jsc.kz

4	Remarks	The possibility of increasing the required level of fire protection up to 9 categories on request.
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UATG AD 2.7 Seasonal Availability - Clearing

1	Types of clearing equipment	Rotor snow-plough based on Ural 4320 - 1 unit, airfield snowplow Amkador-9463 based on MAZ 543403 - 1 unit, airfield snow-plough EuroMash ACC4000 based on Maz 543403 - 1 unit, wind machine based on Kraz-2556 -1 unit, thermal machine based on Ural-375-1 unit, thermal machine TM-59-MG on chassis of the tractor T-150-1 unit, compact sweeper-blowing machine SCHMIDT CJS -914 on chassis MAN - 1 unit, snow-plough based on KAMAZ-53229- 2 units, snow plough based on KAMAZ-65115-1 unit, tractor MTZ-82 truck-2 units, JCB mini loader Skid Steer Loader 155- 1 unit, telescopic loader JCB-540- 140-1 unit, sprayer "Mekosan 3000-18" for applying liquid chemicals-2 units, AIST-7M trailer- 1 unit.
2	Clearance priorities	1. RWY 2. TWY 3. Stands
3	Remarks	Equipment and special vehicles are used in case fall out precipitation.

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

1	Apron surface and strength	STANDS		SURFACE	STRENGTH
		1-6		CONC	PCN 60/R/B/W/T
		7-9		CONC+ASPH	PCN 20/R/B/X/T
		10-17a		CONC+ASPH	PCN 12/F/C/Z/T
		22-23		CONC+ASPH	PCN 15/F/C/Z/T
2	Taxiway width, surface and strength	TWY	WIDTH (M)	SURFACE	STRENGTH
		MAIN TWY D	44	CONC+ASPH	PCN 20/R/B/X/T
		A	23	CONC+ASPH	PCN 84/F/C/X/T
		B	23	CONC+ASPH	PCN 84/F/C/X/T
		C	15	ASPH	PCN 12/F/C/Z/T
		E	23	CONC+ASPH	PCN 84/F/C/X/T
		F	27	ASPH	PCN 17/F/C/Z/T
		G	42	CONC+ASPH	PCN 84/F/C/X/T
3	Altimeter checkpoint location and elevation	Nil			
4	VOR checkpoints	Nil			
5	INS checkpoints	Nil			
6	Remarks	Taxiway D is closed for aircraft takeoff and landing. Part of the MAIN TWY D (from the intersection with TWY A to end of the MAIN TWY D towards the RWY 14), TWY A and B, can be used for helicopter take-off/landing in the daytime			

UATG 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	Markings of thresholds, touchdown zones, centre line, fixed distance markers, RWY edges, RWY designations, taxi holding positions, taxiway centre lines
3	Stop bars	AVBL / RED
4	Other runway protection measures	Yellow
5	Remarks	Nil

UATG AD 2.10 Aerodrome Obstacles

NIL

UATG AD 2.11 Meteorological Information Provided

1	Associated MET Office	AMS Atyrau Phone: +7 (7122) 983178
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation: Periods of validity	AMSC Atyrau, 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 (WRM-200)
9	ATS units provided with information	Briefing, TWR
10	Additional information	Nil

UATG 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
14	149,89°	2999 X 45	84/F/C/X/T CONC+ASPH	470801.45N 0514836.66E - -50.2 FT	THR -74.5 FT	0.03%

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
32	329.90°	2999 X 45	84/F/C/X/T CONC+ASPH	470637.41N 0514948.05E - -50.2 FT	THR -71.9 FT	0.03%

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	300 X 150	3299 X 300	240 X 150	Nil	Nil	Turn Pad LEN 116 m. The total width of the turn pad and runway 100m. REF. AD 2.24.1
Nil	300 X 150	3299 X 300	240 X 150	Nil	Nil	Turn Pad LEN 116 m. The total width of the turn pad and runway 100m. REF. AD 2.24.1

UATG AD 2.13 Declared Distances

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
14	2999	3299	2999	2999	Nil
32	2999	3299	2999	2999	Nil
TWY A - 14	826	1126	826	Nil	Nil
TWY B - 14	1151	1451	1151	Nil	Nil
TWY A - 32	2173	2473	2173	Nil	Nil
TWY B - 32	1848	2148	1848	Nil	Nil

UATG 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
14	CAT II (PALS) 884 M LIH	GRN Nil	PAPI LEFT/ RIGHT 3°	900m White	2940m, spacing 30m, 0-1740m white, 1740-2640m R/W, 2640-2940m red LIH	2880m, spacing 60m, 0-2280m white, last 600m yellow LIH	RED GRN	Nil	Nil
32	CAT I (PALS) 900 M LIH	GRN Nil	PAPI LEFT/ RIGHT 3°	Nil	2940m, spacing 30m, 0-1740m white, 1740-2640m R/W, 2640-2940m red LIH	2880m, spacing 60m, 0-2280m white, last 600m yellow LIH	RED GRN	Nil	Nil

UATG AD 2.15 Other Lighting, Secondary Power Supply

1	ABN/IBN location, characteristics and hours of operation	ABN: At TOWER building, WHITE/GREEN, H24 IBN: Nil
2	LDI location and LGT Anemometer location and LGT	LDI: Nil Anemometer: 375m from RWY 14, 365m from RWY 32
3	TWY edge and centre line lighting	TWY A EDGE: BLU TWY B EDGE: BLU, CL B : GRN TWY E EDGE: BLU, CL E : GRN TWY G CL: GRN
4	Secondary power supply/switch-over time	AVBL, 0 SEC
5	Remarks	Nil

UATG AD 2.16 Helicopter Landing Area

1	Coordinates TLOF or THR of FATO Geoid undulation	470726.5N 0514917.8E -49 FT
2	TLOF and/or FATO elevation	-72 FT
3	TLOF and FATO area dimensions, surface, strength, marking	TLOF/FATO on 8/15 m. CONC+ASPH PCN 20/R/B/X/T Marking
4	True BRG of FATO	141/321
5	Declared distance available	Nil

6	APP and FATO lighting	Nil
7	Remarks	Intersection of TWY D and TWY C

UATG AD 2.17 ATS Airspace

1	Designation and lateral limits	ATYRAU CTR A circle radius 22 NM centered on 470838N 0514805E
2	Vertical limits	4000 FT ALT / GND
3	Airspace classification	C
4	ATS unit call sign Language(s)	ATYRAU TOWER EN ATYRAU VYSHKA RU
5	Transition altitude	10000 FT
6	Hours of applicability	H24
7	Remarks	Nil

UATG 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	ATYRAU ATIS (EN) ATYRAU ATIS (RU)	127,4 MHZ 126,6 MHZ	Nil	Nil	H24	EN, RU
TWR	ATYRAU TOWER (EN) ATYRAU VYSHKA (RU)	118,1 MHZ	Nil	Nil	H24	Nil

UATG 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 14 II/D/4	ITY	109,9 MHZ	H24	470619.6N 0515003.2E		Nil	Nil
GP 14 II/T/4		333,8 MHZ		470750.7N 0514839.2E			
DME 14	ITY	CH 36X		470750.7N 0514839.2E	-100 FT		
ILS LOC 32 I/D/2	IAY	108.3 MHZ	H24	470820.0N 0514820.9E		Nil	Nil
GP 32 I/C/2		334.1 MHZ		470645.8N 0514934.2E			
DME 32	IAY	CH 20X		470645.8N 0514934.2E	-100 FT		

Type of aid, MAG VAR, ILS Classification, Type of supported OP (for VOR/ILS/ MLS, give declination)	ID	Frequency , Channel number	Hours of operati on	Position of transmitting antenna coordinates	Elevati on of DME transmi tting antenn a	Service volume radius from the GBAS referen ce point	Remarks
1	2	3	4	5	6	7	8
DVOR/DME (9°E/2013)	ATR	112,3 MHZ CH 70X	H24	470838.2N 0514805.4E	0 FT	Nil	Nil

UATG AD 2.20 Local Aerodrome Regulations

1. Taxiing

ACFT movement at the aerodrome is conducted by towing and ACFT's thrust. Taxiing and towing are carried out by established marking.

Starting of engine, towing and taxiing are conducted by ATC controller clearance of "Atyrau-Tower".

ACFT stand number and docking procedure are established by shift foreman of CCR (central control room) "Atyrau" based on actual situation: availability of restriction, parking prohibitions and aerodrome part consisting of manoeuvring area and ramp.

Nose-in part of MAIN TWY D (from TWY A to end of main TWY D, east of RWY 32 THR) is used only for ACFT stand in absence of ACFT stand on apron (mass arrivals, apron repairs, etc.). ACFT park at a distance that ensures the safe usage of TWY A for taxiing, take-off and landing.

In exceptional cases, by the decision of shift foreman of CCR with mandatory report to "Atyrau" ATC flight supervisor, it is allowed to use part of MAIN TWY D (BTN TWY A and TWY B at a distance providing safe usage TWY A, B for taxiing, take-off and landing) for parking if there is no possibility ACFT towing, for the purpose of self-taxiing in/out and long-term parking. In these cases, issued NOTAM and helicopter CREW make final decision to take flight operations from (to) MAIN TWY D.

ACFT tracking (leading) is conducted regardless of the time of day:

- during commissioning of low visibility conditions procedures;
- during inability of marking;
- during complicated procedures of movement on the maneuvering area;
- during taxiing IN/OUT to MAIN TWY D in case of using as ACFT STAND;
- on request of ACFT crew.

U-turns on RWY are cleared if ACFT index allowed, CREW responsible for safety. When restrictions are imposed by AD service, U-turns are available only at RWY wedding by clearance of "Atyrau-TWR" ATC controller.

"Atyrau TWR" ATC controller may expedite taxiing to line up and RWY vacating after landing (except LVP procedures duration) to reduce RWY occupancy time. CREW immediately informs ATC controller if it is not possible to complete required instructions.

U-turns for aircraft type AN-12, A320, A321, all modifications of B-737, B-757, B-767, IL-76 and aircraft with heavier takeoff mass are prohibited. U-turns are allowed only on turning bays of RWY 14/32.

2. Takeoff and landing

Before starting the flight the CREW must listen ATIS information, before starting (towing) establish a connection with "Atyrau-Tower" ATC controller at a frequency of 118.1 MHz, inform ATIS current information index, number of ACFT stand and get ATC clearance for take-off.

Depending on the air or ground situation it is allowed to take-off not from the runway THR or from TWY A, B

by agreement between "Atyrau Tower" ATC controller and the crew. ACFT take-off starts from RWY point where rolling take-off coincide required actual TKOFF mass of ACFT and TKOFF conditions. Final decision to take-off is made by ACFT CREW.

ACFT TKOFF and landing with tailwind component are permitted for accelerating AFCT flow movement by CREW or ATS unit's request. CREW is responsible for TKOFF and landing decision.

If flight safety, runway configuration, meteorological conditions and existing approach procedures or air traffic conditions do not prefer another direction, ATS unit shall designate RWY taking into account the performance of the ACFT landing or take-off against the wind. The departure of the aircraft with a heading opposite to the operational runway direction is PROHIBITED.

ACFT CREW TKOFF immediately after TKOFF clearance. If the ACFT crew is not ready to execute immediate TKOFF, it is necessary to inform "Atyrau-TWR" controller before taxiing to line up and about an expected delay time.

Pilot in-command shall make the final decision on the performance for take-off or landing in weather conditions that do not correspond to the minima set by the airlines for take-off and landing. In this case, ATC clearance for take-off or landing shall not be considered as compelling action and ACFT CREW is responsible for taken decision and for result of landing or take-off.

3. The flights of helicopters

For engine start-up, take-off and landing of helicopters, only the RW and part of the main taxiway D are used from the intersection with TW A to the end of MTWY D towards RWY 14, day time, in compliance with the established intervals between aircraft taking off and landing and distances to obstacles, engine start-up, take-off and landing of helicopters on stands 1–3 are permitted during the execution of special priority flights (OVP) and medical evacuation missions.

It is allowed, in agreement with the Atyrau-Tower controller, to start helicopter engines on apron stands of Atyrau aerodrome

Air taxiing of helicopters with a skid landing gear from the parking area to the take-off location and back is carried out according to markings along the route assigned by the Atyrau-Tower controller, observing the established distances to obstacles under the responsibility of the helicopter commander.

Helicopters, in agreement with the Atyrau-Tower controller, are allowed to move by air during the day while maintaining the established distances to obstacles from stand 15-17A to take-off point from MTWY-D and back.

Running takeoff of helicopters and rolling landing, takeoff and landing of helicopters in accordance with IFR (Special VFR during nighttime and twilight) are carried out only from / on the RWY.

In the presence of meteorological phenomena or industrial smoke on a part of the runway, impairing visibility to values below the minimum, the helicopter PIC is allowed to take off and land, in agreement with the air traffic controller, in that part of the runway where the meteorological conditions correspond to its minimum (start / middle / end).

4. The procedures in low visibility conditions

The procedures in low visibility conditions are entered at RVR less than 550 m., when not all maneuvering area or part of it is visually controlled from the control center "Atyrau- Tower".

RWY 14 is used for ICAO CAT 2 landing.

ATC controller with following phrase "Low visibility procedures in progress" reports the beginning of LVP procedures.

During ICAO CAT 2 precision approach pilot is guaranteed that the signals of localizer and glide slope beacons are protected from interference on final landing approach.

The movement of vehicles on the apron and the maneuvering area is restricted.

Obstacles on the RWY and zones of radio beacon landing system are monitored by ATC controller based on the CREW's or aerodrome service specialist's reports.

ATC immediately informs CREW about changing the operational status of radio and lighting equipment.

The pilot (crew) is given three values of visibility on the runway, measured in touchdown zone and in the middle of the runway during landing approach in ICAO Category 2.

If there are consecutive departures and there is no possibility for holding position to different taxiways, aircraft are waiting in line for holding position at ACFT stand.

Only one ACFT can be on the runway.

The clearance for landing is issued in advance before approaching ACFT reaches a distance of 2.2 NM (4 km).

When pointing for landing approach by radar vectoring the ACFT is moved to final approach leg no closer than 11 NM (20 km) from the runway threshold.

Minimum interval between consecutive departing ACFT in low visibility conditions:

- departing ACFT should fly over the LOC antenna before the next departing ACFT start of take-off, but no less of intervals established according to wake turbulence.

The minimum intervals between arriving and departing ACFT:

- departing ACFT should take off before approaching to land ACFT reaches a distance of 6.5 NM (12 km) on final approach leg. (in condition of ICAO category 2)

Minimum interval on final approach between arriving ACFT (in the conditions ICAO Category 2):

- no less 14 NM (25 km)

The crew does not report about the vacating runway as long as the ACFT precede further the marked holding point (STOP line lights).

Taxiing to the apron after vacating of the runway is allowed only by the follow-me-car. The parking of the ACFT on the stand is carried out by the instruction of a person who responsible for meeting the ACFT.

The ACFT taxiing for takeoff from ACFT stand to holding position is accompanied by follow-me-car. At holding position the ACFT does not taxi further marked holding point (STOP line lights) until the clearance of ATS air traffic controller will be received and STOP line lights will be turned off.

When working centerline lights of taxiway B, E it is allowed to taxi via centerline lights without follow-me-car.

ACFT taxiing is carried out on the minimum engine thrust.

During period of LVP operation it is prohibited the takeoff not from runway THR, from taxiway A, B, turns on the runway, ACFT TKOFF with back course of the runway working direction.

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

IFR training and check flights are performed according to established procedures for instrumental takeoff and landing approach. After takeoff, crew maintains received entering approach procedure instructions from air traffic controller.

For training flights, control flights (flying around) of aircraft according to the VFR, an aerodrome flight circle has been established: RWY 32 - left circle, RWY 14 - right circle, circle flight altitude is assigned by the air traffic controller "Atyrau Tower".

Depending on intensity of flights and restrictions imposed, Air traffic manager have the right to restrict the number of training ACFT, to suspend or prohibit the training flights.

Flight inspections of Radio Engineering Flight Ensuring facilities and communications are carried out in accordance with the requirements of the Rules for radio engineering flight ensuring and aviation radio communication of civil aviation.

Training flights in uncontrolled airspace within the horizontal limits of the Atyrau TMA are permitted up to 2,000 feet. If necessary, flights at an altitude of over 2000 FT, shall be performed in coordination with the "Atyrau-Tower" air traffic controller only. Training flights in the horizontal limits of the TMA up to an altitude of 2000 FT

are performed according to the QNH of the area, and for flights at an altitude of 2000 FT and higher on the QNH of the aerodrome.

For training (overflight) by helicopters on hovering, as agreed with the flight supervisor, in the absence taking off and approaching ACFT on the runway, it can be used the site located north-east of the aerodrome check point at the place of widening rapid exit taxiway-D, in the daytime, under minimum meteorological conditions for VFR (SVFR) flights. With observance of established intervals and distances to obstacles. Take-off (landing) from (to) pad in sector azimuth 350°-150° (150°-350°) is prohibited. Movement (hover taxiing) to (from) the pad, hovering training (height) and take-off and landing from (to) the pad shall be performed with clearance of "Atyrau-Tower" controller. Helicopter pilot responsible for safety during movement (taxiing) to (from) the pad, hovering training (hovering), takeoff and landing from (to) the pad.

6. Helicopter pad

7. Emergency landing procedure

In case of on-board emergency during takeoff, pilot-in-command determines the necessary maneuver for purpose of safety.

8. Fuel draining

Fuel dumping is conducted only in emergencies that prevent a decrease of landing mass of ACFT by running out of fuel.

If the CREW needs a radio-silent during the fuel dumping, the duration is agreed between the crew and ATC controller

Fuel dumping is conducted by the designated route of ATS unit depending on air situation on height agreed with CREW in area bounded by waypoints UDEBA-OLAPU-BASPU-UDEBA (not lower 9000 FT).

In an emergency, the crew shall have the right to fuel dumping out of the designated route.

ACFT separation when fuel dumping is carried out in accordance with the Procedures for Air Navigation Services "Air Traffic Management" (PANS-ATM) doc 4444 ATM/501.

UATG AD 2.21 Noise Abatement Procedures

NIL

UATG AD 2.22 Flight Procedures

GENERAL PROVISIONS

In the area of the Atyrau Aerodrome, flights are under the IFR and VFR.

When flying on IFR and VFR in the control area of the Atyrau aerodrome, it is necessary to:

- have permission from the ATS unit received prior to entering the area of responsibility;
- at the request of the ATS unit to report the location;
- follow the instructions of the ATS unit;
- have and continuously maintain two-way radio communication in the VHF band.

IFR and VFR flights are carried out at specified flight levels (heights) in accordance with the rules of vertical, longitudinal and lateral separation with keeping set intervals.

IFR flights have an advantage over VFR flights.

When applicable, arriving aircrafts are sent to the holding area. To regulate the longitudinal intervals between the aircrafts, the crew may be given a command to perform an orbit flight (360 ° turn) with indicating the place and side of the turn.

In case of a flight safety hazard, a change in the predetermined altitude (flight level) of the flight and deviation from the line of the given route is allowed. When a given flight Line or flight altitude deviates from the established line, the Aircraft commander immediately informs the ATS unit under its control, of which the aircraft is exist.

Information on the activities of restricted flight areas, prohibited areas and hazardous areas, within the area of the aerodrome in real time, the overflying permit or the bypass route is assigned to the «Atyrau Tower».

PROCEDURES OF FLIGHTS ON IFR WITHIN THE AERODROME CONTROL ZONE

Takeoff and initial climb are carried out using standard routes indicated on the Standard Departure Chart on Instrument (SID) Runway 14 (Runway 32) or along the paths assigned by the ATS unit.

Aircraft crews are obliged to withstand the prescribed standard departure (SID) and arrival (STAR) routes, and in case of deviation, enter to a given route line immediately.

The aircraft crew must withstand the established speed limit, unless otherwise indicated by the ATS unit. To regulate the flow of traffic, the translational instrumental velocities of the aircraft are applied in order to ensure the intervals required for landing, taking into account the characteristics of the aircraft.

PROCEDURES OF FLIGHTS ON VFR WITHIN THE AERODROME CONTROL ZONE

The permission entry into the aerodrome control zone, the route and altitude of the departing and arriving aircraft, holding area until the aircraft receives permission entry into the range of flights is assigned by the Atyrau Tower.

For flights on VFR, an aerodrome traffic circuit is installed: Runway 32 - left circle Runway 14 - right circle orbit altitude is appointed by the air traffic controller of "Atyrau Tower".

Minimum meteorological conditions in the control area (takeoff and landing of RWY 14/32, Stands 1-3, taxiways A, B, MTW D, helipad) by VFR during the day:

- cloud base height - 500 FT (indicated speed of 140 Kt and less), 1000 FT (indicated speed of 141-250 Kt);
- meteorological visibility range of 2000 meters (indicated speed of 140 Kt or less), 5000 meters (indicated speed of 141-250 Kt)

Minimum meteorological conditions in the control area (takeoff and landing of RWY 14/32, Stands 1-3, TWY A, B, MTW D, helipad) in VFR (SVFR) during the day when flying in order to provide emergency medical and (or) humanitarian helping the population in case of natural disasters, performing search and rescue, emergency rescue operations, especially important flights and training flights:

- Helicopter:
 - cloud base height - 500 FT;
 - meteorological visibility range of 1000 meters
- Aircraft:
 - cloud base height - 500 FT;
 - meteorological visibility range of 1500 meters

Minimum meteorological conditions for flight in the control area (takeoff and landing of RWY 14/32) according to VFR (SVFR) at night when flying in order to provide emergency medical and (or) humanitarian assistance to the population in case of natural disasters, perform search and rescue, rescue operations, especially important flights and training flights:

- Helicopter:
 - cloud base height of the clouds - 1000 FT;
 - meteorological visibility ranges of 4000 meters
- Aircraft:
 - cloud base height of the clouds - 1500 FT;
 - meteorological visibility ranges of 4000 meters

Helicopter flights with cargo on an external sling in the control area are performed according to VFR, bypassing settlements.

RADAR PROCEDURES IN THE AERODROME CONTROL ZONE

To regulate the sequence of landing approach and to maintain safe intervals from any point of the scheme, it is possible to control the aircraft movement in height and direction by the ATS controller using the radar vectoring method. Instructions on the occupation of certain levels (heights) is carried out in accordance with the Location Map of minimum altitude of ATC - ICAO.

In the absence of radar control, but steady operation of the onboard flight-navigation equipment, the crew of the aircraft are allowed to perform landing approach in accordance with the published approach plans on the IFR without a radar or make an abbreviated visual approach.

EMERGENCY LANDING PROCEDURE

In case of an emergency on the aircraft at the take-off stage, the necessary maneuver in order to ensure safety is determined by the aircraft commander.

RULES OF GROUND MOVEMENT

The order of movement of aircraft on the aerodrome

Taxiing out and taxiing the aircraft from (to) the parking lot is carried out according to the signals of the responsible person of the engineering and aviation service of the airport operator, which ensures the reception and release of the aircraft.

The taxiing speed is chosen by the aircraft commander depending on the state of the aerodrome surface, the presence of obstacles, the weight of the aircraft, wind conditions and visibility conditions.

Towing an aircraft with visibility less than 2 km is performed at a under speed with the marker lights on the aircraft, aeronautical lights and the observance of increased safety precautions.

Removal of aircraft from the working area of the aerodrome that have lost the ability to move.

Removal of aircraft that have lost the ability to move is carried out by the engineering and aviation service, the aerodrome service, the special transport service of the aerodrome operator and the aircraft operator.

Information on technical means used in rescue equipment and fire.

Fire and rescue calculation are equipped with the fire fighting equipment presented in the Table 1.

Table 1: Available fire-fighting equipment at Atyrau airport

Name, type of fire truck	Number	Main place of basing	Remark
KamAZ AA-8.5- 70 / -50 / 3 (43118)	3	In ERS box	Used for duty at the fire post accordance to ELFS
KamAZ AA-8.5- 60 (43118), equipped with a device to cover the RW with foam	1	In ERS box	Nil

To complete set of aerodrome fire trucks corresponds to the complete set list. Airport Services Manual requirements «rescue and fire fighting» part 1, ICAO, Doc 9137 – AN/898, third edition – 1990. Each fire truck is equipped with:

- fire-fighting equipment (fire hoses, hand-held fire nozzles, foam generators, gas extinguishing systems, type OU-80 – carbon dioxide);
- means for evacuating people from an emergency aircraft (two section ladder, saw, knives for cutting safety belts, a device for cutting the fuselage skin);
- personal protective equipment for fire-rescue crews (breathing apparatus, firefighter's combat clothing (FCC), helmets, thermal suits, leggings, boots);
- with a trench tool (crowbar, fire axes, sledgehammer, shovel, etc.).

For emergency-rescue operations at the aerodrome, there are:

- a medical trailer van equipped with a collapsible tent, stretchers (68 pieces - 25% of the maximum passenger capacity of the aircraft), immobilization shields, tarpaulins, sets of Kramer stair splints (128 pieces) and emergency medical stowages with a dressing material (20 pieces);
- all-terrain vehicle – Emergency rescue vehicle-mobile command post (ASA-PKP) on the UAZ-390945 chassis - 1 unit, equipped with communication facilities and a loud-speaking system;

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 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). 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) at absolute altitude below 3000 feet 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	MIKE	N473036 E0514611	348°22.0 nm ATR DVOR/DME	Entry/exit/ holding
2	KILO	N472621 E0520715	028°22.0 nm ATR DVOR/DME	Entry/exit/ holding
3	SIERRA	N471708 E0521751	058°22.0 nm ATR DVOR/DME	Entry/exit/ holding
4	PAPA	N470324 E0521922	095°22.0 nm ATR DVOR/DME	Entry/exit/ holding
5	TANGO	N464848 E0520158	146°22.0 nm ATR DVOR/DME	Entry/exit/ holding
6	DELTA	N464941 E0513142	203°22.0 nm ATR DVOR/DME	Entry/exit/ holding
7	GOLF	N470231 E0511709	245°22.0 nm ATR DVOR/DME	Entry/exit/ holding
8	BRAVO	N471414 E0511653	276°22.0 nm ATR DVOR/DME	Entry/exit/ holding

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.

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.

UATG 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. Ornithological situation

The winter period is characterized by the poverty of the species composition and the low number of birds. The spring and autumn periods are characterized mainly by movements of various species of migratory birds and the beginning of nesting. In the Atyrau region, from 50 to 60 species of birds were recorded in the spring and autumn migration. The main directions of spring and autumn migrations are the north and north-east directions and back. The first species of birds, such as the black crow (*Corvus corone*), appear by mid-March 15th. Visual observations show that migrations occur at altitudes up to 200 m and more. In the summer period, many sedentary and migratory birds nest. On the territory of Atyrau region, nesting of up to 100 species of birds has been recorded.

Data on the accumulation of birds and the direction of their flight.

In winter, the following are held in the airport area: blue-gray doves (*Solumba livia* Gin) up to 50 individuals, silver gull (*Larus argentatus* Pontop) up to 40 individuals. In December, the daily activity of birds is observed from 9 to 16 hours, in January from 8 to 17 hours. Flying small groups and single birds in search of food occur at altitudes up to 50 meters. Only blue-gray doves flying in flocks of 7-12 individuals in the direction from the north-east to south-west at 10-12 o'clock in the afternoon and at 16-17 o'clock in the opposite direction have a characteristic flight orientation in the airport runway area.

On the spring span in the vicinity of the airport, there are separate aggregations of various corvidae birds of up to 5,000 individuals, whose daily activity is observed in the morning hours - from 6 to 10 hours, in the evening - from 16 to 19 hours.

The danger to the movement of aircraft in the summer period is represented by the silver gull, black crow and gray wild doves. They mainly nest in the Caspian Sea region, located south of the airport. The distance from aerodrome check point to the sea is about 30 km. The activity of birds is observed in the morning from 6 to 10, in the evening from 16 to 19 hours.

At the aerodrome and the adjacent territory, measures are being taken to eliminate conditions conducive to the accumulation of birds and the scaring of birds by using noise and light-signaling means.

Aircraft crews receive information about the ornithological situation before taking off and landing at ATIS. In the absence of ATIS the information is transmitted by the air traffic controller of the "Atyrau Tower". In the event

of a sudden complication of the ornithological situation, the air traffic controller of the "Atyrau Tower" will immediately transmit information to the crew.

Measures to prevent the accumulation of birds in the aerodrome area include scaring away birds with the help of equipment: noise gun «Stalker M90b», bioacoustics installations «Bird Gard Super Pro AMP», movable bird repeller "Glittei", repeller "Mirror ball", dynamic bird repeller "Condor", inflatable bird repeller "Guardian", propane bird repeller "DBS-E" plastic decoy spikes, metal decoy spikes, hunting saucer trap for wild animals, stationary laser device for protection from birds/animals «Horizon- 1», trigger for threaded cartridges "Hunter's Signal", red laser bird repeller BDL-650.

UATG AD 2.24 Charts Related To An Aerodrome

Name	Page
Aerodrome Chart ICAO	UATG AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UATG AD 2.24.3-1
Aerodrome Obstacle Chart – ICAO – Type A	UATG AD 2.24.4-1
Precision Approach Terrain Chart – RWY 14 ICAO	UATG AD 2.24.5-1
Standard Departure Chart Instrument (SID) RWY 14 ICAO	UATG AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 32 ICAO	UATG AD 2.24.7-2-1
Standard Departure Chart Instrument (SID) RNAV RWY 14 ICAO	UATG AD 2.24.7-3-1
Standard Departure Chart Instrument (SID) RNAV RWY 32 ICAO	UATG AD 2.24.7-4-1
Standard Arrival Chart Instrument (STAR) RWY 14 ICAO	UATG AD 2.24.9-1-1
Standard Arrival Chart Instrument (STAR) RWY 32 ICAO	UATG AD 2.24.9-2-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 14 ICAO	UATG AD 2.24.9-3-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 32 ICAO	UATG AD 2.24.9-4-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 14 ICAO	UATG AD 2.24.9-5-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 32 ICAO	UATG AD 2.24.9-6-1
ATC Surveillance Minimum Altitude Chart ICAO	UATG AD 2.24.10-1
Instrument Approach Chart – ILS/DME CAT I & II RWY 14 ICAO	UATG AD 2.24.11-1-1
Instrument Approach Chart – ILS/DME RWY 32 ICAO	UATG AD 2.24.11-2-1
Instrument Approach Chart – VOR/DME - Y RWY 14 ICAO	UATG AD 2.24.11-3-1
Instrument Approach Chart – VOR/DME - Y RWY 32 ICAO	UATG AD 2.24.11-4-1
Instrument Approach Chart – VOR/DME - Z RWY 14 ICAO	UATG AD 2.24.11-5-1
Instrument Approach Chart – VOR/DME - Z RWY 32 ICAO	UATG AD 2.24.11-6-1
Instrument Approach Chart – RNP RWY 14 ICAO	UATG AD 2.24.11-7-1
Instrument Approach Chart – RNP RWY 32 ICAO	UATG AD 2.24.11-8-1
Visual Approach chart – ICAO	UATG AD 2.24.12-1
VFR Departure/Arrival Chart	UATG AD 2.24.14-1

UATG AD 2.25 Visual segment surface (VSS) penetrations

No penetrations