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AIRAC AMDT 005/2025
Effective Date: 15 May 2025

1. Amendment content:

GEN

GEN 0.2 Information updated

GEN 0.4 Information updated

GEN 3.1 Information updated

ENR

ENR 1.6 Information updated

ENR 3.2 Information updated

ENR 4.4 Information updated

AD

UAAA 2.8, 2.12, 2.18, 2.20, 2.21 Information updated

UATG 2.12 Information updated

UAKD 2.12, 2.20 Information updated

UAKK 2.8, 2.12 Information updated

UACK 2.12 Information updated

UAUU 2.12 Information updated

UAOO 2.13 Information updated

UASP 2.12 Information updated

UACP 2.12, 2.20 Information updated

UATZ 2.12 Information updated

UAIT 2.12 Information updated

UASK 2.12, 2.22 Information updated

UAI 2.14 Information updated

AD 2.24 Changes in aeronautical charts.

2. Hand corrections to the following pages:

Nil

3. Record entry of amendment in GEN 0.2.

4. This AIP amendment incorporates information contained in the following publications:

NOTAM series K:

K0419/25, K0420/25, K0427/25, K0498/25, K0534/25

NOTAM series A:

A1127/25, A1267/25

NOTAM series C:

C1188/25, C1496/25

NOTAM incorporated to this AMDT will be cancelled by NOTAMC on the 30 MAY 2025

SUP:

Nil

AIC:

Nil

5. Insert / remove the pages as shown in list on the next page:

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GEN 0.2 RECORD OF AIP AMENDMENTS

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001/2017	16-Feb-2017	30-Mar-2017	
002/2017	13-Apr-2017	25-May-2017	
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004/2017	03-Aug-2017	14-Sep-2017	
005/2017	28-Sep-2017	09-Nov-2017	
001/2018	21-Dec-2017	01-Feb-2018	
002/2018	15-Mar-2018	26-Apr-2018	
003/2018	10-May-2018	21-Jun-2018	
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005/2018	27-Sep-2018	08-Nov-2018	
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002/2019	17-Jan-2019	28-Feb-2019	
003/2019	14-Feb-2019	28-Mar-2019	
004/2019	11-Apr-2019	23-May-2019	
005/2019	06-Jun-2019	18-Jul-2019	
006/2019	12-Sep-2019	07-Nov-2019	
007/2019	24-Oct-2019	05-Dec-2019	
001/2020	05-Dec-2019	30-Jan-2020	
002/2020	12-Mar-2020	23-Apr-2020	
003/2020	04-Jun-2020	16-Jul-2020	
004/2020	16-Jul-2020	10-Sep-2020	
005/2020	08-Oct-2020	03-Dec-2020	
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005/2021	23-Sep-2021	04-Nov-2021	
006/2021	21-Oct-2021	02-Dec-2021	
001/2022	13-Jan-2022	24-Feb-2022	
002/2022	07-Apr-2022	19-May-2022	
003/2022	30-Jun-2022	11-Aug-2022	
004/2022	25-Aug-2022	06-Oct-2022	
005/2022	20-Oct-2022	01-Dec-2022	
001/2023	15-Dec-2022	26-Jan-2023	
002/2023	12-Jan-2023	23-Feb-2023	

AIRAC AIP AMENDMENT			
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004/2023	04-May-2023	15-Jun-2023	
005/2023	29-Jun-2023	10-Aug-2023	
006/2023	24-Aug-2023	05-Oct-2023	
007/2023	21-Sep-2023	02-Nov-2023	
008/2023	19-Oct-2023	30-Nov-2023	
001/2024	14-Dec-2023	25-Jan-2024	
002/2024	08-Feb-2024	21-Mar-2024	
003/2024	04-Apr-2024	16-May-2024	
004/2024	30-May-2024	11-Jul-2024	
005/2024	27-Jun-2024	08-Aug-2024	
006/2024	25-Jul-2024	05-Sep-2024	
007/2024	19-Sep-2024	31-Oct-2024	
001/2025	12-Dec-2024	23-Jan-2025	
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ENR-1.5 - 2	26 JAN 2023	ENR-1.8 - 8	26 JAN 2023	ENR-1.13 - 2	07 NOV 2019
ENR-1.5 - 3	03 DEC 2020	ENR-1.8 - 9	26 JAN 2023	ENR-1.14 - 1	23 APR 2020
ENR-1.5 - 4	03 DEC 2020	ENR-1.8 - 10	21 MAR 2024	ENR-1.14 - 2	23 APR 2020
ENR-1.6 - 1	26 JAN 2023	ENR-1.8 - 11	23 JAN 2025	ENR-1.14 - 3	07 NOV 2019
ENR-1.6 - 2	26 JAN 2023	ENR-1.8 - 12	23 JAN 2025	ENR-1.14 - 4	07 NOV 2019
ENR-1.6 - 3	26 JAN 2023	ENR-1.8 - 13	10 AUG 2023	ENR-1.14 - 5	07 NOV 2019
ENR-1.6 - 4	23 JAN 2025	ENR-1.8 - 14	10 AUG 2023	ENR-1.14 - 6	07 NOV 2019
ENR-1.6 - 5	08 AUG 2024	ENR-1.8 - 15	10 AUG 2023	ENR-1.14 - 7	07 NOV 2019
ENR-1.6 - 6	11 JUL 2024	ENR-1.8 - 16	10 AUG 2023	ENR-1.14 - 8	07 NOV 2019

ENR 2 AIR TRAFFIC SERVICES AIRSPACE

ENR-2.1 - 1	26 JAN 2023	ENR-2.1 - 11	23 JAN 2025	ENR-2.2 - 1	21 MAR 2024
ENR-2.1 - 2	10 AUG 2023	ENR-2.1 - 12	23 JAN 2025	ENR-2.2 - 2	23 JAN 2025
ENR-2.1 - 3	26 JAN 2023	ENR-2.1 - 13	23 JAN 2025	ENR-2.2 - 3	23 JAN 2025
ENR-2.1 - 4	26 JAN 2023	ENR-2.1 - 14	23 JAN 2025	ENR-2.2 - 4	21 MAR 2024
ENR-2.1 - 5	10 AUG 2023	ENR-2.1 - 15	23 JAN 2025	ENR-2.2 - 5	11 JUL 2024
ENR-2.1 - 6	10 AUG 2023	ENR-2.1 - 16	23 JAN 2025	ENR-2.2 - 6	11 JUL 2024
ENR-2.1 - 7	23 JAN 2025	ENR-2.1 - 17	23 JAN 2025	ENR-2.2 - 7	11 JUL 2024
ENR-2.1 - 8	23 JAN 2025	ENR-2.1 - 18	23 JAN 2025	ENR-2.2 - 8	11 JUL 2024
ENR-2.1 - 9	23 JAN 2025	ENR-2.1 - 19	23 JAN 2025	ENR-2.2 - 9	21 MAR 2024
ENR-2.1 - 10	23 JAN 2025	ENR-2.1 - 20	23 JAN 2025	ENR-2.2 - 10	21 MAR 2024

ENR 3 ATS ROUTES

ENR-3.1 - 1	24 FEB 2022	ENR 3.2.1 - 10	11 JUL 2024	ENR 3.2.1 - 39	31 OCT 2024
ENR-3.1 - 2	20 APR 2023	ENR 3.2.1 - 11	11 JUL 2024	ENR 3.2.1 - 40	31 OCT 2024
ENR-3.1 - 3	20 APR 2023	ENR 3.2.1 - 12	11 JUL 2024	ENR 3.2.1 - 41	31 OCT 2024
ENR-3.1 - 4	24 FEB 2022	ENR 3.2.1 - 13	11 JUL 2024	ENR 3.2.1 - 42	31 OCT 2024
ENR-3.1 - 5	24 FEB 2022	ENR 3.2.1 - 14	11 JUL 2024	ENR 3.2.2 - 1	10 AUG 2023
ENR-3.1 - 6	24 FEB 2022	ENR 3.2.1 - 15	11 JUL 2024	ENR 3.2.2 - 2	10 AUG 2023
ENR-3.1 - 7	24 FEB 2022	ENR 3.2.1 - 16	11 JUL 2024	ENR 3.2.2 - 3	10 AUG 2023
ENR-3.1 - 8	24 FEB 2022	ENR 3.2.1 - 17	11 JUL 2024	ENR 3.2.2 - 4	10 AUG 2023
ENR-3.1 - 9	10 AUG 2023	ENR 3.2.1 - 18	11 JUL 2024	ENR 3.2.2 - 5	10 AUG 2023
ENR-3.1 - 10	10 AUG 2023	ENR 3.2.1 - 19	11 JUL 2024	ENR 3.2.2 - 6	10 AUG 2023
ENR-3.1 - 11	10 AUG 2023	ENR 3.2.1 - 20	11 JUL 2024	ENR 3.2.2 - 7	10 AUG 2023
ENR-3.1 - 12	10 AUG 2023	ENR 3.2.1 - 21	11 JUL 2024	ENR 3.2.2 - 8	10 AUG 2023
ENR-3.1 - 13	10 AUG 2023	ENR 3.2.1 - 22	11 JUL 2024	ENR 3.2.2 - 9	10 AUG 2023
ENR-3.1 - 14	25 JAN 2024	ENR 3.2.1 - 23	11 JUL 2024	ENR 3.2.2 - 10	10 AUG 2023
ENR-3.1 - 15	10 AUG 2023	ENR 3.2.1 - 24	11 JUL 2024	ENR 3.2.2 - 11	20 MAR 2025
ENR-3.1 - 16	10 AUG 2023	ENR 3.2.1 - 25	11 JUL 2024	ENR 3.2.2 - 12	20 MAR 2025
ENR-3.1 - 17	10 AUG 2023	ENR 3.2.1 - 26	11 JUL 2024	ENR 3.2.2 - 13	20 MAR 2025
ENR-3.1 - 18	10 AUG 2023	ENR 3.2.1 - 27	31 OCT 2024	ENR 3.2.2 - 14	20 MAR 2025
ENR 3.2 - 1	04 NOV 2021	ENR 3.2.1 - 28	31 OCT 2024	ENR 3.2.2 - 15	20 MAR 2025
ENR 3.2 - 2	04 NOV 2021	ENR 3.2.1 - 29	31 OCT 2024	ENR 3.2.2 - 16	20 MAR 2025
ENR 3.2.1 - 1	10 AUG 2023	ENR 3.2.1 - 30	31 OCT 2024	ENR 3.2.2 - 17	20 MAR 2025
ENR 3.2.1 - 2	10 AUG 2023	ENR 3.2.1 - 31	31 OCT 2024	ENR 3.2.2 - 18	20 MAR 2025
ENR 3.2.1 - 3	10 AUG 2023	ENR 3.2.1 - 32	31 OCT 2024	ENR 3.2.2 - 19	20 MAR 2025
ENR 3.2.1 - 4	10 AUG 2023	ENR 3.2.1 - 33	31 OCT 2024	ENR 3.2.2 - 20	20 MAR 2025
ENR 3.2.1 - 5	10 AUG 2023	ENR 3.2.1 - 34	31 OCT 2024	ENR 3.2.2 - 21	20 MAR 2025
ENR 3.2.1 - 6	10 AUG 2023	ENR 3.2.1 - 35	31 OCT 2024	ENR 3.2.2 - 22	20 MAR 2025
ENR 3.2.1 - 7	11 JUL 2024	ENR 3.2.1 - 36	31 OCT 2024	ENR 3.2.2 - 23	20 MAR 2025
ENR 3.2.1 - 8	11 JUL 2024	ENR 3.2.1 - 37	31 OCT 2024	ENR 3.2.2 - 24	20 MAR 2025
ENR 3.2.1 - 9	11 JUL 2024	ENR 3.2.1 - 38	31 OCT 2024	ENR 3.2.2 - 25	20 MAR 2025

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ENR 3.2.2 - 27	20 MAR 2025	ENR 3.2.3 - 31	20 FEB 2025	ENR 3.2.7 - 5	10 AUG 2023
ENR 3.2.2 - 28	20 MAR 2025	ENR 3.2.3 - 32	20 FEB 2025	ENR 3.2.7 - 6	10 AUG 2023
ENR 3.2.2 - 29	20 MAR 2025	ENR 3.2.3 - 33	20 FEB 2025	ENR 3.2.7 - 7	10 AUG 2023
ENR 3.2.2 - 30	20 MAR 2025	ENR 3.2.3 - 34	20 FEB 2025	ENR 3.2.7 - 8	31 OCT 2024
ENR 3.2.2 - 31	20 MAR 2025	ENR 3.2.3 - 35	11 JUL 2024	ENR 3.2.7 - 9	31 OCT 2024
ENR 3.2.2 - 32	20 MAR 2025	ENR 3.2.3 - 36	11 JUL 2024	ENR 3.2.7 - 10	31 OCT 2024
ENR 3.2.2 - 33	20 MAR 2025	ENR 3.2.3 - 37	11 JUL 2024	ENR 3.2.7 - 11	31 OCT 2024
ENR 3.2.2 - 34	20 FEB 2025	ENR 3.2.3 - 38	11 JUL 2024	ENR 3.2.7 - 12	31 OCT 2024
ENR 3.2.3 - 1	05 OCT 2023	ENR 3.2.3 - 39	11 JUL 2024	ENR 3.2.7 - 13	31 OCT 2024
ENR 3.2.3 - 2	05 OCT 2023	ENR 3.2.3 - 40	11 JUL 2024	ENR 3.2.7 - 14	31 OCT 2024
ENR 3.2.3 - 3	05 OCT 2023	ENR 3.2.4 - 1	10 AUG 2023	ENR 3.2.7 - 15	31 OCT 2024
ENR 3.2.3 - 4	05 OCT 2023	ENR 3.2.4 - 2	10 AUG 2023	ENR 3.2.7 - 16	31 OCT 2024
ENR 3.2.3 - 5	05 OCT 2023	ENR 3.2.4 - 3	10 AUG 2023	ENR 3.2.7 - 17	31 OCT 2024
ENR 3.2.3 - 6	05 OCT 2023	ENR 3.2.4 - 4	10 AUG 2023	ENR 3.2.7 - 18	31 OCT 2024
ENR 3.2.3 - 7	05 OCT 2023	ENR 3.2.4 - 5	10 AUG 2023	ENR 3.2.7 - 19	31 OCT 2024
ENR 3.2.3 - 8	05 OCT 2023	ENR 3.2.4 - 6	10 AUG 2023	ENR 3.2.7 - 20	31 OCT 2024
ENR 3.2.3 - 9	05 OCT 2023	ENR 3.2.4 - 7	10 AUG 2023	ENR 3.2.7 - 21	10 AUG 2023
ENR 3.2.3 - 10	05 OCT 2023	ENR 3.2.4 - 8	10 AUG 2023	ENR 3.2.7 - 22	10 AUG 2023
ENR 3.2.3 - 11	05 OCT 2023	ENR 3.2.4 - 9	10 AUG 2023	ENR 3.2.7 - 23	10 AUG 2023
ENR 3.2.3 - 12	05 OCT 2023	ENR 3.2.4 - 10	10 AUG 2023	ENR 3.2.7 - 24	10 AUG 2023
ENR 3.2.3 - 13	05 OCT 2023	ENR 3.2.4 - 11	10 AUG 2023	ENR 3.2.7 - 25	10 AUG 2023
ENR 3.2.3 - 14	20 FEB 2025	ENR 3.2.4 - 12	10 AUG 2023	ENR 3.2.7 - 26	10 AUG 2023
ENR 3.2.3 - 15	20 FEB 2025	ENR 3.2.5 - 1	05 OCT 2023	ENR 3.2.7 - 27	15 MAY 2025
ENR 3.2.3 - 16	20 FEB 2025	ENR 3.2.5 - 2	05 OCT 2023	ENR 3.2.7 - 28	20 MAR 2025
ENR 3.2.3 - 17	17 APR 2025	ENR 3.2.6 - 1	10 AUG 2023	ENR 3.2.7 - 29	20 MAR 2025
ENR 3.2.3 - 18	20 FEB 2025	ENR 3.2.6 - 2	10 AUG 2023	ENR 3.2.7 - 30	20 MAR 2025
ENR 3.2.3 - 19	20 FEB 2025	ENR 3.2.6 - 3	10 AUG 2023	ENR 3.2.7 - 31	20 MAR 2025
ENR 3.2.3 - 20	20 FEB 2025	ENR 3.2.6 - 4	10 AUG 2023	ENR 3.2.7 - 32	10 AUG 2023
ENR 3.2.3 - 21	20 FEB 2025	ENR 3.2.6 - 5	10 AUG 2023	ENR-3.3 - 1	19 MAY 2022
ENR 3.2.3 - 22	20 FEB 2025	ENR 3.2.6 - 6	10 AUG 2023	ENR-3.3 - 2	04 NOV 2021
ENR 3.2.3 - 23	20 FEB 2025	ENR 3.2.6 - 7	11 JUL 2024	ENR-3.4 - 1	19 MAY 2022
ENR 3.2.3 - 24	20 FEB 2025	ENR 3.2.6 - 8	11 JUL 2024	ENR-3.4 - 2	04 NOV 2021
ENR 3.2.3 - 25	20 FEB 2025	ENR 3.2.6 - 9	11 JUL 2024	ENR-3.5 - 1	19 MAY 2022
ENR 3.2.3 - 26	20 FEB 2025	ENR 3.2.6 - 10	11 JUL 2024	ENR-3.5 - 2	19 MAY 2022
ENR 3.2.3 - 27	20 FEB 2025	ENR 3.2.7 - 1	10 AUG 2023	ENR-3.6 - 1	19 MAY 2022
ENR 3.2.3 - 28	20 FEB 2025	ENR 3.2.7 - 2	10 AUG 2023	ENR-3.6 - 2	19 MAY 2022
ENR 3.2.3 - 29	20 FEB 2025	ENR 3.2.7 - 3	10 AUG 2023		

ENR 4 RADIO NAVIGATION AIDS/SYSTEMS

ENR-4.1 - 1	05 SEP 2024	ENR-4.4 - 9	15 MAY 2025	ENR-4.4 - 23	15 MAY 2025
ENR-4.1 - 2	11 AUG 2022	ENR-4.4 - 10	15 MAY 2025	ENR-4.4 - 24	15 MAY 2025
ENR-4.2 - 1	30 MAR 2017	ENR-4.4 - 11	15 MAY 2025	ENR-4.4 - 25	15 MAY 2025
ENR-4.2 - 2	30 MAR 2017	ENR-4.4 - 12	15 MAY 2025	ENR-4.4 - 26	15 MAY 2025
ENR-4.3 - 1	30 MAR 2017	ENR-4.4 - 13	15 MAY 2025	ENR-4.4 - 27	15 MAY 2025
ENR-4.3 - 2	30 MAR 2017	ENR-4.4 - 14	15 MAY 2025	ENR-4.4 - 28	15 MAY 2025
ENR-4.4 - 1	10 AUG 2023	ENR-4.4 - 15	15 MAY 2025	ENR-4.4 - 29	15 MAY 2025
ENR-4.4 - 2	15 MAY 2025	ENR-4.4 - 16	15 MAY 2025	ENR-4.4 - 30	15 MAY 2025
ENR-4.4 - 3	15 MAY 2025	ENR-4.4 - 17	15 MAY 2025	ENR-4.4 - 31	15 MAY 2025
ENR-4.4 - 4	15 MAY 2025	ENR-4.4 - 18	15 MAY 2025	ENR-4.4 - 32	15 MAY 2025
ENR-4.4 - 5	15 MAY 2025	ENR-4.4 - 19	15 MAY 2025	ENR-4.4 - 33	15 MAY 2025
ENR-4.4 - 6	15 MAY 2025	ENR-4.4 - 20	15 MAY 2025	ENR-4.4 - 34	10 AUG 2023
ENR-4.4 - 7	15 MAY 2025	ENR-4.4 - 21	15 MAY 2025	ENR-4.5 - 1	30 MAR 2017
ENR-4.4 - 8	15 MAY 2025	ENR-4.4 - 22	15 MAY 2025	ENR-4.5 - 2	30 MAR 2017

ENR 5 NAVIGATION WARNINGS

ENR-5.1 - 1	23 APR 2020	ENR-5.1 - 13	23 APR 2020	ENR-5.2 - 1	07 NOV 2019
ENR-5.1 - 2	02 DEC 2021	ENR-5.1 - 14	23 APR 2020	ENR-5.2 - 2	07 NOV 2019
ENR-5.1 - 3	11 AUG 2022	ENR-5.1 - 15	23 APR 2020	ENR-5.3 - 1	11 AUG 2022
ENR-5.1 - 4	11 AUG 2022	ENR-5.1 - 16	04 NOV 2021	ENR-5.3 - 2	30 MAR 2017
ENR-5.1 - 5	11 AUG 2022	ENR-5.1 - 17	04 NOV 2021	ENR-5.4 - 1	08 AUG 2024
ENR-5.1 - 6	26 JAN 2023	ENR-5.1 - 18	23 APR 2020	ENR-5.4 - 2	30 MAR 2017
ENR-5.1 - 7	11 AUG 2022	ENR-5.1 - 19	23 FEB 2023	ENR-5.5 - 1	30 MAR 2017
ENR-5.1 - 8	11 AUG 2022	ENR-5.1 - 20	23 FEB 2023	ENR-5.5 - 2	30 MAR 2017
ENR-5.1 - 9	11 AUG 2022	ENR-5.1 - 21	23 FEB 2023	ENR-5.6 - 1	10 SEP 2020
ENR-5.1 - 10	04 NOV 2021	ENR-5.1 - 22	23 FEB 2023	ENR-5.6 - 2	10 SEP 2020
ENR-5.1 - 11	23 APR 2020	ENR-5.1 - 23	23 FEB 2023		
ENR-5.1 - 12	23 APR 2020	ENR-5.1 - 24	23 FEB 2023		

ENR 6 EN-ROUTE CHART

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ENR-6 - 1	15 JUL 2021	ENR-6.1 - 1	20 MAR 2025		
ENR-6 - 2	30 MAR 2017	ENR-6.1 - 2	07 NOV 2019		

PART 3 - AERODROMES (AD)

AD 0

AD-0.1 - 1	23 MAY 2019	AD-0.5 - 2	30 MAR 2017	AD-0.6 - 9	08 AUG 2024
AD-0.1 - 2	30 MAR 2017	AD-0.6 - 1	08 AUG 2024	AD-0.6 - 10	08 AUG 2024
AD-0.2 - 1	23 MAY 2019	AD-0.6 - 2	08 AUG 2024	AD-0.6 - 11	08 AUG 2024
AD-0.2 - 2	30 MAR 2017	AD-0.6 - 3	08 AUG 2024	AD-0.6 - 12	08 AUG 2024
AD-0.3 - 1	23 MAY 2019	AD-0.6 - 4	08 AUG 2024	AD-0.6 - 13	08 AUG 2024
AD-0.3 - 2	30 MAR 2017	AD-0.6 - 5	08 AUG 2024	AD-0.6 - 14	08 AUG 2024
AD-0.4 - 1	23 MAY 2019	AD-0.6 - 6	08 AUG 2024	AD-0.6 - 15	08 AUG 2024
AD-0.4 - 2	30 MAR 2017	AD-0.6 - 7	08 AUG 2024	AD-0.6 - 16	08 AUG 2024
AD-0.5 - 1	23 MAY 2019	AD-0.6 - 8	08 AUG 2024		

AD 1 AERODROMES/HELIPORTS - INTRODUCTION

AD-1.1 - 1	17 APR 2025	AD-1.2 - 5	31 OCT 2024	AD-1.4 - 1	21 JUN 2018
AD-1.1 - 2	07 NOV 2019	AD-1.2 - 6	31 OCT 2024	AD-1.4 - 2	30 MAR 2017
AD-1.2 - 1	04 NOV 2021	AD-1.2 - 7	31 OCT 2024	AD-1.5 - 1	17 APR 2025
AD-1.2 - 2	31 OCT 2024	AD-1.2 - 8	31 OCT 2024	AD-1.5 - 2	17 APR 2025
AD-1.2 - 3	04 NOV 2021	AD-1.3 - 1	08 AUG 2024		
AD-1.2 - 4	31 OCT 2024	AD-1.3 - 2	08 AUG 2024		

AD 2 AERODROMES

AD-2-UATE - 1	08 AUG 2024	UATE AD 2.24.11-3 - 2	15 JUN 2023	UATT AD 2.24.9-3 - 1	17 APR 2025
AD-2-UATE - 2	23 FEB 2023	UATE AD 2.24.11-4 - 1	05 SEP 2024	UATT AD 2.24.9-3 - 2	11 AUG 2022
AD-2-UATE - 3	16 MAY 2024	UATE AD 2.24.11-4 - 2	15 JUN 2023	UATT AD 2.24.9-4 - 1	17 APR 2025
AD-2-UATE - 4	05 SEP 2024	UATE AD 2.24.11-5 - 1	02 NOV 2023	UATT AD 2.24.9-4 - 2	11 AUG 2022
AD-2-UATE - 5	05 SEP 2024	UATE AD 2.24.11-5 - 2	15 JUN 2023	UATT AD 2.24.10 - 1	17 APR 2025
AD-2-UATE - 6	05 SEP 2024	UATE AD 2.24.11-6 - 1	02 NOV 2023	UATT AD 2.24.10 - 2	30 MAR 2017
AD-2-UATE - 7	05 SEP 2024	UATE AD 2.24.11-6 - 2	15 JUN 2023	UATT AD 2.24.11-1 - 1	17 APR 2025
AD-2-UATE - 8	05 SEP 2024	UATE AD 2.24.11-7 - 1	15 JUN 2023	UATT AD 2.24.11-1 - 2	25 FEB 2021
AD-2-UATE - 9	20 FEB 2025	UATE AD 2.24.11-7 - 2	23 FEB 2023	UATT AD 2.24.11-2 - 1	15 MAY 2025
AD-2-UATE - 10	20 FEB 2025	UATE AD 2.24.11-8 - 1	15 JUN 2023	UATT AD 2.24.11-2 - 2	25 FEB 2021
UATE AD 2.24.1 - 1	05 OCT 2023	UATE AD 2.24.11-8 - 2	23 FEB 2023	UATT AD 2.24.11-3 - 1	17 APR 2025
UATE AD 2.24.1 - 2	30 MAR 2017	UATE AD 2.24.11-9 - 1	05 SEP 2024	UATT AD 2.24.11-3 - 2	25 FEB 2021
UATE AD 2.24.3 - 1	05 OCT 2023	UATE AD 2.24.11-9 - 2	08 AUG 2024	UATT AD 2.24.11-4 - 1	17 APR 2025
UATE AD 2.24.3 - 2	30 MAR 2017	UATE AD 2.24.11-10 - 1	05 SEP 2024	UATT AD 2.24.11-4 - 2	25 FEB 2021
UATE AD 2.24.4 - 1	23 FEB 2023	UATE AD 2.24.11-10 - 2	08 AUG 2024	UATT AD 2.24.11-5 - 1	17 APR 2025
UATE AD 2.24.4 - 2	11 AUG 2022	UATE AD 2.24.12 - 1	23 FEB 2023	UATT AD 2.24.11-5 - 2	11 AUG 2022
UATE AD 2.24.7-1 - 1	05 SEP 2024	UATE AD 2.24.12 - 2	30 MAR 2017	UATT AD 2.24.11-6 - 1	17 APR 2025
UATE AD 2.24.7-1 - 2	23 FEB 2023	UATE AD 2.24.14 - 1	23 FEB 2023	UATT AD 2.24.11-6 - 2	11 AUG 2022
UATE AD 2.24.7-2 - 1	05 SEP 2024	UATE AD 2.24.14 - 2	15 JUL 2021	UATT AD 2.24.11-7 - 1	15 MAY 2025
UATE AD 2.24.7-2 - 2	23 FEB 2023	AD-2-UATT - 1	08 AUG 2024	UATT AD 2.24.11-7 - 2	04 NOV 2021
UATE AD 2.24.7-3 - 1	05 SEP 2024	AD-2-UATT - 2	26 JAN 2023	UATT AD 2.24.12 - 1	11 AUG 2022
UATE AD 2.24.7-3 - 2	23 FEB 2023	AD-2-UATT - 3	16 MAY 2024	UATT AD 2.24.12 - 2	30 MAR 2017
UATE AD 2.24.7-4 - 1	05 SEP 2024	AD-2-UATT - 4	08 AUG 2024	UATT AD 2.24.14 - 1	11 JUL 2024
UATE AD 2.24.7-4 - 2	16 MAY 2024	AD-2-UATT - 5	08 AUG 2024	UATT AD 2.24.14 - 2	15 JUL 2021
UATE AD 2.24.7-5 - 1	05 SEP 2024	AD-2-UATT - 6	08 AUG 2024	AD-2-UAAA - 1	15 MAY 2025
UATE AD 2.24.7-5 - 2	23 JAN 2025	AD-2-UATT - 7	08 AUG 2024	AD-2-UAAA - 2	31 OCT 2024
UATE AD 2.24.9-1 - 1	05 SEP 2024	AD-2-UATT - 8	08 AUG 2024	AD-2-UAAA - 3	15 MAY 2025
UATE AD 2.24.9-1 - 2	23 FEB 2023	AD-2-UATT - 9	08 AUG 2024	AD-2-UAAA - 4	15 MAY 2025
UATE AD 2.24.9-2 - 1	05 SEP 2024	AD-2-UATT - 10	08 AUG 2024	AD-2-UAAA - 5	15 MAY 2025
UATE AD 2.24.9-2 - 2	23 FEB 2023	AD-2-UATT - 11	05 SEP 2024	AD-2-UAAA - 6	15 MAY 2025
UATE AD 2.24.9-3 - 1	05 SEP 2024	AD-2-UATT - 12	05 SEP 2024	AD-2-UAAA - 7	15 MAY 2025
UATE AD 2.24.9-3 - 2	23 FEB 2023	UATT AD 2.24.1 - 1	11 AUG 2022	AD-2-UAAA - 8	15 MAY 2025
UATE AD 2.24.9-4 - 1	05 SEP 2024	UATT AD 2.24.1 - 2	30 MAR 2017	AD-2-UAAA - 9	15 MAY 2025
UATE AD 2.24.9-4 - 2	23 FEB 2023	UATT AD 2.24.3 - 1	24 FEB 2022	AD-2-UAAA - 10	15 MAY 2025
UATE AD 2.24.9-5 - 1	05 SEP 2024	UATT AD 2.24.3 - 2	12 AUG 2021	AD-2-UAAA - 11	15 MAY 2025
UATE AD 2.24.9-5 - 2	11 JUL 2024	UATT AD 2.24.4 - 1	26 JAN 2023	AD-2-UAAA - 12	15 MAY 2025
UATE AD 2.24.9-6 - 1	05 SEP 2024	UATT AD 2.24.4 - 2	30 MAR 2017	AD-2-UAAA - 13	15 MAY 2025
UATE AD 2.24.9-6 - 2	16 MAY 2024	UATT AD 2.24.7-1 - 1	17 APR 2025	AD-2-UAAA - 14	15 MAY 2025
UATE AD 2.24.10 - 1	05 SEP 2024	UATT AD 2.24.7-1 - 2	20 MAY 2021	AD-2-UAAA - 15	15 MAY 2025
UATE AD 2.24.10 - 2	30 MAR 2017	UATT AD 2.24.7-2 - 1	17 APR 2025	AD-2-UAAA - 16	15 MAY 2025
UATE AD 2.24.11-1 - 1	05 SEP 2024	UATT AD 2.24.7-2 - 2	20 MAY 2021	AD-2-UAAA - 17	15 MAY 2025
UATE AD 2.24.11-1 - 2	11 JUL 2024	UATT AD 2.24.9-1 - 1	17 APR 2025	AD-2-UAAA - 18	15 MAY 2025
UATE AD 2.24.11-2 - 1	05 SEP 2024	UATT AD 2.24.9-1 - 2	25 FEB 2021	AD-2-UAAA - 19	15 MAY 2025
UATE AD 2.24.11-2 - 2	15 JUN 2023	UATT AD 2.24.9-2 - 1	17 APR 2025	AD-2-UAAA - 20	15 MAY 2025
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UARR AD 2.24.10 - 1	11 JUL 2024	UAAL AD 2.24.9-4 - 2	11 JUL 2024	UASK AD 2.24.9-11 - 1	31 OCT 2024
UARR AD 2.24.10 - 2	30 MAR 2017	UAAL AD 2.24.11-1 - 1	10 AUG 2023	UASK AD 2.24.9-11 - 2	11 JUL 2024
UARR AD 2.24.11-1 - 1	11 JUL 2024	UAAL AD 2.24.11-1 - 2	23 FEB 2023	UASK AD 2.24.10 - 1	31 OCT 2024
UARR AD 2.24.11-1 - 2	07 NOV 2019	UAAL AD 2.24.11-2 - 1	10 AUG 2023	UASK AD 2.24.10 - 2	30 MAR 2017
UARR AD 2.24.11-2 - 1	17 APR 2025	UAAL AD 2.24.11-2 - 2	23 FEB 2023	UASK AD 2.24.11-1 - 1	31 OCT 2024
UARR AD 2.24.11-2 - 2	07 NOV 2019	UAAL AD 2.24.11-3 - 1	10 AUG 2023	UASK AD 2.24.11-1 - 2	02 DEC 2021
UARR AD 2.24.11-3 - 1	17 APR 2025	UAAL AD 2.24.11-3 - 2	23 FEB 2023	UASK AD 2.24.11-2 - 1	31 OCT 2024
UARR AD 2.24.11-3 - 2	07 NOV 2019	UAAL AD 2.24.11-4 - 1	10 AUG 2023	UASK AD 2.24.11-2 - 2	31 OCT 2024
UARR AD 2.24.11-4 - 1	17 APR 2025	UAAL AD 2.24.11-4 - 2	23 FEB 2023	UASK AD 2.24.11-3 - 1	31 OCT 2024
UARR AD 2.24.11-4 - 2	07 NOV 2019	UAAL AD 2.24.11-5 - 1	16 MAY 2024	UASK AD 2.24.11-3 - 2	02 DEC 2021
UARR AD 2.24.11-5 - 1	17 APR 2025	UAAL AD 2.24.11-5 - 2	11 JUL 2024	UASK AD 2.24.11-4 - 1	31 OCT 2024
UARR AD 2.24.11-5 - 2	04 NOV 2021	UAAL AD 2.24.11-6 - 1	16 MAY 2024	UASK AD 2.24.11-4 - 2	24 FEB 2022
UARR AD 2.24.12 - 1	11 JUL 2024	UAAL AD 2.24.11-6 - 2	11 JUL 2024	UASK AD 2.24.11-5 - 1	23 JAN 2025
UARR AD 2.24.12 - 2	30 MAR 2017	UAAL AD 2.24.12 - 1	23 FEB 2023	UASK AD 2.24.11-5 - 2	11 JUL 2024
UARR AD 2.24.14 - 1	20 APR 2023	UAAL AD 2.24.12 - 2	09 NOV 2017	UASK AD 2.24.11-6 - 1	23 JAN 2025
UARR AD 2.24.14 - 2	15 JUL 2021	UAAL AD 2.24.14 - 1	15 JUN 2023	UASK AD 2.24.11-6 - 2	11 JUL 2024
AD-2-UASU - 1	31 OCT 2024	UAAL AD 2.24.14 - 2	01 DEC 2022	UASK AD 2.24.12 - 1	23 JAN 2025
AD-2-UASU - 2	20 FEB 2025	AD-2-UASK - 1	31 OCT 2024	UASK AD 2.24.12 - 2	30 MAR 2017
AD-2-UASU - 3	16 MAY 2024	AD-2-UASK - 2	06 OCT 2022	UASK AD 2.24.14 - 1	23 FEB 2023
AD-2-UASU - 4	20 MAR 2025	AD-2-UASK - 3	08 AUG 2024	UASK AD 2.24.14 - 2	11 AUG 2022
AD-2-UASU - 5	20 MAR 2025	AD-2-UASK - 4	15 MAY 2025	AD-2-UASZ - 1	05 OCT 2023
AD-2-UASU - 6	16 MAY 2024	AD-2-UASK - 5	08 AUG 2024	AD-2-UASZ - 2	05 SEP 2024
AD-2-UASU - 7	20 FEB 2025	AD-2-UASK - 6	05 SEP 2024	AD-2-UASZ - 3	05 SEP 2024
AD-2-UASU - 8	16 MAY 2024	AD-2-UASK - 7	23 JAN 2025	AD-2-UASZ - 4	05 SEP 2024
UASU AD 2.24.1 - 1	15 JUN 2023	AD-2-UASK - 8	15 MAY 2025	AD-2-UASZ - 5	05 SEP 2024
UASU AD 2.24.1 - 2	01 FEB 2018	AD-2-UASK - 9	15 MAY 2025	AD-2-UASZ - 6	23 JAN 2025
UASU AD 2.24.3 - 1	15 JUN 2023	AD-2-UASK - 10	15 MAY 2025	AD-2-UASZ - 7	05 SEP 2024
UASU AD 2.24.3 - 2	15 JUN 2023	AD-2-UASK - 11	15 MAY 2025	AD-2-UASZ - 8	16 MAY 2024
UASU AD 2.24.6 - 1	17 APR 2025	AD-2-UASK - 12	31 OCT 2024	UASZ AD 2.24.1 - 1	05 SEP 2024
UASU AD 2.24.6 - 2	11 AUG 2022	UASK AD 2.24.1 - 1	15 MAY 2025	UASZ AD 2.24.1 - 2	01 FEB 2018
UASU AD 2.24.7-1 - 1	15 JUN 2023	UASK AD 2.24.1 - 2	30 MAR 2017	UASZ AD 2.24.3 - 1	05 SEP 2024
UASU AD 2.24.7-1 - 2	01 FEB 2018	UASK AD 2.24.3 - 1	05 SEP 2024	UASZ AD 2.24.3 - 2	04 NOV 2021
UASU AD 2.24.7-2 - 1	15 JUN 2023	UASK AD 2.24.3 - 2	01 DEC 2022	UASZ AD 2.24.6 - 1	11 AUG 2022
UASU AD 2.24.7-2 - 2	01 FEB 2018	UASK AD 2.24.4 - 1	24 FEB 2022	UASZ AD 2.24.6 - 2	11 AUG 2022
UASU AD 2.24.9-1 - 1	15 JUN 2023	UASK AD 2.24.4 - 2	30 MAR 2017	UASZ AD 2.24.7-1 - 1	11 AUG 2022
UASU AD 2.24.9-1 - 2	01 FEB 2018	UASK AD 2.24.6 - 1	31 OCT 2024	UASZ AD 2.24.7-1 - 2	01 FEB 2018
UASU AD 2.24.11-1 - 1	15 JUN 2023	UASK AD 2.24.6 - 2	11 AUG 2022	UASZ AD 2.24.7-2 - 1	11 AUG 2022
UASU AD 2.24.11-1 - 2	15 JUN 2023	UASK AD 2.24.7-1 - 1	31 OCT 2024	UASZ AD 2.24.7-2 - 2	01 FEB 2018
UASU AD 2.24.12 - 1	15 JUN 2023	UASK AD 2.24.7-1 - 2	11 AUG 2022	UASZ AD 2.24.9-1 - 1	11 AUG 2022
UASU AD 2.24.12 - 2	01 FEB 2018	UASK AD 2.24.7-2 - 1	31 OCT 2024	UASZ AD 2.24.9-1 - 2	01 FEB 2018
UASU AD 2.24.14 - 1	23 FEB 2023	UASK AD 2.24.7-2 - 2	11 AUG 2022	UASZ AD 2.24.11-1 - 1	11 AUG 2022
UASU AD 2.24.14 - 2	11 AUG 2022	UASK AD 2.24.7-3 - 1	31 OCT 2024	UASZ AD 2.24.11-1 - 2	11 AUG 2022
AD-2-UAAL - 1	23 FEB 2023	UASK AD 2.24.7-3 - 2	11 AUG 2022	UASZ AD 2.24.12 - 1	11 AUG 2022
AD-2-UAAL - 2	05 OCT 2023	UASK AD 2.24.7-4 - 1	31 OCT 2024	UASZ AD 2.24.12 - 2	01 FEB 2018
AD-2-UAAL - 3	05 OCT 2023	UASK AD 2.24.7-4 - 2	11 AUG 2022	UASZ AD 2.24.14 - 1	23 FEB 2023
AD-2-UAAL - 4	23 FEB 2023	UASK AD 2.24.7-5 - 1	31 OCT 2024	UASZ AD 2.24.14 - 2	11 AUG 2022
AD-2-UAAL - 5	21 MAR 2024	UASK AD 2.24.7-5 - 2	16 MAY 2024	AD-2-UAKD - 1	08 AUG 2024
AD-2-UAAL - 6	08 AUG 2024	UASK AD 2.24.7-6 - 1	31 OCT 2024	AD-2-UAKD - 2	20 MAR 2025
AD-2-UAAL - 7	31 OCT 2024	UASK AD 2.24.7-6 - 2	11 JUL 2024	AD-2-UAKD - 3	20 MAR 2025
AD-2-UAAL - 8	08 AUG 2024	UASK AD 2.24.7-7 - 1	31 OCT 2024	AD-2-UAKD - 4	15 MAY 2025
UAAL AD 2.24.1 - 1	05 OCT 2023	UASK AD 2.24.7-7 - 2	11 JUL 2024	AD-2-UAKD - 5	05 SEP 2024
UAAL AD 2.24.1 - 2	09 NOV 2017	UASK AD 2.24.7-8 - 1	31 OCT 2024	AD-2-UAKD - 6	23 JAN 2025

Page	Date	Page	Date	Page	Date
AD-2-UAKD - 7	15 MAY 2025				
AD-2-UAKD - 8	15 MAY 2025				
AD-2-UAKD - 9	15 MAY 2025				
AD-2-UAKD - 10	15 MAY 2025				
AD-2-UAKD - 11	15 MAY 2025				
AD-2-UAKD - 12	15 MAY 2025				
UAKD AD 2.24.1 - 1	17 APR 2025				
UAKD AD 2.24.1 - 2	30 MAR 2017				
UAKD AD 2.24.3 - 1	20 MAR 2025				
UAKD AD 2.24.3 - 2	25 FEB 2021				
UAKD AD 2.24.4 - 1	15 MAY 2025				
UAKD AD 2.24.4 - 2	20 MAR 2025				
UAKD AD 2.24.7-1 - 1	15 MAY 2025				
UAKD AD 2.24.7-1 - 2	04 NOV 2021				
UAKD AD 2.24.7-2 - 1	11 JUL 2024				
UAKD AD 2.24.7-2 - 2	04 NOV 2021				
UAKD AD 2.24.7-3 - 1	11 JUL 2024				
UAKD AD 2.24.7-3 - 2	11 JUL 2024				
UAKD AD 2.24.7-4 - 1	11 JUL 2024				
UAKD AD 2.24.7-4 - 2	11 JUL 2024				
UAKD AD 2.24.9-1 - 1	11 JUL 2024				
UAKD AD 2.24.9-1 - 2	04 NOV 2021				
UAKD AD 2.24.9-2 - 1	11 JUL 2024				
UAKD AD 2.24.9-2 - 2	04 NOV 2021				
UAKD AD 2.24.9-3 - 1	05 SEP 2024				
UAKD AD 2.24.9-3 - 2	11 JUL 2024				
UAKD AD 2.24.9-4 - 1	11 JUL 2024				
UAKD AD 2.24.9-4 - 2	11 JUL 2024				
UAKD AD 2.24.10 - 1	11 JUL 2024				
UAKD AD 2.24.10 - 2	30 MAR 2017				
UAKD AD 2.24.11-1 - 1	31 OCT 2024				
UAKD AD 2.24.11-1 - 2	31 OCT 2024				
UAKD AD 2.24.11-2 - 1	31 OCT 2024				
UAKD AD 2.24.11-2 - 2	25 FEB 2021				
UAKD AD 2.24.11-3 - 1	31 OCT 2024				
UAKD AD 2.24.11-3 - 2	25 FEB 2021				
UAKD AD 2.24.11-4 - 1	11 JUL 2024				
UAKD AD 2.24.11-4 - 2	25 FEB 2021				
UAKD AD 2.24.11-5 - 1	11 JUL 2024				
UAKD AD 2.24.11-5 - 2	25 FEB 2021				
UAKD AD 2.24.11-6 - 1	31 OCT 2024				
UAKD AD 2.24.11-6 - 2	11 AUG 2022				
UAKD AD 2.24.11-7 - 1	11 JUL 2024				
UAKD AD 2.24.11-7 - 2	11 AUG 2022				
UAKD AD 2.24.11-8 - 1	11 JUL 2024				
UAKD AD 2.24.11-8 - 2	11 AUG 2022				
UAKD AD 2.24.12 - 1	05 SEP 2024				
UAKD AD 2.24.12 - 2	30 MAR 2017				
UAKD AD 2.24.14 - 1	11 JUL 2024				
UAKD AD 2.24.14 - 2	15 JUL 2021				

6. DIGITAL DATA SETS

1. Electronic obstacle data sets are not available.
2. Electronic terrain data sets are not available.
- 3.

Data Set Title	Description	Data subjects included	Geographical scope	Usage limitations
Digital AIP Dataset	AIP data set as specified in ICAO Doc 10066, Procedures for Air Navigation Services - Aeronautical Information Management (PANS-AIM), along with the AIP and the following subsections of the AIP prefixed with "[AIP-DS]" are provided in a form of AIP data set and the reference is provided to the available AIP data set	<ul style="list-style-type: none">• ATS airspace;• Prohibited, restricted and danger areas;• Route;• Route segment;• Waypoint – en-route;• Aerodrome/heliport;• Runway;• Runway direction;• Radio navigation aid.	The state territory of the Republic of Kazakhstan.	The data is intended for aeronautical purposes.

4.AIP data sets are available upon request by email in AIXM 5.1 format.

To obtain the access to the digital data sets, it is necessary to send a request to aip@ans.kz

AIP data sets are updated in accordance with the AIRAC cycles. Users are required to verify the availability of updates and ensure timely downloads.

For technical support and further information, please contact the responsible unit:

Aeronautical Information Management Department

E522 street, building 15
010014, Astana
Republic of Kazakhstan
Phone: +7 (7172) 704268, 704282
Email: aip@ans.kz
AFS: UAAKYNYX, UAAKYOYX

Working Hours: 03.30 – 12.30 UTC except SAT, SUN and HOL

5.Access to digital data sets

Instrument flight procedure data sets are available upon request by email in AIXM 5.1 format.

To obtain the access to the digital data sets, it is necessary to send a request to aip@ans.kz.

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Table 6: SSR COVERAGE OPERATING IN RANGE OF INTERNATIONAL FREQUENCIES

SSR Points	SSR Type	Maximum Radius of coverage (NM)	Upper Limit (ft)	Coordinates	Remarks
Astana	En-route, mono-impulse	215	65000	N510254 E0712848	
Astana	En-route and aerodrome mono-impulse	215	65000	N510106 E0712736	
Ayaguz	En-route, mono-impulse	215	65000	N475557 E0802649	
Balkhash	En-route	195	40000	N465313 E0750137	
Balkhash	En-route and aerodrome mono-impulse	215	65000	N465254 E0745940	
Beineu	En-route, mono-impulse	215	65000	N452011 E0550734	
Karaganda	En-route and aerodrome mono-impulse	215	65000	N494002 E0732002	
Karaganda	Aerodrome	108	33000	N494008 E0732001	
Kokshetau	En-route and aerodrome mono-impulse	215	65000	N531938 E0693555	
Kokshetau	En-route, mono-impulse	215	65000	N531940 E0693557	
Kyzylorda	En-route, mono-impulse	215	65000	N444141 E0653623	
Kostanay	En-route, mono-impulse	215	65000	N531136 E0633202	
Pavlodar	En-route and aerodrome mono-impulse	215	65000	N521136 E0770437	
Petropavlovsk	En-route and aerodrome mono-impulse	215	65000	N544618 E0691109	
Taldykorgan	Aerodrome	205	32808	N450730 E0782626	
Taraz	En-route and aerodrome mono-impulse	215	65000	N425112 E0711746	
Taraz	En-route and aerodrome mono-impulse	215	65000	N425114 E0711741	

Table 6: SSR COVERAGE OPERATING IN RANGE OF INTERNATIONAL FREQUENCIES

SSR Points	SSR Type	Maximum Radius of coverage (NM)	Upper Limit (ft)	Coordinates	Remarks
Turkistan	En-route and aerodrome mono-impulse	215	65000	N431833 E0683321	
Uralsk	En-route, mono-impulse	215	65000	N510951 E0513344	
Uralsk	En-route and aerodrome mono-impulse	215	65000	N510858 E0513252	
Ust-Kamenogorsk	Aerodrome	108	33000	N500205 E0823012	
Semey	En-route, mono-impulse	215	65000	N501855 E0801146	
Semey	En-route, mono-impulse	257	65000	N501858 E0801142	
Shymkent	En-route and aerodrome	195	40000	N422200 E0692848	
Zhezkazgan	En-route, mono-impulse	215	65000	N474222 E0674429	
Zhezkazgan	En-route and aerodrome mono-impulse	215	65000	N474224 E0674429	
Control center Zharkent	En-route, mono-impulse	226	65616	N441400 E0795720	

3. AUTOMATIC DEPENDENT SURVEILLANCE - BROADCAST (ADS-B)

Installed at the aerodromes:

Aktau, Aktobe, Almaty, Astana, Atyrau, Balkhash, Karaganda, Kokshetau, Kostanay, Kyzylorda, Pavlodar, Petropavlovsk, Semey, Shymkent, Taldykorgan, Taraz, Turkistan, Uralsk, Urdzhar, Ust-Kamenogorsk, Zaisan, Zhezkazgan.

Equipped with ADS-B aircraft automatically and often send reports of surveillance conditions to the ground station via a data link. The basic data elements in broadcasting reports are:

1. aircraft identification index and 24-bit address;
2. location data (and relevant accuracy and integrity information);
3. speed vector (and the accuracy vector);
4. barometric altitude.

4. OTHER RELEVANT INFORMATION AND PROCEDURES

Nil

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
Z627 (RNAV 5)						
▲ ZUKFU	425125N 0650356E KZO 184.0° 112.3 NM (500 FT)					
	271° 090°	59.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ BARNO	425826N 0634258E KZO 211.2° 130.7 NM (500 FT)					
	270° 089°	37.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ UBAGU	430228N 0625120E KZO 221.0° 153.8 NM (500 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
Z632 (RNAV 5)						
△ REBDA	414708N 0690515E SMK 198.0° 38.6 NM (1400 FT)					
	338° 158°	11.3 NM	FL 510 FL 60	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ NIMAG	415801N 0690101E SMK 212° 30.8 NM (1400 FT)					
	338° 158°	29.2 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ ARSUL	422600N 0685000E SMK 271.0° 27.3 NM (1400 FT)					
	333° 152°	25.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
▲ LARBA	424922N 0683725E TRK 170.0° 30.2 NM (1000 FT)					
	333° 152°	30.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ GENDI	431800N 0682200E TRK 254.0° 9.4 NM (1000 FT)					

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
Z727 (RNAV 5)						
▲ ADARO (FIR BDRY)		504706N 0815242E UKM 325.0° 51.2 NM (1000 FT)				
	145° 326°	51.2 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ UST-KAMENOGORSK TOWER 130.1 MHZ {C}
▲ UST-KAMENOGORS K DVOR/DME (UKM)		500158N 0823031E				
	142° 322°	42.7 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ UST-KAMENOGORSK TOWER 130.1 MHZ {C}
△ ABOTO		492544N 0830521E UKM 142.0° 42.7 NM (1000 FT)				
	142° 322°	2.7 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ ARHIM		492317N 0830743E UKM 322.3° 45.3 NM (1000 FT)				
	142° 322°	6.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}

ENR 4.4 NAME CODE DESIGNATORS FOR SIGNIFICANT POINTS

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
ABAMO	422454N 0691433E		TMA UAI
ABDAM	513051N 0781707E	T649, Z584	
ABDIB	435743N 0505211E		TMA UATE
ABDUN	461337N 0594316E	L139, M161, N161	
ABEBA	442957N 0740248E	M34	
ABEKA	410705N 0684442E	M168	
ABELI	513524N 0751312E	L988, N996, W358, Z160, Z746	
ABENU	502909N 0684952E	L86	
ABEVO	405000N 0683442E	P180	
ABGEN	405742N 0684248E	M168	
ABIGU	474742N 0630108E	L51, N167	
ABIRA	502331N 0622455E	M166	
ABMIK	455616N 0743604E	M34, N102, Z583	
ABONA	461133N 0751857E	N170	
ABOTO	492544N 0830521E	Z727	
ABRAS	514331N 0771053E	L988, P984	
ABREK	462025N 0763143E	N126	
ABULA	495910N 0682343E	L86	
ABULU	480139N 0555532E	L992	
ABURA	473345N 0664312E	N161	
ADABA	435820N 0762009E	L143, L855, N170, Z583, Z584	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
ADAKA	434416N 0624955E	L855, M161	
ADARO	504706N 0815242E	B833, G96, N37, Z727	
ADASA	524618N 0751436E	P179	
ADAZA	434304N 0645326E	N990	
ADEBA	533925N 0704004E	T586	
ADEDA	423438N 0514628E	N73, Z581	
ADEKU	502301N 0641824E	M166, N167	
ADESA	420940N 0694854E	L139, Z580	
ADETA	500015N 0773321E	M149, N37, P984	
ADIRO	445011N 0752356E	M149, N143	
ADLAN	495132N 0792510E	N102	
ADLIK	482457N 0614611E	L985	
ADLIM	443715N 0652222E		TMA UAOO
ADLON	530129N 0704047E	N985, Z160	
ADODA	523230N 0750554E	N985, W361, Z584	
ADOKA	482224N 0671842E	L145	
ADOLU	502038.9N 0795401.0E		
ADONU	454418N 0683532E	P178	
ADPAK	444919N 0520844E	N102, Q198	
ADRAT	500334N 0581528E	M993	
ADREM	442548N 0643118E	L163, M75	
ADRIK	480432N 0684119E	L51, W351	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
ADRI	461940N 0805137E	N993	
ADUMI	460903N 0613915E	L163	
AGADI	480559N 0733338E	L998, N126, Z624	
AGAKA	463544N 0805503E	N993	
AGAKO	474352N 0714935E	L26, N161	
AGATU	493220N 0594622E	L147, L162	
AGEBO	474010N 0672652E		TMA UAKD
AGERA	430738N 0672650E	N147, N987	
AGILA	444901N 0515422E	N996, Q198	
AGINU	494800N 0761100E	M34, N37, N993	
AGLEK	433045N 0744744E	Z370, Z817	
AGMAN	490942N 0550920E	M161, N60	
AGMEN	471352N 0513428E		TMA UATG
AGMUR	450056N 0644106E	L86, L139	
AGNAT	463927N 0775115E	L143	
AGNIM	453221N 0543918E	L992, P574	
AGPIN	483931N 0754146E	M34	
AGUNA	435906N 0754739E	M149, M618, Z589	
AGURO	511525N 0715011E		TMA UACC
AGURU	532928N 0694548E		TMA UACK
AGUSA	471400N 0820338E	M166	
AKALI	440829N 0611937E	L165, L985	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
AKASA	491819N 0773455E	M993, P984	
AKAZU	404218N 0683815E	L170	
AKELI	494707N 0681322E	L86	
AKIBU	465522N 0515013E		TMA UATG
AKIMU	444353N 0731255E	N147	
AKIRA	454323N 0771829E	L143, Z160	
AKITU	483624N 0681921E	L26, N37, N990	
AKOSO	534140N 0650940E	N60, W355	
AKUKU	425036N 0510509E	P574	
ALABA	481845N 0553938E	L988, N73, T586	
ALAKO	441958N 0735903E	M34, T524	
ALDAZ	464232N 0523825E		TMA UATG
ALEGA	480900N 0713249E	M993	
ALFIL	485654N 0700340E	N37	
ALGAS	504613N 0581203E	A357, N60	
ALILA	454830N 0800916E	L26	
ALOLI	431841N 0764421E		TMA UAAA
ALOTO	445010N 0530653E	N73, P574, Q198	
ALUGI	434745N 0780816E	Z315	TMA UAAA
AMABU	445737N 0781952E		TMA UAAT
AMASO	474914N 0684857E	M993, N161	
AMIGU	491645N 0692517E	M75, P178, Z586	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
AMIKA	432238N 0761952E		TMA UAAA
AMOHA	454502N 0505523E	L736	
AMOLA	523853N 0715604E	M75, Z160	
AMREK	452109N 0660226E	N990, W332	
AMUTU	504649N 0711721E		TMA UACC
ANELI	444956N 0743510E	Z589	
ANESA	424006N 0703654E	N143, Z580	
ANIDU	451707N 0783318E		TMA UAAT
ANIGA	452130N 0534647E	M158, M610	
ANIGO	460143N 0660207E	M75, M741	
ANTOH	530853N 0685629E		RR-3, RR-7
APSEN	440338N 0771854E	P984	
APTOK	503035N 0750940E	Z160	
APTUS	505558N 0704601E	L988, N996, T523	
ARBIM	492045N 0645739E	L26, M741, P574	
ARBOL	433055N 0705137E	L145, L728, M610, N102, Z621	RR-2
ARDIK	521459N 0642204E	L145	
ARGER	493808N 0725855E		TMA UAKK
ARHIM	492317N 0830743E	N143, Z727	
ARISA	512924N 0503254E	G3, L736, M166	RR-1, RR-5, RR-8
ARKAM	471135N 0643220E	N161	
ARKER	471757N 0580839E	M161, N55	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
ARLIF	433927N 0524039E	N161, N193	
ARLIH	492724N 0742621E	M166, W348	
ARMIK	474512N 0664137E	L51	
ARMUS	422345N 0694556E		TMA UAI
ARNUS	430052N 0533509E	L992, T916	
ARSAN	474436N 0600738E	L51, M199, P574	
ARSUL	422600N 0685000E	Z380, Z578, Z632	
ARTOT	425650N 0710100E		TMA UADD
ARVAR	432233N 0691027E	Z621	
ASDET	511633N 0713946E		TMA UACC
ASDIB	511544N 0514610E		TMA UARR
ASDON	532134N 0631638E		TMA UAUU
ASDUK	520012N 0765857E		TMA UASP
ASLIK	470509N 0681542E	L145	
ASLOK	410548N 0671954E	M741, N987	RR-6
ASNAP	502302N 0565926E		TMA UATT
ASTIK	502734N 0691434E	L998, P574	
ATBAN	515824N 0682152E	L994, N987, Z624, T523	
ATBER	530311N 0634911E		TMA UAUU
ATNAL	435307N 0533948E	N55, N154	
ATNON	521149N 0673350E	L994, N55	
ATNUR	444559N 0500948E	L864, N193, Q198	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
ATPOR	445123N 0784955E	N126, Z370	
ATRAN	422321N 0660522E	Z621	
ATRUS	465302N 0670715E	L147, N990	
AVLAK	461214N 0614508E	M199	
AZABI	444424N 0493000E	A87, M610, Q161, Q198	RR-4
AZITI	433936N 0764351E		RR-2, RR-7
AZORI	480139N 0721512E	Z583	
BABUR	452312N 0493000E	N102, N193	
BADAS	442221N 0643656E	L163, L855	
BAGIL	473425N 0741044E	L998	
BAGIR	490131N 0514106E	M158, W324	
BAGNA	434754N 0775719E	Z315, Z370	
BAGNU	530720N 0755304E	P984	
BAGOB	495029N 0823755E		TMA UASK
BAGUT	502745N 0803139E		TMA UASS
BAKID	462633N 0622354E	N167	
BAKIS	440031N 0764333E	L998, W333	
BALGO	430234N 0733602E	M34	
BALIG	431944N 0515018E	Q161	RR-2, RR-4
BALMI	531107N 0704613E	W361, Z584	
BALOK	521416N 0635540E	M741	TMA UAUU
BALOL	502308N 0772831E	P984	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
BALUN	420100N 0512742E	N55, N73	
BAMAN	451700N 0823700E	L26	
BAMAT	504125N 0781025E	L994, M149	
BAMET	463042N 0663051E	M75	
BAMIK	523517N 0620524E	N60	
BAMOM	505814N 0512427E		TMA UARR
BAMUT	415121N 0692445E	Z554, Z580	
BANOS	501116N 0723844E	N170, W333	
BANOV	503704N 0830918E	L135	
BANUM	474633N 0804834E	M166, M618	
BAPER	433011N 0534642E	L992, N193	
BARAR	425030N 0700344E	N102	
BARKI	545153N 0710000E	A357, N60	
BARNO	425826N 0634258E	M161, Z627	
BARSI	530153N 0695555E		TMA UACK
BARUR	443207N 0791739E	N126	
BASAN	433420N 0735429E	L147	
BASPA	502144N 0704001E	M75, Z624	
BASPI	433257N 0791501E	M610	
BASPU	471514N 0525046E	L51	
BASUN	440216N 0505614E		TMA UATE
BATAD	500554N 0640927E	N167	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
BATEG	445958N 0781301E		TMA UAAT
BAVAG	531819N 0665235E	N985, T522, W361, Z584	
BEBLU	544630N 0665030E	N167, N170, T522	RR-7
BEDIT	500537N 0821029E		TMA UASK
BEDKA	501318N 0721545E	T523	
BEDMU	541215N 0704523E	P179	
BEDNU	420007N 0692621E	Z554	
BEDOR	482529N 0673251E	M168, N987, W332	
BEDRU	490642N 0623638E	M993	
BEDUR	433546N 0765739E	L998, M610	
BEKAS	514029N 0515327E	L163, M56	
BEKOR	494513N 0623050E	L26, L988, N55	
BEKRO	434850N 0753952E	T524	
BERTO	433159N 0794824E	M610, Z315	
BERVI	434059N 0741156E	M610	
BESOL	502254N 0610548E	M166, T586	
BETIK	480807N 0665309E	L86, Z164	
BETPU	455758N 0675945E	M168	
BIKLU	532548N 0633314E		TMA UAUU
BIKRI	472814N 0752625E	M149	
BIKTO	531235N 0691745E		TMA UACK
BILGA	483452N 0552426E	Z210	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
BILMO	430414N 0711143E		TMA UADD
BIMDO	441809N 0673135E	M610, N987	
BIMSO	531631N 0652038E	W361, Z584	
BINBU	530105N 0634057E		TMA UAUU
BINRA	423005N 0691638E		TMA UAI
BINRI	432607N 0751309E	L143, Z370	
BIOTA	442124N 0764224E	Z584	
BIPSO	521614N 0772311E		TMA UASP
BITNU	520734N 0764609E		TMA UASP
BOBRO	440648N 0744228E	T524	
BODNU	502346N 0750918E	T649, Z160	
BODSI	445034N 0541914E	L992, M158, N37, Q198	RR-2
BOGDI	432517N 0741622E	Z817	
BOKIS	505736N 0833312E	L135	
BOLGO	494300N 0563525E	Z210	
BOLNA	433712N 0625812E	M161	
BOLSU	511507N 0725620E	L988, N996, W358, Z553	
BOMKA	420232N 0691624E	P178	
BONZU	481815N 0833043E	Z208	
BORIS	425127N 0660533E	N147	
BUDER	521310N 0632052E	L165	TMA UAUU
BUDET	445507N 0645824E	L139, M75	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
BUDUL	471917N 0514811E		TMA UATG
BUGEB	410824N 0670836E	P180	
BUKEN	440406N 0650744E	N990	
BULOG	500854N 0660036E	L145, N996	
BURID	470234N 0810051E	N161, N993, Z370	
BURIK	470012N 0675152E	M168	
BUSAB	444159N 0651844E		TMA UAOO
DAKIN	540930N 0722418E	L86, M75, N55, N990, T586	
DEKED	433653N 0741306E	Z370	
DEMAS	424732N 0712008E	L145	
DEPIR	540211N 0662405E	N60, N167, W355	
DESER	445502N 0753100E	N143, Z583	
DESOK	441629N 0775521E	L135	
DETAK	434823N 0765029E	L855, L998	
DETOV	501555N 0731235E	Z553	
DEVNA	500647N 0833619E	M993	
DIBAD	411700N 0675600E	N193, Z554	
DIBUK	472631N 0754536E	N102	
DIDAL	512908N 0695453E	L994	
DIDOB	544558N 0693143E		TMA UACP
DIDOP	433941N 0633027E	L162	
DIKAM	443650N 0663555E	L855	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
DILGI	504833N 0772303E	L994, P984	
DILIR	493452N 0625056E	N996	
DILNA	441450N 0644911E	L163, P184	
DILOL	433936N 0512339E		TMA UATE
DILVA	533219N 0693807E		TMA UACK
DIMPA	463633N 0495959E	L864, L988	
DINBO	480029N 0664647E	M993	
DIPSU	475340N 0675220E		TMA UAKD
DIPUD	500238N 0571914E		TMA UATT
DIRIN	501352N 0822119E		TMA UASK
DISAD	434529N 0511835E		TMA UATE
DITKI	482034N 0692417E	L26, L51	
DITLO	431708N 0765420E		TMA UAAA
DITSO	470443N 0671637E	N990, W332	
DITSU	441934N 0743855E	N143	
DIVNO	454418N 0574000E	M610, N161	RR-2
DODEM	484212N 0773614E	M166, N102, P984, W348	
DODID	520353N 0765234E		TMA UASP
DODOK	451420N 0760011E	L998, N143	
DODOL	423536N 0712617E		TMA UADD
DODUR	412300N 0684800E	L163, M168, P178, Z554, Z578, Z580	
DOGEL	442430N 0525059E	N37, N73	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
DOKUS	502539N 0513528E	M158, W324	
DOKUT	524814N 0651230E	L994, L998	
DOLEP	470047N 0520352E		TMA UATG
DONUP	423759N 0694912E	N102	
DONUR	473022N 0750038E	Z160	
DOPAN	521213N 0625401E	Z582	
DOPAR	481831N 0682229E	M75	
DOSAK	520044N 0781212E	P179, N985	
DOSOR	415702N 0691225E	P178	
DOTAL	440745N 0780904E	Z160, Z370	
DOZIN	492040N 0721800E	L51, N37, W351	
EDADU	430032N 0710621E		TMA UADD
EDAKO	504120N 0522510E	M161	
EDANO	510858N 0725804E	L994, Z553, Z746	
EDETO	495808N 0670732E	M168, N987, P574, W332	
EDIBA	424519N 0682349E	Z380	
EDOLO	465805N 0515702E		TMA UATG
EDOSA	521955N 0771645E		TMA UASP
EKLAT	432230N 0753237E	Z370	
EKNIL	444003N 0732651E	N102	
EKNOD	494703N 0733707E		TMA UAKK
EKTAB	494555N 0750718E	N37, Z160	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
EKTEN	513242N 0523030E	A122, M158, Z102	
EKTUS	514225N 0765305E	L988, M34	
ELENU	435017N 0741838E	L855	
ELSEB	463234N 0675439E	L147, M168	
ELSUT	511342N 0805506E	G121, L143	
EMBEK	502333N 0625947E	M166	
ENETO	494223N 0591154E	L147, T586	
ENONA	480316N 0763820E	N102	
EPOLI	472234N 0541316E	L51, N996	
ERMEK	441245N 0661954E	Z380	
EROMI	461234N 0762117E	Z160	
ERSAS	532341N 0632455E		TMA UAUU
ERTOL	421834N 0694354E		TMA UAI
ERTUZ	441307N 0641019E	L86, L855, T916	
ERUTA	480837N 0604210E	L162	
ESADO	470607N 0760037E	W336, Z243	
ESUMA	491025N 0765006E	M149, M993	
ETEDA	442024N 0763206E	L143, L998, W333	
ETELA	481055N 0554657E	N996	
ETORI	503208N 0790845E	L994	
ETOTU	525858N 0633244E		TMA UAUU
ETRAN	463321N 0780521E	N143	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
FAZUL	440916N 0613731E	M875, T916	
FINON	450211N 0773900E	P984	TMA UAAT
FULSA	453758N 0784751E	L135	TMA UAAT
GAGSU	522335N 0771018E		TMA UASP
GAKMA	440610N 0774907E	L135	
GALKI	511035N 0771814E	P984, T649	
GALSU	461126N 0804952E	N993	
GAMBU	441106N 0702401E	L145, L855	
GANGA	530026N 0695146E		TMA UACK
GARDU	453219N 0523200E	N996, Z102	
GASBI	422611N 0502811E	A357, N60, N161	RR-2
GASBU	434640N 0791528E	Z315	
GEDNO	502211N 0740032E	N993	
GEDSA	483738N 0624054E	L147, L165, L728, P574	
GEGSI	471634N 0514119E		TMA UATG
GEKSO	431544N 0664228E	M741	
GEKTI	433253N 0771244E		TMA UAAA
GEMBO	500256N 0625600E	L165, N55	
GENDI	431800N 0682200E	L139, M168, N147, Z621, Z632	
GENGA	461625N 0773739E	L26, L143, N143, N147, P984	
GERLI	495334N 0535254E	M56, M161	
GERPU	425739N 0714951E	L728, Z817	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
GIGDA	461942N 0801638E	Z370	
GIGRI	441248N 0521256E	N37	
GIGUR	444920N 0645300E	M75, M610	
GIKON	531041N 0700822E		TMA UACK
GILAK	465738N 0815536E	N161	
GILAT	415707N 0660000E	N102	
GIMRI	434530N 0672931E	L139, N987	
GIREM	473219N 0743709E	N170, W333	
GIRUL	430826N 0520542E	N73, Q161	
GISEK	443231N 0652559E		TMA UAOO
GISIR	465704N 0665732E	L147, M75	
GISTO	472457N 0524654E	L988	
GITIM	441752N 0662540E	M741, L139	
GITNA	524459N 0652518E	L994, M168	
GOBDI	545052N 0692749E		TMA UACP
GOBOR	433811N 0681918E	M168, P178	
GOBSO	505523N 0763521E	L994, M34, T649	
GOGDI	470320N 0525055E	L139	
GOGDO	442524N 0772618E	P984	
GOLGI	453153N 0533543E	M158, N73	
GOLTU	500404N 0741911E	T649	
GOMAL	470809N 0795150E	L135, M618, N161	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
GOMIR	501042N 0844206E	N143, M618, M993	
GONEL	483912N 0735912E	M993, N170	
GORBO	490316N 0761100E	M166, M993, W348	
GORIM	484905N 0672456E	L26, L86, M168, N987	
GORVA	462455N 0664655E	N990, W332	
GOSLU	431413N 0764830E		TMA UAAA
GOSPA	485256N 0633233E	M993, N167, P574	
GULDO	495223N 0562651E	N60	TMA UATT
GUMGA	510752N 0630806E	T586	
GURPI	495618N 0711236E	M166, Z586, Z624	
GUTAN	514024N 0505912E	A368, M161	
IBDAS	473412N 0782432E	L143, Z243	
IBLAN	511832N 0710620E		TMA UACC
IBMOB	413436N 0680213E	Z753	
IDILI	443608N 0780716E	L135	TMA UAAT
IDMIS	444251N 0655218E		TMA UAOO
IKANA	545924N 0681200E	A359, P179	
INKUM	454952N 0620739E	L139, L162, L163, L165, M199, N167	
INLUL	463730N 0803449E	Z370	
INREL	424136N 0713019E		TMA UADD
INRIK	500744N 0692030E	N990, M166	
INRIS	512800N 0521856E	A122, M158	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
INTAL	484345N 0702839E	W351	
IPLED	432348N 0493000E	G96, N37	RR-8
IPRAR	404431N 0683447E	M168	
IRGIT	485220N 0750436E	M993, Z160	
ITAKA	435224N 0493000E	L864, N154, R227	
IZIMA	432236N 0770503E	L135, L998, N170, P984, Z315, Z370	
KANZI	502504N 0742336E	W351	
KARIM	431136N 0674737E	N147, Z380, Z579	
KEDUL	511959N 0514052E		TMA UARR
KEKAM	512300N 0771529E	P984	TMA UASP
KEKUN	492143N 0581653E	M199, T586	
KERUL	415128N 0520821E	Z581	
KESOS	433713N 0512713E		TMA UATE
KESOT	500111N 0600343E	L26, T586	
KEZUT	452811N 0790448E	N993	TMA UAAT
KODOL	511638N 0695651E	T523	
KODUM	475556N 0544537E	L988, N996, Z210	
KOKAV	542244N 0673738E	N60, N170, W355	
KOKON	500958N 0702609E	M75	
KOLAM	423702N 0702540E	N143, Z580	
KOLIB	454047N 0512848E	N60, W324	
KOLUR	515901N 0704103E	N170, N990, W333	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
KOMOS	424517N 0713537E		TMA UADD
KOMRE	455641N 0572649E	N37	
KONAT	452754N 0774805E	P984, Z160, Z584	
KONEK	460631N 0750443E	M149	
KORAG	435134N 0560000E	N102, N154	
KUDUG	433216N 0675457E	L139	
KUGIR	440625N 0705906E	L855, N147	
KUGUN	493139N 0685550E	N990	
KULHI	431211N 0730422E	Z817	
KUNAS	430923N 0560000E	N193	
KURAB	442311N 0610344E	N167	
KUROL	475900N 0704800E	L26, M993	
KURUL	485059N 0554051E	M161, Z210	
KUSOT	502128N 0655110E	L145, M166	
KUSUM	514420N 0644639E	L145, T586	
LAGMO	514954N 0791500E	L988, M149, N985, P179, T649	RR-3
LAGUK	440528N 0795517E	N126	
LAKEL	431216N 0765439E	L135, P984	
LALAS	485941N 0755014E	M34, M993	
LALKA	530017N 0683140E	T586	
LALRI	500626N 0572512E		TMA UATT
LAMGI	500657N 0644154E	L988, M741	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
LANIN	472659N 0545937E	L51, N73	
LANOL	411133N 0685506E	N193, Z578	
LANOR	540536N 0624042E	L145, L985, L998, M741, N993, R482	RR-6
LANUK	493317N 0623239E	N996	
LARBA	424922N 0683725E	Z632	
LARoz	451010N 0521956E	M610	
LARPI	501721N 0560345E	M166	
LASDO	462443N 0755651E	Z160	
LASNA	492602N 0815315E	L135	
LASPA	534852N 0684219E	N170	
LATKO	522508N 0664427E	L994, T522, T586	
LATNU	445345N 0612553E	L985, M161, N167	
LATRI	475217N 0843229E	Z208, Z727	TMA UASZ
LAVLO	545546N 0692355E		TMA UACP
LEDPO	444735N 0654840E		TMA UAOO
LEGLA	432826N 0771654E		TMA UAAA
LEKLU	450701N 0754903E	N143, N170	
LEMDU	470002N 0674228E	N987	
LENTA	514854N 0602236E	L993, N60	
LEPSI	465750N 0534950E	L139, N996	
LESNA	501302N 0725127E	Z588	
LETIK	551200N 0683200E	A303, N987	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
LIGMO	504539N 0710837E	M75, T523, Z746	
LIKRU	431730N 0765447E		TMA UAAA
LIMTO	440138N 0684518E	M610	
LIPSI	461808N 0784001E	M618, Z584	
LIRMO	530945N 0692524E		TMA UACK
LIRNA	501159N 0812203E	L994, W361	
LITBA	501849N 0582332E	M166	
LITNO	492856N 0730737E		TMA UAKK
LODEZ	531715N 0623004E	G111, L985, L994	
LOGTO	483204N 0561202E	L992, M161, T586	
LOLBI	501913N 0565328E		TMA UATT
LONSI	435826N 0743022E	T916	
LUGER	464426N 0655200E	L86, L728, M741	
LUKET	473310N 0562135E	L51	
LUKUR	443112N 0673226E	L855, N987	
LUKUS	480759N 0741658E	N170, W333	
LULEK	524106N 0700733E	N170, W333	
LULKE	485932N 0522700E	Z102	
LUMUD	495933N 0760202E	W352	
LUMUR	430639N 0512953E	Z581	
LUNOV	493800N 0801801E	W360, Z584	
LUREL	501613N 0790803E	N37, W352	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
LURIT	432931N 0761943E		TMA UAAA
LURUM	494127N 0564322E	N73	
LUSAM	511128N 0515127E		TMA UARR
LUSIR	510229N 0511911E		TMA UARR
LUSUT	474510N 0680213E		TMA UAKD
LUTEK	482853N 0730459E	M993, Z624	
LUZMI	422426N 0681456E	M168	
MADEV	471857N 0770328E	N161, W336, Z243	
MAGOL	425338N 0685144E	L139, P178	
MAKEK	461854N 0791700E	L135	
MAKUT	483217N 0683632E	L26, M75	
MALOD	451812N 0751037E	M149, N147, Z583	
MAMIR	425438N 0763642E	L135, P984	RR-7
MANAD	491421N 0604601E	L147, N996	
MAROR	453720N 0753509E	N170	
MASAV	450507N 0551053E	N37, N55, N161	
MASED	510644N 0511355E		TMA UARR
MEDOL	433425N 0531659E	N55, N193	
MIHOS	441332N 0712336E	N147, T916	
MIKDO	425058N 0714551E	Z580	
MIKNO	420200N 0681200E	L163, M168, N143, Z579	
MIKSA	511608N 0784241E	M149, Z584	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
MILSO	452519N 0604609E	M161, M610	RR-2, RR-5
MIMKA	502620N 0693328E	N990	
MIMRI	433808N 0634822E	L86, M75, P184	
MIRGA	452416N 0693051E	L145	
MISPU	435002N 0512237E		TMA UATE
MOGTU	485209N 0543832E	N60	
MOMUL	411524N 0664024E	P180	
MONEG	523627N 0671849E	N993, T586	
MULTA	510442N 0565042E	A360, M199, M875	
MUZEL	433756N 0692447E	N147	
NAGAZ	490336N 0504220E	L736	
NARUR	513200N 0641130E	M741, T586	
NASAB	435310N 0504810E		TMA UATE
NASIP	430347N 0715332E	N143	
NASMO	451929N 0782626E		TMA UAAT
NATUS	445208N 0643650E	M610	
NEBSO	474925N 0675717E		TMA UAKD
NEGMI	511245N 0714553E		TMA UACC
NELOL	462733N 0530638E		CTR UATZ
NELTI	541942N 0641630E	L165, M168	
NEMEG	491804N 0831242E	M618, Z727	
NEMKU	485904N 0734736E	N170, W333	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
NEPIL	434133N 0522455E	N73, N193, Z102	
NEPLA	470920N 0740031E	L26	
NESDO	454926N 0544739E	L992	
NESUN	460123N 0801738E	N993	
NETAT	403653N 0682413E	M168	
NIGET	434124N 0771126E	L855, P984	
NIKNA	462557N 0513838E	N60, W324	
NIKVI	473555N 0673148E		TMA UAKD
NIMAD	495842N 0824844E		TMA UASK
NIMAG	415801N 0690101E	Z632	
NINBU	505748N 0583554E	A357, N60	
NINKO	471748N 0810819E	Z208, Z243	TMA UASU
NIPAL	462919N 0764342E	L26	
NIRAN	461504N 0615245E	L162	
NITNA	433032N 0633601E	L162, M75	
NODSA	544646N 0685017E		TMA UACP
NOKNA	495154N 0811139E	M993	
NONKE	443400N 0781634E	Z160	TMA UAAT
NONDI	460552N 0673842E	N987	
NONRI	493111N 0785223E	N102, M993	
OBAMA	460212N 0690233E	L145, L147	
OBARU	472917N 0751312E	M34	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
OBATA	462130N 0491148E	L988	
OBIBU	445219N 0654502E		TMA UAOO
OBUNA	505513N 0791803E	W361, Z584	
ODAMA	503331N 0753513E	T649	
ODATU	505427N 0710518E		TMA UACC
ODILA	494259N 0575122E	M199, M875, L728	
ODIVA	423530N 0640848E	L162, M161, N990	RR-5
ODLUR	432532N 0771101E		TMA UAAA
ODORI	415901N 0684908E	Z578	
ODPUT	473004N 0553846E	L51, L992	
OGADO	453804N 0810107E	L26	
OGANU	462857N 0565153E	N55, P574	
OGAPI	512648N 0511336E	A368, M161	
OGIRU	433336N 0765119E		TMA UAAA
OGLUP	510857N 0715158E		TMA UACC
OGOKI	502245N 0643432E		RR-1, RR-6
OGOLI	412858N 0663632E	N143, N193	
OGRIP	405454N 0680500E	P178, P180, Z580	
OGTOL	424905N 0733002E	L728, Z580	
OGUDU	501515.5N 0795418.6E		
OKESO	411051N 0673608E	Z554	
OKRAT	433034N 0765506E		TMA UAAA

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
OKSOL	495436N 0824319E		TMA UASK
OLAPU	475146N 0514531E	M158, W324	
OLGAS	520510N 0714507E	M75	
OLINA	451645N 0615140E	L165, M610	
OMITO	501033N 0581909E	L26	
OSBOR	410054N 0683059E	Z753	
OSMOG	473140N 0673643E		TMA UAKD
OSNER	482119N 0785409E	M166, L143	
OSROL	504818N 0700112E	L988, N996, W358, Z624	
OSTAG	502223N 0803234E		TMA UASS
OTMAS	460419N 0530034E	M158, N996	
PABRI	451455N 0704239E	L147, T524	
PAVEL	425947N 0664642E	L163, M741, N147, Z753	
PEKIR	433539N 0770931E	M610, P984	
PEMOL	464841N 0551720E	L139, L992	
PETEM	480656N 0553022E	N73, N996	
PETOR	535420N 0713136E	P179, T586	
PIGAL	433428N 0780356E	M610	
PIKAN	425300N 0493000E	A80, N996	
PIMIB	501013N 0573110E		TMA UATT
PIRIM	444808N 0511741E	N60, Q198, W324	
PIVAL	514549N 0775050E	L988, W361, Z584	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
POBEK	432534N 0672754E	N987, Z380	
POBUR	533800N 0721400E	M75, P179, Z553	
POKAT	432530N 0694508E	Z621	
POMNI	510638N 0493240E	L864	
RABEN	502602.3N 0795343.3E		
RALAN	440812N 0493000E	A924, Z581	
RAVNI	504030N 0615807E	L985, T586, Z582	
RAVOB	404718N 0683330E	L143	
RAZBI	425954N 0673533E	Z621	
REBDA	414708N 0690515E	P178, Z632	
REGMU	435005N 0760012E	L143, Z589	
REKRU	531530N 0701102E		TMA UACK
RELGE	435304N 0530630E	N154, N161	
RELGO	500234N 0701730E	M75, M166	
RELRU	424925N 0681812E	M168, Z380	
REMOL	442704N 0681238E	L855, M168	
REMTI	470757N 0670843E	M75	
RENPA	524400N 0701548E	Z588	
RENPI	463437N 0522656E	M158, Z102	
REPLA	452358N 0533011E	N73	
RESBA	462255N 0621359E	L165	
RESDO	475618N 0595446E	M199	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
RIBMO	442238N 0520908E	P574	TMA UATE
RIGDO	495937N 0581049E	L147	
RIKPI	455225N 0794910E	L26, N993, Z370	
RIKRI	465319N 0543423E	L139, N73	
RILBA	485158N 0585148E	M199, N996	
RILOK	431224N 0662729E	L163	
RIMDO	431940N 0631837E	M75, M161	
RIMIR	524153N 0690123E	N987	
RIMUN	502651N 0570524E		TMA UATT
RINET	443026N 0663402E	M610	
RINIT	435305N 0535549E	L992, N154	
RINUR	482255N 0681040E	N990	
RISAD	441324N 0761312E	N170	
RISAS	435854N 0715247E	L855, N102	
RISUL	464525N 0773723E	P984	
RITAB	454308N 0754239E	L998, W333	
RITAL	414130N 0671206E	N143, M741	
RITET	464937N 0623417E	N161, N167	
RITMU	441806N 0723603E	L147, N102	
RIVUT	493332N 0730316E		TMA UAKK
ROBIZ	443142N 0662450E		RR-2, RR-6
RODAM	431348N 0741934E	L147	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
RODRO	411433N 0690034E	L163	
ROGIR	501701N 0803329E		TMA UASS
ROGUN	531944N 0682341E	W361, Z584	
ROHIL	511738N 0754034E	L51, W351	
ROKOD	494408N 0801719E	M993, Z584	
RONED	494226N 0734127E		TMA UAKK
RONRO	500944N 0821555E		TMA UASK
ROPEL	544155N 0685416E		TMA UACP
ROPIM	505038N 0711120E		TMA UACC
ROSID	483440N 0762005E	M149	
ROSIM	423415N 0672453E	L163, N987	
RUDAL	512154N 0675222E	L998, N987	
RUDIZ	471122N 0790856E	N143, N161	
RUGUS	474250N 0591219E	L51, L163, M875	
RULAD	433001N 0804359E	M610, N126	RR-2
RUSEK	424549N 0690116E	L139, P178	
RUTIL	421053N 0510433E	P574, Z102	
SANIR	505230N 0572942E	G552, L992	
SANUR	455717N 0612446E	L139, L985	
SARIN	465156N 0825317E	M166, N161	RR-1
SEHAL	494940N 0721215E	M166	
SIRHA	494354N 0730121E		RR-1, RR-7

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
SIVKO	501827N 0543349E	L163, L728, M166	RR-1
SOMIP	502106N 0801402E	G96, G121, L143, L994, N37, N102, Z584	
SOMOL	534918N 0745629E	P984	
SOPRA	434455N 0775106E		TMA UAAA
SUBAN	463355N 0762353E	L26	
SUBOL	474716N 0645433E	L51, L147	
SUGUM	432507N 0771027E		TMA UAAA
SUKUR	494431N 0661957E	L145, P574	
SULET	430602N 0743503E	L143	
SULIB	494914N 0742808E	N37, W352	
SURAR	481318N 0631317E	N167	
SUTUR	501837N 0711714E	Z586	
TAGAL	485638N 0763825E	M149, M166	
TENLU	495139N 0733246E		TMA UAKK
TENRO	445953N 0741408E	M34, N102, N147	
TETKI	540020N 0692425E	N987, W333	
TIBDA	493800N 0632900E	L26, N996, Z164	
TIGTA	432728N 0620446E	L855, M875	
TIKTO	494006N 0565014E	L992	TMA UATT
TIMKA	440832N 0681511E	M168, M610, P178	
TIPEN	435532N 0632045E	L162, L855	
TIPSA	433809N 0753149E	L143, M610, Z817	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
TIRBA	433456N 0773031E	L135, L855, M610, Z315, Z370	
TIROK	472456N 0655037E	L147, N161	
TIROM	421434N 0531720E	L992, Q161	RR-4
TIROP	421942N 0691234E		TMA UAI
TISRA	463851N 0564100E	L139	
TITIL	443944N 0543810E	N55, N161	
TITUR	532406N 0610924E	G111, L994, N985	RR-3
TOGDI	472143N 0731457E	L26, Z583	
TOKNA	482525N 0750316E	Z160	
TOLKI	473415N 0811640E	M166, Z208	
TOMGO	434146N 0734454E	L147, L855, M34, M610, N143, Z370	RR-2
TONLA	421334N 0681508E	N102	
TOZIS	490511N 0494538E	L864	
TOZLI	441054N 0621817E	M161, T916	
TUGLA	465142N 0505006E	L736, L988	
TUKNA	451058N 0623308E	L162, M610	
TUKTO	441136N 0760830E	Z583	
TULFA	500354N 0764539E	W352	
TULGA	415347N 0701204E	L139	
TULPI	461318N 0752358E	L998, W333	
TUMIN	530655N 0693301E		TMA UACK
TURIK	423108N 0700422E	N143	

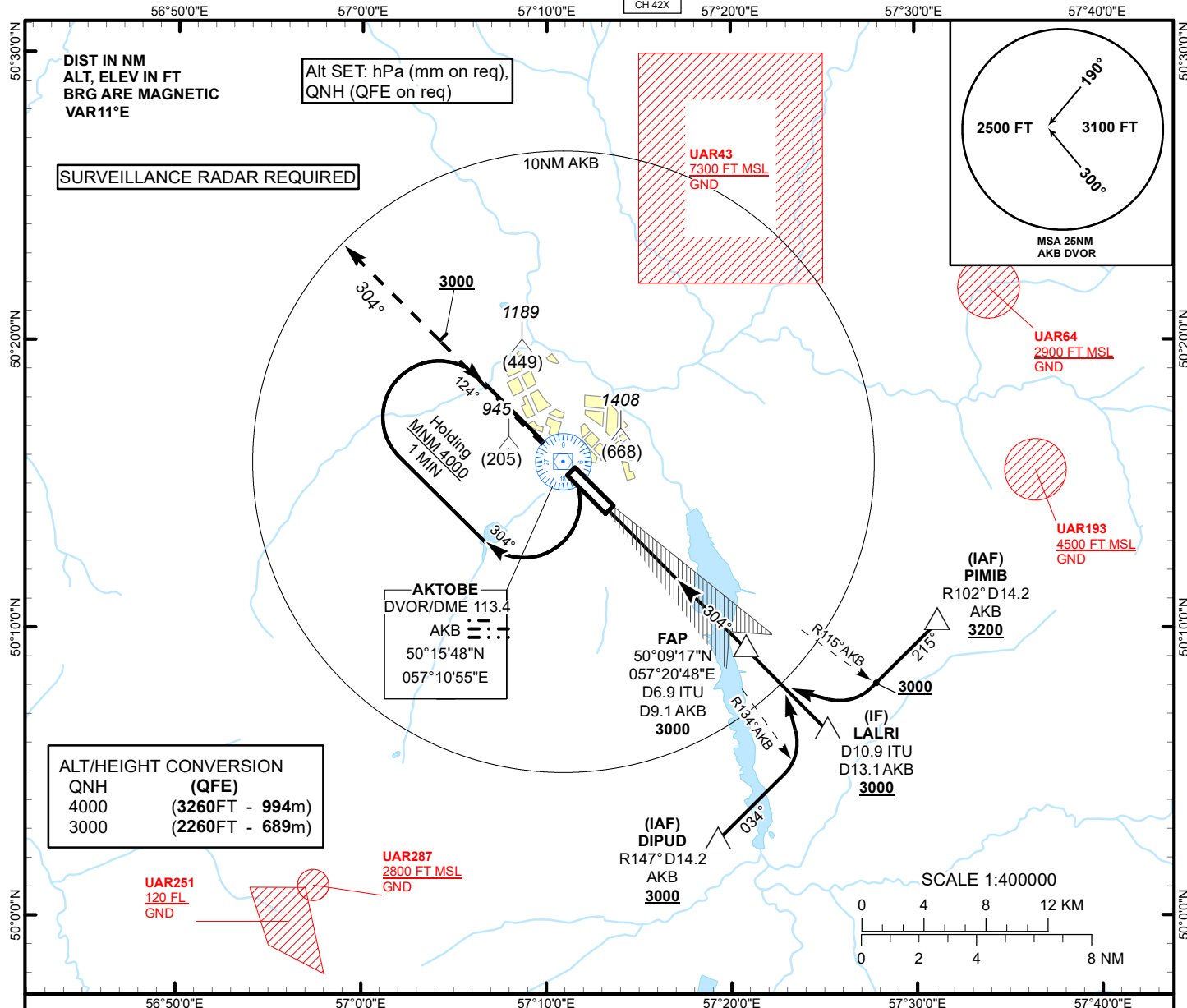
Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
TUOK	442214N 0685447E	L728, L855	
TUSEP	503136N 0680751E	L988, L993, N126, N996, W358, Z583, Z746	
TUTUL	463825N 0674057E	L147, N987	
TUXOK	543701N 0685814E		TMA UACP
UBAGU	430228N 0625120E	M75	
UDATO	473801N 0573755E	L51, M161	
UDEBA	473802N 0523443E	N60, Z102	
UDEKA	455252N 0770006E	N143, Z160	
UGLUK	484125N 0555642E	M161, N73	
ULKAP	490729N 0755332E	M34, M166	
ULRIP	474743N 0634635E	L51, N37	
ULSET	530027N 0720230E	M75, W361, Z584	
ULSON	435244N 0522039E	N154	
UMDEM	485611N 0665322E	L26, L145	
UMIRO	441421N 0763537E	L998, Z584	
UMKAS	414012N 0672149E	N987	
UMLOD	432218N 0750715E	L143, M618	
UNADA	433551N 0764831E	M610, N170	
UNIBE	522328N 0643445E	W332	
UNITO	450238N 0632952E	L163, M610	
UNLOM	501425N 0740834E	L51, W351	
UNREN	423755N 0712502E		TMA UADD

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
URABU	455108N 0500407E	L864	
URUSU	504142N 0585724E	L162	
USUGA	433600N 0761934E	M610, T524, Z583, Z589	
UTORI	451248N 0535555E	P574	
UVASU	404236N 0681306E	L143	
UVTOK	493924N 0794524E	L143, M993	
UZLOR	464915N 0613205E	L162, L985	
VAGEM	520159N 0710114E	Z588	
VAKES	433230N 0510000E		TMA UATE
VAMRI	501330N 0681645E	M166, P574	
VAMUK	403400N 0683430E	L170	
VETUB	504107N 0701250E	P574, Z624, Z746	
VETUS	532638N 0695329E		TMA UACK
VEVIK	505201N 0523529E	M56, M166, Z102	
ZAZBU	532352N 0630332E		RR-3, RR-6
ZUKFU	425124.9N 0650355.5E	Z627	
ZURGO	441233N 0631012E	L162, T916	
ZUSLA	423838N 0675917E	Z579	

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INSTRUMENT
APPROACH
CHART - ICAO

AERODROME ELEV 741 FT

HEIGHTS RELATED TO
THR 30 ELEV 740 FTILS
LLZ 110.5
ITU
GP 329.6
CH 42XAKTOBE TOWER 120.90
AKTOBE ATIS (EN) 126.0
AKTOBE ATIS (RU) 127.80AKTOBE
ILS/DME
RWY 30

MISSED APPROACH

Climb on track 304° to 3000.
After passing 2000 radar
vectoring will be provided.
RADIO FAILURE:
In case of RCF climb on track
304° to 2000 or above.
Outbound to D5.2 NM AKB,
turn LEFT to AKB. Climb to 4000,
and join to holding pattern.

TRANSITION ALT
10000DVOR/DME
AKB

ILS RDH 54

ELEV 740
THR RWY 30

FAP
D6.9 ITU
D9.1 AKB
3000

IF
LALRI
D10.9 ITU
D13.1 AKB
3000

CHANGE: R115 AKB ALT.

Aircraft Category		A	B	C	D	THR - DME ITU	6.9	6	5	4	3	2	1
Straight-in Approach OCA/H						DME AKB	9.1	8.2	7.2	6.2	5.2	4.2	3.2
	CAT I	952(213)	952(213)	952(213)	952(213)	ALTITUDE	3000	2700	2408	2081	1757	1434	1113
						HEIGHT	(2260)	(1960)	(1668)	(1341)	(1017)	(694)	(373)

DME ITU ZERO RANGED TO THR RWY 30

Aerodrome Operating Minima DH ft x RVR(CMV)	CAT I					GS	Kt	80	100	120	140	160	180
						Rate of descent	ft/min	420	530	630	740	840	950

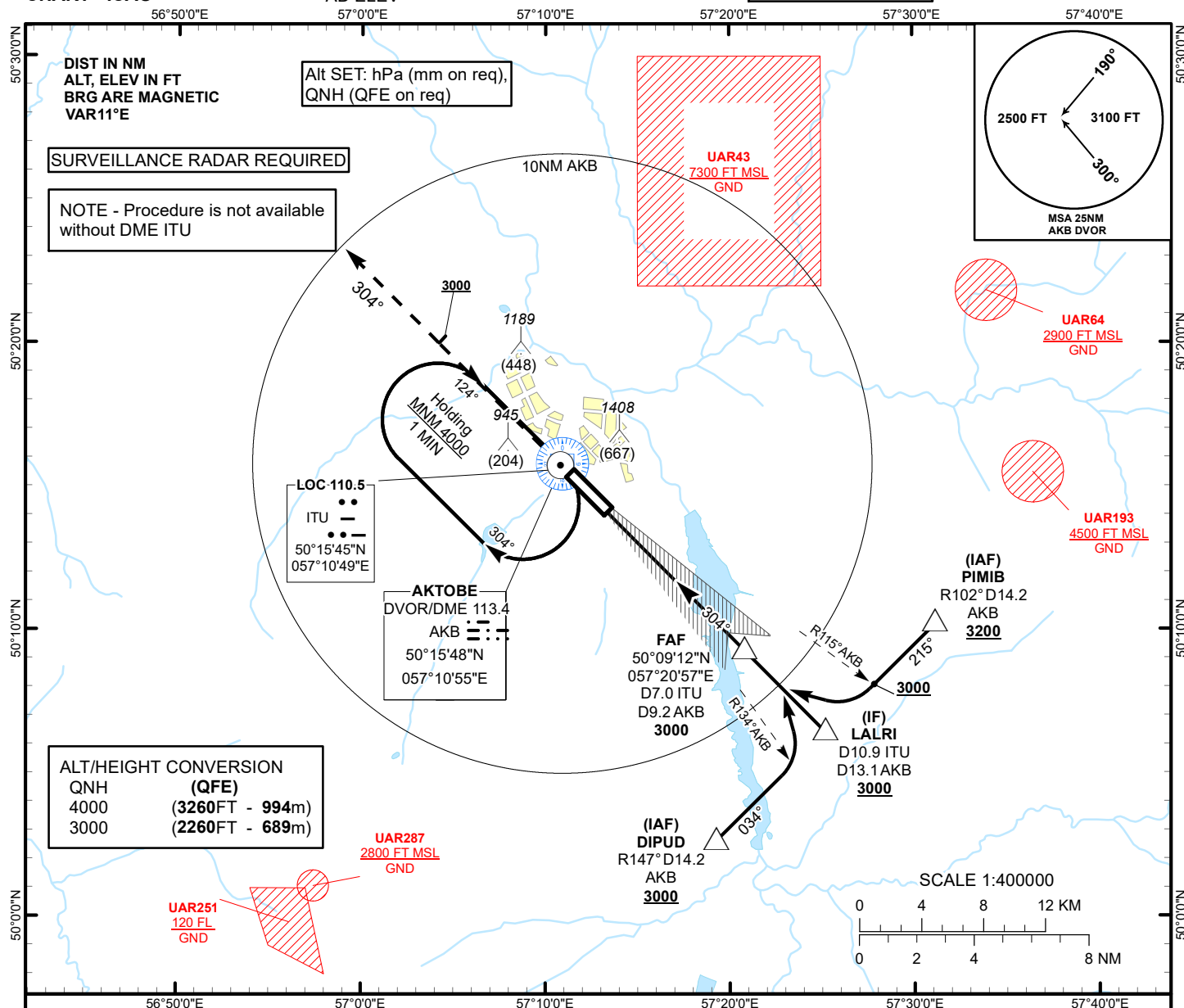
AKTOBE (UATT)
ILS/DME RWY30

AERONAUTICAL DATA TABULATION

ILS approach to RWY30 from AKB DVOR/DME, DIPUD, PIMIB, LALRI	
Fix/point	Coordinates
AKB DVOR/DME	50° 15' 48.3"N 057° 10' 54.8"E
DIPUD R147°, D14.2 AKB (IAF)	50° 02' 38.2"N 057° 19' 14.0"E
PIMIB R102°, D14.2 AKB (IAF)	50° 10' 13.4"N 057° 31' 10.1"E
LALRI D10.9 ITU, D13.1 AKB (IF)	50° 06' 26.0"N 057° 25' 11.6"E
D6.9 ITU, D9.1 AKB (FAP)	50° 09' 17.1"N 057° 20' 48.2"E
THR RWY30	50° 14' 09.59"N 057° 13' 16.51"E
ITU LLZ	50° 15' 44.7"N 057° 10' 49.0"E

INSTRUMENT
APPROACH
CHART - ICAO

AERODROME ELEV 741 FT

HEIGHTS RELATED TO
AD ELEVAKTOBE TOWER 120.90
AKTOBE ATIS (EN) 126.0
AKTOBE ATIS (RU) 127.80AKTOBE
LOC/DME
RWY 30

MISSED APPROACH

Climb on track 304° to 3000.
After passing 2000 radar
vectoring will be provided.
RADIO FAILURE:
In case of RCF climb on track
304° to 2000 or above.
Outbound to D5.2 AKB,
turn LEFT to AKB. Climb to 4000,
and join to holding pattern.

TRANSITION ALT
10000DVOR/DME
AKBMAPt
D3.1 AKB
D0.9 ITU

PDG 5.2%(3.0°)

FAF
D7.0 ITU
D9.2 AKB
3000IF
LALRI
D10.9 ITU
D13.1 AKB
3000ELEV 740
THR RWY 30

CHANGE: R115 AKB ALT.

Aircraft Category		A	B	C	D	THR - DME ITU	1	2	3	4	5	6	7.0
Straight-in Approach OCA/H	LLZ (GP INOP)	1080(340)	1080(340)	1080(340)	1080(340)	DME AKB	3.2	4.2	5.2	6.2	7.2	8.2	9.2
						ALTITUDE	1108	1427	1745	2064	2382	2700	3000
						HEIGHT	(367)	(686)	(1004)	(1323)	(1641)	(1959)	(2259)
DME ITU ZERO RANGED TO THR RWY 30													
Aerodrome Operating Minima DH ft x RVR(CMV)	LLZ (GP INOP)					GS	Kt	80	100	120	140	160	180
						FAF-MAPt(6.1NM)	min:sec	4:35	3:40	3:03	2:37	2:17	2:02
						Rate of descent	ft/min	420	530	630	740	840	950

AKTOBE (UATT)
LOC/DME RWY30

AERONAUTICAL DATA TABULATION

LOC/DME approach to RWY30 from DIPUD, PIMIB, LALRI	
Fix/point	Coordinates
AKB DVOR/DME	50° 15' 48.3"N 057° 10' 54.8"E
DIPUD R147°, D14.2 AKB (IAF)	50° 02' 38.2"N 057° 19' 14.0"E
PIMIB R102°, D14.2 AKB (IAF)	50° 10' 13.4"N 057° 31' 10.1"E
LALRI D10.9 ITU, D13.1 AKB (IF)	50° 06' 26.0"N 057° 25' 11.6"E
D7.0 ITU, D9.2 AKB (FAF)	50° 09' 11.6"N 057° 20' 56.8"E
THR RWY30	50° 14' 09.59"N 057° 13' 16.51"E
ITU LLZ	50° 15' 44.7"N 057° 10' 49.0"E

UAAA AD 2

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

UAAA AD 2.1 Aerodrome Location Indicator And Name

UAAA - ALMATY

UAAA AD 2.2 Aerodrome Geographical And Administrative Data

1	ARP coordinates and site at AD	432120N 0770238E 054°/2676m from THR 05R
2	Direction and distance from (city)	31°, 8.1 NM from Almaty center
3	Elevation/Reference temperature	2238 FT/29.5° C
4	Geoid undulation at AD ELEV PSN	-148 FT
5	MAG VAR/Annual Change	5° E (2023) / 0.01°
6	AD Administration, address, telephone, telefax, telex, AFS	Post: Authority of Airport 2 Mailin str. 050039 Almaty, JSC "Almaty International Airport" Republic of Kazakhstan Phone: +7 (727) 3888888 Phone: +7 (727) 3888884 Fax: +7 (727) 3888885 AFS: UAAAAPBF AFS: UAAAAPDU Email: info@alairport.com
7	Types of traffic permitted (IFR/VFR)	IFR-VFR
8	Remarks	Nil

UAAA AD 2.3 Operational Hours

1	AD Operator	H24 Phone: +7 (727) 3888888
2	Customs and immigration	H24 Phone: +7 (727) 2703409
3	Health and sanitation	H24
4	AIS Briefing Office	H24
5	ATS Reporting Office (ARO)	H24 Phone: +7 (727) 2573217 Fax: +7 (727) 2573724
6	MET Briefing Office	H24 Phone: +7 (727) 2574029 Phone: +7 (727) 2572803
7	ATS	H24
8	Fuelling	H24
9	Handling	H24 Phone: +7 (727) 3888445
10	Security	H24
11	De-icing	H24

12	Remarks	Nil
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UAAA AD 2.4 Handling Services And Facilities

1	Cargo-handling facilities	Modern handling up to 30 tonnes weight
2	Fuel/oil types	TS-1, RT(equivalent to Jet A-1)/ MS-20, MS-8P
3	Fuelling facilities/capacity	AVBL, Modern tankers without limitation
4	De-icing facilities	De-icing fluid treatment machines - 6 units
5	Hangar space for visiting aircraft	Available by prior request
6	Repair facilities for visiting aircraft	Repairs at aircraft repair base.
7	Remarks	Nil

UAAA AD 2.5 Passenger Facilities

1	Hotels	Airport hotel, city hotel
2	Restaurants	AVBL
3	Transportation	Buses, taxis
4	Medical facilities	Aid post at Airport Terminal, ambulance service, hospitals in Almaty
5	Bank and Post Office	Banks, bank ATM, currency exchange, post office
6	Tourist Office	AVBL
7	Remarks	Nil

UAAA AD 2.6 Rescue And Fire Fighting Services

1	AD category for fire fighting	CAT A9
2	Rescue equipment	Modern rescue equipment. 5 fire engines with a total volume of fire-fighting composition - 41000 liters.
3	Capability for removal of disabled aircraft	Recovery equipment available: Lifting bags Kunz RLB 30-14, 30-17, 45-17. Lifting capacity up to 44t. Dollies Kunz 7-1000, 90-2200, load capacity 10t and 90t. Kunz Lifting Sling system, lifting capacity range 3t-55t. Ground Reinforcement mats Kunz Mammoth-Trakmat. Chains, jacks, hoists, hooks.
4	Remarks	Nil

UAAA AD 2.7 Seasonal Availability - Clearing

1	Types of clearing equipment	10 plow-brush equipment with turbo pipes, 3 rotors, 3 wind machines, 5 spraders (reagent sprayers), 5 pushers for cleaning the snow shafts, 1 sidewalk cleaning machine per runway, 2 graders, 2 bulldozers, 1 snow rolling machine, Other modern snow removal equipment. The anti-icing granular reagent "NKMM" and the anti-icing liquid reagent NORDWEIF of the NORM brand are used to remove ice from airfield coatings.
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2	Clearance priorities	1. RWY 2. TWY 3. Stands
3	Remarks	(Seasonal availability: All seasons, caution advised in winter during snow conditions) At surface condition code 2 and below: RWY 05R/23L closed

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

1	Apron surface and strength	APRON	STANDS	SURFACE	STRENGTH
		1	3-6	CONC+ASPH	PCN 61/F/C/W/T
			12-13,13A,13B	CONC+ASPH	PCN 55/R/B/X/T
		2	65-66	CONC+ASPH	PCN 56/R/A/X/T
			67-69	CONC+ASPH	PCN 73/F/C/X/T
		3	47-50	CONC+ASPH	PCN 66/F/C/X/T
			51-56	CONC+ASPH	PCN 51/F/C/X/T
			57-60, 59A, 60A, 71-73	CONC+ASPH	PCN 55/R/B/W/U
		4	1-2	CONC+ASPH	PCN 21/F/C/W/T
			61-62	CONC+ASPH	PCN 24/F/C/X/T
			63-64	CONC+ASPH	PCN 45/F/C/X/U
			42A, 42-46A	CONC+ASPH	PCN 12/F/C/X/T
		5	29-31, 31A	CONC+ASPH	PCN 24/R/B/X/T
			32A, 32-36	CONC+ASPH	PCN 26/R/B/X/T
			26-28	CONC+ASPH	PCN 33/R/B/X/T
		6	201,202,203	CONC	PCN 56/R/B/W/T
			204/204L/204R 205/205L/205R	CONC	PCN 71/R/B/W/T
2	Taxiway width, surface and strength	TWY	WIDTH (M)	SURFACE	STRENGTH
		A	22.5 M	CONC+ASPH	PCN 69/R/B/W/T
		B	23 M	CONC+ASPH	PCN 66/F/C/X/U
		C	22.5 M	CONC+ASPH	PCN 55/R/B/X/U
		D	37 M	CONC+ASPH	PCN 71/F/C/X/T
		E	24 M	CONC+ASPH	PCN 71/F/C/X/T
		F	23 M	CONC+ASPH	PCN 66/F/C/X/T
		H	45 M	CONC+ASPH	PCN 66/F/C/X/U
		K	25 M	CONC+ASPH	PCN 55/R/B/X/U
		L	25 M	CONC+ASPH	PCN 81/F/C/X/T
3	Altimeter checkpoint location and elevation	THR RWY 23R - 677,3 m/2222,1ft THR RWY 23L - 681,6 m/2236,2 ft			
4	VOR checkpoints	Nil			
5	INS checkpoints	Nil			
6	Remarks	Nil			

UAAA 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 RWY, guidance sign designating taxiways and apron Cat IIIB - RWY 23R: parking guidance system via TWY K at aircraft stand 6 or 7. RWY 23L: parking guidance system via TWY A at aircraft stand 4 or 5.
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, stands
3	Stop bars	TWY: A, B, C, D, K, L, F, E, H. RED
4	Other runway protection measures	Nil
5	Remarks	RWY23L: centerline lights on exit from RWY to TWY A and lights on rapid exit from RWY to TWY C. Yellow / Green. RWY23R: centerline lights on exit from RWY to TWY K and TWY L and lights on rapid exit from RWY to TWY D. Yellow / Green. TWY A: Holding lights in front of ILS RWY05L zone. Yellow.

UAAA AD 2.10 Aerodrome Obstacles

NIL

UAAA AD 2.11 Meteorological Information Provided

1	Associated MET Office	Meteorological service Almaty Phone: +7 (727) 2572803 Phone: +7 (727) 2574029
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation: Periods of validity	Meteorological service Almaty 24 HR (0024, 0606, 1212, 1818)
4	Trend forecast Interval of issuance	TREND 30 min
5	Briefing/consultation provided	Personal consultation (English, 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, ACC
10	Additional information	AIS "MeteoBriefing" for preparation of flight documentation and for meteorological service of crews distantly

UAAA 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
05R	55,81°	4400 X 45	65/R/B/X/T CONC+ASPH	432028.46N 0770102.85E - -148.3 FT	THR 2227.7 FT TDZ 2228 FT	See AOC type A
23L	235,84°	4400 X 45	65/R/B/X/T CONC+ASPH	432148.52N 0770344.44E - -149 FT	THR 2236.2 FT TDZ 2236 FT	
05L	55,82°	4500 X 45	51/R/A/W/T CEMENT/ CONC	432050.44N 0770130.67E - -148.6 FT	THR 2221.5 FT TDZ 2223 FT	See AOC type A
23R	235,85°	4500 X 45	51/R/A/W/T CEMENT/ CONC	432212.33N 0770416.00E - -149 FT	THR 2222.1 FT TDZ 2231 FT	

SWY dimensions	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	4700 X 283	90 X 150	Nil	AVBL	The strip RWY 05R/23L not symmetrical extend transversely axis direction RWY at a distance: 150m fm the NW side, 133m fm the SE side RWY 05R/23L Turn Pad LEN 120 m, the total width of the turn pad and TWY «A»105 m REF. AD 2.24.1 RWY 05R/23L Turn Pad LEN 110 m, the total width of the turn pad and TWY «F»75 m REF. AD 2.24.1 Turn Pad LEN 110 m, the turn pad and runway 75 m REF. AD 2.24.1 RWY 05R/23L Turn Pad LEN 120 m, the total width of the turn pad and TWY «E»65 m REF. AD 2.24.1 RWY 05L/23R end 23 R. The length of the turn pad area is 150 m, the width of the turn pad area is 95 m. AD 2.24.1
Nil	Nil	4700 X 283	90 X 150	Nil	AVBL	
Nil	300 X 150	4800 X 300	90 X 150	Nil	AVBL	
Nil	300 X 150	4800 X 300	90 X 150	Nil	AVBL	

UAAA AD 2.13 Declared Distances

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
05R	4400	4700	4400	4400	Nil
23L	3880	3880	4400	4400	Nil
05L	4500	4800	4500	4500	Nil
23R	4500	4800	4500	4500	Nil
TWY F - 23R	3528	3828	3528	Nil	Nil
TWY B - 05R	3681	3981	3681	Nil	Nil
TWY C - 05R	3085	3385	3085	Nil	Nil
TWY D - 05L	2957	3257	2957	Nil	Nil

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
TWY D - 23R	1543	1843	1543	Nil	Nil
TWY E - 05L	2010	2310	2010	Nil	Nil
TWY E - 23R	2490	2790	2490	Nil	Nil
TWY D - 05R	2320	2620	2320	Nil	Nil
TWY D - 23L	1560	1560	2080	Nil	Nil
TWY E - 05R	1010	1310	1010	Nil	Nil
TWY E - 23L	2870	2870	3390	Nil	Nil
TWY C - 23L	795	795	1315	Nil	Nil
Turning Bay A - 23L	2180	2180	2700	Nil	Nil
Turning Bay A - 05R	1700	2000	1700	Nil	Nil

UAAA 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
05 R	CAT I (PALS) 720 M LIH	GRN Nil	PAPI LEFT/3°	Nil	4400m, spacing 15m, 0- 3500m white, 3500- 4100m red/ white, 4100- 4400m red	4400m, spacing 60m, 0-3798m white, last 600m yellow LIH	RED Nil	Nil	(Warni ng: ALS RWY 05 shorten ed to 720m)
23 L	CAT IIIB (PALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	900 m	4400m, spacing 15m, 0- 3500m white, 3500- 4100m red/ white, 4100- 4400m red	4400m, spacing 60m, 0-3798m white, last 600m yellow LIH	RED Nil	Nil	Runnin g impuls e lights combin ed with approa ch lights, from 900 to 300 m from the thresho ld

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
05 L	CAT I (PALS) 870 M LIH	GRN Nil	PAPI LEFT/3°	Nil	4500m, spacing 15m, 0- 3600m white, 3600- 4200m R/W, 4200- 4500m red	4500m, spacing 60m, 0-3900 white, last 600m yellow LIH	RED Nil	Nil	Nil
23 R	CAT I (PALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	4500m, spacing 15.0m, 0- 3600m white, 3600- 4200m R/W, 4200- 4500m red	4500m, spacing 60m, 0-3900m white, last 600m yellow LIH	RED Nil	Nil	Nil

UAAA 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	EDGE: All TWY CL: TWY A, C, D, F, K, L Parking maneuvering lights and stop lights on stands - 4, 5, 6, 201, 202, 203, 204L, 204, 204R, 205L, 205, 205R.
4	Secondary power supply/switch-over time	AVBL, 0 sec
5	Remarks	RWY 23L: Side approach lights - 270 m from the THR. Red.

UAAA AD 2.16 Helicopter Landing Area

NIL

UAAA AD 2.17 ATS Airspace

1	Designation and lateral limits	ALMATY CTR 432628N 0770533E - 433119N 0771523E - 432614N 0772005E - 431119N 0765000E - 431624N 0764515E - 431729N 0764725E - 431659N 0764807E - 431853N 0765356E - 432102N 0765419E - 432507N 0770249E then a counter-clockwise arc radius 1.6 NM centered on 432640N 0770322E - 432628N 0770533E
2	Vertical limits	5200 FT ALT / GND
3	Airspace classification	D

4	ATS unit call sign Language(s)	ALMATY TOWER EN ALMATY VYSHKA RU
5	Transition altitude	10000 FT
6	Hours of applicability	H24
7	Remarks	Nil

UAAA 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	ALMATY APPROACH (EN) ALMATY PODKHOD (RU)	118.3 MHZ	Nil	Nil	H24	Nil
ATIS	ALMATY ATIS (EN) ALMATY ATIS (RU)	129,8 MHZ 135,1 MHZ	Nil	Nil	H24	Nil
RADAR	ALMATY RADAR (EN) ALMATY KRUG (RU)	126.8 MHZ	Nil	Nil	H24	Nil
SMC	ALMATY GROUND (EN) ALMATY RULENIE (RU)	121,7 MHZ	Nil	Nil	H24	Nil
TWR	ALMATY TOWER (EN) ALMATY VYSHKA (RU)	119,4 MHZ	Nil	Nil	H24	Nil
Production and dispatcher service	ALMATY TRANZIT (EN) ALMATY TRANZIT (RU)	131.900 MHZ	Nil	Nil	As AD	Nil
DELIVERY	ALMATY DELIVERY (EN) ALMATY DELIVERY (RU)	120.8 MHZ	Nil	Nil	H24	Nil

UAAA 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
DVOR/DME (5°E/2023)	ATA	116.4 MHZ CH 111X	H24	432229.4N 0770507.0E	2200 FT	Nil	Nil
ILS LOC 05R I/D/2	ILM	110.3 MHZ	H24	432159.6N 0770406.7E		Nil	Nil
GP 05R I/C/2		335 MHZ		432030.9N 0770117.7E			
DME 05R	ILM	CH 40X		432030.9N 0770117.7E	2200 FT		

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	Elevatio n of DME transmitt ing antenna	Service volume radius from the GBAS reference point	Rema rks
1	2	3	4	5	6	7	8
ILS LOC 23L III/E/2	IAL	108.1 MHZ	H24	432018.8N 0770043.4E		Nil	Nil
GP 23L III/T/2		334.7 MHZ		432138.5N 0770335.9E			
DME 23L	IAL	CH 18X		432138.5N 0770335.9E	2300 FT		
ILS LOC 05L I/D/4	IMA	109,1 MHZ	H24	432223.6N 0770438.8E		Nil	Nil
GP 05L I/C/4		331,4 MHZ		432059.1N 0770138.7E			
DME 05L	IMA	CH 28X		432059.1N 0770138.7E	2200 FT		
ILS LOC 23R III/E/4	IAA	111,3 MHZ	H24	432037.6N 0770104.8E		Nil	Nil
GP 23R III/T/4		332,3 MHZ		432210.7N 0770401.6E			
DME 23R	IAA	CH 50X		432210.7N 0770401.6E	2200 FT		
NDB	AAN	763 KHZ	HO	432208.1N 0770424.0E	Nil	Nil	Nil

UAAA AD 2.20 Local Aerodrome Regulations

1. Airport regulations

Aircraft movement along aerodrome is conducted under its own power and by towing vehicles. Taxiing and towing are carried out by established marking. Aircraft taxiing (towing) and take-off on a runway are conducted with the clearance of Almaty ATS unit.

At the apron stands it is allowed the start-up and testing of engines on idle modes upon request from "Almaty Taxiing" air traffic controller with regard to safety measures.

Start-up of engines at the stands 3-6 is prohibited. When there is out-of-use APU the start-up of one engine before towing to engine start-up place is conducted with the clearance of "Almaty Taxiing" air traffic controller.

Testing (run-up) of aircraft engines on modes exceeding the idle is carried out at the stand 69.

The crew can perform start-up of engines in the process of aircraft towing if this procedure is considered by flight operations manual of aircraft and agreed with the technical staff of the towing group.

Aircraft towing with the started engine (start-up during towing) at snowy, icy (slippery) apron is prohibited.

To replace aircraft wheels with a jack, only on hard surfaces (concrete, concrete slabs)

When deicing is needed flight crew notifies the "Almaty Taxiing" air traffic controller when requesting clearance for towing (start-up of engines). Deicing at the aircraft stands 1-6 is prohibited. Coordination of the deicing process is conducted by "Almaty Transit" at the frequency of 131.900 MHz. Deicing is performed:

- at the stands with asphalt-concrete surfacing;

- on the centerline of the apron.

Coordination air traffic controller of "Almaty Transit" designates the stand number, the docking procedure of aircraft and place of start-up, based on of the real situation on the apron, the presence of short-term limitations and parking prohibitions and aircraft movement on the aerodrome manoeuvring area.

Simultaneous parking procedure of freight aircraft with code F to aircraft stands 65-66 is carried out via towing.

2. Taxiing to/from aircraft stands

Towing, start-up of engines and taxiing of aircraft into/from the stands are conducted with the clearance of "Almaty Taxiing" air traffic controller.

Before the flight the crew must listen to the ATIS information, in the period of 5 minutes to 25 minutes before the departure time establish contact with the "ALMATY DELIVERY" on a frequency of 120.800 MHz, report the current ATIS information index and receive ATC clearance. Before tow/start engines establish contact with the "ALMATY GROUND" on a frequency of 121.700 MHz, report the current ATIS information index, the parking stand number, request permission to tow/start engines.

Depending on the ground and air situation, runway operational direction the taxiing control unit enters "holding procedure of start-up clearance" with the timing and start-up sequence of aircraft.

When runway operational direction is 23R or 23L the departure clearance with the heading of 051° is issued at the moment of crew request for aircraft start-up clearance (towing).

Regardless of the time of day aircraft accompanying (leading) is performed by follow me car when low visibility procedures is in effect, in the lack of visibility of marking intended for aircraft movement or by request of the flight crew.

Contact with "Almaty Tower" ATC unit is carried out by command of "Almaty Taxiing" air traffic controller.

Taxiing to aircraft stands 4-6 equipped by aircraft positioning system is performed singly or by follow me car up to the entrance into the coverage area of the system. Taxiing onto aircraft stands is performed by using indication of positioning system. In case of system failure, taxiing is performed by aircraft marshaller signals.

Taxiing to stands 201-205, 204L/204R, 205L/205R equipped with Automatic Visual Docking Guidance Systems (AVDGS) is either conducted autonomously or guided by a follow-me vehicle until the aircraft enters the coverage area of the system. Docking at the stand is carried out according to the indications provided by the positioning system. In case of system failure, docking is performed based on signals from the marshaller.

Taxiing onto aircraft stands that unequipped with parking system is performed by aircraft marshaller signals.

The order of taxiing in/out to/from aircraft stands:

- Taxiing onto/out aircraft stand close to the VIP-south building is performed by the follow me car. Taxiing onto aircraft stands 1-2, 63, 64 heading on VIP-south building is performed under its own power, taxiing out is performed by towing.
- Taxiing onto aircraft stands 3-6, 32A-34 is carried out under its own power, taxiing out is carried out by towing to the start-up place.
- Taxiing onto aircraft stand 12-13, 13A, 13B is carried by towing, taxiing out is carried out under its own power.
- Taxiing into/out of aircraft stands 48-56 shall be carried out under its own power by ATC instruction.
- Taxiing and taxiing on MS 47 under tow.
- Taxiing onto/out of aircraft stands 57-58, 71-73 is carried out under its own power.
- Taxiing onto aircraft stands 59A, 60A (heading on south) is carried out under its own power when aircraft stands 58, 59, 60, is free, taxiing out is carried out by towing.
- Taxiing of aircraft that not exceeded the size of IL-76 onto aircraft stands 59-60, is carried out under its own power when aircraft stands 59A, 60A is free, taxiing out is carried out under its own power when aircraft stands 59A, 60A is free.

- Taxiing onto aircraft stands 59A, 60A is carried out by towing, taxiing out is carried out under its own power when aircraft stands 59, 60 is free.
- Taxiing onto aircraft stands 65-69 is carried out under its own power, taxiing out is carried out by towing.
- Taxiing onto/out of aircraft stand 79 is carried out under its own power after the "Follow-me" car.
- Taxiing onto aircraft stands 201-205, 204L/204R, 205L/205R is carried out under its own power, taxiing out is carried out by towing to starting point.

3. Limitations during taxiing

Aircraft turns with code C and higher from TWY B to RWY 05R/23L to the side of the threshold 05R and from runway 05R/23L to TWY B from the threshold 05R are prohibited.

Taxiing and towing of all aircraft types is allowed with a wingspan not exceeded of wingspan of B747-400.

Aircraft not higher than 10,4m are placed on aircraft stands 63.

Crossing of holding position marking of RWY 23L/05R and 05L/23R by aircraft taxiing via TWY-F, TWY-D and TWY-E without ATC clearance is prohibited.

Crossing of holding position marking of RWY 05L/23R by aircraft taxiing via TWY-K and TWY-L towards RWY 05L/23R without ATC clearance is prohibited.

Taxiing of a Boeing 747-800 (Boeing 747-8f and Boeing 747-8i) is possible only on apron № 2 via TWY - L. Further taxiing of a Boeing 747-800 (Boeing 747-8f and Boeing 747-8i) is possible from apron № 2 via TWY - B and TWY - H for arrival and departure, also taxiing is possible via RWY 05L/23R, RWY 05R/23L, TWY-C, TWY-D, TWY-E and TWY-F. Taxiing on aprons № 1, 3, 4, 5, 6 for this type of aircraft is prohibited.

The aircraft must leave the occupied parking area no later than 1 minute after receiving permission to tow. In case of delay in the start of towing, the responsible person, the apron service repeatedly requests permission or cancels towing.

4. Take-off and landing

When reaching the designated holding point close to runway the flight crew informs "Almaty Tower" ATC unit and reports the readiness for take-off.

After receiving the report from the flight crew about readiness for take-off "Almaty Tower" ATC unit may allow the flight crew to line up position and immediate take-off, depending on the air situation. The flight crew must inform the "Almaty Tower" ATC unit if they cannot perform immediate take-off.

When the RWY is occupied, or the absence of suitable intervals "Almaty Tower" ATC unit allows the flight crew only to line up.

The flight crew, which needs to conduct taxiing backwards on RWY 05R or 05L for the line-up position of RWY 23R or 23L from TWY A, TWY K, TWY D or TWY E, should be permitted to taxiing on RWY 05R or 05L by "Almaty Tower" ATC unit.

The RWY used for taxiing, performs the functions of TWY or main TWY for the lining-up or vacating the RWY. Herewith, aircraft crew must comply with all taxiing procedures in accordance with the requirements of the Aircraft Flight Manual and other regulatory documents, including taxiing speed:

- under the normal conditions of the environment and the RWY condition, should not exceed 30 knots (55 km/h) at long distances on the runway and should not exceed 20 knots (37 km/h) at short distances on the runway;
- under the low visibility procedures and meteorological conditions contributing to the deterioration of the RWY condition should not exceed 10 knots (18 km/h).

Pre-flight checks by crew in the cockpit must be completed before the line-up position. Checks on the runway, should be minimized.

Flight crew performs take-off immediately after receiving clearance for take-off. If the flight crew cannot comply

with above requirement, they should inform about it the "Almaty Tower" ATC unit before taxiing onto the RWY, and to inform about the required delay time.

Depending on the air or the ground situation it is allowed to take-off from the intersection of TWY with the runway on-request of the flight crew or by initiative "Almaty Tower" ATC unit. Take-off is carried out from the point on the runway, where available characteristics of the runway is comply with required for the actual take-off mass of the aircraft and take-off conditions. The pilot-in-command takes the final decision about the take-off from the taxiway and runway intersection.

Warming-up and testing of engines before take-off is conducted on a runway or on taxiway by "Almaty Tower" ATC unit clearance after the request of the flight crew.

Tailwind takeoff and landing of aircraft is allowed for accelerating the traffic of airplanes flow on request of flight crew or at the initiative of ATSU. Responsibility for taking decision about such take-off or landing lies with the pilot-in-command of aircraft.

In order to reduce runway occupancy time, "Almaty Tower" ATC unit may issue a clearance to land beyond the landing area of the runway (except the aircraft of categories "heavy" and "superheavy") or expedite vacating of the runway. If it is impossible to perform the required operation, the crew shall immediately inform the air traffic controller.

The pilot-in-command takes the final decision about take-off or landing in meteorological conditions are inconsistent with aerodrome operating minima. In this case the air traffic controller clearance for takeoff or landing is not pilot-in-command compelling to complete it and the responsibility for the final decision and the outcome of the take-off or landing lies with the pilot-in-command of aircraft.

Runway allocation is carried out by ATSU taking into account upwind landing or takeoff of aircraft, in case if accidents prevention concept, runway configuration, meteorological conditions and operating procedures of landing approach or air traffic conditions do not preferred another direction. To increase runway capacity it is allowed aircraft release with reverse course from operating direction of the runway (take-off and landing in opposite directions) under the following conditions:

- radar control;
- before reaching 3200 FT by departed aircraft and establishing contact with ATC unit it's prohibited to arriving aircraft descent below 8000 FT;
- aircraft release is carried out according flight supervisor clearance and after provisional approval between the points of ATS aerodrome control center.

Turning pad and turning pad marking, with width 75m, are available on the RWY 05R/23L on the distance 2730m from RWY 05 THR.

RWY 05R/23L at surface condition code 4 and below TKOF and LDG prohibited.

5. Operations on parallel runways 05R / 23L and 05L / 23R

Both runways are intended for departures and arrivals.

Note: In view of the fact that the distance between the runway centerlines is 209 m, there are restrictive bearings and boundaries that do not allow establishing procedures for the divergence of the courses during take-off, the minimum time and linear intervals for all take-off and landing operations are set to the same as with a single runway; simultaneous take-offs and landings under any conditions with parallel runways are not performed.

Flight supervisor decides which runway in use based on analysis of the air and meteorological situation, surface condition, the operability of radio and lighting facilities, and meteorological equipment.

When aircraft is on the holding position on taxiway C, taxiway D, taxiway E or taxiway F, the runway located behind the aircraft is considered as occupied and is not used for takeoff or landing.

Additional departure procedures:

- it is permitted to line-up on each runway at the same time; the aircraft that will take-off the second in sequence shall be informed about take-off delay;

- the permission for take-off at the same time from both runways is not issued;
- to prevent the approach of the aircraft in the case of missed approach of arriving aircraft, the permission for take-off from the parallel runway is not given if the linear separation between the arriving and departing aircraft is 2.2 NM or less.

Additional arriving procedures:

- pilots should conduct preliminary preparation for landing on each of the operating runway, if both runways are in use;
- if an ILS approach is performed on one runway, approach to second runway can be performed as DVOR DME, RNP approach or visual approach (simultaneous ILS operation on parallel runways is prohibited);
- redirection of aircraft to parallel runway during ILS, DVOR DME or RNP approach in IFR conditions after turn to the final approach leg and in VFR flight or IFR flight in VMC after 3 NM from landing RWY THR is not allowed;
- redirection of aircraft to parallel RWY in all cases shall be performed after flight crew report about readiness to approach to another RWY.

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

Training and practice flights, check-test and check flights (flyover) of aircraft are carried out in accordance with the requirements established by the flight operation Regulations in Civil Aviation.

IFR flight is conducted in accordance to established procedures for instrumental take-off and landing approach. After take-off, the crew maintains the specified conditions given by the air traffic controller for entering the approach procedure. VFR flight is performed by an agreed route with the ATSU.

Number of aircraft carried out training or practice flight, check-test and check flights (flyover) within Almaty TMA 1, TMA 2 and CTR, is determined by the air traffic manager of the aerodrome based on the presence of prohibited and restriction areas, air and meteorological conditions.

Depending on the intensity of flights and activated restrictions, flight supervisor could limit the number of training aircraft, to suspend or prohibit the training flights.

Check-test aircraft flights are performed during the daytime with visibility at least 2000 m and the ceiling at least 650 ft for all types of aircraft.

7. Fuel draining

Fuel draining is conducted only in emergency situations that do not allow to decrease the aircraft landing mass by running out of fuel.

Fuel draining is conducted by the designated route of ATSU on height agreed with crew:

- Route 1: USUGA - ADABA - TIPSA - USUGA (not lower 8000 FT ALT);
- Route 2: DESOK - TIRBA - BAGNA - DESOK (not lower 10000 FT ALT).

In an emergency, the crew could drain the fuel out of the designated route.

If the flight crew needs a radio-silence during the fuel draining, the duration is agreed between the crew and air traffic controller.

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

8. Procedures in low visibility conditions

LVP are in effect when RVR is less than 550 m.

The beginning of LVP is reported by the ATIS or by the ATSU with following message: "Low visibility procedures" are in operation.

RWY 05R, RWY 05L, RWY 23R, RWY 23L are equipped for take-off in LVP conditions.

RWY 23R, RWY 23L are equipped for precise approach and landing by category II, IIIA and IIIB.

The crossing of the turned on lights of the line "STOP" is prohibited.

A-SMGCS based on SMR, SSR, MLAT and ADS-B supports surface movement operations based on established operational procedures.

The crew of the aircraft is informed by the ATS unit about change of the operational status of the radio technical, lighting and meteorological equipment.

In the conditions of categories II and III, ATS units apply additional horizontal separation of the aircraft.

When **RVR is less than 350 m**:

- turning of aircraft at 180° in the ends of 23R, 23L and in the extension "A" is **prohibited**.

When **RVR not less than 300 m**

- aircraft taxiing on aprons and taxiways (except for TWY C, TWY E, TWY D, TWY F) is carried out only after the "follow-me car";
- RWY 23R and RWY 23L are used for precise approach and landing by category II.

When **RVR is less than 300 m**

- TWY B, TWY H, TWY E not equipped with RCL are not used for taxiing;
- RWY 23R and RWY 23L are used for precise approach and landing by category IIIA.

9. Helicopter flights

Helicopter taxiing is carried out taking into account wind limitations, according to the flight manual, with constant visibility of the landmarks ahead.

Helicopters with a trolley type of undercarriage move through the air from the parking place to the place of take-off and back along the route assigned by the dispatcher "Almaty taxiing" behind the escort vehicle under the responsibility of the helicopter commander.

Helicopter engines at parking spot №61-62 are started only for warming up and testing at low gas.

Helicopter engines for departure from parking spot №61-62 should be started at parking traverse parking spot №62 in front of TWY A.

Engines may be started, check hover, take-off/landing by helicopter during daytime from (to) parking spot near VIP-south building, from (to) apron №4 and conjunction TWY-B, at intersection TWY-B with TWY-H and at section TWY-H between TWY-K and TWY-L, in compliance with established intervals between takeoffs and landings of aircraft, provided the established weather minimum for flights under Air Approach Lane (special Air Approach Lane) is met. Responsibility for takeoff (landing) in this case rests with the helicopter commander.

Helicopters take off from the airfield after:

- the crew's request for a control hover and obtaining permission to perform it from the control tower dispatcher;
- the helicopter crew completes a control hover;
- the crew's report of readiness for takeoff (by plane, by helicopter), and obtaining permission for takeoff from dispatcher the Tower a control tower controller.

For helicopter take-off, helicopter landing after control hover is not necessary. The helicopter commander determines the control hover altitude, but the helicopter performing the control hover should not interfere with other aircraft taking off and landing.

In the presence of weather conditions or smoke on part of the runway that reduce visibility to values below the

established weather minimum for Air Approach Lane flights (special Air Approach Lane), it is permitted to land on that part of the runway where the weather conditions correspond to the minimum (beginning/middle/end). The helicopter commander is responsible for making such a landing.

Takeoff with run-up and landing with run-in, helicopter takeoff and landing at night and when performing Air Approach Lane flight are performed from/on the runway.

UAAA AD 2.21 Noise Abatement Procedures

1. NOISE ABATEMENT DEPARTURE PROCEDURE

DEP from RWY05L and RWY05R Aircraft operators shall follow NADP 1 noise abatement departure procedure, according to ICAO Doc. 8168 OPS/611 VOL III (PANS-OPS VOL III).

2. NOISE ABATEMENT DEPARTURE PROCEDURE

RWY23L and RWY23R Aircraft operators shall follow NADP 1 noise abatement departure procedure, according to ICAO Doc. 8168 OPS/611 VOL III (PANS-OPS VOL III). The use of noise abatement departure procedure 1 (NADP1) as mentioned in ICAO Doc 8168 Volume III is recommended for all jet aircraft departures from ALA airport. If for operational reasons compliance with the recommended procedure is not possible, procedure NADP2 may be used.

3. Arrival procedures

for details see UAAA AD 2.22 para 7 CONTINUOUS DESCENT OPERATION

4. Selection of RWY in use

1. The term "RWY in use" indicates the RWY that, at a particular time, is considered by ALA TWR to be the most suitable for use by the types of aircraft expected to land or take-off at the aerodrome.

2. Accepting a runway is a pilot's decision. If the pilot-in-command considers the runway-in-use not usable for the reason of safety, he shall request permission to use another runway. ATC will accept such request, if traffic and air safety conditions permit.

UAAA AD 2.22 Flight Procedures

1. General provisions

In the aerodrome area of Almaty the flights are conducted on IFR and VFR.

While VFR and IFR flights in aerodrome control area of Almaty is necessary:

- Have a permission of ATSU prior to entry into the relevant area of responsibility;
- At the request of the ATSU to inform the location;
- Follow the instructions of the appropriate ATSU;
- To have and continuously support two-way radio communication in the VHF range.

IFR and VFR flights are conducted at assigned flight level (altitude) in accordance with the rules of vertical, longitudinal and lateral separation maintaining the established intervals.

IFR flights take precedence over the VFR flights.

If it is necessary, the arriving aircraft hold a course for to the holding area. To regulate the longitudinal intervals between aircraft crew can be instructed to conduct the flight in orbit (turn at 360 °) with statement of the place and side of the turn.

In the event of a threat to flight safety it is allowed to change assigned flight altitude (flight level) and crabbing from desired track. If you deviate from assigned desired track or flight altitude the pilot-in command immediately inform about their actions the ATS, which controls the aircraft.

During the initial contact with the "Almaty Approach" air traffic controller at a frequency of 118.3 MHz, the crew

informs an index of current ATIS information and identification index of aircraft.

"Almaty Approach" or "Almaty Circuit" designate the information about activities of the forbidden zones, restricted flight area, danger areas, airdropping of parachutes and flight of balloons in the aerodrome area borders in real time, overflying permit and the go-around route "Almaty Approach" or "Almaty Circuit".

IFR flights are not carried out beyond the limiting bearing determined by the geographical coordinates 431116N 0763518E (R238° D24.5 ATA) - 431042N 0765041E (R217° D15 8. ATA) - 432229N 0770507E (DVOR/DME ATA) - 432733N 0774145E (R074° D27.2 ATA), below flight level FL190.

2. Procedures of IFR flights within an aerodrome control area (CTR)

Takeoff and initial climb is conducted by standard routes shown on the Standard Instrument Departure (SID) charts Runway 05R / L (runway 23L / R) or on trajectory defined by ATS.

Arrival is carried out by standard routes shown on the Standard instrument arrival (STAR) Runway 05R/L (runway 23L / R) or on trajectory defined by ATS.

The flight crew is required to withstand the prescribed standard route of Instrument departure (SID) and arrival (STAR), and in the case of deviations, go on an assigned track immediately.

If an aircraft, forces to standard Instrument departure route (SID) is issued a clearance for climb to (altitude), located above the flight level shown on the SID, an aircraft follows the published vertical profile of a SID, if such restrictions are prescribed standard route of Instrument departure.

In those cases, when arriving at a standard instrument arrival route (STAR) aircraft is cleared to descend to a flight level lower than flight level of the STAR, an aircraft follows the published vertical profile of STAR, if such restrictions are not cancelled by ATS.

The flight crew must withstand specified limit airspeed, if otherwise specified from the ATS. The translational indicated airspeed regulation of aircraft is applied for a traffic flow regulation in order to ensure intervals necessary for landing, taking into account the characteristics of the aircraft.

"Almaty Circuit" and "Almaty Tower" ATC units determine ability to perform visual landing approach based on the analysis of air condition and weather conditions.

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

Air traffic service in the control zone of the Almaty aerodrome is carried out by the controller of the "Tower" ATC unit. The aircraft flights within CTR are performed on absolute altitudes according to the QNH pressure of the Almaty airfield. Flight altitudes are calculated by the aircraft crew in accordance with the Civil Aviation Flight Rules of the Republic of Kazakhstan.

Air traffic controller of "Tower" ATC unit assigns the altitude (flight level) of the flight, the functions of Air traffic service does not include ground and artificial obstacles collision avoidance.

The aircraft crew shall ensure that the clearance issued by the ATS unit in this regard is safe. Bypass of artificial obstacles by the aircraft crew is carried out independently.

Transit VFR flights of the aircraft through the CTR of the Almaty aerodrome are carried out with permission and under the control of the "Tower" ATC unit in accordance with the airspace classification.

Coordination of the entrance and the conditions for the transit of the CTR airspace of the Almaty aerodrome by the aircraft crews flying in uncontrolled airspace is carried out in accordance with the current rules. The aircraft crew, five minutes prior to the scheduled entry time into the aerodrome control zone, requests permission from the «Tower» ATC unit to enter, specifying the entry point and flight altitude. Entry is allowed only after obtaining approval under the conditions, conveyed by the «Tower» ATC unit.

Crossing the runway alignment, within Almaty CTR, is made only with the permission of the air traffic controller of the "Tower" ATC unit at a safe altitude according to the QNH pressure of the aerodrome.

Entry of aircraft of category A and helicopters flying in VFR at 5200ft and below to the control zone (CTR) is carried out only with the permission of the air traffic controller of the "Tower" ATC unit through the reference waypoint.

After passing the reference waypoint the air traffic controller of the "Tower" ATC unit issues permission to fly

to the nearest turn of the corresponding flight circle.

When the aircraft enters the runway "05 Left" / "05 Right" (left flight circle), enter the circle:

- from reference waypoints MIKE, YANKEE, ZULU, PAPA, VICTOR, holding JULIETT – left hand turns
- from reference waypoints SIERRA, ROMEO, OSCAR, holding TANGO – right hand turns

When the aircraft enters the runway "23 Left" / "23 Right" (right flight circle), enter the circle:

- from reference waypoints MIKE, YANKEE, ZULU, PAPA, VICTOR, holding JULIETT – right hand turns
- from reference waypoints SIERRA, ROMEO, OSCAR, holding TANGO – left hand turns

Entry of aircraft into the flight circle for landing approach is carried out only with the permission of the air traffic controller of the "Tower" ATC unit.

The reference waypoints of CTR are used by the air traffic controller of the "Tower" ATC unit to regulate the sequence of aircraft landing at the Almaty aerodrome and as holding areas for aircraft of categories A and helicopters. Flights of aircraft in holding area are performed by the command of the air traffic controller of the "Tower" ATC unit at the specified altitude and are performed with a left turn. If the air situation requires the aircraft to hold in the immediate vicinity of the runway, the air traffic controller of the "Tower" ATC unit allows the orbit (left / right 360 ° turn) at any designated radial distance from DVOR / DME ATA.

Exit of aircraft of category A and helicopters flying in VFR at 5200ft and below from the control zone (CTR) is carried out at the shortest distance (unless otherwise prescribed by the the air traffic controller of the "Tower" ATC unit) through the reference waypoint.

When the aircraft departs from the runway "05 Left" / "05 Right":

- to reference waypoints MIKE, YANKEE, ZULU, PAPA, VICTOR – left hand turns
- to reference waypoints SIERRA, ROMEO, OSCAR – right hand turns

When the aircraft departs from the runway "23 Left" / "23 Right":

- to reference waypoints MIKE, YANKEE, ZULU, PAPA, VICTOR – right hand turns
- to reference waypoints SIERRA, ROMEO, OSCAR – left hand turns

Table 1: Visual reference of VFR flights within Almaty CTR

No	Waypoint name	Type	Visual reference	Geographical coordinates	Radial and distance from DVOR/DME «ATA»
1	OSCAR	Entry/exit	power transmission line pole	432152N 0771116E	093° / 4,5 NM
2	ROMEO	Entry/exit	SW outskirts of Alatau	432018N 0770807E	130° / 3,1 NM
3	SIERRA	Entry/exit	SE outskirts of Besagash	431749N 0770306E	192° / 4,9 NM
4	TANGO	Holding	Eastern outskirts of Tuzdybastau	431953N 0770453E	179° / 2,6 NM
5	VICTOR	Entry/exit	Water basin / lake of Zhalkamys river	432732N 0770743E	015° / 5,4 NM
6	PAPA	Entry/exit	Eastern outskirts of Kyzyltu	432504N 0770450E	350° / 2,6 NM
7	MIKE	Entry/exit	warehouse of "Metro" hypermarket	431853N 0765356E	241° / 8,9 NM

Table 1: Visual reference of VFR flights within Almaty CTR

No	Waypoint name	Type	Visual reference	Geographical coordinates	Radial and distance from DVOR/DME «ATA»
8	JULIETT	Holding	southern outskirts of Zhana Kuat cottage town	432318N 0770147E	284° / 2,6 NM
9	YANKEE	Entry/exit	Y-shaped road intersection (Burundaiskaya Street and Highway)	432102N 0765419E	255° / 8 NM
10	ZULU	Entry/exit	separate structure of utility building (south of the intersection of the Esentai and Baskarasu rivers)	432302N 0765829E	271° / 4,9 NM

4. Radar procedures within a aerodrome control area (CTR)

To regulate the order of the landing approach and compliance with safe intervals from any point of the scheme it is possible to control the movement of aircraft for altitude and direction by ATS air traffic controller by radar vectoring. Direction for reaching the flight level (altitudes) is carried out in accordance with the ATC Surveillance Minimum Altitude Chart ICAO.

Landing approach procedures with the help of surveillance radar is not applied.

In the absence of radar control, but the stable operation of the flight and navigation equipment the flight crew is allowed to conduct the landing approach in accordance with the published IFR approach procedures in accordance without radar or conduct a visual landing approach.

During IFR flights in the absence of radar control and unstable operation of aircraft navigation equipment the decrease from the lower safe flight level (FL200) is not allowed. In this case, the aircraft should follow the alternate aerodrome.

5. Radio contact loss (failure)

Warning: the procedures are conducted during radio contact loss (failure) have differences with standards, recommended practices and regulations of ICAO (Annex 2 ICAO).

When radio communication loss the crew must:

- switch on SOS-signal, set up code 7600;
- use the emergency frequency of 121.5 MHz, radio contact with other aircraft and ATS points;
- guard the frequency DVORATA (116,4 MHz) or locator beacon (763 kHz) for getting information and air traffic controller instruction;
- when radio contact losing after takeoff to land or follow the destination aerodrome in accordance with the conditions, issued by the ATS;
- conduct aerodrome approach and landing approach by approach procedure;
- when flight without a radio contact at night the location of aircraft denote by periodic switching on the landing lights or beacon lights flashing.

6. The emergency landing procedure

In the event of an emergency on the aircraft at takeoff phase, aircraft pilot-in-command determines the necessary manoeuvre in order to ensure the safety of aircraft.

7. Continuous Descent Operation

1. CDOs are performed during periods of low traffic density at ATC discretion.
2. CDOs are executed only by ACFT that use standard arrival procedures RNAV1 based on GNSS.
3. 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.
4. 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.
5. 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.
6. Depending on traffic, CDO may start from TOD or lower levels.
7. 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.
8. 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.
9. If necessary ATC may issue additional instructions: "WHEN READY DESCEND TO (LEVEL), REPORT LEAVING (or REPORT TOP-OF-DESCENT)"
10. 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.
11. 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.
12. 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.

8. 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.

UAAA 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 16. Standards of Aerodromes (Heliports) Operation Civil Aviation Republic Kazakhstan.	Runway strip physical characteristics	Runway strip for runway 05R/23L, has dimensions less than the established in legislation.	An equivalent level of safety has been approved 25.09.2020 to 31.12.2022
Section 10. point 168. Standards of Aerodromes (Heliports) Operation Civil Aviation Republic Kazakhstan.	The length of the approach lights	The length of the approach lights with landing direction 51* for runway 05R/23L is less than the established in legislation.	Does not affect for operations.
Section 2. point 43. Standards of Aerodromes (Heliports) Operation Civil Aviation Republic Kazakhstan.	Radius of turn-off curve	Radius of turn-off curve is less than the established in legislation.	Restrictions on turning-off for aircrafts with the code letter C and higher until the reconstruction of this section

2. Ornithological situation in the aerodrome area.

The ornithological situation in the aerodrome area is determined by the seasonal and daily migration of birds. The Almaty aerodrome is surrounded by fields and residential areas, and on the approach to RWY 23L, 23R by agricultural fields.

2.1 Seasonal migration of birds (time)

The period of spring migration - activity from late February to late May, the most active peak migration in April, but there may be changes when the climatic conditions change. The danger is posed by rooks, jackdaws, pigeons, buzzards, kestrels, kites, pheasants, cranes, owls, rolling rollers, ducks, waders, etc. Bird activity is observed in the morning hours from 00:00 to 03:00 (UTC) and in the evening from 12:00 to 15:00 (UTC).

The period of autumn migration is active from mid-August to the end of November, also depending on the climate and sharp changes in weather conditions.

The danger is posed by rooks, jackdaws, pigeons, buzzards, kestrels, kites, pheasants, cranes, owls, rolling rollers, ducks, waders, etc.

The most active flight hours are from 23:00 to 03:00 (UTC), evening movements from 11:00 to 15:00 (UTC).

The intensity of bird migration increases during agricultural work and the maturation of cereals and other crops.

During these times, pilots are advised to turn on landing lights when flying in the aerodrome area, during takeoff, landing approach, and during climb and descent.

Spring and Autumn periods are characterized by movements of migratory birds: rooks flights 300-600 individuals from 01:00 to 03:00 hours (UTC) from west to east and from 12:00 to 15:00 (UTC) from east to west at the altitude of 200-600 FT.

In **summer**, in the morning and evening hours, a flight of flocks of birds of prey from 5 to 20 individuals is observed at a relative altitude of up to 600 FT and rollers at an altitude of 33 FT. All year round, there are flights of pigeons, corvids at relative altitude of up to 200 FT in flocks of 15-25 individuals and more.

2.2 Direction

The main directions of migration in spring are from southwest to northeast, in autumn in the opposite direction. In autumn, in the area of the aerodrome and at the aerodrome, a large number of mynah, black crows are accumulated, representing a serious danger for flights from sunrise to sunset.

On the territory of the airside area, the main flights occur from NW to SE and in the opposite direction.

2.3 Altitude

The altitude of flights depends on the season and weather conditions. Different types of birds fly at different heights.

Approximate heights of flights of various bird species found on the airfield and near the airside area and aerodrome:

- ducks - from 295 to 9842 FT;
- larks and various waders - from 131 to 4593 FT;
- birds of prey - from 328 to 26246 FT;
- lane and pink starlings - from 133 to 1509 FT;
- swallows - from 16 to 66 FT;
- seagulls - from 328 to 1640 FT;
- sparrows - from 16 to 49 FT;
- owls - from 16 to 98 FT;
- pheasants - from 3 to 16 FT;

2.4 Intensity of bird migration

Bird migration takes place around the clock.

2.5 Daily migration of birds

2.5.1 Daily migration of birds (time)

From dawn to the onset of evening twilight

2.5.2 Direction

Flights over the terrain and to feeding bases with the intersection of the takeoff and landing course from NW to SE.

2.5.3 Altitude

Flights from 32 to 492 FT. Mass flights of corvids at altitudes of 164-1640 FT.

2.6 Radar control over the flying of birds

Radar control over the flying of birds in the area of the aerodrome is not provided.

2.7 Information transmission

Information about the ornithological situation is transmitted via the ATIS broadcasting channel in English and Russian and, if necessary, through the ATM dispatcher. In case of complication of the ornithological situation in the aerodrome area, it is possible for a short-term inclusion in the ATIS report of additional concretizing information about the peculiarities of the ornithological situation.

UAAA AD 2.24 Charts Related To An Aerodrome

Name	Page
Aerodrome Chart ICAO	UAAA AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UAAA AD 2.24.3-1
Aerodrome Obstacle Chart – ICAO – Type A RWY 05L/23R	UAAA AD 2.24.4-1-1

Name	Page
Aerodrome Obstacle Chart – ICAO – Type A RWY 05R/23L	UAAA AD 2.24.4-2-1
Precision Approach Terrain Chart – RWY 23L ICAO	UAAA AD 2.24.5-1-1
Precision Approach Terrain Chart – RWY 23R ICAO	UAAA AD 2.24.5-2-1
Area Chart ICAO	UAAA AD 2.24.6-1
Standard Departure Chart Instrument (SID) RWY 05R/L ICAO	UAAA AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 05R/L ICAO	UAAA AD 2.24.7-2-1
Standard Departure Chart Instrument (SID) RWY 05R/L ICAO	UAAA AD 2.24.7-3-1
Standard Departure Chart Instrument (SID) RWY 23L/R ICAO	UAAA AD 2.24.7-4-1
Standard Departure Chart Instrument (SID) RWY 23L/R ICAO	UAAA AD 2.24.7-5-1
Standard Departure Chart Instrument (SID) RWY 23L/R ICAO	UAAA AD 2.24.7-6-1
Standard Departure Chart Instrument (SID) RNAV RWY 05R/L ICAO	UAAA AD 2.24.7-7-1
Standard Departure Chart Instrument (SID) RNAV RWY 05R/L ICAO	UAAA AD 2.24.7-8-1
Standard Departure Chart Instrument (SID) RNAV RWY 05R/L ICAO	UAAA AD 2.24.7-9-1
Standard Departure Chart Instrument (SID) RNAV RWY 23L/R ICAO	UAAA AD 2.24.7-10-1
Standard Departure Chart Instrument (SID) RNAV RWY 23L/R ICAO	UAAA AD 2.24.7-11-1
Standard Departure Chart Instrument (SID) RNAV RWY 23L/R ICAO	UAAA AD 2.24.7-12-1
Standard Departure Chart Instrument (SID) RNAV RWY 23L/R ICAO	UAAA AD 2.24.7-13-1
Standard Arrival Chart Instrument (STAR) RWY 05R/L ICAO	UAAA AD 2.24.9-1-1
Standard Arrival Chart Instrument (STAR) RWY 05R/L ICAO	UAAA AD 2.24.9-2-1
Standard Arrival Chart Instrument (STAR) RWY 05R/L ICAO	UAAA AD 2.24.9-3-1
Standard Arrival Chart Instrument (STAR) RWY 05R/L ICAO	UAAA AD 2.24.9-4-1
Standard Arrival Chart Instrument (STAR) RWY 23L/R ICAO	UAAA AD 2.24.9-5-1
Standard Arrival Chart Instrument (STAR) RWY 23L/R ICAO	UAAA AD 2.24.9-6-1
Standard Arrival Chart Instrument (STAR) RWY 23L/R ICAO	UAAA AD 2.24.9-7-1
Standard Arrival Chart Instrument (STAR) RWY 23L/R ICAO	UAAA AD 2.24.9-8-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 05R/L ICAO	UAAA AD 2.24.9-10-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 05R/L ICAO	UAAA AD 2.24.9-12-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 05R/L ICAO	UAAA AD 2.24.9-13-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 05R/L ICAO	UAAA AD 2.24.9-15-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 23L/R ICAO	UAAA AD 2.24.9-16-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 23L/R ICAO	UAAA AD 2.24.9-17-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 23L/R ICAO	UAAA AD 2.24.9-18-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 05R/L ICAO	UAAA AD 2.24.9-19-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 05R/L ICAO	UAAA AD 2.24.9-20-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 05R/L ICAO	UAAA AD 2.24.9-22-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 23L/R ICAO	UAAA AD 2.24.9-23-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 23L/R ICAO	UAAA AD 2.24.9-24-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 23L/R ICAO	UAAA AD 2.24.9-25-1
ATC Surveillance Minimum Altitude Chart ICAO	UAAA AD 2.24.10-1
Instrument Approach Chart – ILS/DME RWY 05R ICAO	UAAA AD 2.24.11-1-1

Name	Page
Instrument Approach Chart – ILS/DME - Y RWY 05L ICAO	UAAA AD 2.24.11-2-1
Instrument Approach Chart – ILS/DME - Z RWY 05L ICAO	UAAA AD 2.24.11-3-1
Instrument Approach Chart – ILS/DME - Y CAT II & III RWY 23L ICAO	UAAA AD 2.24.11-4-1
Instrument Approach Chart – ILS/DME - Y CAT II & III RWY 23R ICAO	UAAA AD 2.24.11-5-1
Instrument Approach Chart – ILS/DME - Z CAT II & III RWY 23R ICAO	UAAA AD 2.24.11-6-1
Instrument Approach Chart – LOC/DME RWY 05L ICAO	UAAA AD 2.24.11-7-1
Instrument Approach Chart – VOR/DME RWY 05L ICAO	UAAA AD 2.24.11-8-1
Instrument Approach Chart – VOR/DME RWY 05R ICAO	UAAA AD 2.24.11-9-1
Instrument Approach Chart – VOR/DME RWY 23L ICAO	UAAA AD 2.24.11-10-1
Instrument Approach Chart – RNP RWY 05L ICAO	UAAA AD 2.24.11-11-1
Instrument Approach Chart – RNP RWY 05R ICAO	UAAA AD 2.24.11-12-1
Instrument Approach Chart – RNP RWY 23L ICAO	UAAA AD 2.24.11-13-1
Instrument Approach Chart – RNP RWY 23R ICAO	UAAA AD 2.24.11-14-1
Visual Approach chart – ICAO	UAAA AD 2.24.12
VFR Departure/Arrival Chart	UAAA AD 2.24.14

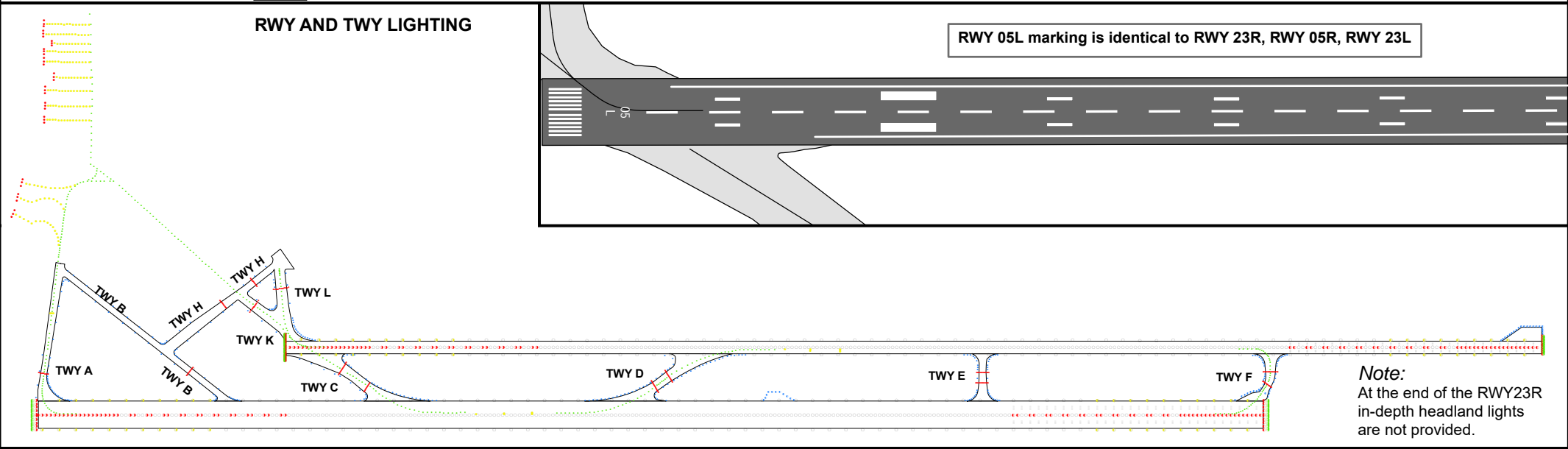
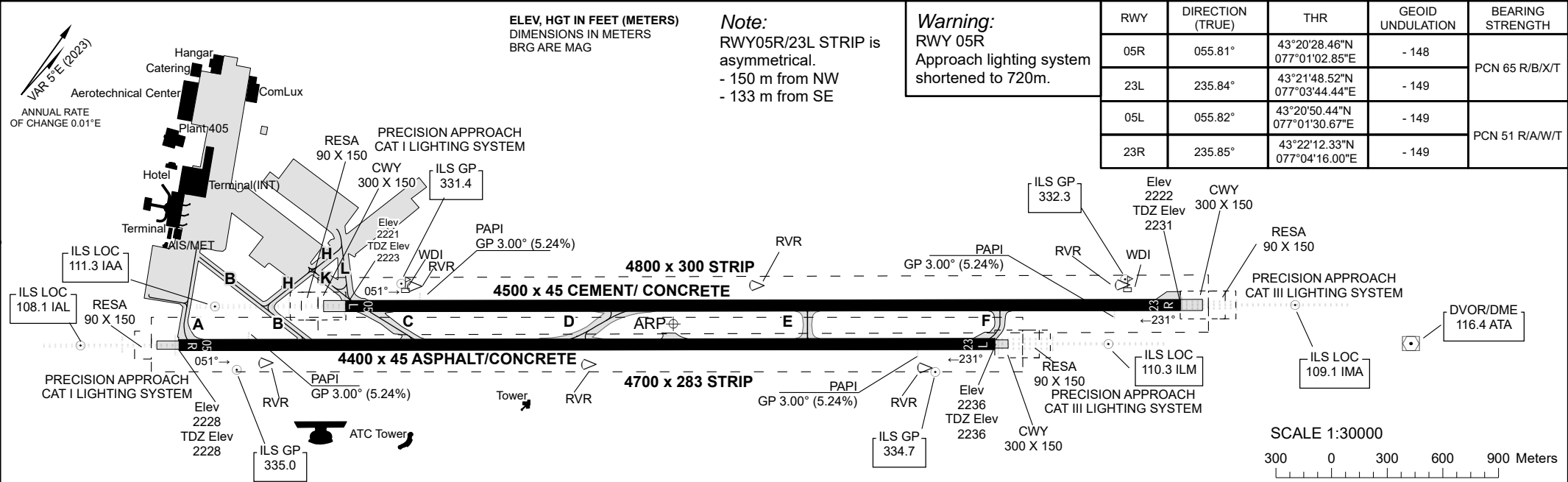
AERODROME
CHART - ICAO

AD ELEV
2238FT (682m)

ARP 432120N
0770238E

TWR	119.4
GROUND	121.7
DELIVERY	120.8

ALMATY



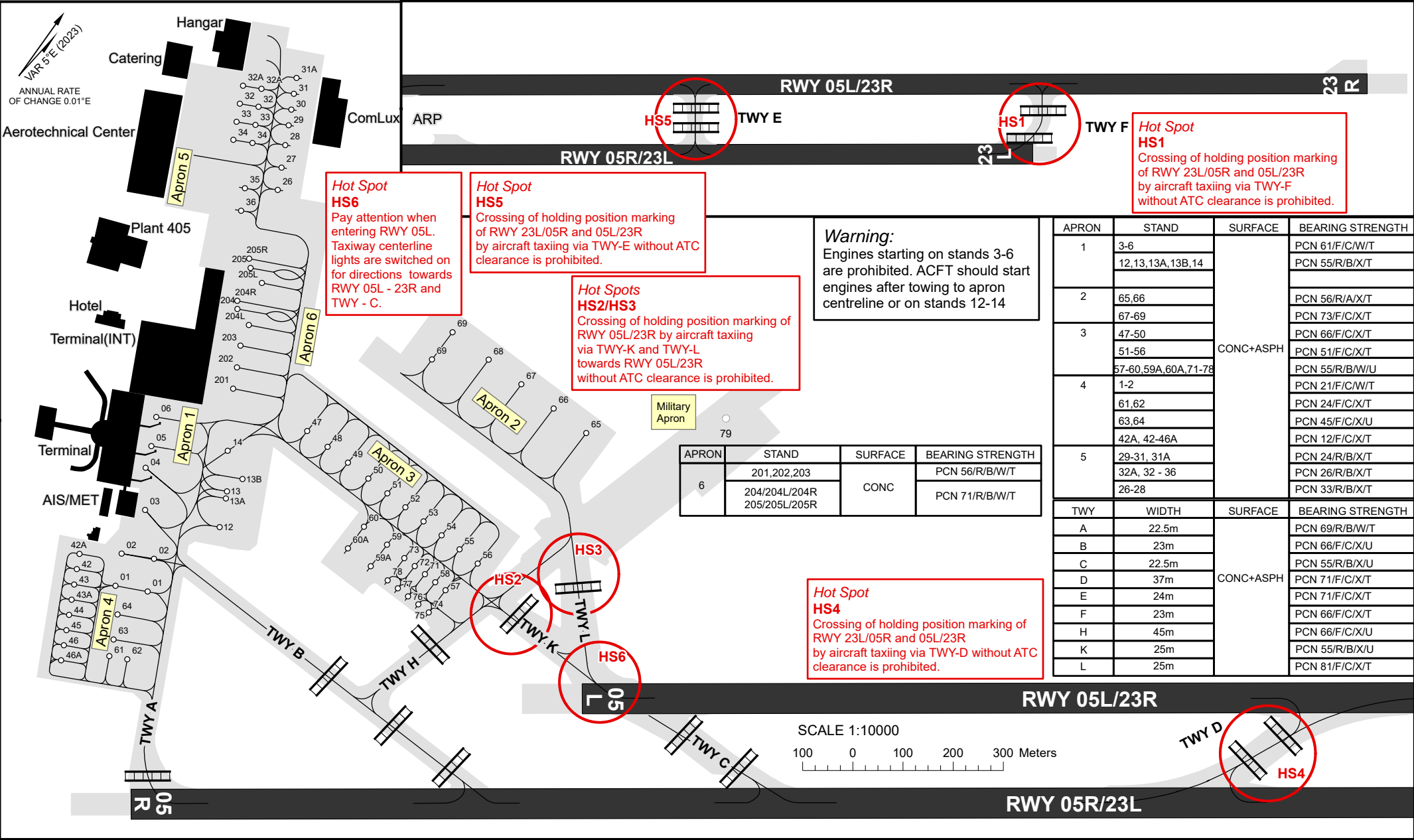
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AERODROME GROUND MOVEMENT
AND PARKING CHART - ICAO

APRON 1 ELEV 2218FT
APRON 2 ELEV 2205FT
APRON 3 ELEV 2215FT
APRON 4 ELEV 2221FT
APRON 5 ELEV 2208FT

TWR	119.4
GROUND	121.7
DELIVERY	120.8

ALMATY



Hot Spot HS6
Pay attention when entering RWY 05L. Taxiway centerline lights are switched on for directions towards RWY 05L - 23R and TWY - C.

Hot Spot HS5
Crossing of holding position marking of RWY 23L/05R and 05L/23R by aircraft taxiing via TWY-E without ATC clearance is prohibited.

Hot Spots HS2/HS3
Crossing of holding position marking of RWY 05L/23R by aircraft taxiing via TWY-K and TWY-L towards RWY 05L/23R without ATC clearance is prohibited.

Warning:
Engines starting on stands 3-6 are prohibited. ACFT should start engines after towing to apron centreline or on stands 12-14

Hot Spot HS1
Crossing of holding position marking of RWY 23L/05R and 05L/23R by aircraft taxiing via TWY-F without ATC clearance is prohibited.

Hot Spot HS4
Crossing of holding position marking of RWY 23L/05R and 05L/23R by aircraft taxiing via TWY-D without ATC clearance is prohibited.

APRON	STAND	SURFACE	BEARING STRENGTH
1	3-6	CONC+ASPH	PCN 61/F/C/W/T
	12,13,13A,13B,14		PCN 55/R/B/X/T
2	65,66		PCN 56/R/A/X/T
	67-69		PCN 73/F/C/X/T
3	47-50		PCN 66/F/C/X/T
	51-56		PCN 51/F/C/X/T
	57-60,59A,60A,71-78		PCN 55/R/B/W/U
4	1-2		PCN 21/F/C/W/T
	61,62		PCN 24/F/C/X/T
	63,64		PCN 45/F/C/X/U
	42A, 42-46A		PCN 12/F/C/X/T
5	29-31, 31A		PCN 24/R/B/X/T
	32A, 32 - 36		PCN 26/R/B/X/T
	26-28		PCN 33/R/B/X/T
TWY	WIDTH	SURFACE	BEARING STRENGTH
A	22.5m	CONC+ASPH	PCN 69/R/B/W/T
B	23m		PCN 66/F/C/X/U
C	22.5m		PCN 55/R/B/X/U
D	37m		PCN 71/F/C/X/T
E	24m		PCN 71/F/C/X/T
F	23m		PCN 66/F/C/X/T
H	45m		PCN 66/F/C/X/U
K	25m		PCN 55/R/B/X/U
L	25m		PCN 81/F/C/X/T

ALMATY

STANDS CHARACTERISTICS

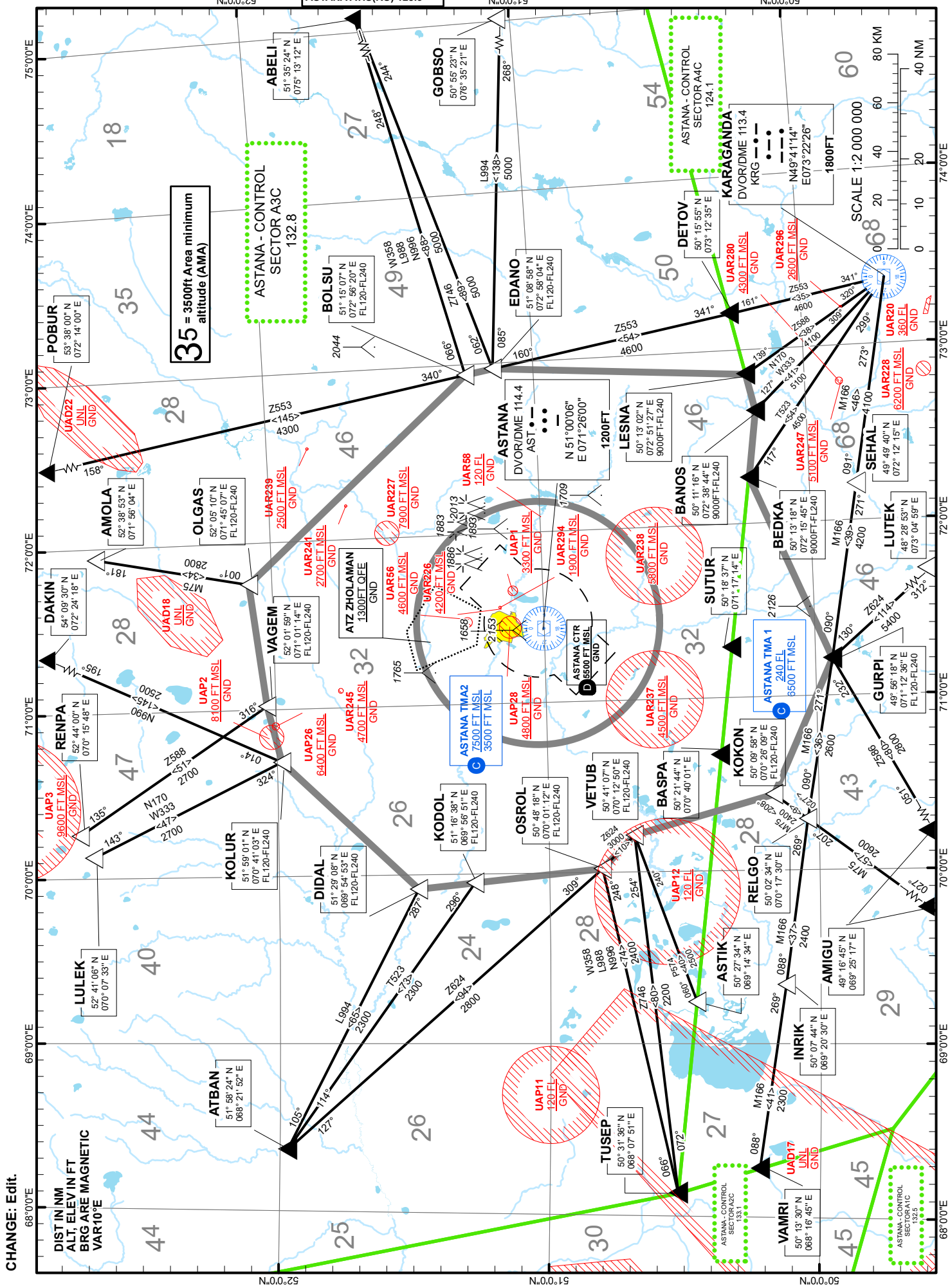
Apron	Stand	Coordinates	
		Latitude	Longitude
4	01	43 20 39.58 N	077 00 50.87 E
4	01	43 20 40.44 N	077 00 53.51 E
4	02	43 20 41.52 N	077 00 49.72 E
4	02	43 20 42.42 N	077 00 52.35 E
1	03	43 20 44.71 N	077 00 49.27 E
1	04	43 20 46.98 N	077 00 47.22 E
1	05	43 20 48.35 N	077 00 46.56 E
1	06	43 20 50.08 N	077 00 45.48 E
1	12	43 20 46.49 N	077 00 55.59 E
1	13	43 20 48.67 N	077 00 54.35 E
1	13A	43 20 48.25 N	077 00 54.62 E
1	13B	43 20 49.89 N	077 00 54.87 E
1	14	43 20 50.86 N	077 00 52.39 E
5	26	43 21 06.63 N	077 00 43.10 E
5	27	43 21 07.96 N	077 00 42.27 E
5	28	43 21 09.30 N	077 00 41.43 E
5	29	43 21 10.48 N	077 00 40.69 E
5	30	43 21 11.42 N	077 00 40.10 E
5	31	43 21 12.36 N	077 00 39.51 E
5	31A	43 21 13.30 N	077 00 38.92 E
5	32	43 21 10.38 N	077 00 37.56 E
5	32	43 21 09.87 N	077 00 36.04 E
5	32A	43 21 10.95 N	077 00 35.38 E
5	32A	43 21 11.45 N	077 00 36.89 E
5	33	43 21 08.78 N	077 00 36.70 E
5	33	43 21 09.30 N	077 00 38.24 E
5	34	43 21 07.70 N	077 00 37.36 E
5	34	43 21 08.22 N	077 00 38.92 E
5	35	43 21 05.53 N	077 00 40.61 E
5	36	43 21 04.19 N	077 00 41.45 E
4	42	43 20 39.07 N	077 00 47.21 E
4	42A	43 20 39.98 N	077 00 46.65 E
4	43	43 20 38.15 N	077 00 47.78 E
4	43A	43 20 37.25 N	077 00 48.34 E

Apron	Stand	Coordinates	
		Latitude	Longitude
4	44	43 20 36.34 N	077 00 48.91 E
4	45	43 20 35.43 N	077 00 49.47 E
4	46	43 20 34.53 N	077 00 50.03 E
4	46A	43 20 33.62 N	077 00 50.59 E
3	47	43 20 54.80 N	077 00 57.23 E
3	48	43 20 54.69 N	077 00 59.51 E
3	49	43 20 54.58 N	077 01 01.79 E
3	50	43 20 54.47 N	077 01 04.07 E
3	51	43 20 54.37 N	077 01 06.20 E
3	52	43 20 54.28 N	077 01 08.21 E
3	53	43 20 54.18 N	077 01 10.24 E
3	54	43 20 54.09 N	077 01 12.26 E
3	55	43 20 53.99 N	077 01 14.27 E
3	56	43 20 53.89 N	077 01 16.30 E
3	57	43 20 51.30 N	077 01 15.27 E
3	58	43 20 51.35 N	077 01 14.12 E
3	59	43 20 51.61 N	077 01 08.72 E
3	59A	43 20 49.87 N	077 01 08.60 E
3	60	43 20 51.74 N	077 01 06.14 E
3	60A	43 20 50.00 N	077 01 06.04 E
4	61	43 20 35.59 N	077 00 53.91 E
4	62	43 20 36.07 N	077 00 55.38 E
4	63	43 20 36.64 N	077 00 53.39 E
4	64	43 20 38.12 N	077 00 52.43 E
2	65	43 21 04.80 N	077 01 17.78 E
2	66	43 21 04.93 N	077 01 14.17 E
2	67	43 21 05.06 N	077 01 10.60 E
2	68	43 21 05.19 N	077 01 06.98 E
2	69	43 21 03.15 N	077 01 02.82 E
2	69	43 21 05.35 N	077 01 02.97 E
3	71	43 20 51.41 N	077 01 12.96 E
3	72	43 20 51.47 N	077 01 11.82 E
3	73	43 20 51.52 N	077 01 10.66 E
3	74	43 20 49.50 N	077 01 15.14 E
3	75	43 20 49.56 N	077 01 13.98 E
3	76	43 20 49.61 N	077 01 12.83 E
3	77	43 20 49.67 N	077 01 11.68 E
3	78	43 20 49.73 N	077 01 10.54 E
6	201	43 20 54.38 N	077 00 49.70 E
6	202	43 20 55.66 N	077 00 48.92 E
6	203	43 20 56.95 N	077 00 48.10 E
6	204L	43 20 58.36 N	077 00 47.69 E
6	204	43 20 58.80 N	077 00 46.06 E
6	204R	43 20 59.23 N	077 00 45.64 E
6	205L	43 21 01.08 N	077 00 46.56 E
6	205	43 21 01.47 N	077 00 44.98 E
6	205R	43 21 01.92 N	077 00 44.42 E

AREA
CHART - ICAO

TMA ASTANA
NURSULTAN NAZARBAYEV
INTERNATIONAL AIRPORT

ASTANA TOWER 135.5
ASTANA APPROACH 124.6
ASTANA RADAR 120.7
ASTANA GROUND 119.6
ASTANA ATIS(EN) 129.5
ASTANA ATIS(RU) 128.3



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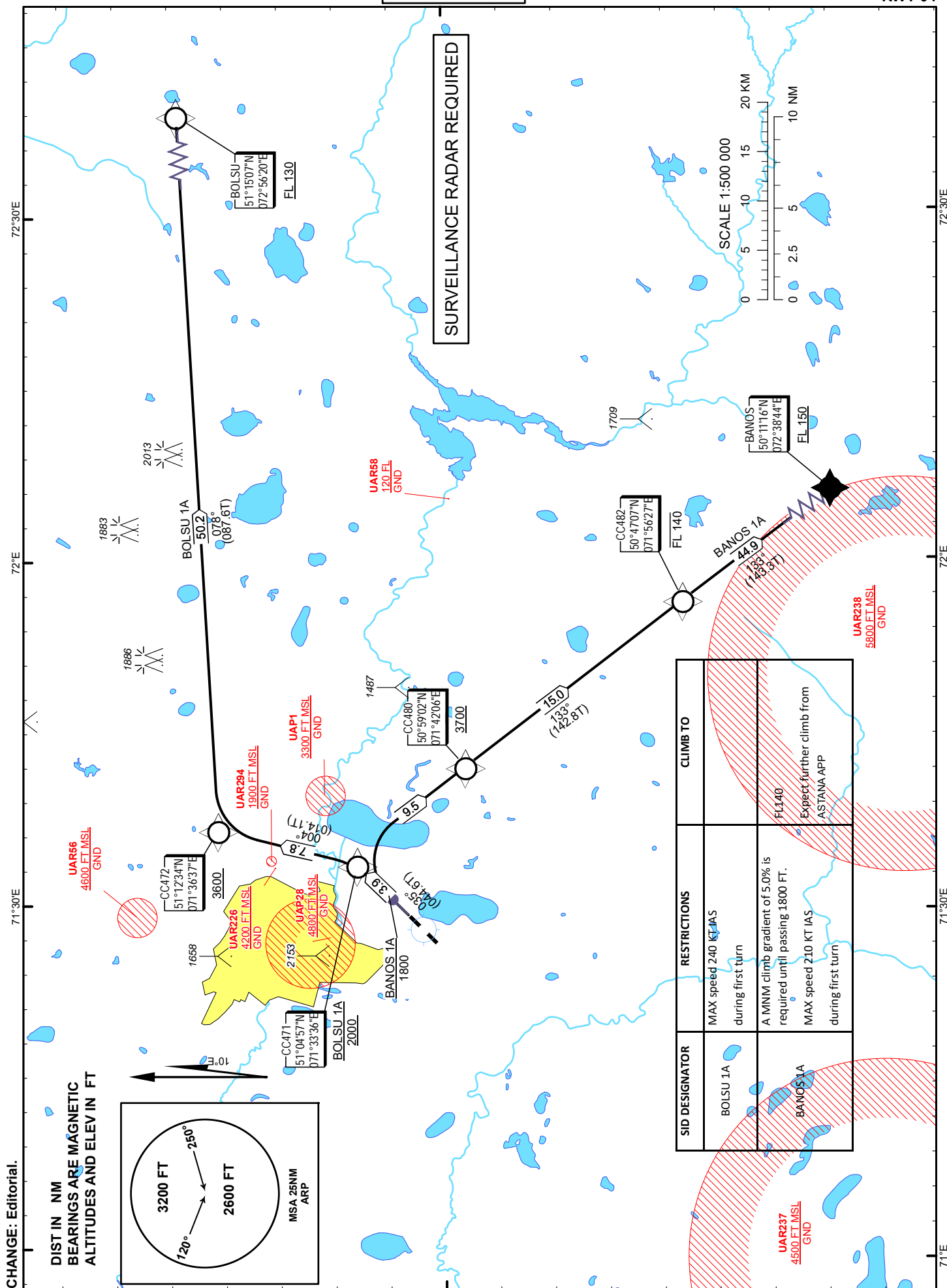
STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO

TRANSITION ALTITUDE
10000 FT

ASTANA TOWER 135.5
ASTANA APPROACH 124.6
ASTANA RADAR 120.7
ASTANA ATIS(EN) 129.5
ASTANA ATIS(RU) 128.3

BANOS 1A, BOLSU 1A
(RNAV 1 SID BASED ON GNSS)

ASTANA
NURSULTAN NAZARBAYEV
INTERNATIONAL AIRPORT
RWY 04



**TABULAR
DESCRIPTION**

BANOS 1A RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	CA		-	35(44.6)	10	2.1	-	+1800	-210	2.9	RNAV1
20	DF	CC480	-		10	9.5	R	+3700		1.9	RNAV1
30	TF	CC482	-	133(142.8)	10	15	-	-FL140		1.9	RNAV1
40	TF	BANOS	-	133(143.3)	10	44.9	-	+FL150		1.9	RNAV1

WAYPOINT LIST

BANOS 1A		
Waypoint Identifier	Coordinates	
DER	510210.90N	0712915.64E
CC480	505902.26N	0714206.01E
CC482	504707.26N	0715627.27E
BANOS	501116.00N	0723844.00E

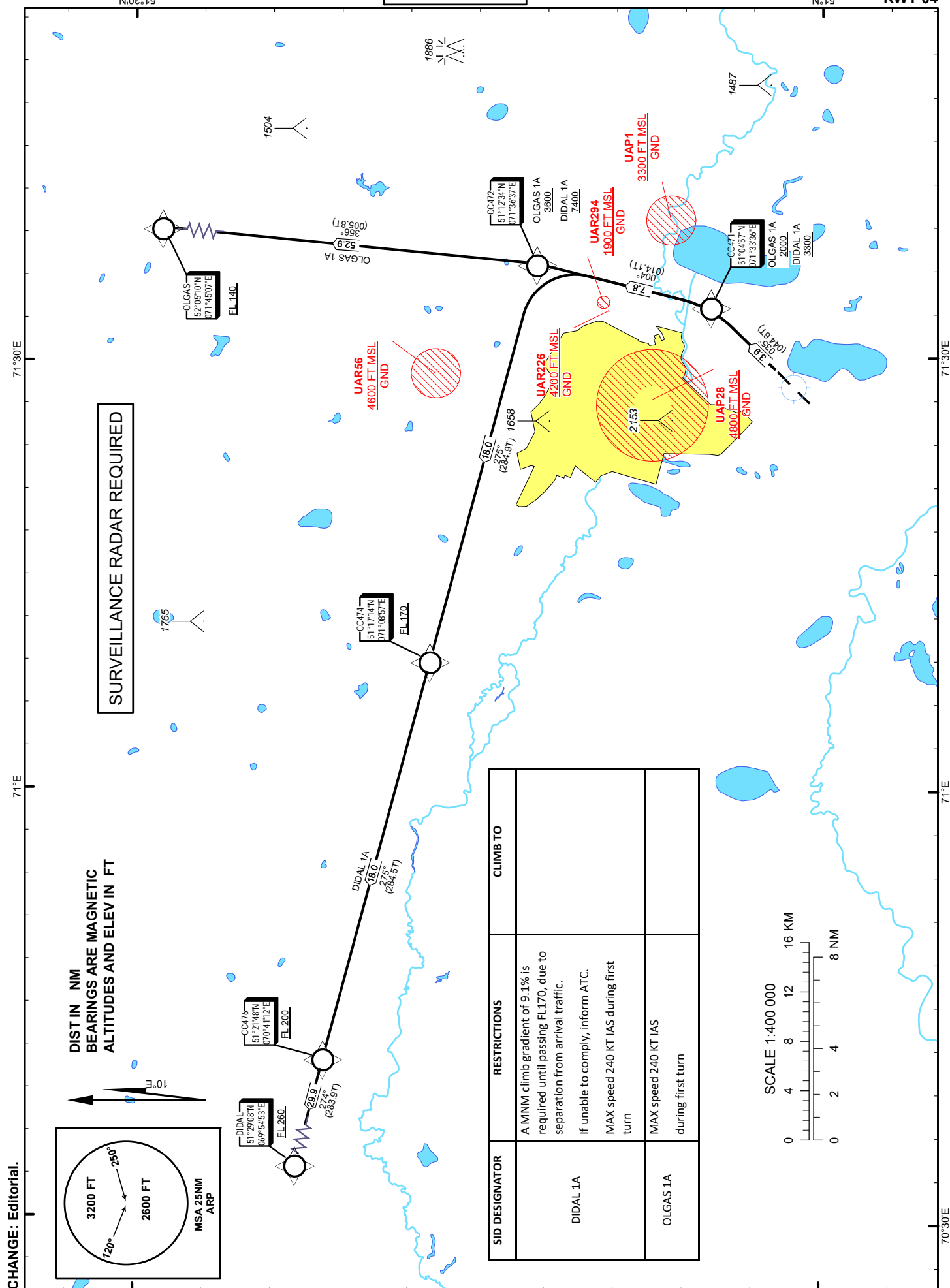
**TABULAR
DESCRIPTION**

BOLSU 1A RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	CF	CC471	-	35(44.6)	10	3.9	-	+2000	-240	1.9	RNAV1
20	TF	CC472	-	04(14.1)	10	7.8	L	+3600		1.9	RNAV1
30	TF	BOLSU	-	78(87.6)	10	50.2	R	+FL130		1.9	RNAV1

WAYPOINT LIST

BOLSU 1A		
Waypoint Identifier	Coordinates	
DER	510210.90N	0712915.64E
CC471	510457.35N	0713335.86E
CC472	511233.52N	0713637.17E
BOLSU	511507.00N	0725620.00E

**ASTANA
NURSULTAN NAZARBAYEV
INTERNATIONAL AIRPORT**



CHANGE: Editorial.

**TABULAR
DESCRIPTION**

DIDAL 1A RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	CF	CC471	-	35(44.6)	10	3.9	-	+3300	-240	5.2	RNAV1
20	TF	CC472	-	4(14.1)	10	7.8	L	+7400		5.2	RNAV1
30	TF	CC474	-	275(284.9)	10	18	L	+FL170		5.2	RNAV1
40	TF	CC476	-	275(284.5)	10	18	-	+FL200		1.9	RNAV1
50	TF	DIDAL	-	274(283.9)	10	29.9	-	+FL260		1.9	RNAV1

WAYPOINT LIST

DIDAL 1A		
Waypoint Identifier	Coordinates	
DER	510210.90N	0712915.64E
CC471	510457.35N	0713335.86E
CC472	511233.52N	0713637.17E
CC474	511713.85N	0710857.33E
CC476	512147.69N	0704111.75E
DIDAL	512908.00N	0695453.00E

**TABULAR
DESCRIPTION**

OLGAS 1A RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	CF	CC471	-	35(44.6)	10	3.9	-	+2000	-240	1.9	RNAV1
20	TF	CC472	-	4(14.1)	10	7.8	L	+3600		1.9	RNAV1
30	TF	OLGAS	-	356(5.8)	10	52.9	L	+FL140		1.9	RNAV1

WAYPOINT LIST

OLGAS 1A		
Waypoint Identifier	Coordinates	
DER	510210.90N	0712915.64E
CC471	510457.35N	0713335.86E
CC472	511233.52N	0713637.17E
OLGAS	520510.00N	0714507.00E

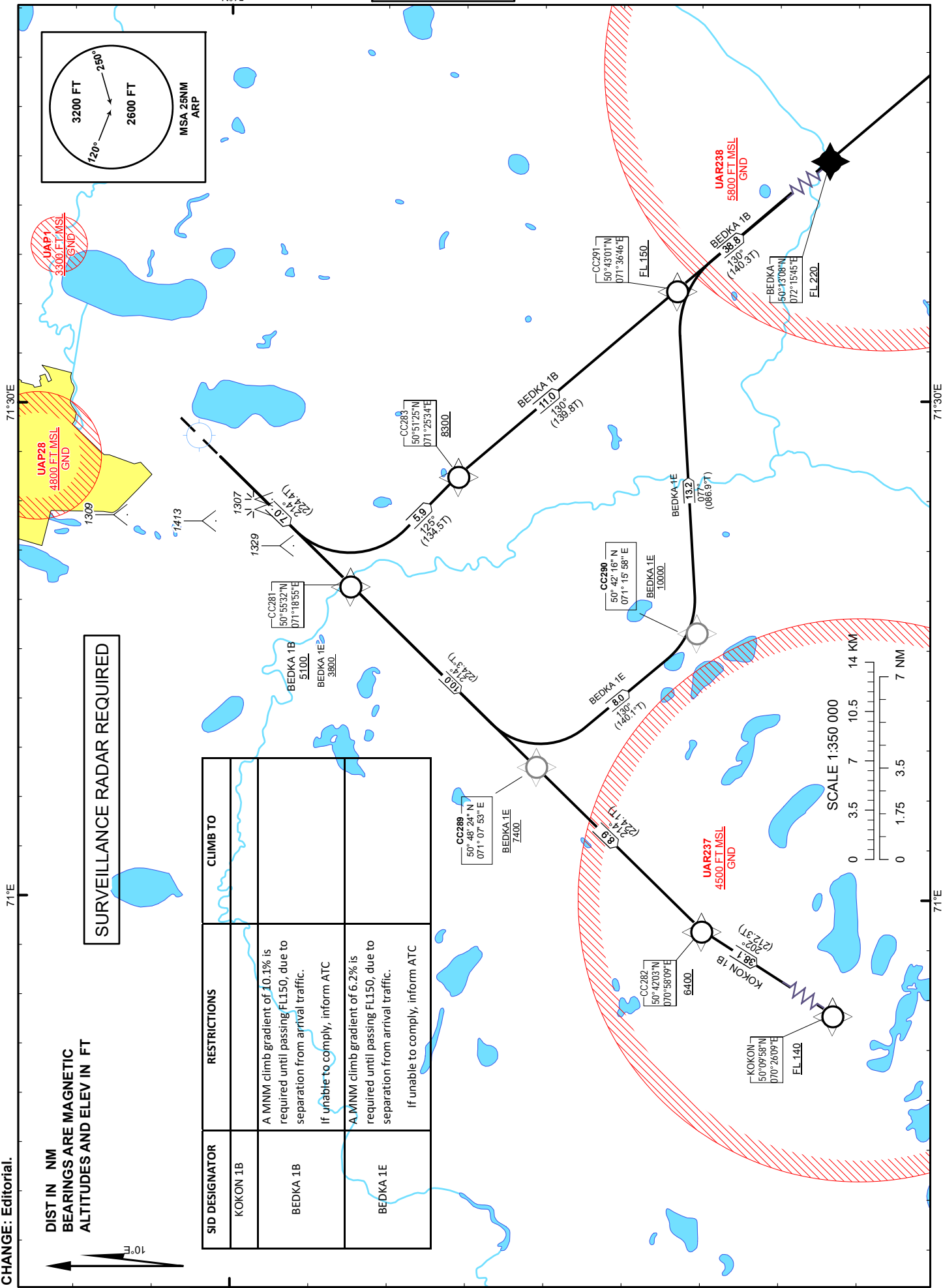
STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO

TRANSITION ALTITUDE
10000 FT

ASTANA TOWER 135.5
ASTANA APPROACH 124.6
ASTANA RADAR 120.7
ASTANA ATIS(EN) 129.5
ASTANA ATIS(RU) 128.3

BEDKA 1B, BEDKA 1E,
KOKON 1B
(RNAV 1 SID BASED ON GNSS)

ASTANA
NURSULTAN NAZARBAYEV
INTERNATIONAL AIRPORT
RWY 22



DIST IN NM
BEARINGS ARE MAGNETIC
ALTITUDES AND ELEV IN FT

SURVEILLANCE RADAR REQUIRED

SID DESIGNATOR	RESTRICTIONS	CLIMB TO
KOKON 1B		
BEDKA 1B	A MNM climb gradient of 10.1% is required until passing FL150, due to separation from arrival traffic. If unable to comply, inform ATC	
BEDKA 1E	A MNM climb gradient of 6.2% is required until passing FL150, due to separation from arrival traffic. If unable to comply, inform ATC	

TABULAR DESCRIPTION

BEDKA 1B RWY22											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	CF	CC281	-	214(224.4)	10	7	-	+5100	-250	6.6	RNAV1
20	TF	CC283	-	125(134.5)	10	5.9	L	+8300		6.6	RNAV1
30	TF	CC291	-	130(139.8)	10	11	R	+FL150		6.6	RNAV1
40	TF	BEDKA	-	130(140.3)	10	38.8	-	+FL220		1.9	RNAV1

WAYPOINT LIST

BEDKA 1B											
Waypoint Identifier	Coordinates										
DER	510031.69N	0712641.10E									
CC281	505532.44N	0711855.42E									
CC283	505124.63N	0712534.27E									
CC291	504301.41N	0713646.15E									
BEDKA	501318.00N	0721545.00E									

WAYPOINT LIST

BEDKA 1E											
Waypoint Identifier	Coordinates										
DER	510031.69N	0712641.10E									
CC281	505532.44N	0711855.42E									
CC289	504824.01N	0710753.04E									
CC290	504216.41N	0711558.43E									
CC291	504301.41N	0713646.15E									
BEDKA	501318.00N	0721545.00E									

TABULAR DESCRIPTION

BEDKA 1E RWY22											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	CF	CC281	-	214(224.4)	10	7	-	+3800	-250	3.5	RNAV1
20	TF	CC289	-	214(224.3)	10	10	-	+7400		3.5	RNAV1
30	TF	CC290	-	130(140.1)	10	8	L	+10000		3.5	RNAV1
40	TF	CC291	-	77(86.9)	10	13.2	L	+FL150		3.5	RNAV1
50	TF	BEDKA	-	130(140.3)	10	38.8	R	+FL220		1.9	RNAV1

TABULAR DESCRIPTION

KOKON 1B RWY22											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	CF	CC281	-	214(224.4)	10	7	-	+2600	-250	1.9	RNAV1
20	TF	CC289	-	214(224.3)	10	10	-	+4600		1.9	RNAV1
30	TF	CC282	-	214(224.1)	10	8.9	-	+6400		1.9	RNAV1
40	TF	KOKON	-	202(212.3)	10	38.1	L	+FL140		1.9	RNAV1

WAYPOINT LIST											
KOKON 1B											
Waypoint Identifier	Coordinates										
DER	510031.69N	0712641.10E									
CC282	504202.54N	0705809.22E									
KOKON	500958.00N	0702609.00E									

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	At the end of RWY 14, there is a turn pad with a length of 116 m and a width of 100 m.
Nil	300 X 150	3299 X 300	240 X 150	Nil	Nil	At the end of RWY 32, there is a turn pad with a length of 116 m and a width of 100 m.

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	2880m, spacing 60m, 0-2280m white, last 600m yellow	RED GRN	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
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	2880m, spacing 60m, 0-2280m white, last 600m yellow	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

NIL

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 I/D/4	ITY	109,9 MHZ	H24	470619.6N 0515003.2E		Nil	Nil
GP 14 I/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		
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, on1y 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.

It is allowed, in agreement with the Atyrau-Tower controller, to start helicopter engines at stands 1-3.

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 about the technical means and equipment used in rescue and fire fighting.

On fire and rescue crews have a fire equipment provided 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-40 (43195)	1	In boxing emergency-rescue service	Used for duty at the fire station
MAN AA-40 (26320)	1	In boxing emergency-rescue service	- II - II - II - II -

Table 1: Available fire-fighting equipment at Atyrau airport

Name, type of fire truck	Number	Main place of basing	Remark
MAN AA-70 (32321)	1	In boxing emergency-rescue service	- II - II - II - II -
KamAZ AA-8 / 60-50 / 3 (43118), equipped with a device to cover the runway with foam	1	In boxing emergency-rescue service	- II - II - II - II -

The complete set of fire trucks corresponds to the complete set list. Each fire truck is equipped:

- fire-fighting equipment (fire hoses, hand-held fire barrels, foam generators);
- means for evacuating people from an emergency aircraft (ladder, saw, knives for cutting safety belts, a device for cutting the fuselage skin);
- personal protective equipment for fire-rescue crews (breathing apparatus, helmets, thermal suits);
- supporting (bar, fire axes, hammer, shovel, etc.)
- with a trench tool (crowbar, fire axes, sledgehammer, shovel, etc.).

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

- trailer van equipped with stretchers (80 pieces) and emergency medical stowages with a dressing material (for 80 people);
- GAZ-66 car equipped with a VHF channel and an emergency radio station TESLA;
- car UAZ-3153RO1, equipped with communication facilities and loud-speaking installation

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.

No	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

№	Waypoint name (visual reference)	Geographical coordinates	Radial (mag.) and distance from NAVAID (ARP)	Remarks
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 (*Solomba 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 spires, 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

2	Clearance priorities	1. RWY 2. TWY 3. Stands
3	Remarks	A liquid deicing reagent "Green Way F65" is used to remove and prevent the formation of ice deposits on the runway

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

1	Apron surface and strength	STANDS		SURFACE	STRENGTH
		1-5, 2A, 3A		CONC+REINF	PCN 55/R/A/W/T
		6-9, 6A, 13A		CONC+REINF	PCN 32/R/A/X/T
		10-12		CONC+ASPH	PCN 20/R/A/X/T
		13-18		CONC+ASPH	PCN 19/R/A/X/T
		14A		CONC+REINF	PCN 55/R/A/W/T
		19-21, 20A		CONC+REINF	PCN 52/R/A/W/T
		22-27 (AN-2)		CONC+ASPH	Nil
2	Taxiway width, surface and strength	TWY	WIDTH (M)	SURFACE	STRENGTH
		A	23	CONC+REINF	PCN 55/R/A/W/T
		B	23	CONC+REINF	PCN 35/R/A/X/T
		4	18	CONC+REINF	Nil
		Taxiing on the apron (ST 1-5)	Nil	CONC+REINF	PCN 48/R/A/W/T
		Taxiing on the apron (from ST 6 to ST 18)	Nil	CONC+REINF	PCN 31/R/A/X/T
		Taxiing on the apron (from ST 19 to ST 21)	Nil	CONC+REINF	PCN 52/R/A/W/T
3	Altimeter checkpoint location and elevation	Stands: 1-3,2A, 6-9 – 536m/1759FT; 4-5 – 537m/1762FT; 10-11, 3A,6A, 21, 20A– 535m/1755FT; 12-20,13A,14A, 22-27 – 534m/1752FT.			
4	VOR checkpoints	Nil			
5	INS checkpoints	Nil			
6	Remarks	Starting aircraft engines installed nose to the terminal in stands 1-9 is prohibited. Starting the engines is allowed after towing to the places intended for starting the engines. It is allowed to start engines and taxiing on its own thrust of aircraft engines of the A320 type and less on stand 4, 7, and 9 when the aircraft is installed parallel to the station. TWY 4 - MIL			

UAKK 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-boards at entrance of TWYs to RWYs DGS: Nil
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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 and side lines. Lights: RWY and TWY A,B
3	Stop bars	Nil
4	Other runway protection measures	Nil
5	Remarks	Leading VAN «Follow me» AVBL

UAKK AD 2.10 Aerodrome Obstacles

NIL

UAKK AD 2.11 Meteorological Information Provided

1	Associated MET Office	Meteorological service Karaganda Phone: +7 (7212) 496673
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation: Periods of validity	Meteorological service Karaganda, 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	H24 ARO, TWR, 122.000 MHZ, RU, EN.
10	Additional information	Nil

UAKK 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
05	58,38°	3601 X 60	55/R/A/W/T REINF+CON C	493948.35N 0731851.49E - -119.4 FT	THR 1765.7 FT	-0.106%
23	238,42°	3601 X 60	55/R/A/W/T REINF+CON C	494049.44N 0732124.50E - -119.4 FT	THR 1753.1 FT	+0.106%

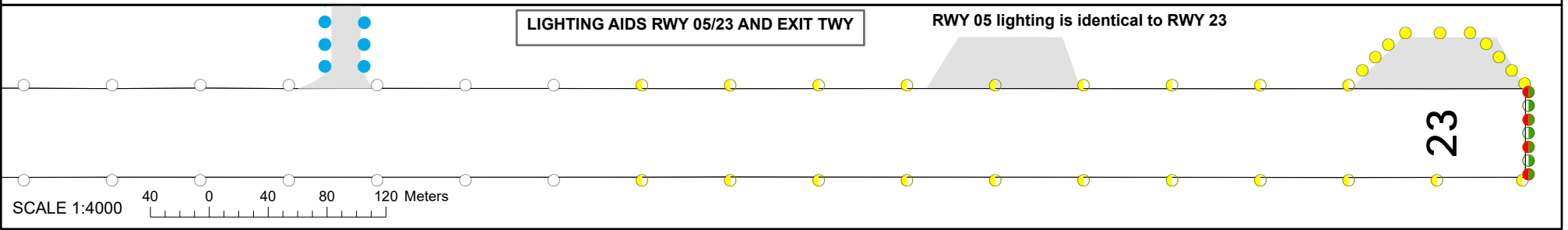
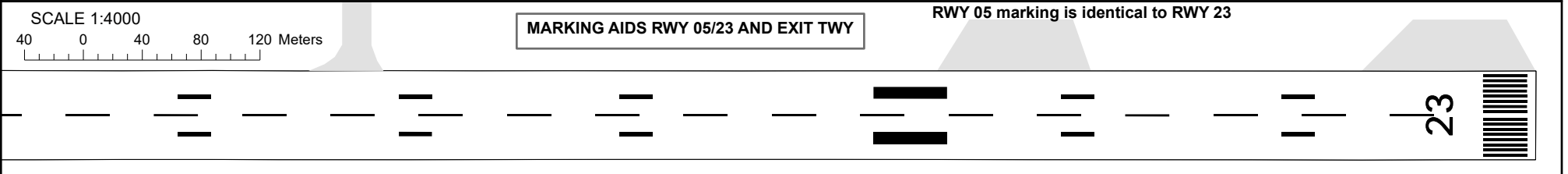
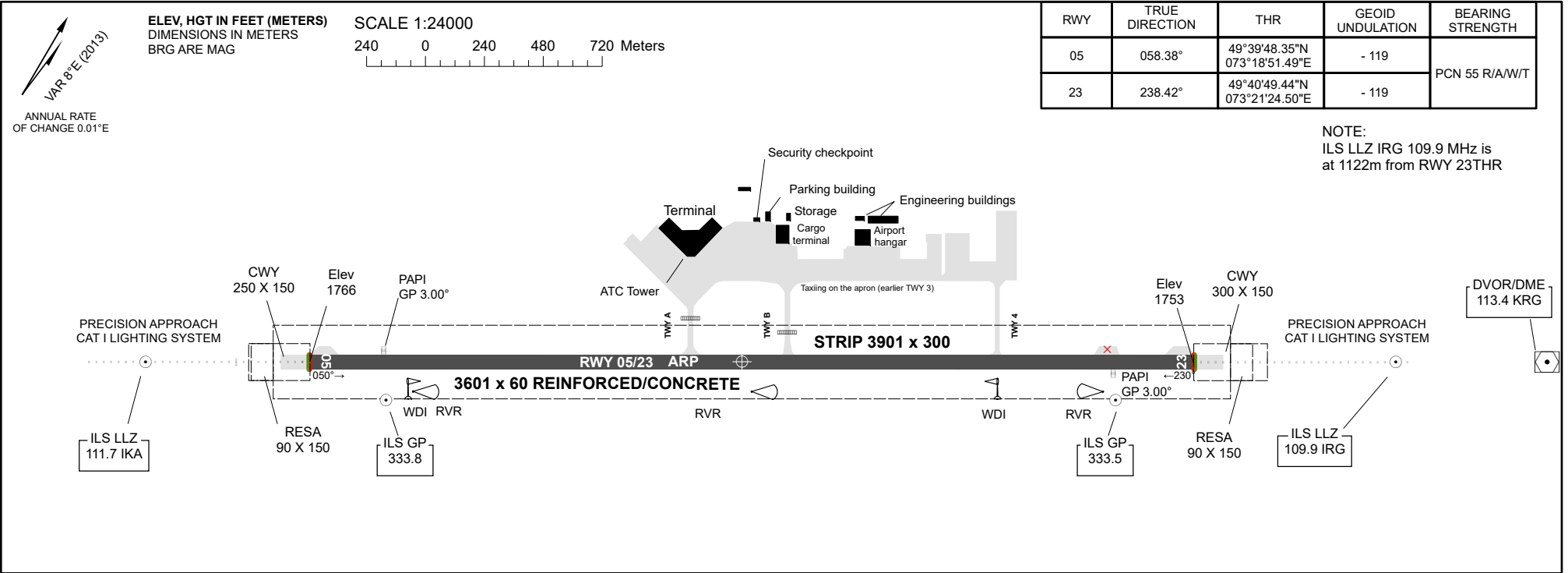
AERODROME
CHART - ICAO

AD ELEV
1766FT

ARP 494018N
0732007E

TWR 122.0

KARAGANDA



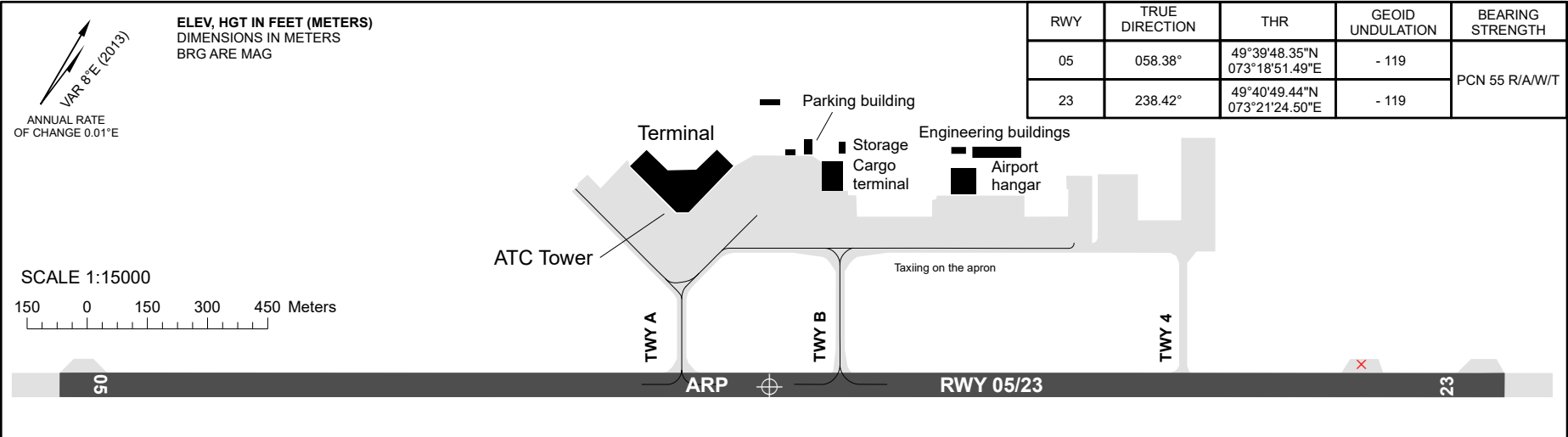
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AERODROME GROUND MOVEMENT
AND PARKING CHART - ICAO

APRON ELEV 1759FT (536)

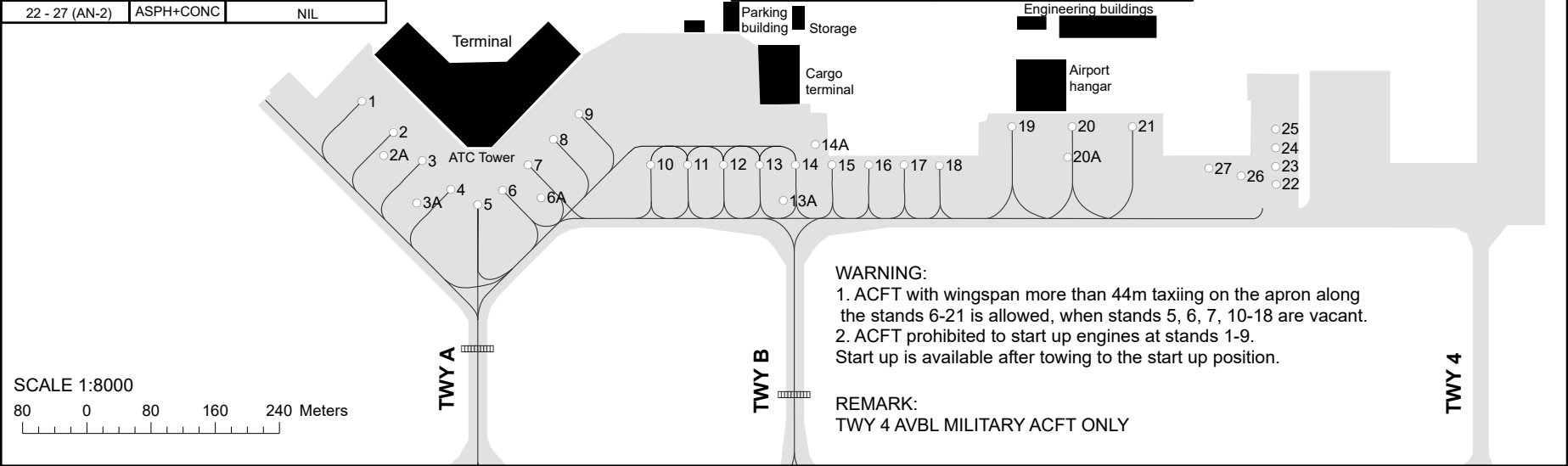
TWR 122.0

KARAGANDA



STAND	SURFACE	BEARING STRENGTH
1-5, 2A, 3A	REINF+CONC	PCN 55/R/A/W/T
6-9, 6A, 13A		PCN 32/R/A/X/T
10-12	ASPH+CONC	PCN 20/R/A/X/T
13-18		PCN 19/R/A/X/T
14A	REINF+CONC	PCN 55/R/A/W/T
19-21, 20A	REINF+CONC	PCN 52/R/A/W/T
22 - 27 (AN-2)	ASPH+CONC	NIL

TWY	WIDTH	SURFACE	BEARING STRENGTH
A	23m	REINF+CONC	PCN 55/R/A/W/T
B	23m		PCN 35/R/A/X/T
4	18m		NIL
Apron (Stands 1 - 5)			PCN 55/R/A/W/T
Apron (Stand 6 - 18)			PCN 32/R/A/X/T
Apron (Stand 19 - 21)			PCN 52/R/A/W/T



KARAGANDA

STANDS CHARACTERISTICS

Apron	Stand	Coordinates	
		Latitude	Longitude
	01	49 40 25.65 N	073 19 38.48 E
	02	49 40 25.25 N	073 19 41.14 E
	02A	49 40 24.24 N	073 19 41.39 E
	03	49 40 24.87 N	073 19 43.61 E
	03A	49 40 23.32 N	073 19 44.70 E
	04	49 40 24.49 N	073 19 46.07 E
	05	49 40 24.54 N	073 19 47.98 E
	06	49 40 25.55 N	073 19 48.83 E
	06A	49 40 26.13 N	073 19 51.10 E
	07	49 40 26.97 N	073 19 49.35 E
	08	49 40 28.38 N	073 19 49.87 E
	09	49 40 29.79 N	073 19 50.38 E
	10	49 40 29.57 N	073 19 55.83 E
	11	49 40 30.35 N	073 19 57.79 E
	12	49 40 31.12 N	073 19 59.69 E
	13	49 40 31.87 N	073 20 01.60 E
	13A	49 40 31.14 N	073 20 04.03 E
	14	49 40 32.63 N	073 20 03.51 E
	14A	49 40 33.74 N	073 20 03.89 E
	15	49 40 33.39 N	073 20 05.45 E
	16	49 40 34.17 N	073 20 07.40 E
	17	49 40 34.92 N	073 20 09.27 E
	18	49 40 35.66 N	073 20 11.14 E
	19	49 40 38.53 N	073 20 13.72 E
	20	49 40 39.80 N	073 20 16.91 E
	20A	49 40 38.65 N	073 20 17.66 E
	21	49 40 41.07 N	073 20 20.10 E
	22	49 40 42.13 N	073 20 29.59 E
	23	49 40 42.73 N	073 20 28.99 E
	24	49 40 43.36 N	073 20 28.39 E
	25	49 40 44.02 N	073 20 27.77 E
	26	49 40 41.67 N	073 20 27.47 E
	27	49 40 41.25 N	073 20 25.51 E

UACK AD 2.7 Seasonal Availability - Clearing

1	Types of clearing equipment	1. 5 snow fighting vehicles 2. 1 rotary snow plough, 3. 2 snowplows
2	Clearance priorities	1. RWY 2. TWY 3. Stands
3	Remarks	1 Dry reagent spreader (Green Way SF); 1 Fluid reagent sprayer (Nord Wey F)

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

1	Apron surface and strength	APRON	STANDS	SURFACE	STRENGTH
		A	1-2	CONC+ASPH	PCN 46/F/C/X/T
			3-8	CONC+ASPH	PCN 18/F/C/X/T
2	Taxiway width, surface and strength	TWY	WIDTH (M)	SURFACE	STRENGTH
		A	23	CONC+ASPH	PCN 46/F/C/X/T
3	Altimeter checkpoint location and elevation	At Apron A/264m (867ft)			
4	VOR checkpoints	Nil			
5	INS checkpoints	Nil			
6	Remarks	Nil			

UACK 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 on the intersections of TWY A and RWY, TWY A and apron A DGS: Nil
2	RWY and TWY markings and LGT	Markings of threshold, touchdown zones, centre line, fixed distance markers, RWY sides, RWY designations, taxi holding positions, taxiway centre lines and sides Lighting: threshold, runway edge, and runway end lights; runway edge sides.
3	Stop bars	Nil
4	Other runway protection measures	Nil
5	Remarks	Leading VAN «Follow me» AVBL

UACK AD 2.10 Aerodrome Obstacles

NIL

UACK AD 2.11 Meteorological Information Provided

1	Associated MET Office	Meteorological service Kokshetau Phone: +7 (7162) 298286
2	Hours of service MET Office outside hour	HO
3	Office responsible for TAF preparation: Periods of validity	Meteorological service Kokshetau, 9HR (0209, 0312, 0615, 0918, 1221)

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

UACK 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
02	31,77°	2849 X 45	46/F/C/X/T CONC+ASPH	531909.85N 0693504.28E - -89.9 FT	THR 888.1 FT	See AOC Type A
20	211,79°	2849 X 45	46/F/C/X/T CONC+ASPH	532028.22N 0693625.39E - -89.9 FT	THR 873.7 FT	See AOC Type A

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	150 X 200	3149 X 300	90150	Nil	Nil	RWY 02/20. The length of the turn pads is 107 m. The total RWY width at the expanded sections is 75 m.
Nil	400 X 200	3149 X 300	90150	Nil	Nil	

UACK AD 2.13 Declared Distances

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
02	2849	2999	2849	2849	Nil
20	2849	3249	2849	2849	Nil

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
TWY A - RWY 02	1326	1476	1326	Nil	Nil
TWY A - RWY 20	1523	1923	1523	Nil	Nil

UACK 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
02	CAT I (PALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	2849m, spacing 60m, 0-2250 white, last 600m yellow LIH	RED Nil	Nil	Nil
20	CAT I (PALS) 870 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	2849m, spacing 60m, 0-2250 white, last 600m yellow LIH	RED Nil	Nil	Nil

UACK 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 Anemometer: 300m from THR 02, 300m from THR 20, in RVR equipment
3	TWY edge and centre line lighting	TWY A EDGE: BLU
4	Secondary power supply/switch-over time	AVBL, 1 SEC
5	Remarks	Nil

UACK AD 2.16 Helicopter Landing Area

NIL

UACK AD 2.17 ATS Airspace

1	Designation and lateral limits	KOKSHETAU CTR A circle radius 25 NM centered on 532103N 0693701E
2	Vertical limits	4000 FT ALT / GND
3	Airspace classification	C
4	ATS unit call sign Language(s)	KOKSHETAU TOWER EN KOKSHETAU VYSHKA RU
5	Transition altitude	10000 FT

6	Hours of applicability	See NOTAM
7	Remarks	Nil

UACK 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
TWR	KOKSHETAU TOWER (EN) KOKSHETAU VYSHKA (RU)	127,9 MHZ	Nil	Nil	See NOTAM	Nil
ATIS	KOKSHETAU ATIS (EN) KOKSHETAU ATIS (RU)	134,9 MHZ 126 MHZ	Nil	Nil	As AD	ATIS information is being updated during AD working hours. Outside AD working hours ATIS information is not updated.

UACK 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 02 I/D/2	IOT	110,3 MHZ	H24	532051.7N 0693649.8E		Nil	Nil
GP 02 I/C/2		335 MHZ		531917.8N 0693522.1E			
DME 02	IOT	CH 40X		531917.8N 0693522.0E	900 FT		
ILS LOC 20 I/D/2	IKW	109,5 MHZ	H24	531841.4N 0693434.9E		Nil	Nil
GP 20 I/C/2		332,6 MHZ		532016.7N 0693623.0E			
DME 20	IKW	CH 32X		532016.7N 0693623.0E	900 FT		
VOR/DME (11°E/2013)	KTU	115,5 MHZ CH 102X	H24	532102.7N 0693701.1E	900 FT	Nil	Nil

UACK AD 2.20 Local Aerodrome Regulations

Taxiing of aircraft to the stands and to the line-up position shall be carried out behind the "Follow me" car.
Aircraft crew shall be notified in advance about taxiway routing and stand surface condition by "Tower air traffic

controller's.

De-icing procedure shall be carried out on the stands. The deviation areas are absent.

The movement of vehicles in the areas of ILS is limited by signs "STOP" and the writings "Radio beacon system zone". Pass way without clearance of control point "Tower" is FORBIDDEN! ". Aircraft movement is limited by "STOP" line on the TWY A.

Operation of large aircraft is without restrictions

Taxiing in winter condition in any cases shall be carried out behind the "Follow me" car

Towing vehicle is not available

UACK AD 2.21 Noise Abatement Procedures

NIL

UACK AD 2.22 Flight Procedures

1. Flight and ground movement procedures.

Departing aircraft shall fly over fix points on the predetermined heights with IAS limitations, noted on SID and instrument approach charts.

Aircraft takeoff and landing with tailwind is permitted when tailwind speed is not greater than value set by Flight Operational manual of each aircraft type. Final decision of tailwind landing/takeoff shall be made by pilot-in-command.

It is allowed to take off not from the beginning of the runway if the available runway characteristics from the start of the takeoff run correspond to those required (as calculated by the crew) for the actual takeoff weight and takeoff conditions.

Helicopter take-off and landing shall be carried out from RWY (intersection of TWY and RWY).

Aircraft ground movement on manoeuvring area shall be carried out by taxiing or towing. Taxiing and towing shall be carried out strictly along TWY centreline, apron and stand guideline.

Taxiing (towing) of aircraft shall be carried out by instructions of Tower ATC. Taxiing speed shall be set by pilot-in-command according to the condition of TWY, presence of obstacles, aircraft weight, wind conditions and visibility.

In all cases taxiing speed should not exceed speed set by Flight Operational manual of this type of aircraft.

ATC is responsible for taxi route assignment; pilot-in-command is responsible for taxiing rules compliance; person, assigned for control taxiing on the airfield section, is responsible for safety.

Helicopter taxiing shall be carried out with wind limitations, according to Flight Operational manual, at constant visibility of landmarks located in front.

In the absence of the possibility of taxiing or towing (the unsatisfactory condition of the ground or the design of the helicopter does not allow taxiing), the helicopter is allowed to move through the air in strict compliance with the requirements of the relevant paragraphs of the Flight Procedure and Rules in Civil Aviation of the Republic of Kazakhstan. Air taxiing of helicopters with a skid landing gear from the stand to the take-off place and back, is carried out according to the marking on the route designated by the air traffic controller of the control point "Tower" in compliance with the established obstruction clearance under the responsibility of the helicopter commander.

2. Low Visibility Procedures.

Low Visibility Procedures (LVP) are effected when RVR is less than 550 m when manoeuvring area or part thereof is not visually monitored from the "Tower" control centre. Low Visibility Procedures are cancelled when RVR is greater than 550 m.

Low Visibility Procedures are initiated by Air traffic Manager, in case of his absence - by Tower ATC.

The following procedure shall be carried out in case of low visibility conditions, when Tower ATC is not able to control aircraft movement on the manoeuvring area:

- Clearance for TWY entering shall be given only after received report of TWY vacation from other aircraft or vehicle.

Control the obstacles on RWY and in ILS critical areas is carried out by air traffic controller according to reports of flight crew or aerodrome service specialist reports. The report of runway vacation shall be passed only after vacation of ILS critical area indicated by the light signs.

Taxiing into apron after RWY vacation shall be carried out after follow-me car. Taxiing into stands shall be carried out by marshaller's signals.

Taxiing of aircraft out of stands to TWY A shall be carried out after follow-me car. Aircraft shall stop at the holding position before the light sign indicating the ILS critical area.

The operation of LVP shall be reported by Tower ATC phrase: "LOW VISIBILITY PROCEDURES IN OPERATION".

"Tower" controller informs pilots about any changes in the operational status of radio and lighting equipment.

3. 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 1800 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	DRAGOMIROVKA (southern outskirts of Dragomirovka)	N534423 E0692204	328° 25.0 nm KTU VOR/DME	Entry
2	BOLSHOI IZIUM (northern side of Bolshoi Izium)	N534600 E0693828	351° 25.0 nm KTU VOR/DME	Exit
3	OZERNOE (visual reference – A-13 highway)	N532918 E0701627	059° 25.0 nm KTU VOR/DME	Entry
4	SEKMBAISOR (SW side of Sekmbaisor)	N532532 E0701808	068° 25.0 nm KTU VOR/DME	Exit

№	Waypoint name (visual reference)	Geographical coordinates	Radial (mag.) and distance from NAVAID (ARP)	Remarks
5	BRUSILOVKA (SE outskirts of Brusilovka)	N525749 E0695215	147° 25.0 nm KTU VOR/DME	Entry
6	KARAUYL (northern outskirts of Karauyl)	N525606 E0693525	171° 25.0 nm KTU VOR/DME	Exit
7	SERAFIMOVKA (northern outskirts of Serafimovka)	N525854 E0691751	196° 25.0 nm KTU VOR/DME	Entry
8	AIDARLY (NW outskirts of Aidarly)	N530304 E0690810	213° 25.0 nm KTU VOR/DME	Exit
9	ELENOVKA (Eastern side of Elenovka)	N531624 E0685603	248° 25.0 nm KTU VOR/DME	Entry
10	ZHOLDYBAI (SW coast of Zholdybai lake)	N532239 E0685523	263° 25.0 nm KTU VOR/DME	Exit
11	STANTSIONNYI (Eastern outskirts of Stantsionnyi)	N532143 E0693024	268° 4.0 nm KTU VOR/DME	Holding, circle and absolute altitude by "Tower" ATC instructions

UACK 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 black crows, jackdaws occur daily for 1-2 hours before and after sunrise, when the birds fly from their resting place (birch stakes north-west of the runway 3000m) across the runway and the approach areas of runway 02 and runway 20 to the south-easterly direction to the nearby fields and pastures.

The flight altitude of birds varies from 0 to 100 m above ground level. An hour or two hours before sunset the birds return to the place of rest.

The intensive flight of the silver gull also occurs in the pre-dawn hours from nearby lakes located south-east of the runway, in a westerly direction (Kokshetau city, municipal solid waste landfill).

In the autumn period, a large number of rooks, crows, jackdaws accumulate in the area of the aerodrome, which pose a serious danger to flights from sunrise to sunset. The aerodrome service informs the ATS service about bird clusters at the aerodrome and their flights, as well as approximate flight heights above ground level.

Measures to disperse of the bird aggregations include: periodic bird scaring with propane guns; mobile bioacoustic installation; effective measures against spontaneous garbage dumps (Akkol village; termination of agricultural activity within the airport area.

UACK AD 2.24 Charts Related To An Aerodrome

Name	Page
Aerodrome Chart ICAO	UACK AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UACK AD 2.24.3-1
Aerodrome Obstacle Chart – ICAO – Type A RWY 02/20 ICAO	UACK AD 2.24.4-1
Area Chart ICAO	UACK AD 2.24.6-1
Standard Departure Chart Instrument (SID) RWY 02 ICAO	UACK AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 02 ICAO	UACK AD 2.24.7-2-1
Standard Departure Chart Instrument (SID) RWY 20 ICAO	UACK AD 2.24.7-3-1
Standard Departure Chart Instrument (SID) RWY 20 ICAO	UACK AD 2.24.7-4-1
Standard Arrival Chart Instrument (STAR) RWY 02 ICAO	UACK AD 2.24.9-2-1
Standard Arrival Chart Instrument (STAR) RWY 20 ICAO	UACK AD 2.24.9-3-1
ATC Surveillance Minimum Altitude Chart ICAO	UACK AD 2.24.10-1
Instrument Approach Chart - ILS/DME RWY 20 ICAO	UACK AD 2.24.11-1-1
Instrument Approach Chart - ILS/DME RWY 02 ICAO	UACK AD 2.24.11-2-1
Instrument Approach Chart – VOR/DME RWY 20 ICAO	UACK AD 2.24.11-3-1
Instrument Approach Chart – VOR/DME RWY 02 ICAO	UACK AD 2.24.11-4-1
Visual Approach chart – ICAO	UACK AD 2.24.12-1
VFR Departure/Arrival Chart	UACK AD 2.24.14-1

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

1	Apron surface and strength	APRON	STANDS	SURFACE	STRENGTH
		1	3 - 8A	NIL	NIL
		2	1, 1A, 2, 2A	CONC+ASPH	PCN 56/F/C/X/T
		2A	9-12	CONC+ASPH	PCN 65/F/C/X/T
2	Taxiway width, surface and strength	TWY	WIDTH (M)	SURFACE	STRENGTH
		A	23	CONC+ASPH	PCN 53/F/C/X/T
		B	Nil	GRASS	Nil
		C	Nil	GRASS	Nil
		D	Nil	GRASS	Nil
		E	Nil	GRASS	Nil
		TWY F from TWY E to TWY D	Nil	GRASS	Nil
		TWY F from TWY C to TWY A	Nil		
		H	Nil	GRASS	Nil
		I	Nil	GRASS	Nil
		J	Nil	GRASS	Nil
		L	23	CONC+ASPH	PCN 65/F/C/X/T
3	Altimeter checkpoint location and elevation	Nil			
4	VOR checkpoints	Nil			
5	INS checkpoints	Nil			
6	Remarks	Nil			

UAUU 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	Nil
4	Other runway protection measures	Nil
5	Remarks	Nil

UAUU AD 2.10 Aerodrome Obstacles

NIL

UAUU AD 2.11 Meteorological Information Provided

1	Associated MET Office	AMS Kostanay Phone: +7 (7142) 270182
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation: Periods of validity	AMSC Kostanay, 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, SWM+SWH, SWL of Kazakhstan;
8	Supplementary equipment AVBL for providing information	Nil
9	ATS units provided with information	Briefing, TWR
10	Additional information	Nil

UAUU 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	156.92°	2813 X 45	50/F/C/X/T CONC+ASPH	531312.74N 0633223.66E - -71.65 FT	THR 598.4 FT	Nil
32	336.94°	2813 X 45	50/F/C/X/T CONC+ASPH	531149.00N 0633323.08E - -71.95 FT	THR 571.87 FT	Nil

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 150	3113 X 300	90 X 140	Nil	Nil	At the end of RWY 14, there is a turn pad for 180-degree aircraft maneuvers, with a width of 92 meters. 180-degree turns on the runway are permitted for aircraft with index 3 or lower. All other aircraft may perform 180- degree turns only on designated turn pads. The runway width is 45 meters.
Nil	Nil	3113 X 300	250 X 140	Nil	Nil	At the end of RWY 32, there is a turn pad for 180-degree aircraft maneuvers, with a width of 92 meters. 180-degree turns on the runway are permitted for aircraft with index 3 or lower. All other aircraft may perform 180- degree turns only on designated turn pads. The runway width is 45 meters.

UAUU AD 2.13 Declared Distances

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
14	2813	3213	2813	2813	Nil
32	2813	2813	2813	2813	Nil
TWY B - 14	Nil	Nil	Nil	Nil	Nil
TWY D - 32	Nil	Nil	Nil	Nil	Nil

UAUU 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 I (PALS) 900 M LIH	GRN Nil	PAPI RIGHT/3°	Nil	Nil	2814m, spacing 60m, 0-2214 white, last 600m yellow	RED Nil	Nil	Nil
32	CAT I (PALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	2814m, spacing 60m, 0-2214 white, last 600m yellow	RED Nil	Nil	Nil

UAUU 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, 1 SEC
5	Remarks	Nil

UAUU AD 2.16 Helicopter Landing Area

NIL

UAUU AD 2.17 ATS Airspace

1	Designation and lateral limits	KOSTANAY CTR A circle radius 25 NM centered on 531113N 0633346E
2	Vertical limits	4000 FT ALT / GND
3	Airspace classification	C

4	ATS unit call sign Language(s)	KOSTANAY TOWER EN KOSTANAY VYSHKA RU
5	Transition altitude	10000 FT
6	Hours of applicability	ANY 02:00 - 00:00 UTC
7	Remarks	Nil

UAUU 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
TWR	KOSTANAY TOWER (EN) KOSTANAY VYSHKA (RU)	129,3 MHZ	Nil	Nil	ANY 02:00 - 00:00 UTC	Nil
ATIS	KOSTANAY ATIS (EN) KOSTANAY ATIS (RU)	118,5 MHZ 126,8 MHZ	Nil	Nil	As AD	ATIS information is being updated during AD working hours. Outside AD working hours ATIS information is not updated.

UAUU 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 I/D/2	IKT	111.7 MHZ	H24	531120.9N 0633343.0E		Nil	Nil
GP 14 I/C/2		333.5 MHZ		531301.1N 0633224.6E			
DME 14	IKT	CH 54X		531301.1N 0633224.6E	600 FT		

Type of aid, MAG VAR, ILS Classification, Type of supported OP (for VOR/ILS/ MLS, give declination)	ID	Frequency, Channel number	Hours of operatio n	Position of transmitting antenna coordinates	Elevation of DME transmitt ing antenna	Service volume radius from the GBAS referen ce point	Remar ks
1	2	3	4	5	6	7	8
ILS LOC 32 I/D/2	INA	110.7 MHZ	H24	531329.9N 0633211.5E		Nil	Nil
GP 32 I/C/2		330.2 MHZ		531156.3N 0633310.6E			
DME 32	INA	CH 44X		531156.3N 0633310.6E	600 FT		
DVOR/DME (13°E/2022)	KST	114.8 MHZ CH 95X	H24	531113.0N 0633345.5E	600 FT	Nil	Nil

UAUU AD 2.20 Local Aerodrome Regulations

1. Aircraft movement procedures (towing, taxiing) on the airfield.

For arriving aircraft

Runway vacation is reported on taxiway only when ILS critical area marked with lights indicators is vacated.

Taxiing and towing

Aircraft movement on the aerodrome is carried out under its own power and with towing car. Taxiing and towing are carried out via fixed marking.

Parking an aircraft to the parking stand is carried out by command of meeting person. Start and testing of engines in idle mode on aircraft stands are allowed by request from the "Tower" with safety precautions. Testing (run-up) of aircraft engines on modes exceeding the idle modes should be carried out on holding position on taxiway A.

For departing aircraft.

The aircraft taxi to take-off under its own power. Aircraft should stop in front of light indicator of ILS critical area at holding position.

2. Safety precautions during taxiing, towing of aircraft considering visibility and surface conditions of apron, aircraft stands and taxiways.

In poor visibility during the day up to 2000 m or less:

- aerodrome lighting system should be switched on;
- aerodrome service should carry out additional visual inspection of the aerodrome and its elements before every take-off or landing; the results of the inspection are sent to the air traffic controller of control point "Tower", and record is made in a special register;
- when the visibility is less than 400 m the aircraft taxiing is carried out by following the follow me car;
- the towing of aircraft with started engine on snow covered with ice (slippery) apron is prohibited.

3. The procedure of taxiing-in to the parking places under its own power and towing.

Taxiing-in to parking place is carried out by the responsible person signals of the aircraft operational

maintenance section.

Assignment of parking stands for arriving aircraft should be carried out by the air traffic controller of the Operating Flight Service (OFC) of airport with following informing the air traffic controller of control point "Tower" and Engineering Technical Service no later than 20 min before landing. The Engineering Technical Service is responsible for safety of the aircraft movement to the parking place. The aircraft must be parked at the parking stand according to markings.

4. The procedure of taxiing out from parking places under its own power and towing

Taxiing out from the parking place is should be carried out with the clearance of control point "Tower" by the signals of the responsible person of the aircraft operational maintenance section.

5. Deicing area, main engines start area, deviation area.

Aircraft deicing area – parking stands.

Main engine start area – on available stands.

Deviation area - are not available.

6. Aircraft and vehicles movement procedures in ILS critical and sensitive areas at aerodrome operation on ICAO minima category 1, 2, and.

For departing aircraft.

Aircraft should stop in front of ILS critical area light indicator on holding position. Taxiing to line-up position by the command of control point "Tower". Vehicles are forbidden to cross and to be in critical and sensitive areas of ILS, without the coordination and permission of the control point "Tower".

(Aerodrome Kostanay has not been categorized)

7. Restrictions in the operation of large aircraft, including restrictions on the use of its own power for taxiing (if such restrictions are available)

Taxiing of aircraft of index 4 (Tu-134, Yak-42 and An-12) on the taxiway-E, taxiway-D, taxiway-F (from the taxiway-E to taxiway-C), index 3 (Yak-40, IL-114 , E-190) on the taxiway-B, index 6 (IL-76, B-757), index 5 (Tu-154), index 4 (B-727, B-737, Tu-134, Yak-42) on the taxiway-A and taxiway-F (from taxiway-D to taxiway-A), index 6 (IL-76, B-757), index 5 (An-12 and Tu-154), index 4 (A-320, B-737, Tu-134, An-12, Yak-42), index 3 (An-24, Yak-40, IL-114) on the taxiway-C to carry out strictly according to the marking of taxiway center line and at increased attention of the crew compliance with the safe distance from the wheels of landing gear truck before the covering edges. IL-76 - under 2 inboard engines!

8. Taxiing in winter conditions (apron) in case if some taxiways are not equipped with lights of center line, and they cannot be visible due to snow.

Decision on the necessity of leading is taken by the shift chief of the Operating Flight Service of airport (flight supervisor) or on the request of the crew.

The leading of aircraft is carried out by the aerodrome service of airport as well as "Leading of aircraft at the aerodrome "Kostanay" Manual" dated May 30, 2011, on the vehicle, specially equipped for this purpose. The leading of aircraft is carried out in difficult weather conditions, when visibility is less than 400 m., or in cases when maneuvering area markings for aircraft and service vehicles movement are not visible (due to snow or other reasons), during following up the aircraft of litter "A", "OK" as well as on the request of crew. Thereby the engineer of aerodrome service shall perform the on-duty functions on following up the aircraft.

9. Removal of disabled aircraft.

Initial actions to ensure the safety of the damaged aircraft, its special equipment and the aircraft documents, any other actions specified by normative documents on the classification and investigation of aviation accidents, before the arrival of investigation commission, is assigned to the crew of aircraft and officers of Airport JSC, in whose territory the aircraft was damaged.

An official person of Airport JSC should notify the owner of aircraft about the nature of the damage, possibility and terms of the evacuation of aircraft, proposals on the procedure of its reconstruction.

Evacuation of aircraft from accident site should be carried out with the permission of the commission investigating the accident. Execution of works on evacuation is assigned to Director of "International Airport" Kostanay" JSC.

The Director of "International Airport" Kostanay" JSC approved for evacuation of the damaged aircraft should:

- to complete from employees of the Engineering Aviation Service the non-staff unit of airport on evacuation;
- to prepare a crew to work on the evacuation considering the aircraft location, access roads to it, planned to use of lift and transportation funds;
- provide the crew:
 - with special tools and instruments;
 - with means of load-lifting, transport, communication, lighting, ground handling, rigging, fire-fighting;
 - with materials needed for packaging and transportation of equipment and parts of aircraft;
 - with containers for collection of drainable oil products.

The preparation to the evacuation of aircraft at the scene of accident includes:

- site equipping for lifting of aircraft and storing of removing equipment, engine and airframe parts;
- preparation of access ways to the aircraft and for remove it to the road, suitable for transportation;
- Approval of route, transportation, safety measures, guiding with representatives of the State Traffic Inspectorate;
- works in order to prevent exposure of toxic fluids on human, radiation of radioactive devices;
- dismantling of electric accumulators from board of aircraft;
- dismantling of equipment and parts of the airframe, removal of which is reasonable before lift and placing the aircraft on supports or vehicle;
- lifting and placing an aircraft on acceptable for dismantlement supports;
- draining fuel and lubrication materials, service liquids from tanks (containers) and airframe systems, engines, out gassing from the vessel under pressure;
- dismantling of equipment requiring special storage conditions or preservation;
- works on the aircraft associated with its preparation for evacuation should be carried out in accordance with the requirements of operational documentation. In preparing for the evacuation of aircraft, during transportation and unloading to take measures on occupational safety and health and excluding additional damages of aircraft, dismantled parts and items. Evacuation of damaged aircraft from the airfield:
 1. Damaged (overran) aircraft should be removed from airfield with the permission of the Chairman of the commission on investigation of the aviation accident or on the direction of the Director of "International Airport" Kostanay" JSC;
 2. Evacuation of aircraft should be carried out after passengers and crew left the aircraft, luggage, mail and cargo unloaded, fuel and special fluids from tanks and systems drained, electric accumulators removed.
 3. Evacuation work should be carried out in compliance with all precautionary measures excluding

further damage of aircraft, and in the presence of fire brigade SPASOP. Procedure of performance is determined by instructions for evacuation

4. When aircraft which is damaged at the airfield and not repairable, prevents for take-off, landing and taxiing of other aircraft, this aircraft should be removed from runway, safety strips and taxiways using specially adapted cables and tractors by the decision of the Director of "International Airport» Kostanay" JSC. Herewith it's necessary to take measures to prevent the risk of fire, damage of equipment, which has not been destroyed in the crash, and to ensure the safety of people.
5. Responsibility for the organization of aircraft evacuation from the airfield in the territory of "Kostanay" airport is assigned to Director of "International Airport" Kostanay" JSC.
6. Direct supervision of works on evacuation is assigned to Head of the Engineering Aviation Service, and in his absence – to the leading engineer of the Engineering Aviation Service, "International airport" Kostanay" JSC.
7. The evacuation is carried out by non-staff unit of IAS. If necessary, to involve specialists of other services and divisions of "International Airport" Kostanay" JSC, as well as representatives of the airline of the aircraft owner and cooperating organizations.

UAUU AD 2.21 Noise Abatement Procedures

NIL

UAUU AD 2.22 Flight Procedures

1. Flight and ground movement procedures.

Departing aircraft shall fly over fix points on the predetermined heights with IAS limitations, noted on SID and instrument approach charts.

Aircraft takeoff and landing with tailwind is permitted when tailwind speed is not greater than value set by Flight Operational manual of each aircraft type. Final decision of tailwind landing/takeoff shall be made by pilot-in-command.

Takeoff shall be performed from the starting point of RWY where runway physical characteristics complies required actual aircraft takeoff weight and takeoff conditions.

Helicopter lift-off and landing shall be carried out from RWY (intersection of TWY and RWY), and from helicopter pads, determined by AAP.

Aircraft ground movement on manoeuvring area shall be carried out by taxiing or towing. Taxiing and towing shall be carried out strictly along TWY centreline, apron and stand guideline.

Taxiing (towing) of aircraft shall be carried out by instructions of Tower ATC. Taxiing speed shall be set by pilot-in-command according to the condition of TWY, presence of obstacles, aircraft weight, wind conditions and visibility.

In all cases taxiing speed should not exceed speed set by Flight Operational manual of this type of aircraft.

ATC is responsible for taxi route assignment; pilot-in-command is responsible for taxiing rules compliance; person, assigned for control taxiing on the airfield section, is responsible for safety.

Helicopter taxiing shall be carried out with wind limitations, according to Flight Operational manual, at constant visibility of landmarks located in front.

Hover taxiing with General flight rules observance shall be carried out in case of ground taxiing unavailability (poor ground surface conditions or helicopter design doesn't allow to ground taxi).

2. Low Visibility Procedures.

Low Visibility Procedures (LVP) are effected when RVR is less than 550 m when manoeuvring area or part thereof is not visually monitored from the "Tower" control centre. Low Visibility Procedures are cancelled when

RVR is greater than 550 m.

Low Visibility Procedures are initiated by Air traffic Manager, in case of his absence - by Tower ATC.

The following procedure shall be carried out in case of low visibility conditions, when Tower ATC is not able to control aircraft movement on the manoeuvring area:

- Clearance for TWY entering shall be given only after received report of TWY vacation from other aircraft or vehicle.

Control the obstacles on RWY and in ILS critical areas is carried out by air traffic controller according to reports of flight crew or aerodrome service specialist reports. The report of runway vacation shall be passed only after vacation of ILS critical area indicated by the light signs.

Taxiing into the apron after RWY vacation shall be carried out after follow-me car. Taxiing into stand shall be carried out by marshaller's signals.

Taxiing of departing aircraft from stand to holding position shall be carried out after follow-me car. Aircraft shall stop at the holding position before the light sign indicating the ILS critical area.

The operation of LVP shall be reported by Tower ATC phrase: "LOW VISIBILITY PROCEDURES IN OPERATION".

"Tower" controller informs pilots about any changes in the operational status of radio and lighting equipment.

3. 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. Flight crew should ensure safety of that clearance. VFR flights at altitudes below 1000 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 1000 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 (southern outskirts of Lysanovka)	N532940 E0630540	306° 25.0 nm KST DVOR/DME	Entry/exit
2	BRAVO (northern outskirts of Vladimirovka)	N532924 E0640221	031° 25.0 nm KST DVOR/DME	Entry/exit

№	Waypoint name (visual reference)	Geographical coordinates	Radial (mag.) and distance from NAVAID (ARP)	Remarks
3	CHARLIE (SE outskirts of Shcherbakovo)	N530853 E0641508	083° 25.0 nm KST DVOR/DME	Entry/exit
4	TANGO (eastern outskirts of Pervomaiskoe)	N525919 E0641014	106° 25.0 nm KST DVOR/DME	Entry/exit
5	DELTA (western outskirts of Semenovka)	N524903 E0635249	141° 25.0 nm KST DVOR/DME	Entry/exit
6	HOTEL (SW outskirts of Rudnyi)	N525600 E0630054	221° 25.0 nm KST DVOR/DME	Entry/exit
7	DVOR/DME KST	N531113 E0633346		Holding
8	LIMA (western outskirts of Sheminovskoe)	N532400 E0632559	328° 13.6 nm KST DVOR/DME	Holding
9	GOLF (northern outskirts of Zarechnoe)	N531410 E0634410	053° 6.9 nm KST DVOR/DME	Holding
10	MIKE (southern outskirts of Ryspai)	N525702 E0633712	160° 14.4 nm KST DVOR/DME	Holding
11	PAPA (western outskirts of Zhdanovka)	N530931 E0632322	243° 6.5 nm KST DVOR/DME	Holding

UAUU 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. Bird concentration near airport.

The intensive flights of birds take place daily during 1-2 hours before/after sunset, when birds fly from the lake (1500 km west of the RWY) across the RWY and approach area of RWY 14 and RWY 32 to north or north-west from the airport. The height of bird flights varies from 0 till 600m above ground level. Birds fly back to the lake 1-2 hours before sunset.

The main migration direction in spring: from southwest to north-east; in autumn: in the counter direction. There is a great concentration of birds at the aerodrome area in autumn. That presents a great danger to flights from sunrise till sunset.

In case of necessity, the dispatcher of ATC "Tower" informs pilots about bird flights and approximate heights above ground level.

The mentioned above time intervals pilots are recommended, if design characteristics of airborne equipment allows, to switch on landing lights during the flights in aerodrome area, during take-off, approach, climbing, descent.

Bird concentration scattering measures include:
periodical bird deterrence, effective measures regarding to scavenging, removal of green plantations and ground covering, abandon of agricultural activity within the airport area.

UAUU AD 2.24 Charts Related To An Aerodrome

Name	Page
Aerodrome Chart ICAO	UAUU AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UAUU AD 2.24.3-1
Standard Departure Chart Instrument (SID) RWY 14 ICAO	UAUU AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 32 ICAO	UAUU AD 2.24.7-2-1
Standard Arrival Chart Instrument (STAR) RWY 14 ICAO	UAUU AD 2.24.9-1-1
Standard Arrival Chart Instrument (STAR) RWY 32 ICAO	UAUU AD 2.24.9-2-1
ATC Surveillance Minimum Altitude Chart ICAO	UAUU AD 2.24.10-1
Instrument Approach Chart – ILS/DME RWY 14 ICAO	UAUU AD 2.24.11-1-1
Instrument Approach Chart – ILS/DME RWY 32 ICAO	UAUU AD 2.24.11-2-1
Instrument Approach Chart – VOR/DME - Z RWY 14 ICAO	UAUU AD 2.24.11-3-1
Instrument Approach Chart – VOR/DME RWY 32 ICAO	UAUU AD 2.24.11-4-1
Instrument Approach Chart – VOR/DME - Y RWY 14 ICAO	UAUU AD 2.24.11-7-1
Visual Approach chart – ICAO	UAUU AD 2.24.12-1
VFR Departure/Arrival Chart	UAUU AD 2.24.14-1

2	Clearance priorities	1. RWY 2. TWY 3. Stands
3	Remarks	(Seasonal availability: All seasons, caution advised in winter during snow conditions) Type of anti-icing reagent: "Green Way SFU" brand A (granular)

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

1	Apron surface and strength	STANDS		SURFACE	STRENGTH
		1-3		CONC+ASPH	PCN 67/F/C/X/T
		4, 5, 6, 8		CONC+ASPH	PCN 60/F/C/W/T
		7, 9, 10		CONC+ASPH	PCN 59/F/C/W/T
		AN-2, MI-8		CONC+ASPH	PCN 5/F/C/Y/T
2	Taxiway width, surface and strength	TWY	WIDTH (M)	SURFACE	STRENGTH
		A	24	CONC+ASPH	PCN 67/F/C/X/T
		B	24	CONC+ASPH	PCN 53/F/C/W/T
3	Altimeter checkpoint location and elevation	Nil			
4	VOR checkpoints	Nil			
5	INS checkpoints	Nil			
6	Remarks	Nil			

UAOO 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 threshold, touchdown zones, aiming point, undershoot area, turning line, turning line edge, centre line, RWY edges, RWY designation. Edge lights of RWY, TWY A and TWY B
3	Stop bars	Nil
4	Other runway protection measures	Nil
5	Remarks	RWY 05/23 ACFT with max TKOF mass more than 30000kg shall carry out turnings at RWY turn pad only

UAOO AD 2.10 Aerodrome Obstacles

NIL

UAOO AD 2.11 Meteorological Information Provided

1	Associated MET Office	Meteorological service Kyzylorda Phone: +7 (7242) 261798
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation: Periods of validity	Meteorological service Kyzylorda, 2 9 HR (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, SWM+SWH, SWL of Kazakhstan;
8	Supplementary equipment AVBL for providing information	Doppler weather radar (DWR-C)
9	ATS units provided with information	Briefing, TWR
10	Additional information	Nil

UAOO 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
05	61,32°	2700 X 45	53/F/C/W/T CONC+ASPH	444201.89N 0653432.79E - -123 FT	THR 424.5 FT	0.2%
23	241,34°	2700 X 45	53/F/C/W/T CONC+ASPH	444243.85N 0653620.40E - -123.4 FT	THR 433.1 FT	-0.2%

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	3000 X 300	100 X 150	Nil	AVBL	Nil
Nil	250 X 150	3000 X 300	100 X 150	Nil	Nil	Nil

UAOO AD 2.13 Declared Distances

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
05	2700	2950	2700	2700	Nil
23	2700	2950	2700	2700	Nil

UAOO 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
05	CAT I (HIALS) 900 M LIH	GRN Nil	PAPI LEFT/3° 16,2 M	Nil	Nil	2700m, 0-2100m white, spacing 60m, last 600m yellow LIH	RED Nil	Nil	Nil
23	(HIALS) 900 M LIH	GRN Nil	PAPI LEFT/3° 16,3 M	Nil	Nil	2700m, 0-2100m white, spacing 60m, last 600m yellow LIH	RED Nil	Nil	Nil

UAOO 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 Anemometer: 350m from RWY05 to ARP, 350m from RWY23 to ARP
3	TWY edge and centre line lighting	TWY A EDGE: BLU TWY B EDGE: BLU
4	Secondary power supply/switch-over time	AVBL, 1 sec
5	Remarks	Nil

UAOO AD 2.16 Helicopter Landing Area

NIL

UAOO AD 2.17 ATS Airspace

1	Designation and lateral limits	KYZYLORDA CTR 445812N 0655209E - 444136N 0660448E - 442430N 0652105E - 444102N 0650816E - 445812N 0655209E
2	Vertical limits	2200 FT ALT / GND
3	Airspace classification	C
4	ATS unit call sign Language(s)	KYZYLORDA TOWER EN KYZYLORDA VYSHKA RU
5	Transition altitude	10000 FT
6	Hours of applicability	See NOTAM
7	Remarks	Nil

UAOO 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
TWR	KYZYLORDA TOWER (EN) KYZYLORDA VYSHKA (RU)	120,9 MHZ	Nil	Nil	See NOTAM	Nil
Production and dispatcher service	KYZYLORDA TRANZIT (EN) KYZYLORDA TRANZIT (RU)	131.175 MHZ	Nil	Nil	As AD	Nil
ATIS	KYZYLORDA ATIS (EN) KYZYLORDA ATIS (RU)	134,9 MHZ 122.9 MHZ	Nil	Nil	As AD	ATIS information is being updated during AD working hours. Outside AD working hours ATIS information is not updated.

UAOO 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 05 I/D/2	IKZ	111,1 MHZ	H24	444258.5N 0653658.0E		Nil	Nil
GP 05 I/C/2		331,7 MHZ		444202.0N 0653447.4E			
DME 05	IKZ	CH 48X		444202.0N 0653447.4E	400 FT		
DVOR/DME (7°E/2022)	KZO	112.7 MHZ CH 74X	H24	444144.9N 0653349.3E	500 FT	Nil	Nil

AERODROME OBSTACLE CHART - ICAO
TYPE A (OPERATING LIMITATIONS)

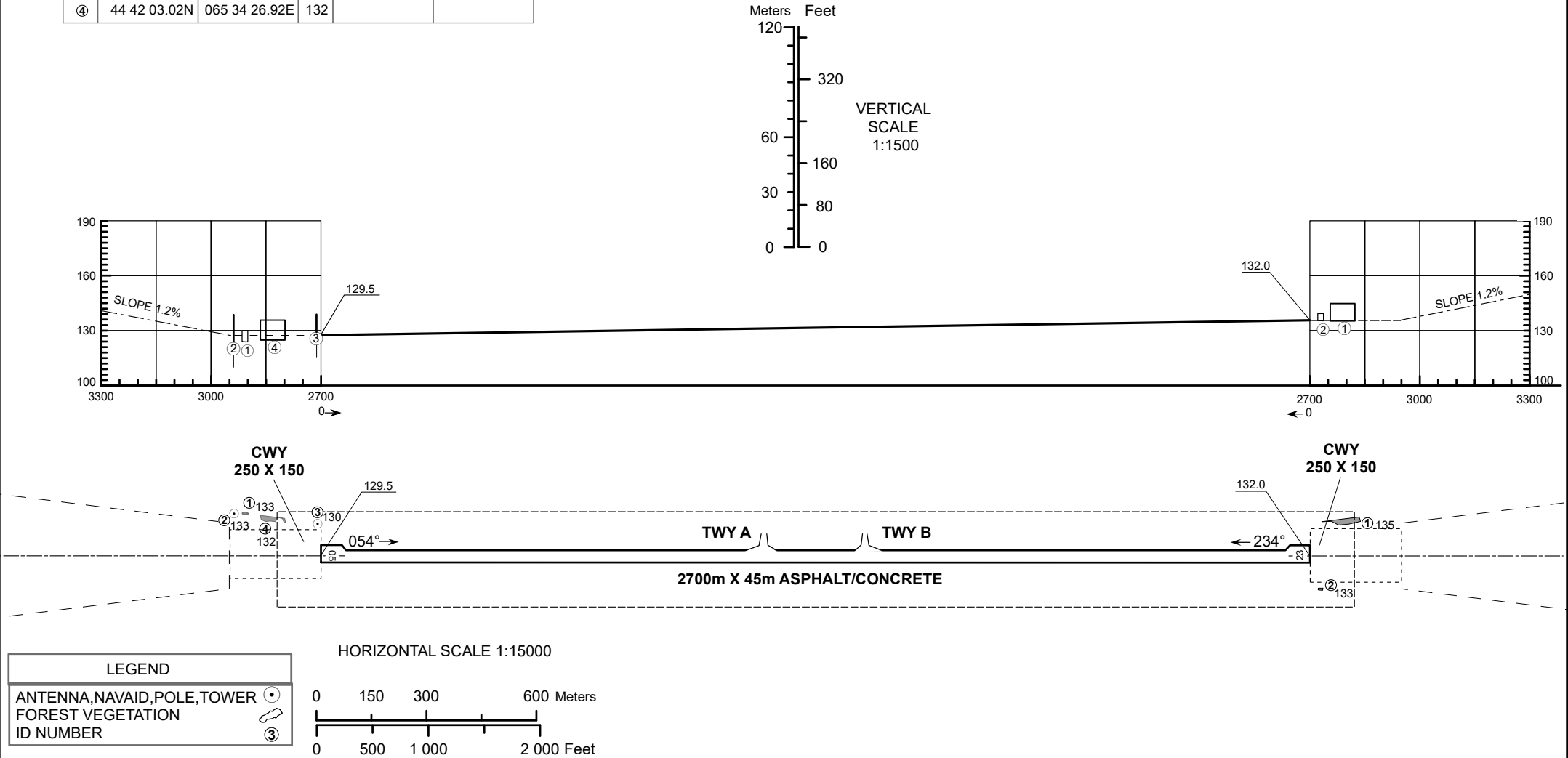
KYZYLORDA

DIMENSIONS AND ELEVATIONS IN METERS
MAGNETIC VARIATION 7° E (2022)

ORDER OF ACCURACY					
№	LAT	LON	H	Horizontal, m	Vertical, m
①	44 42 02.08N	065 34 22.43E	133	0.011	0.022
②	44 42 01.51N	065 34 20.82E	133		
③	44 42 04.26N	065 34 30.53E	130		
④	44 42 03.02N	065 34 26.92E	132		

RWY 05/23		
DICLARED DISTANCES		
RWY 05		RWY 23
2700	TAKE-OFF RUN AVAILABLE	2700
2950	TAKE-OFF DISTANCE AVAILABLE	2950
2700	ACCELERATE STOP DISTANCE AVAILABLE	2700
2700	LANDING DISTANCE AVAILABLE	2700

ORDER OF ACCURACY					
№	LAT	LON	H	Horizontal, m	Vertical, m
①	44 42 47.44N	065 36 20.63E	135	0.011	0.022
②	44 42 41.69N	065 36 23.18E	133		



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

1	Apron surface and strength	STANDS		SURFACE	STRENGTH
		1,4		CONC+ASPH	PCN 51/F/C/X/T
		2,3		CONC+ASPH	PCN 32/F/C/X/T
		5		CONC+ASPH	PCN 26/F/C/Y/T
		9		CONC+ASPH	PCN 28/F/C/Y/T
		6-8		CONC	PCN 14/R/B/X/T
		10-12		CONC+ASPH	PCN 14/R/B/X/T
2	Taxiway width, surface and strength	TWY	WIDTH (M)	SURFACE	STRENGTH
		A	23	CONC+ASPH	PCN 53/F/C/X/T
3	Altimeter checkpoint location and elevation	Nil			
4	VOR checkpoints	Nil			
5	INS checkpoints	Nil			
6	Remarks	Nil			

UASP 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-boards 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	Nil
4	Other runway protection measures	Nil
5	Remarks	Nil

UASP AD 2.10 Aerodrome Obstacles

NIL

UASP AD 2.11 Meteorological Information Provided

1	Associated MET Office	Meteorological service Pavlodar Phone: +7 (7182) 491373
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation: Periods of validity	Meteorological service Pavlodar, 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, 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

UASP 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
03	42,66°	2500 X 45	66/F/C/X/T CONC+ASPH	521113.50N 0770339.41E - -125.7 FT	THR 382.9 FT	See AOC type A
21	222.68°	2500 X 45	66/F/C/X/T CONC+ASPH	521212.95N 0770508.58E - -125.7 FT	THR 410.4 FT	See AOC type A

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	150 X 160	2620 X 300	90 X 150	Nil	Nil	RWY 03 turn pad: length 100 m, width 75 m.
Nil	300 X 160	2620 X 300	90 X 150	Nil	Nil	RWY 21 turn pad: length 100 m, width 75 m.

UACP AD 2

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

UACP AD 2.1 Aerodrome Location Indicator And Name

UACP - PETROPAVLOVSK

UACP AD 2.2 Aerodrome Geographical And Administrative Data

1	ARP coordinates and site at AD	544632N 0691110E At the centre of RWY
2	Direction and distance from (city)	162°, 5.9 NM from Petropavlovsk
3	Elevation/Reference temperature	458 FT/23° C
4	Geoid undulation at AD ELEV PSN	-82 FT
5	MAG VAR/Annual Change	12° E (2013) / 0,02° increasing
6	AD Administration, address, telephone, telefax, telex, AFS	Post: Authority of Airport 150010, Republic of Kazakhstan, Petropavlovsk, North-Kazakhstan region, Kyzylzhar region, Pribrezhnyi rural district, post office box 28 JSC "Petropavlovsk International Airport" Phone: +7 (7152) 462556 Fax: +7 (7152) 462556 Phone: +7 (7152) 463142 passengers service organization AFS: UACPAPXX AFS: UACPAPBF Email: petr_airport@mail.ru
7	Types of traffic permitted (IFR/VFR)	IFR-VFR
8	Remarks	Nil

UACP AD 2.3 Operational Hours

1	AD Operator	See NOTAM Phone: +7 (7152) 462556 Phone: +7 (7152) 400173
2	Customs and immigration	ANY 02:30 - 11:00 UTC Phone: +7 (7152) 463329 Phone: +7 (7152) 469843 Phone: +7 (7152) 394835
3	Health and sanitation	ANY 02:30 - 11:00 UTC Phone: +7 (7152) 463142
4	AIS Briefing Office	ANY 03:00 - 12:00 UTC
5	ATS Reporting Office (ARO)	ANY 03:00 - 12:00 UTC Phone: +7 (7152) 461213
6	MET Briefing Office	HO Phone: +7 (7152) 464773
7	ATS	See NOTAM Phone: +7 (7152) 461213
8	Fuelling	ANY 03:00 - 12:00 UTC Phone: +7 (7152) 463142

9	Handling	ANY 03:00 - 12:00 UTC
10	Security	H24
11	De-icing	ANY 03:00 - 12:00 UTC Phone: +7 (7152) 399730
12	Remarks	Nil

UACP AD 2.4 Handling Services And Facilities

1	Cargo-handling facilities	Modern handling up to 3 tonnes weight
2	Fuel/oil types	TS-1
3	Fuelling facilities/capacity	2 tankers TZ-MAZ 7500 liters, 350 liters/min TZ-KAMAZ 30000 liters, 1200 liters/min
4	De-icing facilities	De-icing machine LMD-2000
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Air start unit: TUG TMD 270-CIII – 1 unit, Power Supply: ElectroAir - 1 unit: 1x 28.5DCV, 2x115 ACV 400Hz, 1 unit: 2x115 ACV 400Hz, Autoprades: Isuzu NPR66 - 2 units, height up to 5m.

UACP AD 2.5 Passenger Facilities

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

UACP AD 2.6 Rescue And Fire Fighting Services

1	AD category for fire fighting	CAT A5
2	Rescue equipment	2 fire trucks, volume = 19200 litres (water), 1300 litres (blowing agent). Device for coating runway foam. Towing ambulance.
3	Capability for removal of disabled aircraft	Aircraft up to 30 tons, that have lost it capability to move, can be removed without destroying the landing gear. Phone: +7 (7152) 462556 Phone: +7 (7152) 340454 Email: petr_airport@mail.ru
4	Remarks	The possibility of increasing the required level of fire protection up to 7 categories on request.

UACP AD 2.7 Seasonal Availability - Clearing

1	Types of clearing equipment	2 plow brush machines, 1 rotor
2	Clearance priorities	1. RWY 2. TWY 3. Stands
3	Remarks	(Seasonal availability: All seasons, caution advised in winter during snow conditions) The anti-icing reagent GREEN WAY "A" is used for ice removal on RWY, TWY, apron

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

1	Apron surface and strength	STANDS		SURFACE	STRENGTH
		1		CONC+ASPH	PCN 63/F/D/X/T
		3, 4		CONC+ASPH	PCN 50/R/C/X/T
		2, 5, 6, 7, 8		CONC+ASPH	PCN 57/F/D/X/T
2	Taxiway width, surface and strength	TWY	WIDTH (M)	SURFACE	STRENGTH
		A	23	CONC+ASPH	PCN 50/R/C/X/T
3	Altimeter checkpoint location and elevation	Apron 140m (459ft) THR 23 139.461m (458ft) THR 05 135.276m (444ft)			
4	VOR checkpoints	Nil			
5	INS checkpoints	Nil			
6	Remarks	Stands 5-8 can be used for helicopter take-off/landing			

UACP 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	"Apron" sign on yellow background in black letters
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	1 Leading VANs «Follow me» AVBL 1 NIVA CHEVROLET VAZ-2123

UACP AD 2.10 Aerodrome Obstacles

NIL

UACP AD 2.11 Meteorological Information Provided

1	Associated MET Office	Meteorological service Petropavlovsk Phone: +7 (7152) 464773
2	Hours of service MET Office outside hour	HO

3	Office responsible for TAF preparation: Periods of validity	Meteorological service Petropavlovsk, 9HR (0312,0615,0918,1221)
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 (DWR-C)
9	ATS units provided with information	Briefing, TWR
10	Additional information	Nil

UACP 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
05	65,52°	2801 X 45	63/F/D/XT CONC+ASPH	544612.89N 0690958.74E - -82 FT	THR 443.9 FT	0,45%
23	245,55°	2801 X 45	63/F/D/X/T CONC+ASPH	544650.42N 0691221.41E - -82 FT	THR 457.7 FT	0,086%

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 150	3101 X 300	150 x 250	Nil	AVBL	The RWY turn pad length is 116 m, the total width of the RWY turn pad is 75 m. Refer to AIP section 2.24.1

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 150	3101 X 300	150 x 250	Nil	AVBL	The RWY turn pad length is 116 m, the total width of the RWY turn pad is 75 m. Refer to AIP section 2.24.1

UACP AD 2.13 Declared Distances

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
05	2801	3201	2801	2801	Nil
23	2801	3201	2801	2801	Nil

UACP 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
05	(SALS) 420 M LIL	GRN Nil	PAPI LEFT/3°	Nil	Nil	2802m, spacing 60m, 0-2202m white, last 600m yellow LIH	RED Nil	Nil	Nil
23	CAT I (PALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	2802m, spacing 60m, 0-2202m white, last 600m yellow LIH	RED Nil	Nil	Nil

UACP 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, 0 sec
5	Remarks	Nil

UACP AD 2.16 Helicopter Landing Area

NIL

UACP AD 2.17 ATS Airspace

1	Designation and lateral limits	PETROPAVLOVSK CTR A circle radius 25 NM centered on 544703N 0691309E
2	Vertical limits	4000 FT ALT / GND
3	Airspace classification	C
4	ATS unit call sign Language(s)	PETROPAVLOVSK TOWER EN PETROPAVLOVSK VYSHKA RU
5	Transition altitude	10000 FT
6	Hours of applicability	See NOTAM
7	Remarks	Nil

UACP 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
TWR	PETROPAVLOVSK TOWER (EN) PETROPAVLOVSK VYSHKA (RU)	123,7 MHZ	Nil	Nil	See NOTAM	Nil
ATIS	PETROPAVLOVSK ATIS (EN) PETROPAVLOVSK ATIS (RU)	127,4 MHZ 118,3 MHZ	Nil	Nil	As AD	ATIS information is being updated during AD working hours. Outside AD working hours ATIS information is not updated.

UACP 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 23 I/D/2	IPT	108.3 MHZ	H24	544600.3N 0690911.0E		Nil	Nil
GP 23 I/C/2		334.1 MHZ		544641.4N 0691208.5E			
DME 23	IPT	CH 20X		544641.4N 0691208.5E	500 FT		
DVOR/DME (12°E/2017)	PSK	112,5 MHZ CH 72X	H24	544702.9N 0691308.7E	500 FT	Nil	Nil

UACP AD 2.20 Local Aerodrome Regulations

1. Procedure for the movement (towing, taxiing) of aircraft on the airfield.

For arriving aircraft

The RWY clearance report is made to the TWY only after the ILS critical area, indicated by light indicators, has been cleared.

Taxiing and towing

Aircraft movement on the airfield is carried out using their own engines and towing by tractors. Taxiing and towing are performed according to the established markings.

Aircraft parking at the parking lot is carried out on the instructions of the meeting person. At the Apron Parking Place it is allowed to start and test the engines in "low throttle" modes upon request of the Tower Dispatch Center, taking into account safety measures. Testing (racing) of aircraft engines on modes exceeding "low throttle" is performed at the preliminary start on Taxiway A.

For departing aircraft.

Aircraft take off on the thrust of their own engines. At pre-launch, aircraft must stop in front of the ILS critical zone light.

2. Taxiing/towing precautions with taking onto account visibility conditions, surface condition of runway, apron, stands and taxiways.

When daytime visibility deteriorates to 2000m or less:

- the airfield lighting and signalling equipment is switched on;
- before each aircraft takeoff or landing, the aerodrome service performs an additional visual inspection of the airfield and its elements; the results of the inspection are transmitted to the dispatcher of Dispatch Center "Tower", and a record is made in a special logbook;
- If visibility is less than 400m, the aircraft shall be taxied behind the escort vehicle.
- It is prohibited to tow an aircraft with the engine running on a snow-covered, ice-covered (slippery) apron.

3. Taxiing into stands under own engines power and by towing.

Rolling into the parking place is performed by signals of the person in charge of the aircraft operational and technical maintenance area..

Allocation of parking places for arriving aircraft shall be made by the PDSA dispatcher with subsequent informing of the dispatcher of Dispatch Center "Tower", and the Engineering and Maintenance Department no later than 20 minutes prior to landing. The engineering and technical staff shall be responsible for the safe movement of the aircraft to the parking place. The aircraft shall be parked exactly according to the markings.

Note: In the absence of towing transport, taxiing to the parking lot should be performed on the apron pavement of the taxiing axis of the aircraft should be drawn with dotted lines of yellow color, taking into account the distance for the aircraft index specified in p.44 Order of the Minister of Investment and Development of the Republic of Kazakhstan dated March 31, 2015 № 381 "On approval of the norms of airfields (helicopters) of civil aviation airworthiness for operation" the distance between the centerline of the taxiing route on the apron and fixed obstacles shall be not less than 28.5 m for aircraft of index 4.

4. Taxiing out of stands under own engines power and by towing.

Departure from the parking place is performed with the permission of the Tower Dispatch Center on the signals of the responsible person of the aircraft operational and technical maintenance section.

5. De-icing areas, engine start-up areas, deviation areas.

Places where aircraft are treated with anti-icing fluids - Parking area.

Locations for launching marshaling engines - at existing parking lots.

Deviation sites - not available.

6. Procedure for movement of aircraft and vehicles in critical and sensitive areas of course-glide beacons when the airfield is operating under ICAO category 1, 2 and 3 minimums ICAO.

For departing aircraft.

Aircraft on pre-launch must stop in front of the ILS critical zone light. Taxiing to the executive launch as instructed by the Tower Control Center. Vehicles are prohibited to cross and stay in the critical and sensitive areas of the curs glissade beacons without the agreement and permission of the Tower Control Room.

7. Restrictions in the operation of large aircraft including restrictions on the use of its own power for taxiing.

Aircraft taxiing at Petropavlovsk airfield of class "B" ("4D"), designed for international flights, are operated aircraft type B767-200/300 II-76 TD (index 6), B757- 200/300, B737-200/300/400/500/600/700/800, A320-200, Tu-154 (index 5) and other aircraft of lower class and index;

operation of B747-8F, A340-600 type aircraft with full weight with intensity limitation up to 10 flights per day.

8. Taxiing in winter conditions (apron), in case some taxiways are not equipped with centerline lights and they may not be visible due to snow.

The decision on the necessity of leading is made by the shift supervisor of the Airport Dispatch Center (Flight Director) or at the request of the crew.

Leading of aircraft is performed by the airport's aerodrome service using a vehicle specially equipped for this purpose. Leading of aircraft is carried out in difficult weather conditions, in visibility less than 400 m., or in cases of lack of visibility of marking lines for aircraft and special vehicles (due to snow cover or other reasons), in the case of aircraft escorting "A", "OK", as well as at the request of the crew. In this case, the aerodrome service engineer performs the functions of an aircraft escort duty officer.

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

Initial actions to ensure the safety of the damaged aircraft, its special equipment and ship documentation, other actions stipulated by the regulatory documents on classification and investigation of aviation accidents, until the arrival of the investigation commission, shall be assigned to the aircraft crew and the officials of the Limited Liability Partnership airport on whose territory the aircraft was damaged.

An official of the airport Limited Liability Partnership shall notify the owner of the aircraft about the nature of the damage, the possibility and terms of evacuation of the aircraft, and proposals on the procedure for its recovery.

Evacuation of aircraft from the site of an Aviation Accident shall be carried out with the permission of the commission investigating the accident. The Director of the Limited Liability Partnership "Kyzyl-Zhar International Airport" shall be responsible for evacuation.

Director of the Limited Liability Partnership "Kyzyl-Zhar International Airport" Ltd. who has received permission to evacuate the damaged aircraft, shall:

- Staff the airport's emergency evacuation team with UNSO employees;
- prepare the calculation for evacuation operations, taking into account the aircraft location, access roads to it, and the planned means of lifting and transportation;

provide the calculation with:

- special devices and tools;
- means of lifting, transportation, communication, lighting, ground service, rigging, fire-fighting;
- materials necessary for packing and transportation of equipment and parts of the aircraft;
- containers for collection of discharged oil products.

Preparations for aircraft evacuation at the accident site include:

- arrangement of sites for lifting the aircraft and storing the equipment, engines and airframe parts to be removed;
- preparation of access roads to the aircraft and its removal to a road suitable for transportation;
- coordination of the route, transportation, safety measures, escort organization with representatives of the State Automobile Inspection;
- carrying out work to protect people from exposure to toxic liquids and radiation from radioactive devices;
- dismantling of electric batteries from the aircraft;
- dismantling of equipment and parts of the airframe, the filming of which is expedient prior to lifting and installation of the aircraft on supports or on a vehicle;
- lifting and mounting the aircraft on supports that allow for its planned disassembly into parts;
- draining of fuel and lubricants, special liquids from tanks (containers) and systems of the airframe, engines, venting of gases from pressurized vessels;
- dismantling of equipment requiring special storage or safety conditions;
- work on the aircraft related to its preparation for evacuation should be performed in accordance with the requirements of the operational documentation. When preparing the aircraft for evacuation, during transportation and unloading, take measures to protect labor and prevent additional damage to the aircraft, dismantled parts and products.

Evacuation of damaged aircraft from the airfield:

- Damaged (rolled out) aircraft shall be evacuated from the airfield with the permission of the Chairman of the Aircraft Accident Investigation Commission or on the instruction of "Kyzyl-Zhar International Airport" Limited Liability Partnership;
- Evacuation of the aircraft shall be started after passengers and crew leave the aircraft, unload baggage, mail and cargo, drain fuel and special liquids from tanks and systems, remove electric batteries.
- Evacuation works shall be carried out in compliance with all safety precautions preventing further damage to the aircraft and in the presence of a fire brigade of the fire and rescue service. The order of performance is defined in the evacuation instruction.

- In cases when an aircraft damaged on the airfield and not subject to repair interferes with takeoff, landing and taxiing of other aircraft, upon the decision of the Director of "Kyzyl-Zhar International Airport" Limited Liability Partnership, remove the aircraft from the Takeoff and Landing Runway, safety runway and taxiway by drag with the help of specially adapted ropes and tractors, while taking measures to prevent fire, damage to equipment not destroyed in the accident, to ensure the safety of people.
- Responsibility for the organization of aircraft evacuation from the airfield on the territory of the airport is assigned to the Director of "Kyzyl-Zhar International Airport" Limited Liability Partnership.
- Direct supervision of evacuation works shall be assigned to the Head of Aviation Engineering Service, and in his absence - to the Lead Engineer of Aviation Engineering Service of "Kyzyl-Zhar International Airport" Limited Liability Partnership.
- Evacuation shall be carried out by a non-staff calculation of the Aviation Engineering Service. If necessary, involve specialists of other services and departments of "Kyzyl-Zhar International Airport" Limited Liability Partnership, as well as representatives of the aircraft owner airline and interacting organizations

UACP AD 2.21 Noise Abatement Procedures

NIL

UACP AD 2.22 Flight Procedures

1. Flight and ground movement procedures.

Departing aircraft shall fly over fix points on the predetermined heights with IAS limitations, noted on SID and instrument approach charts.

Aircraft takeoff and landing with a tailwind is permitted when tailwind speed is not greater than the value set by Flight Operational manual of each aircraft type. Pilot-in-command shall make final decision of tailwind landing/takeoff.

Departure of aircraft with runway back bearing is available in case of observance of following terms:

- availability of continuous radar control;
- separation intervals will be established between departing and arriving aircraft.

Takeoff shall be performed from the starting point of RWY where runway physical characteristics comply required actual aircraft takeoff weight and takeoff conditions.

Helicopter take-off and landing shall be carried out from RWY (intersection of TWY and RWY), from TWY 1, and to/from landing pad for Category A and helicopters, parking stands 5, 6, 7, 8. Pilot-in-command is responsible for taking-off and landing from/to parking stands 5, 6, 7, 8, landing pad for Category A and helicopters, and compliance with the established distances to obstacles

Aircraft ground movement on manoeuvring area shall be carried out by taxiing or towing. Taxiing and towing shall be carried out strictly along TWY centreline, apron and stand guideline.

Taxiing of aircraft shall be carried out by the instructions of Tower ATC. Taxiing speed shall be set by pilot-in-command according to the condition of TWY, presence of obstacles, aircraft weight, wind conditions and visibility.

In all cases, taxiing speed should not exceed speed set by Flight Operational manual of this type of aircraft.

ATC is responsible for taxi route assignment; pilot-in-command is responsible for taxiing rules compliance; person, assigned for control taxiing on the airfield section, is responsible for safety.

Helicopter taxiing shall be carried out with wind limitations, according to Flight Operational manual, at constant visibility of landmarks located in front.

Hover taxiing with General flight rules observance shall be carried out in case of ground taxiing unavailability (poor ground surface conditions or helicopter design doesn't allow to ground taxi).

U-turns on RWY 05/23 are allowed for aircraft type B737-200 and heavier in thresholds and turning bays only.

2. Low Visibility Procedures.

Low Visibility Procedures (LVP) are effected when RVR is less than 550 m when manoeuvring area or part thereof is not visually monitored from the "Tower" control centre. Low Visibility Procedures are cancelled when RVR is greater than 550 m.

Low Visibility Procedures are initiated by Air traffic Manager, in case of his absence - by Tower ATC.

The following procedure shall be carried out in case of low visibility conditions, when Tower ATC is not able to control aircraft movement on the manoeuvring area:

- Clearance for TWY entering shall be given only after received report of TWY vacation from other aircraft or vehicle.

Control the obstacles on RWY and in ILS critical areas is carried out by air traffic controller according to reports of flight crew or aerodrome service specialist reports. The report on runway vacation in conditions of low visibility is carried out on taxiways only after the vacation of the ILS critical zones indicated by light sign (holding position).

Taxiing into apron after RWY vacation shall be carried out after follow-me car. Taxiing into stands shall be carried out by marshaller's signals.

Taxiing of aircraft out of stands to TWY A shall be carried out after follow-me car. Aircraft shall stop at the holding position before the light sign indicating the ILS critical area.

The operation of LVP shall be reported by Tower ATC phrase: "LOW VISIBILITY PROCEDURES IN OPERATION".

"Tower" controller informs pilots about any changes in the operational status of radio and lighting equipment.

3. 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 (northern side of Sokolovka, visual reference – A-12 highway)	N551147 E0691909	355° 25.0 nm PSK DVOR/DME	Entry/exit
2	BRAVO (northern outskirts of Bugrovoe)	N550401 E0694457	035° 25.0 nm PSK DVOR/DME	Entry/exit
3	CHARLIE (northern outskirts of Poludino)	N545257 E0695510	064° 25.0 nm PSK DVOR/DME	Entry/exit
4	DELTA (Eastern side of Borki)	N543553 E0695142	104° 25.0 nm PSK DVOR/DME	Entry/exit
5	ECHO (western side of Dobrovolskoe)	N542424 E0693115	143° 25.0 nm PSK DVOR/DME	Entry/exit
6	GOLF (northern side of Aralagash, visual reference – A-1 highway)	N542209 E0691010	172° 25.0 nm PSK DVOR/DME	Entry/exit
7	HOTEL (northern outskirts of Rassvet, visual reference – A-16 highway)	N542943 E0684211	214° 25.0 nm PSK DVOR/DME	Entry/exit
8	VICTOR (western outskirts of Ledenevo)	N544144 E0683100	246° 25.0 nm PSK DVOR/DME	Entry/exit
9	OSCAR (western side of Krasnyi Oktiabr)	N544828 E0683001	261° 25.0 nm PSK DVOR/DME	Entry/exit
10	TANGO (northern outskirts of Mamliutka)	N545711 E0683335	282° 25.0 nm PSK DVOR/DME	Entry/exit
11	LIMA (NE outskirts of Ploskoe)	N544711 E0692914	077° 9.3 nm PSK DVOR/DME	Holding, circle and absolute altitude by "Tower" ATC instructions
12	KILO (SE outskirts of Chapaevo)	N543741 E0691013	178° 9.5 nm PSK DVOR/DME	Holding, circle and absolute altitude by "Tower" ATC instructions
13	PAPA (southern outskirts of Arhangelskoe)	N544550 E0685557	251° 10.0 nm PSK DVOR/DME	Holding, circle and absolute altitude by "Tower" ATC instructions

UACP AD 2.23 Additional Information

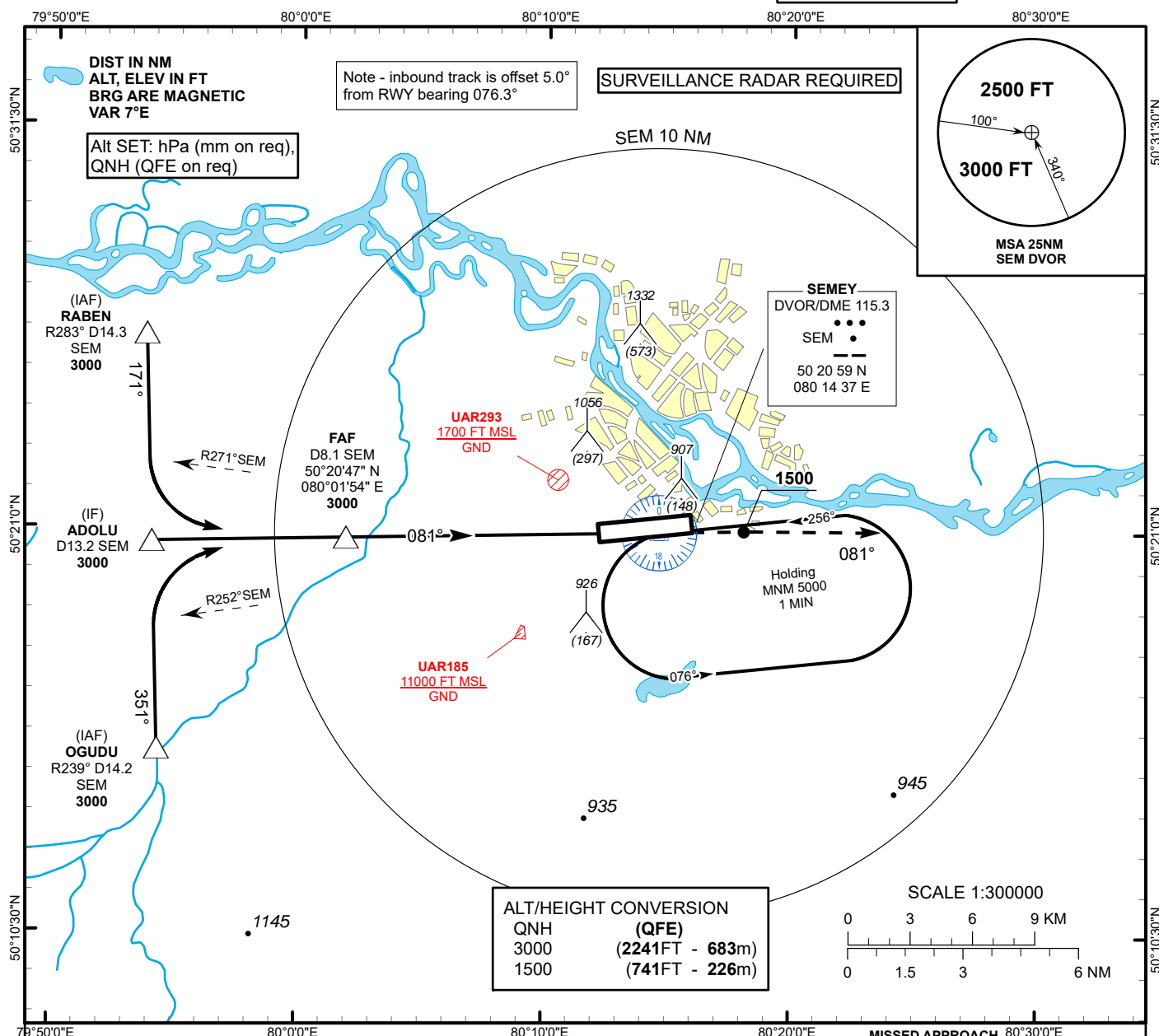
1. Accepted exceptions, exemptions and restrictions in aerodrome certificate.

Regulatory reference	Requirement of regulations	Description of exceptions, exemptions and restrictions	Measures taken and validity period
Nil	Nil	Nil	Nil

UACP AD 2.24 Charts Related To An Aerodrome

Name	Page
Aerodrome Chart ICAO	UACP AD 2.24.1-1
Aerodrome Ground Movement and Aircraft Parking Chart ICAO	UACP AD 2.24.3-1
Aerodrome Obstacle Chart – ICAO – Type A	UACP AD 2.24.4-1
Standard Departure Chart Instrument (SID) RWY 23 ICAO	UACP AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 05 ICAO	UACP AD 2.24.7-2-1
Standard Arrival Chart Instrument (STAR) RWY 05 ICAO	UACP AD 2.24.9-1-1
Standard Arrival Chart Instrument (STAR) RWY 23 ICAO	UACP AD 2.24.9-2-1
ATC Surveillance Minimum Altitude Chart - ICAO	UACP AD 2.24.10-1
Instrument Approach Chart – ILS/DME - Y RWY 23 ICAO	UACP AD 2.24.11-1-1
Instrument Approach Chart – ILS/DME - Z RWY 23 ICAO	UACP AD 2.24.11-2-1
Instrument Approach Chart – VOR/DME - Y RWY 05 ICAO	UACP AD 2.24.11-3-1
Instrument Approach Chart – VOR/DME - Z RWY 05 ICAO	UACP AD 2.24.11-4-1
Instrument Approach Chart – VOR/DME - Z RWY 23 ICAO	UACP AD 2.24.11-5-1
Instrument Approach Chart – VOR/DME - Y RWY 23 ICAO	UACP AD 2.24.11-6-1
Visual Approach chart – ICAO	UACP AD 2.24.12-1
VFR Departure/Arrival Chart	UACP AD 2.24.14-1

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INSTRUMENT
APPROACH
CHART - ICAOAERODROME ELEV 759 FT
HEIGHTS RELATED TO
AD ELEVSEMEY TOWER 128.0
SEMEY ATIS (EN) 118.5
SEMEY ATIS (RU) 122.4SEMEY
VOR/DME Y
RWY 08IF
ADOLU
D13.2 SEM
3000FAF
D8.1 SEM
3000TRANSITION ALT
10000

MISSED APPROACH
Climb on track 081° to 3000. After passing
1500 radar vectoring will be provided.
Then as directed.

RADIO FAILURE: In case of RCF climb
on track 081° to 2000 or above. Outbound
to D6.0 NM SEM, turn LEFT to SEM. Climb
to 5000, and join to holding pattern.

MAPt
D1.9 SEMDVOR/DME
SEMELEV 759
THR RWY 08

12

11

10

9

8

7

6

5

4

3

2

1

0

-1

-2

Aircraft Category

A

B

C

D

DIST to THR

NM

6.9

5.0

4.0

3.0

2.0

1.0

Straight-in
Approach
OCA/H

VOR/DME

1120(360)

1120(360)

DME SEM

NM

8.1

6.2

5.2

4.2

3.2

2.2

ALTITUDE

FT

3000

2400

2081

1763

1445

1127

HEIGHT

FT

(2241)

(1641)

(1322)

(1004)

(686)

(367)

CHANGE: SRR, RCF.

Aerodrome
Operating Minima
MDH ft x RVR(CMV)

VOR/DME

GS

Kt

80

100

120

140

160

180

FAF-MAPt (6.2)

min:sec

4:35

3:47

3:09

2:42

2:22

2:06

Desc.Rate(5.2%)

ft/min

420

530

640

740

850

950

SEMEY
VOR/DME Y

AERONAUTICAL DATA TABULATION

VOR approach to RWY08 from RABEN, ADOLU, OGUDU	
Fix/point	Coordinates
(FAF) D8.1 SEM	50° 20' 46.9"N 080° 01' 54.3"E
ADOLU (IF) D13.2 SEM	50° 20' 38.9"N 079° 54' 01.0"E
RABEN (IAF) R283° D14.3 SEM	50° 26' 02.3"N 079° 53' 43.3"E
OGUDU (IAF) R239° D14.2 SEM	50° 15' 15.5"N 079° 54' 18.6"E
DVOR/DME SEM	50° 20' 58.7"N 080° 14' 37.5"E
THR RWY 08	50° 21' 00.82"N 080° 12' 43.63"E
Final approach descent angle is 3°	

UAII 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
10	106,22°	3300 X 45	50/R/A/X/T REINF+CON C	422209.24N 0692722.27E - -138.5 FT	THR 1309.4 FT	See AOC Type A
28	286,25°	3300 X 45	50/R/A/X/T REINF+CON C	422139.35N 0692940.74E - -140.4 FT	THR 1386.6 FT	See AOC Type A

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	Nil	3600 X 300	90 X 150	Nil	AVBL	Nil
Nil	150 X 160	3600 X 300	90 X 150	Nil	AVBL	Displaced THR 140 M (DTHR 422140.62N 0692934.86E) - elev. 1383,9 FT

UAII AD 2.13 Declared Distances

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
10	3300	3300	3300	3300	Nil
28	3300	3450	3300	3160	Nil
TWY D - 10	2656	2656	2656	Nil	Nil
TWY C - 10	1181	1181	1181	Nil	Nil
TWY E - 10	877	877	877	Nil	Nil
TWY B - 10	787	787	787	Nil	Nil
TWY A - 28	3112	3261	3112	Nil	Nil
TWY B - 28	2512	2662	2512	Nil	Nil
TWY E - 28	2422	2572	2422	Nil	Nil
TWY C - 28	2118	2268	2118	Nil	Nil

UAII 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
10	CAT I (HIALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	3300m, spacing 60m, 0-2700m white, last 600m yellow LIH	RED Nil	Nil	Nil
28	CAT I (HIALS) 920 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	3160m, spacing 60m, 0-2560m white, last 600m yellow LIH	RED Nil	Nil	Thresh old displac ed by 140 m.

UAII 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	MAIN P EDGE: BLU TWY A EDGE: BLU TWY C EDGE: BLU TWY D EDGE: BLU TWY K EDGE: BLU TWY L EDGE: BLU
4	Secondary power supply/switch-over time	AVBL, 1 SEC
5	Remarks	Nil

UAII AD 2.16 Helicopter Landing Area

NIL

UAII AD 2.17 ATS Airspace

1	Designation and lateral limits	SHYMKENT CTR 423034N 0700213E - 421105N 0695739E - 421833N 0685528E - 424054N 0690306E - 423034N 0700213E
2	Vertical limits	4500 FT ALT / GND
3	Airspace classification	C
4	ATS unit call sign Language(s)	SHYMKENT TOWER EN SHYMKENT VYSHKA RU
5	Transition altitude	10000 FT
6	Hours of applicability	H24

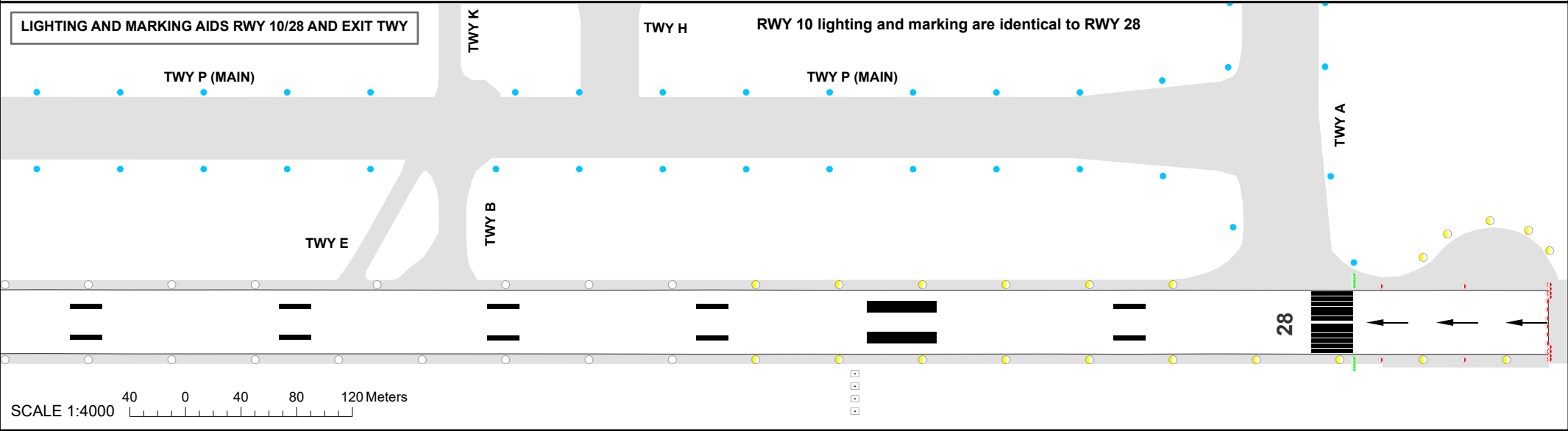
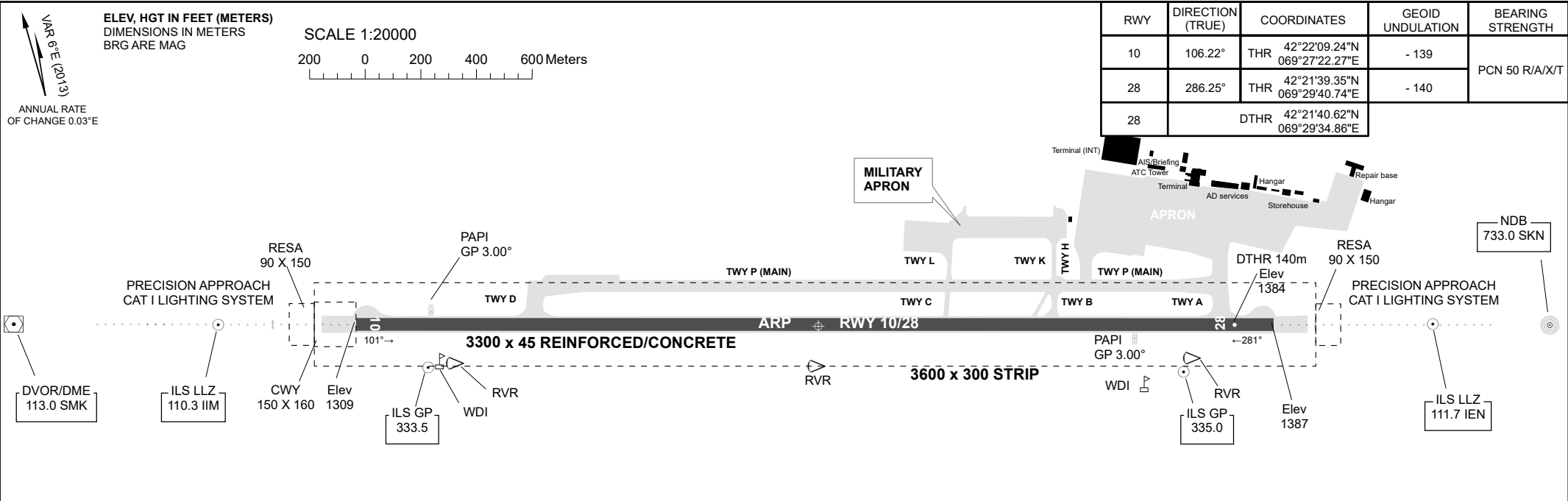
AERODROME
CHART - ICAO

AD ELEV
1387FT (423m)

ARP 422154N
0692832E

TWR 125.9

SHYMKENT



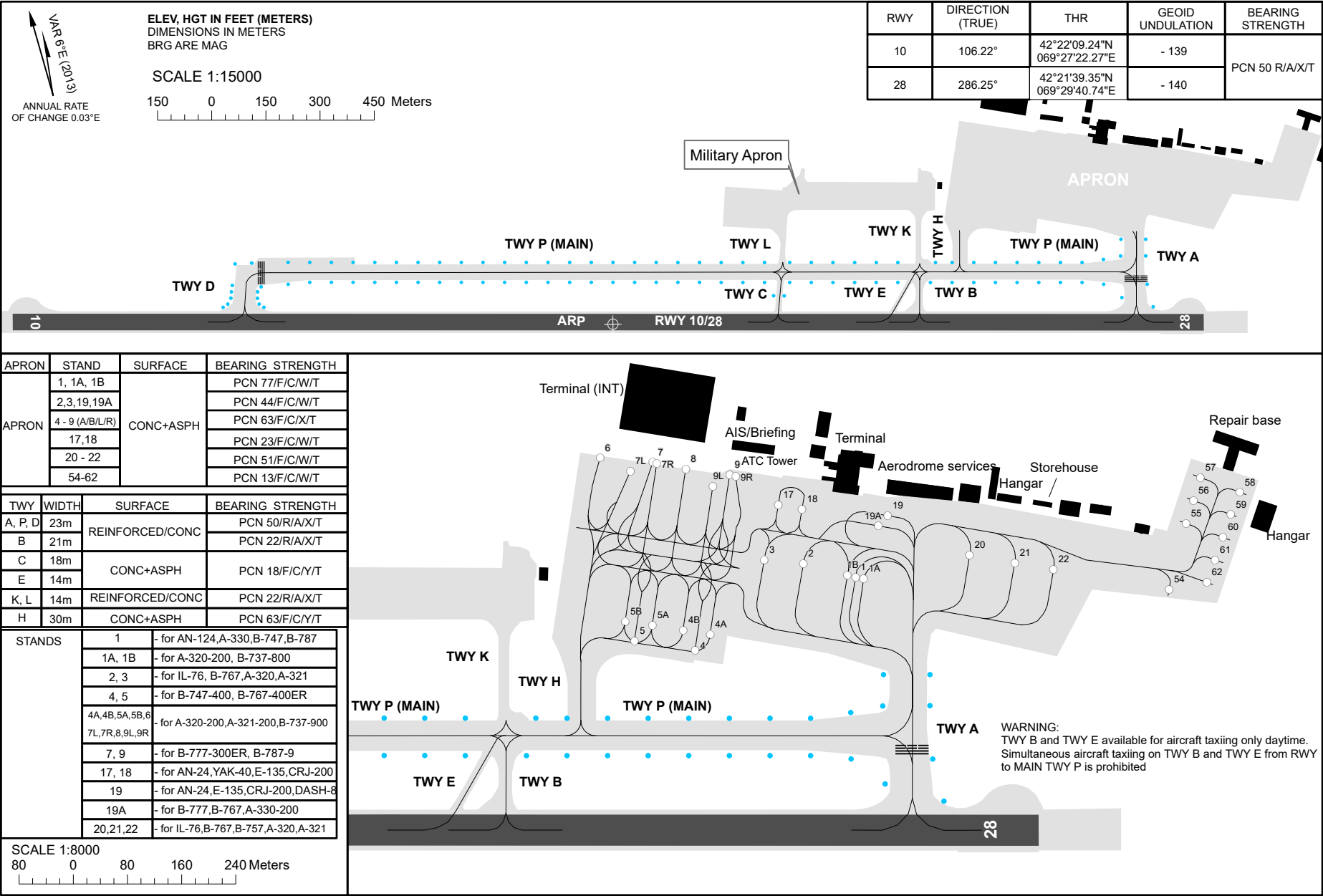
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AERODROME GROUND MOVEMENT
AND PARKING CHART - ICAO

APRON ELEV 1385FT (422m)

TWR 125.9

SHYMKENT



SHYMKENT

STANDS CHARACTERISTICS

Apron	Stand	Coordinates	
		Latitude	Longitude
	1	42 21 53.44 N	069 29 33.96 E
	1A	42 21 53.42 N	069 29 35.03 E
	1B	42 21 54.02 N	069 29 33.40 E
	2	42 21 54.75 N	069 29 30.96 E
	3	42 21 55.46 N	069 29 28.61 E
	4B	42 21 53.31 N	069 29 22.32 E
	4	42 21 52.23 N	069 29 22.70 E
	4A	42 21 52.76 N	069 29 23.92 E
	5B	42 21 54.49 N	069 29 18.89 E
	5	42 21 53.47 N	069 29 19.11 E
	5A	42 21 53.94 N	069 29 20.49 E
	6	42 22 02.34 N	069 29 20.27 E
	7L	42 22 01.32 N	069 29 21.91 E
	7	42 22 01.44 N	069 29 23.46 E
	7R	42 22 01.33 N	069 29 23.68 E
	8	42 22 00.68 N	069 29 25.38 E
	9L	42 21 59.53 N	069 29 26.75 E
	9	42 21 59.83 N	069 29 28.01 E
	9R	42 21 59.68 N	069 29 28.35 E
	17	42 21 57.79 N	069 29 30.46 E
	18	42 21 57.28 N	069 29 31.86 E
	19	42 21 55.84 N	069 29 37.06 E
	19A	42 21 55.49 N	069 29 36.30 E
	20	42 21 52.94 N	069 29 41.44 E
	21	42 21 51.97 N	069 29 44.09 E
	22	42 21 51.14 N	069 29 46.37 E
	54	42 21 48.68 N	069 29 53.18 E
	55	42 21 51.48 N	069 29 55.42 E
	56	42 21 52.44 N	069 29 56.30 E
	57	42 21 53.40 N	069 29 57.14 E
	58	42 21 52.20 N	069 29 59.31 E
	59	42 21 51.30 N	069 29 58.36 E
	60	42 21 50.35 N	069 29 57.46 E
	61	42 21 49.41 N	069 29 56.56 E
	62	42 21 48.49 N	069 29 55.65 E

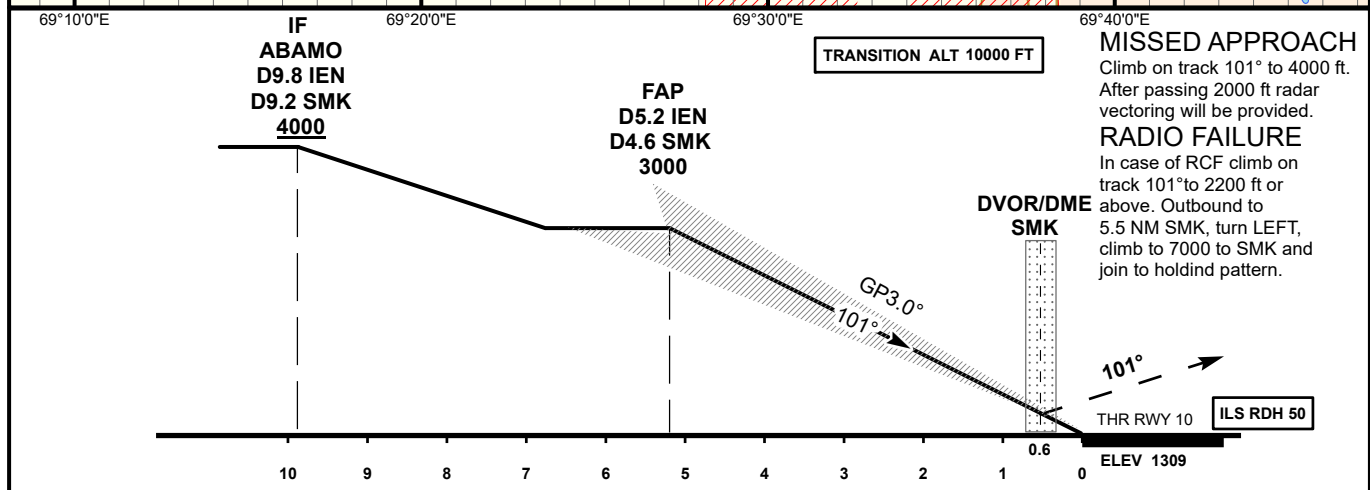
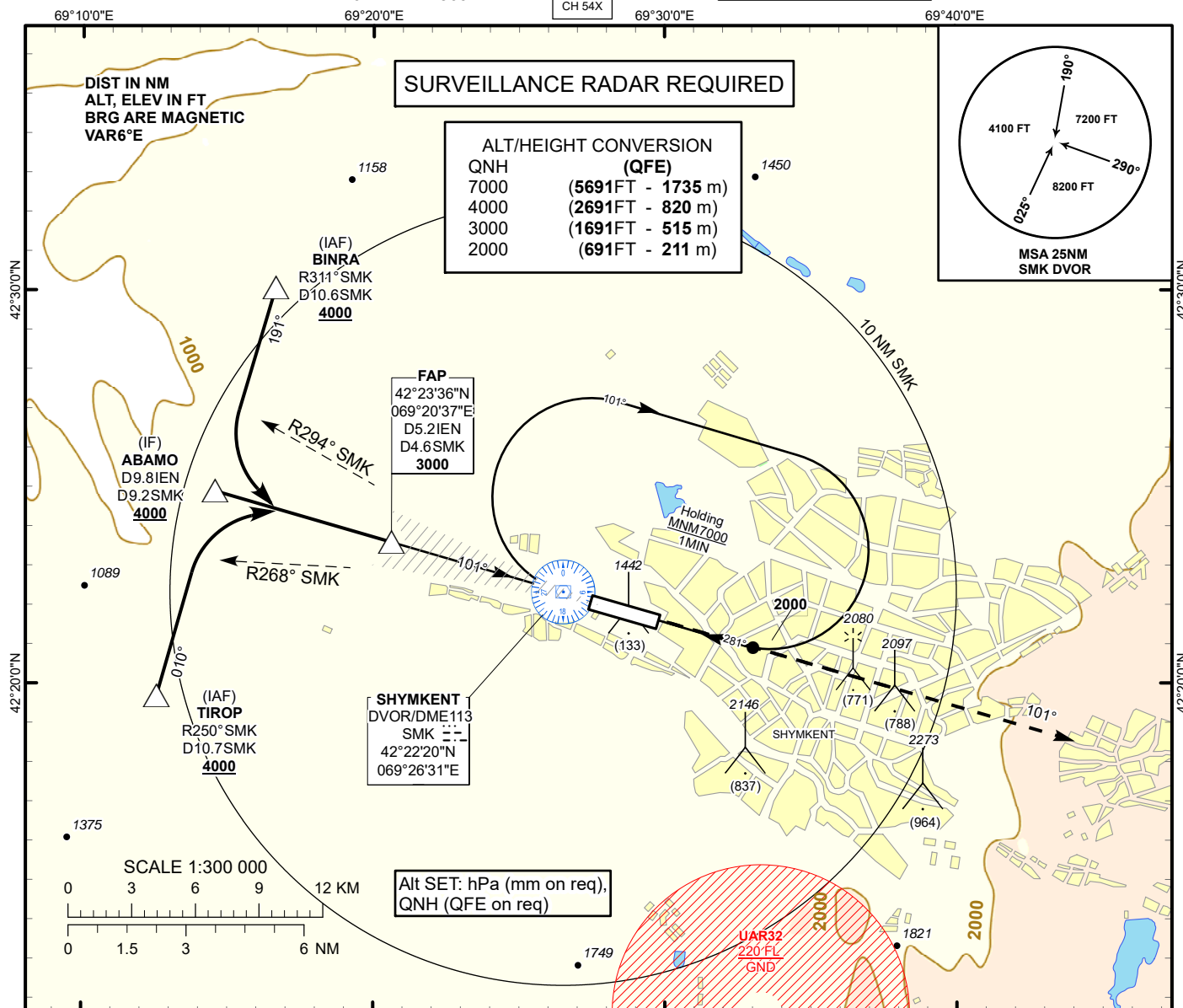
INSTRUMENT
APPROACH
CHART - ICAO

AERODROME ELEV 1387FT
HEIGHTS RELATED TO
THR RWY10 - ELEV 1309FT

ILS
LLZ 111.7
IEN
GP 333.5
CH 54X

SHYMKENT TOWER 125.9
SHYMKENT ATIS (EN) 119.2
SHYMKENT ATIS (RU) 126.6

SHYMKENT
ILS/DME
RWY 10



CHANGE: FAP ALT, editorial.

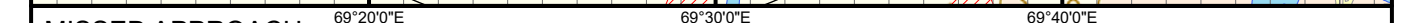
Aircraft Category		A	B	C	D	DIST to THR DME IEN	NM	5.2	4	3	2	1	
Straight-in Approach OCA/H						DME SMK	NM	4.5	3.3	2.3	1.3	0.3	
	CAT I	1509(200)	1516(207)	1526(217)	1536(227)	ALTITUDE	FT	3000	2646	2322	1999	1678	
						HEIGHT	FT	(1691)	(1337)	(1013)	(690)	(369)	
DME IEN ZERO RANGED TO THR RWY 10													
Aerodrome Operating Minima DH ft x RVR (CMV)	CAT I												
						GS	Kt	80	100	120	140	160	180
						Desc.Rate(5.2%)	ft/min	420	530	630	740	840	950

SHYMKENT
ILS/DME

AERONAUTICAL DATA TABULATION

ILS approach to RWY10 from ABAMO, BINRA, TIROP	
Fix/point	Coordinates
DVOR/DME SMK	42° 22' 20.4"N 069° 26' 30.6"E
(FAP) D5.2 IEN, D4.6 SMK	42° 23' 36.3"N 069° 20' 36.9"E
ABAMO (IF) D9.2 SMK	42° 24' 53.9"N 069° 14' 33.3"E
BINRA (IAF) R311°, D10.6 SMK	42° 30' 04.6"N 069° 16' 38.1"E
TIROP (IAF) R250°, D10.7 SMK	42° 19' 42.2"N 069° 12' 33.8"E
THR RWY 10	42° 22' 09.24"N 069° 27' 22.27"E
IEN LOC	42° 21' 34.2"N 069° 30' 04.8"E

SHYMKENT
LOC/DME
RWY 28



Profile view of the runway showing elevation and distance. The profile starts at a dashed line at 281 degrees, then drops to a solid line at 280 degrees, and then rises to a solid line at 279 degrees. The elevation is 1384 feet. The distance is marked from 3 to 11.

DME IIM ZERO RANGED TO THR RWY 28

Aerodrome Operating Minima MDH ft x RVR (CMV)	LLZ (GP INOP)															
						GS	Kt	80	100	120	140	160	180			
						Desc.Rate(5.2%)	ft/min	420	530	630	740	840	950			
						FAF-MAPT(5.9NM)	min:sec	4:30	3:36	3:00	2:34	2:15	2:00			

AIRAC AMDT 005/2025

SHYMKENT
LOC/DME

AERONAUTICAL DATA TABULATION

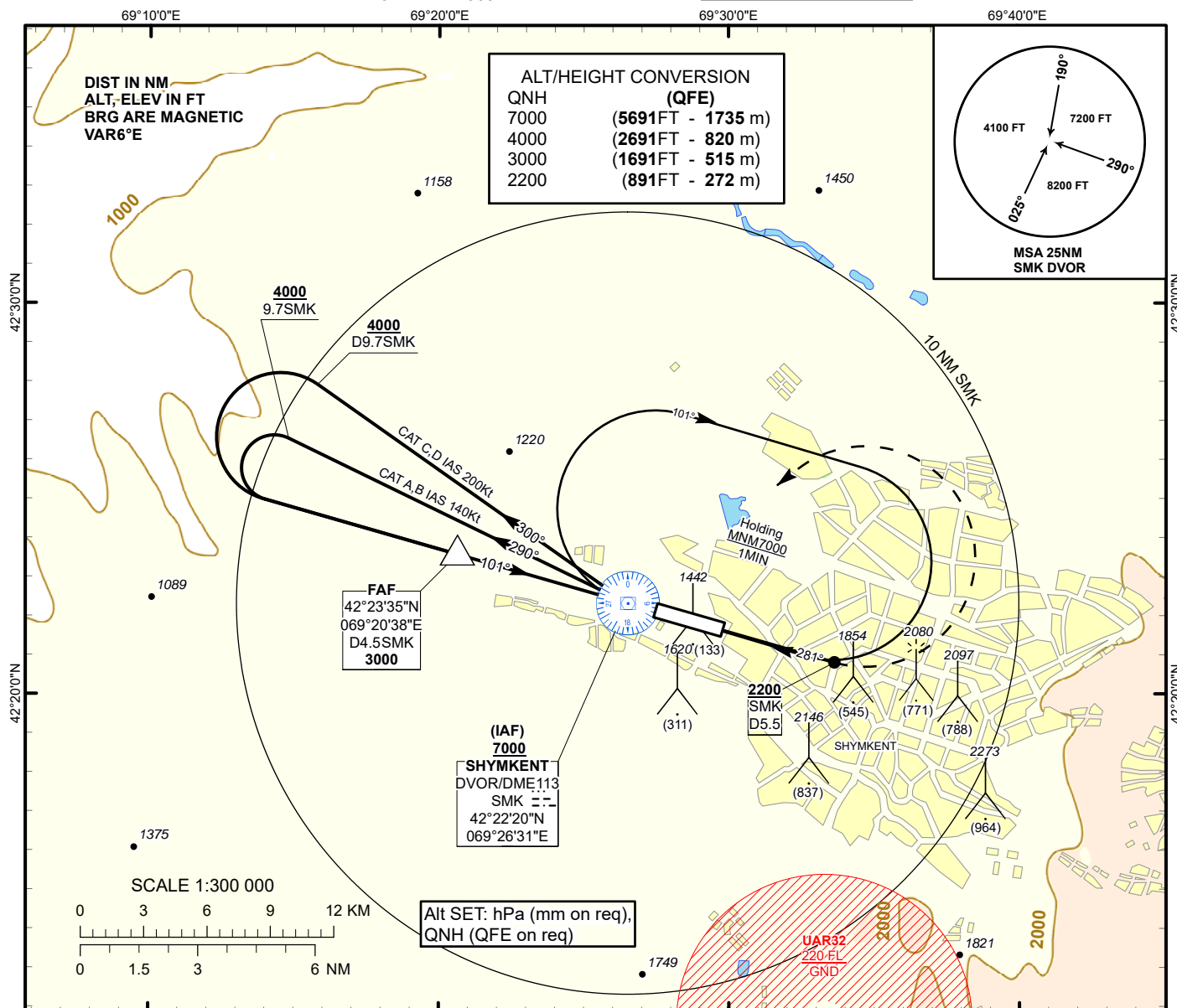
LOC/DME approach to RWY28 from ARMUS, ERTOL	
Fix/point	Coordinates
(SDF) D3.1 IIM, D5.4 SMK	42° 20' 49.0"N 069° 33' 32.6"E
(FAF) D6.2 IIM, D8.6 SMK	42° 19' 55.4"N 069° 37' 38.4"E
ERTOL (IF) D11.1 IIM, D13.4 SMK	42° 18' 33.5"N 069° 43' 53.6"E
ARMUS (IAF) R079°, D14.5 SMK	42° 23' 44.6"N 069° 45' 55.9"E
SMK DVOR/DME	42° 22' 20.4"N 069° 26' 30.6"E
IIM LOC	42° 22' 13.7"N 069° 27' 01.5"E
DTHR RWY 28	42° 21' 40.62"N 069° 29' 34.86"E
Final approach descent angle is 3°	

INSTRUMENT
APPROACH
CHART - ICAO

AERODROME ELEV 1387FT
HEIGHTS RELATED TO
THR RWY10 - ELEV 1309FT

SHYMKENT TOWER 125.9
SHYMKENT ATIS (EN) 119.2
SHYMKENT ATIS (RU) 126.6

SHYMKENT
VOR/DME Z
RWY 10



MISSED APPROACH

Climb on track 101°
to 2200 or above,
then turn LEFT to SMK,
but not less than 5.5 nm SMK,
Climb initially to 4000,
then as directed by ATC.

RADIO FAILURE

In the case of RCF climb to
7000 to SMK and join to
holding pattern.
Missed approach turn speed
limited to 250 Kt IAS maximum.

TRANSITION ALT 10000 FT

4000
D9.7 SMK

FAF
D4.5 SMK
3000

MAPt
DVOR/DME
SMK

PDG 5.2%(3.0°)
101°

101°

THR RWY 10
ELEV 1309

CHANGE: FAF ALT, editorial.

Aircraft Category		A	B	C	D	DIST to THR	NM	5.2	4	3	2	1	
Straight-in Approach OCA/H						DME SMK	NM	4.5	3.3	2.3	1.3	0.3	
	VOR/DME	1630(320)	1630(320)	1630(320)	1630(320)	ALTITUDE	FT	3000	2632	2313	1995	1676	
						HEIGHT	FT	(1691)	(1323)	(1004)	(686)	(367)	
Aerodrome Operating Minima MDH ft x RVR (CMV)	VOR/DME												
						GS	Kt	80	100	120	140	160	180
						Desc.Rate(5.2%)	ft/min	420	530	630	740	840	950
						FAF-MAPt(4.5NM)	min:sec	3:23	2:42	2:15	1:56	1:41	1:30

SHYMKENT
VOR/DME Z

AERONAUTICAL DATA TABULATION

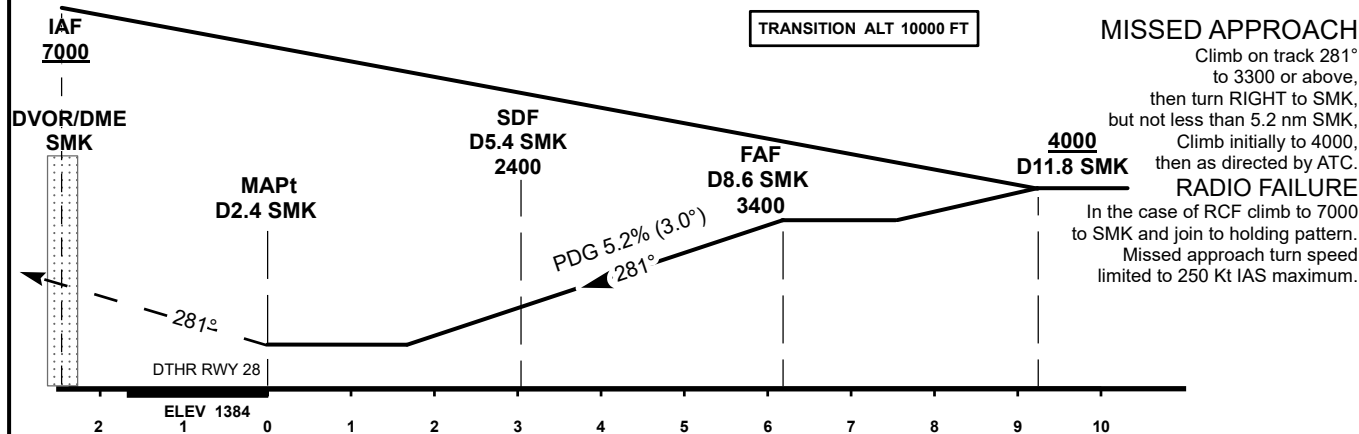
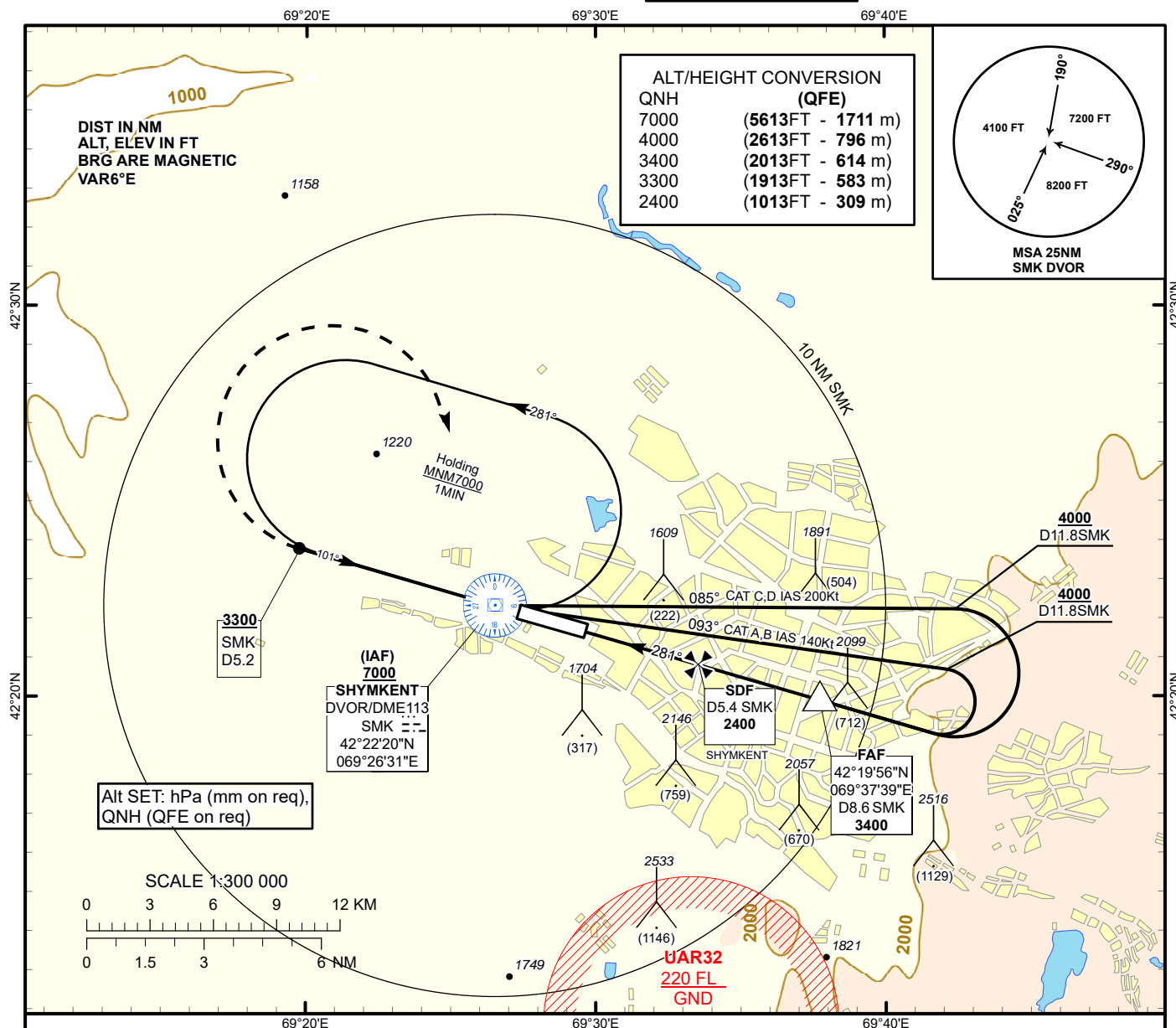
VOR approach to RWY10 from SMK DVOR/DME	
Fix/point	Coordinates
(IAF) SMK DVOR/DME	42° 22' 20.4"N 069° 26' 30.6"E
(FAF) D4.5 SMK	42° 23' 35.2"N 069° 20' 37.8"E
THR RWY 10	42° 22' 09.24"N 069° 27' 22.27"E
Final approach descent angle is 3°	

INSTRUMENT
APPROACH
CHART - ICAO

AERODROME ELEV 1387FT
HEIGHTS RELATED TO
AD ELEV

SHYMKENT TOWER 125.9
SHYMKENT ATIS (EN) 119.2
SHYMKENT ATIS (RU) 126.6

SHYMKENT
VOR/DME Z
RWY 28



Aircraft Category		A	B	C	D	DIST to DTHR	NM	1.0	2.0	3.0	4.0	5.0	6.2
Straight-in Approach OCA/H						DME SMK	NM	3.4	4.4	5.4	6.4	7.4	8.6
	VOR/DME SDF	1970(590)	1970(590)	1970(590)	1970(590)	ALTITUDE	FT	1754	2073	2391	2710	3028	3400
	VOR/DME WO SDF	2370(980)	2370(980)	2370(980)	2370(980)	HEIGHT	FT	(367)	(686)	(1004)	(1323)	(1641)	(2013)
Aerodrome Operating Minima MDH ft x RVR (CMV)	VOR/DME					GS	Kt	80	100	120	140	160	180
						Desc.Rate(5.2%)	ft/min	420	530	630	740	840	950
						FAF-MAPt(6.2NM)	min:sec	4:39	3:43	3:06	2:39	2:20	2:04

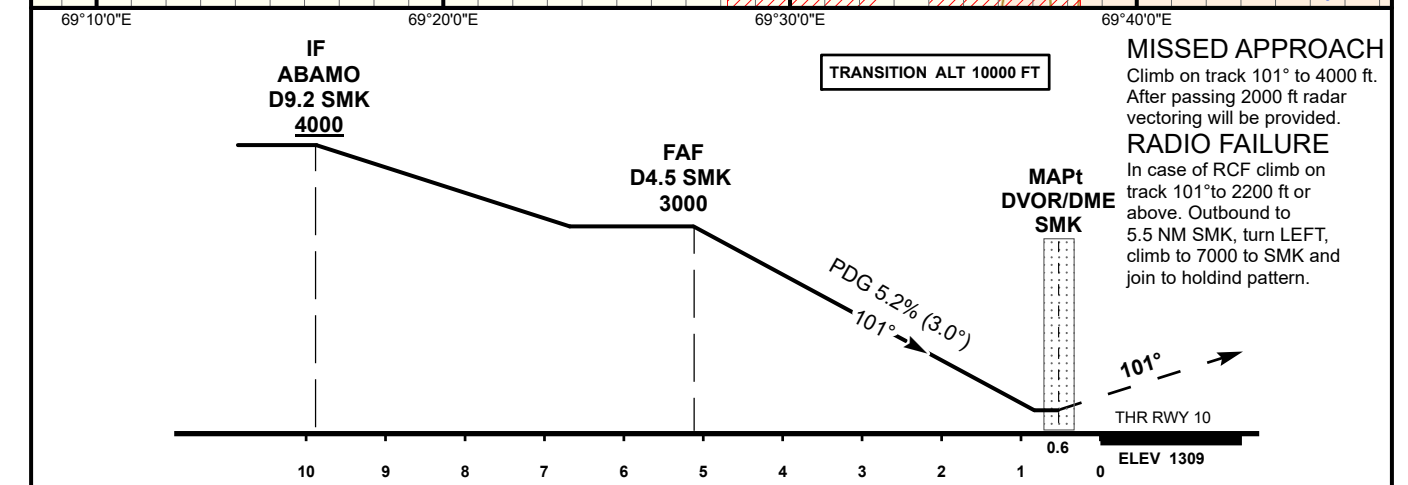
CHANGE: FAF ALT, editorial.

SHYMKENT
VOR/DME Z

AERONAUTICAL DATA TABULATION

VOR approach to RWY28 from SMK DVOR/DME	
Fix/point	Coordinates
(IAF) SMK DVOR/DME	42° 22' 20.4"N 069° 26' 30.6"E
(FAF) D8.6 SMK	42° 19' 55.9"N 069° 37' 38.6"E
(SDF) D5.4 SMK	42° 20' 49.2"N 069° 33' 32.7"E
DTHR RWY 28	42° 21' 40.62"N 069° 29' 34.86"E
Final approach descent angle is 3°	

**SHYMKENT
VOR/DME Y
RWY 10**



Aircraft Category		A	B	C	D	DIST to THR	NM	5.2	4	3	2	1	
Straight-in Approach OCA/H						DME SMK	NM	4.5	3.3	2.3	1.3	0.3	
	VOR/DME	1630(320)	1630(320)	1630(320)	1630(320)	ALTITUDE	FT	3000	2632	2313	1995	1676	
						HEIGHT	FT	(1691)	(1323)	(1004)	(686)	(367)	
Aerodrome Operating Minima MDH ft x RVR (CMV)	VOR/DME												
						GS	Kt	80	100	120	140	160	180
						Desc.Rate(5.2%)	ft/min	420	530	630	740	840	950
						FAF-MAPT(4.5NM)	min:sec	3:23	2:42	2:15	1:56	1:41	1:30

CHANGE: FAF ALT, editorial.

SHYMKENT
VOR/DME Y

AERONAUTICAL DATA TABULATION

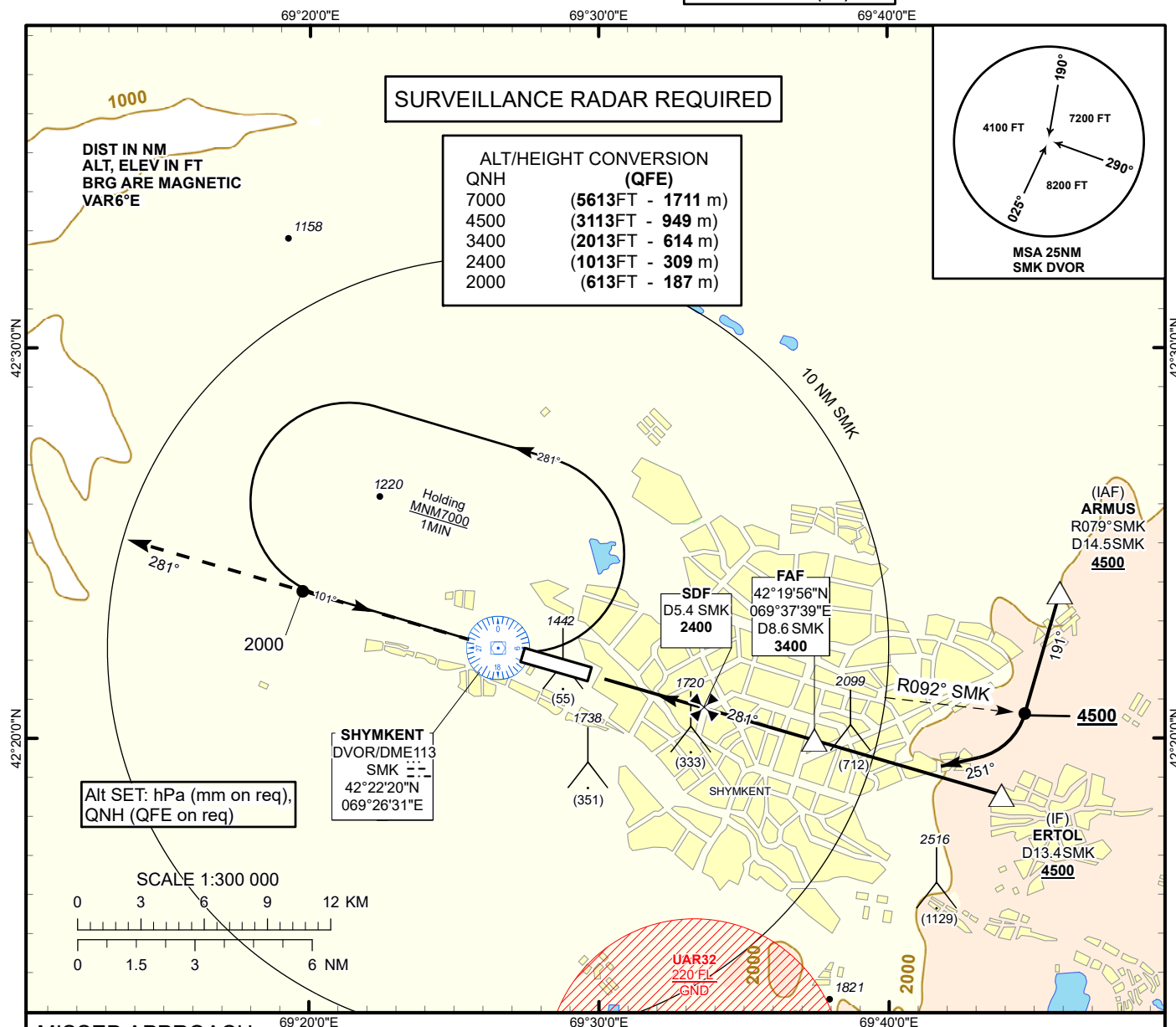
VOR approach to RWY10 from ABAMO, BINRA, TIROP	
Fix/point	Coordinates
(FAF) D4.5 SMK	42° 23' 35.2"N 069° 20' 37.8"E
ABAMO (IF) D9.2 SMK	42° 24' 53.9"N 069° 14' 33.3"E
BINRA (IAF) R311°, D10.6 SMK	42° 30' 04.6"N 069° 16' 38.1"E
TIROP (IAF) R250°, D10.7 SMK	42° 19' 42.2"N 069° 12' 33.8"E
SMK DVOR/DME	42° 22' 20.4"N 069° 26' 30.6"E
THR RWY 10	42° 22' 09.24"N 069° 27' 22.27"E
Final approach descent angle is 3°	

INSTRUMENT
APPROACH
CHART - ICAO

AERODROME ELEV 1387 FT
HEIGHTS RELATED TO
AD ELEV

SHYMKENT TOWER 125.9
SHYMKENT ATIS (EN) 119.2
SHYMKENT ATIS (RU) 126.6

SHYMKENT
VOR/DME Y
RWY 28



MISSED APPROACH

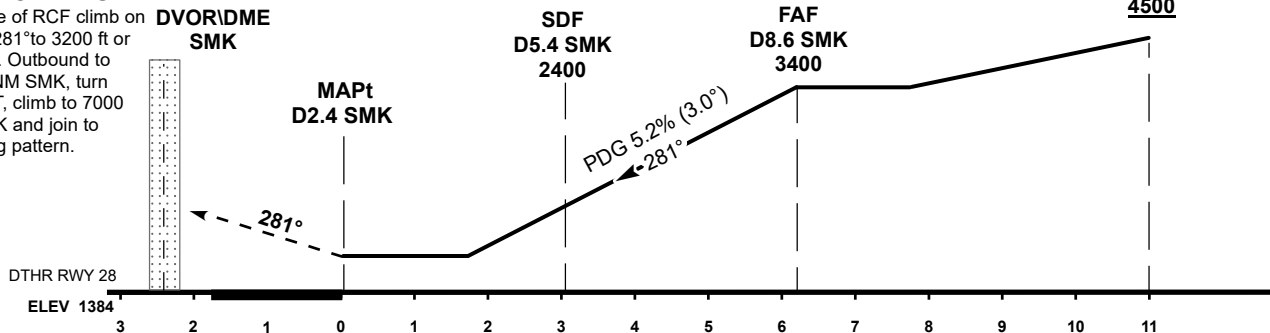
Climb on track 281° to 4500ft.
After passing 2000 ft radar
vectoring will be provided.

RADIO FAILURE

In case of RCF climb on
track 281° to 3200 ft or
above. Outbound to
D5.2 NM SMK, turn
RIGHT, climb to 7000
to SMK and join to
holding pattern.

TRANSITION ALT 10000 FT

IF
ERTOL
D13.4 SMK
4500



Aircraft Category		A	B	C	D	DIST to DTHR	NM	1.0	2.0	3.0	4.0	5.0	6.2
Straight-in Approach OCA/H						DME SMK	NM	3.4	4.4	5.4	6.4	7.4	8.6
	VOR/DME SDF	1970(590)	1970(590)	1970(590)	1970(590)	ALTITUDE	FT	1754	2073	2391	2710	3028	3400
	VOR/DME WO SDF	2370(980)	2370(980)	2370(980)	2370(980)	HEIGHT	FT	(367)	(686)	(1004)	(1323)	(1641)	(2013)
Aerodrome Operating Minima MDH ft x RVR (CMV)	VOR/DME					GS	Kt	80	100	120	140	160	180
						Desc.Rate(5.2%)	ft/min	420	530	630	740	840	950
						FAF-MAPt(6.2NM)	min:sec	4:39	3:43	3:06	2:39	2:20	2:04

CHANGE: FAF ALT, editorial.

SHYMKENT
VOR/DME Y

AERONAUTICAL DATA TABULATION

VOR approach to RWY28 from ARMUS, ERTOL	
Fix/point	Coordinates
(SDF) D5.4 SMK	42° 20' 49.2"N 069° 33' 32.7"E
(FAF) D8.6 SMK	42° 19' 55.9"N 069° 37' 38.6"E
ERTOL (IF) D13.4 SMK	42° 18' 33.5"N 069° 43' 53.6"E
ARMUS (IAF) R079°, D14.5 SMK	42° 23' 44.6"N 069° 45' 55.9"E
SMK DVOR/DME	42° 22' 20.4"N 069° 26' 30.6"E
DTHR RWY 28	42° 21' 40.62"N 069° 29' 34.86"E
Final approach descent angle is 3°	

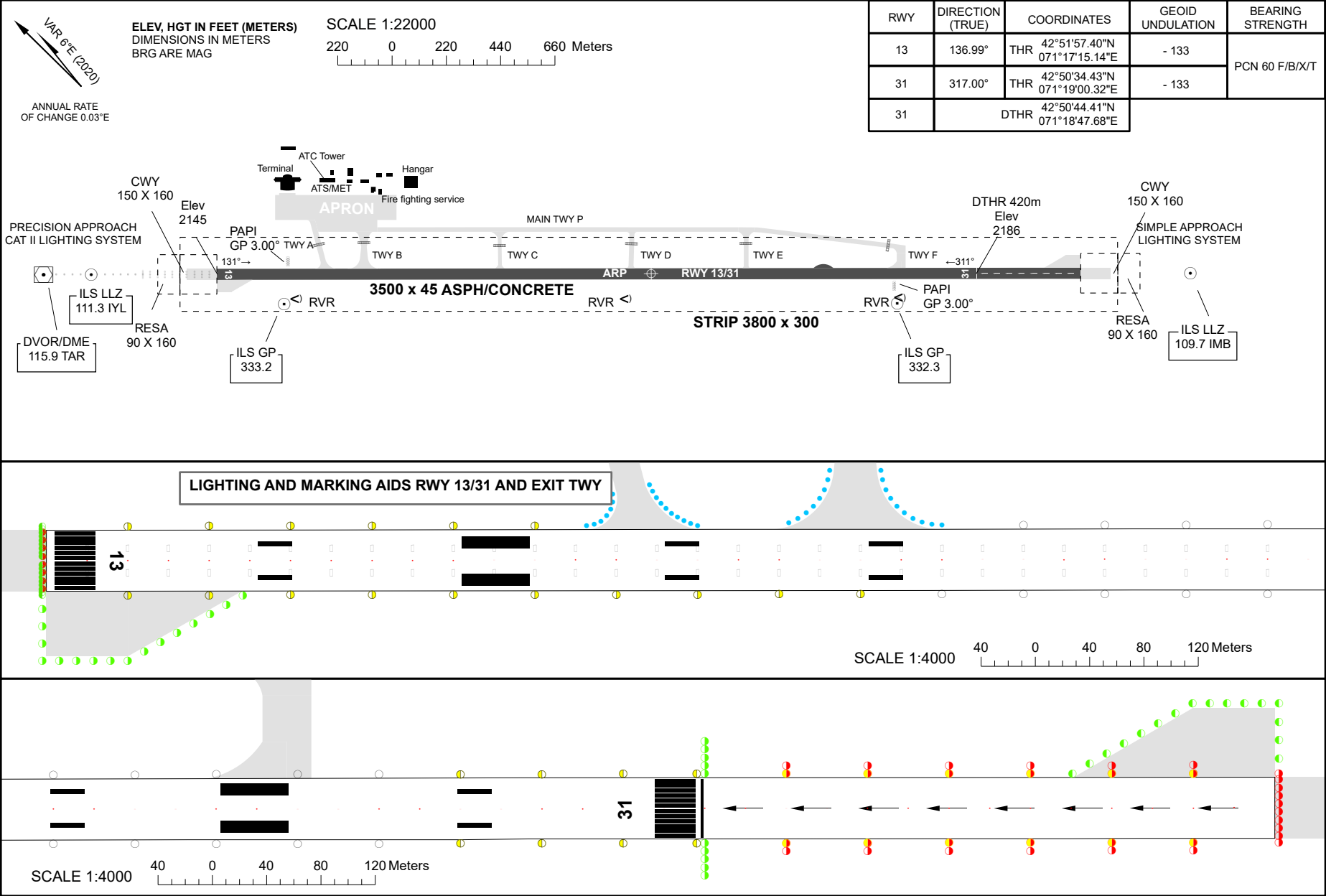
AERODROME
CHART - ICAO

AD ELEV
2190FT (667m)

ARP 425116N
0711808E

TWR 122.1

TARAZ

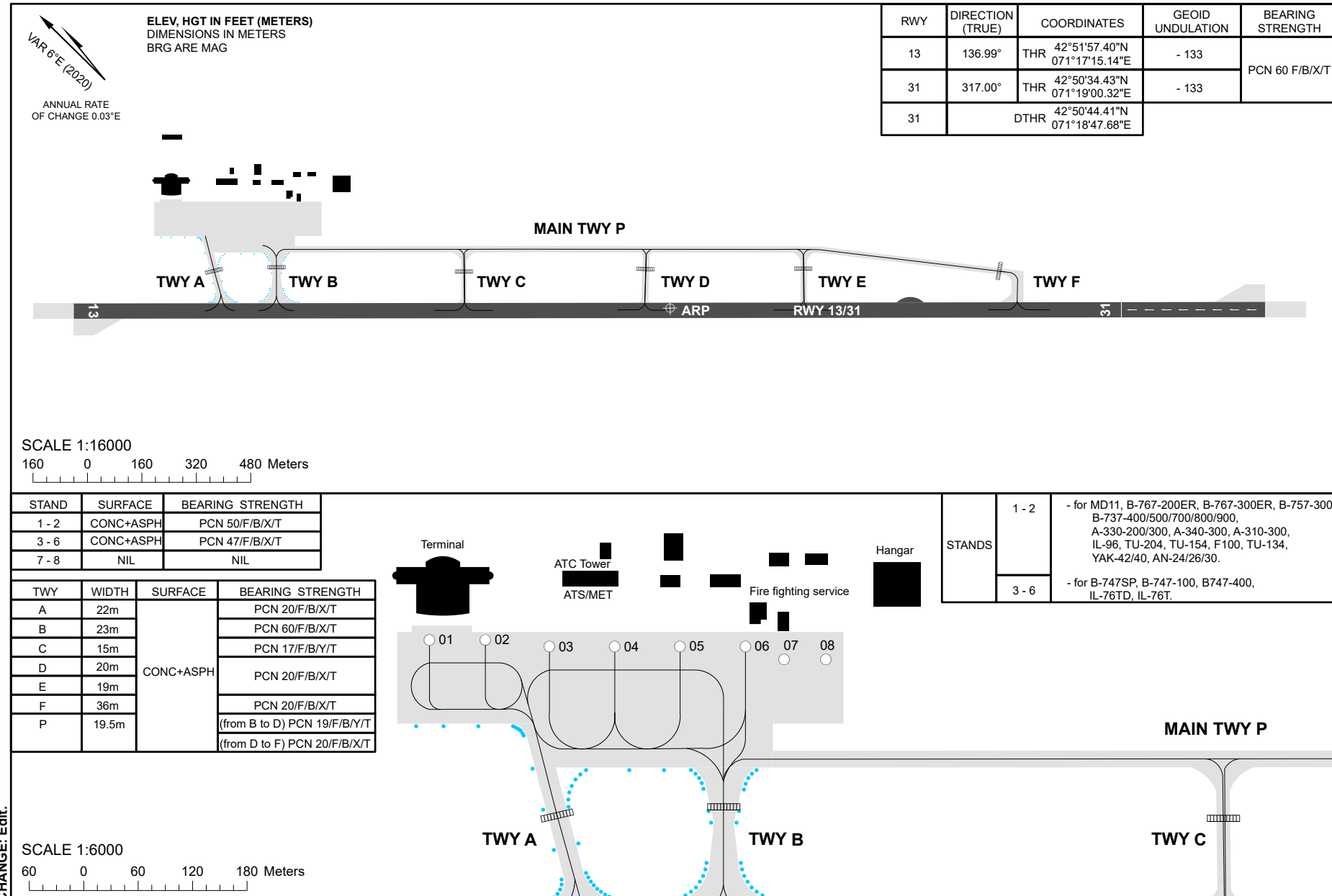


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AERODROME GROUND MOVEMENT AND PARKING CHART - ICAO

APRON ELEV 2149FT (655m)

TWR 122.1

TARAZ

TARAZ

STANDS CHARACTERISTICS

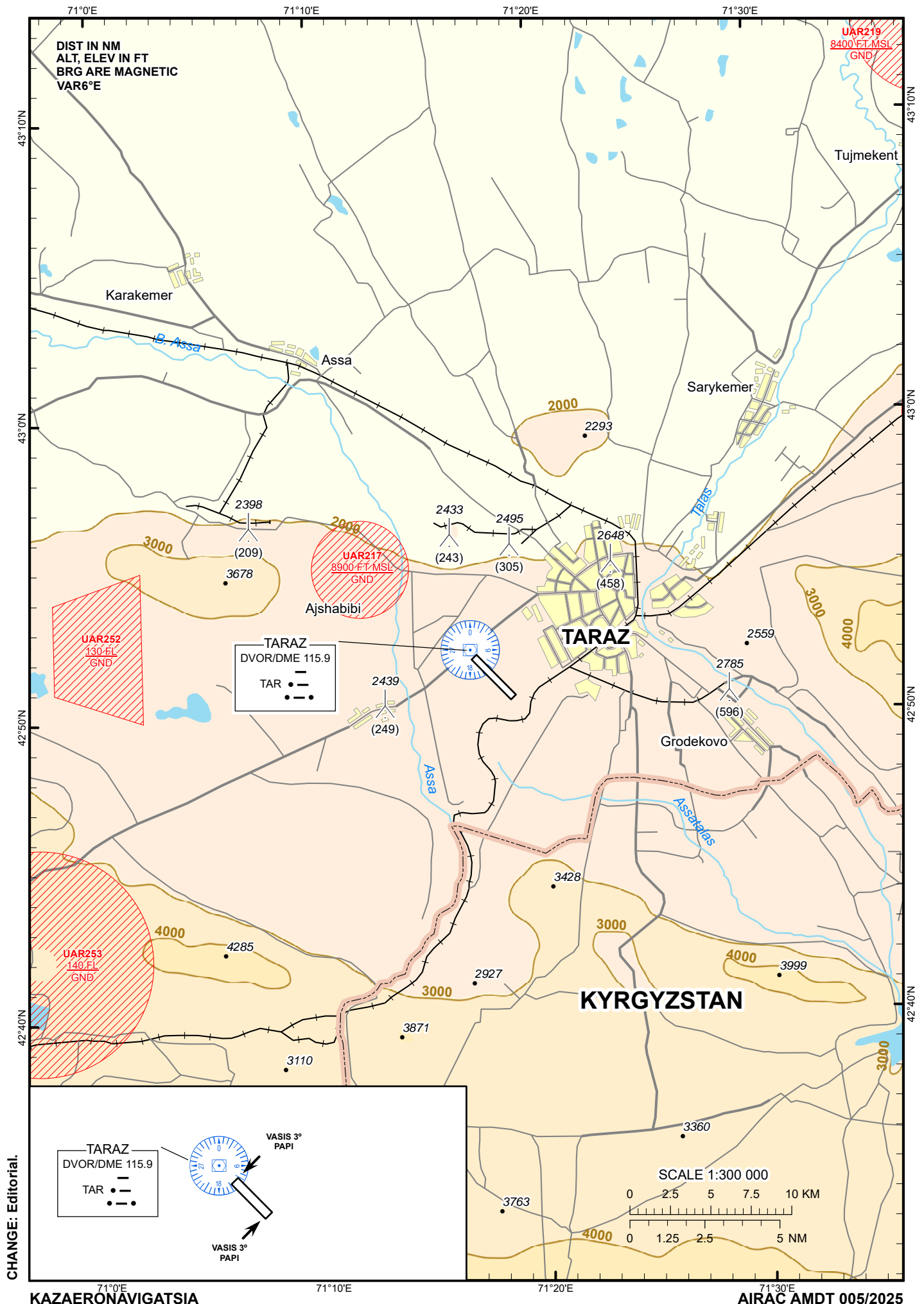
Apron	Stand	Coordinates	
		Latitude	Longitude
	1	42 51 57.87 N	071 17 33.39 E
	2	42 51 56.41 N	071 17 35.24 E
	3	42 51 54.57 N	071 17 37.12 E
	4	42 51 52.86 N	071 17 39.28 E
	5	42 51 51.16 N	071 17 41.45 E
	6	42 51 49.45 N	071 17 43.61 E

VISUAL APPROACH
CHART - ICAO

AERODROME ELEV **2190 FT**
HEIGHTS RELATED TO
AD ELEV

TARAZ TOWER 122.1
TARAZ ATIS (EN) 118.5
TARAZ ATIS (RU) 127.4

TARAZ



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4	Remarks	Total amount and means of delivery of the extinguishant complies with category 5 of LRFP. To provide standard time of deployment to 18 and 36 thresholds, firefighting crews of TCO emergency response teams arrive to fire post №1 on the closed taxiway 15 minutes prior to ETA of aircraft.
---	---------	---

UATZ AD 2.7 Seasonal Availability - Clearing

1	Types of clearing equipment	To clean the artificial pavements of the airfield from precipitation, a WAUSAU SD3131 snowplow trucks (1 units) with a brush coverage of 6 m are used, a special vehicle MAZ 53402 KO-806-20 (1 unit) is used to apply the "NordWay NF" и "GreenWay SFU" anti-icing reagent. Airport runway friction tester Skidometer BV 11 and brake cart ATT-2 (1 unit) with a BRIZ-KS devices (2 units) are used to measure the friction coefficient on the runway.
2	Clearance priorities	1. RWY, TWY 1, Stand 2 2. Stand 1, Stand 3, TWY 2
3	Remarks	Nil

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

1	Apron surface and strength	STANDS		SURFACE	STRENGTH
		1 - 3		CONC+ASPH	PCN 15/F/C/Y/T
2	Taxiway width, surface and strength	TWY	WIDTH (M)	SURFACE	STRENGTH
		1	15	CONC+ASPH	PCN 15/F/C/Y/T
		2	8	CONC+ASPH	PCN 15/F/C/Y/T
3	Altimeter checkpoint location and elevation	Nil			
4	VOR checkpoints	Nil			
5	INS checkpoints	Nil			
6	Remarks	TWY 2 is intended only for taxiing helicopters			

UATZ 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, edge, RWY designation, taxi holding position, taxiway centre line
3	Stop bars	Nil
4	Other runway protection measures	Nil
5	Remarks	Nil

UATZ AD 2.10 Aerodrome Obstacles

NIL

UATZ AD 2.11 Meteorological Information Provided

1	Associated MET Office	Meteorological service Tengiz Phone: +7 (712302) 3864
2	Hours of service MET Office outside hour	ANY 01:30 - 13:00 UTC
3	Office responsible for TAF preparation: Periods of validity	Meteorological service Atyrau, H24 (0024, 0606, 1212, 1818) Phone: +7 (7122) 209402, 983178
4	Trend forecast Interval of issuance	TREND 30 min, draws up by Meteorological service Atyrau,
5	Briefing/consultation provided	Personal consultation (Russian) Meteorological service Tengiz
6	Flight documentation/languages used	TAF, METAR, SPECI, SIGMET, GAMET, AIRMET English
7	Charts and other information AVBL for briefing or consultation	Nil
8	Supplementary equipment AVBL for providing information	Nil
9	ATS units provided with information	TWR
10	Additional information	Nil

UATZ 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
18	188.00°	1400 X 30	15/F/C/Y/T CONC+ASPH	461829.01N 0532543.11E - -53 FT	THR -76.8 FT	0.08%
36	008.00°	1400 X 30	15/F/C/Y/T CONC+ASPH	461744.11N 0532534.00E - -53 FT	THR -80.0 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	150 x 150	1700 X 150	90 X 80	Nil	NIL	RWY 18 has a turn pad with a length of 80 m and a width of 45 m.

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	150 x 150	1700 X 150	90 X 80	Nil	NIL	RWY 36 has a turn pad with a length of 51 m and a width of 45 m.

UATZ AD 2.13 Declared Distances

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
18	1400	1550	1400	1400	Nil
36	1400	1550	1400	1400	Nil

UATZ 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
18	(SALS) 420 M LIL	GRN Nil	PAPI LEFT/3°	Nil	Nil	1400m, spacing 60m, 0-920m white, last 480m yellow	RED Nil	Nil	Nil
36	(SALS) 420 M LIL	GRN Nil	PAPI LEFT/3°	Nil	Nil	1400m, spacing 60m, 0-920m white, last 480m yellow	RED Nil	Nil	Nil

UATZ 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	Anemometer: 185m from RWY 18, 257m from RWY 36
3	TWY edge and centre line lighting	TWY 1 EDGE: BLU TWY 2 EDGE: BLU
4	Secondary power supply/switch-over time	Available, 1 sec
5	Remarks	Nil

UATZ AD 2.16 Helicopter Landing Area

1	Coordinates TLOF or THR of FATO Geoid undulation	461745,75N 0532546,90E -49 FT
2	TLOF and/or FATO elevation	-61 FT
3	TLOF and FATO area dimensions, surface, strength, marking	TLOF / FATO - the shape of a circle with a diameter of 30 m, the marking is made in the form of a white solid line, in the center there is a white sighting circle with a diameter of 13 m with a yellow letter H, the supporting surface is CONC+ASPH
4	True BRG of FATO	098,01° / 278,01°
5	Declared distance available	Nil
6	APP and FATO lighting	The THORN F2.1 approach lighting system is positioned in a straight line along the direction of the approach. The system consists of three lights arranged in a row at 30 m intervals with an 18 m long light horizon located 90 m from the perimeter of the zone. System lights are omnidirectional white lights. The perimeter lights of the helipad (heliport) are installed at a distance of 1 meter from the edge of the artificial surface of the helipad, at the junction of the helipad and taxiway No. 2 there is one in-depth light, the total number of lights is 14, the colour of the lights is green. Searchlights for illumination (general lighting) of the helipad (heliport), installed on 4 sides of the heliport, the total number of spotlights is 4, the colour of the lights is white.
7	Remarks	Type of visual approach slope indicator (HAPI): HAPI THORN HBAs are installed from both landing courses at a distance of 45 m from the perimeter of the landing zone.

UATZ AD 2.17 ATS Airspace

1	Designation and lateral limits	TENGIZ CTR A circle radius 16.2 NM centered on 461807N 0532539E
2	Vertical limits	4000 FT ALT / GND
3	Airspace classification	C
4	ATS unit call sign Language(s)	TENGIZ TOWER (EN) TENGIZ VYSHKA (RU)
5	Transition altitude	10000 FT
6	Hours of applicability	MON-SAT - 01:30 - 13:00 UTC SUN - NOT AVBL
7	Remarks	Nil

UATZ 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
TWR	TENGIZ TOWER (EN) TENGIZ VYSHKA (RU)	119,2 MHZ	Nil	Nil	Sat 01:30 - 13:00 Working day 01:30 - 13:00 UTC	Nil

UATZ 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
VOR/DME (9°E/2021)	TGZ	113.9 MHZ CH 86X	Sat 01:30 - 13:00 Working day 01:30 - 13:00 UTC	461723.9N 0532529.9E	0 FT	Nil	Nil
NDB	KI	660 KHZ	Sat 01:30 - 13:00 Working day 01:30 - 13:00 UTC	461854.1N 0532548.1E	Nil	Nil	Nil

UATZ AD 2.20 Local Aerodrome Regulations**1. Taxiing**

Aircraft taxiing on the aerodrome should be carried out by its own thrust, and by towing if it is necessary.

Taxiing and towing should be carried out according to the marking.

Engine start, towing and taxiing should be carried out by ATC clearance of "Tengiz-Tower". Aircraft stand number and parking procedure should be assigned by shift chief of "Tengiz" aerodrome by agreement of "Tengiz-Tower" ATC, based on actual situation on the apron, short-term restrictions, prohibitions for parking procedures and movement on the apron and aerodrome maneuvering area.

Taxiing should be carried out on minimal engine thrust.

In order to reduce runway use, «Tengiz-Tower» ATC has the right to expedite the taxiing for taking line-up position, and runway vacation after landing as well. If it is impossible to perform required action, the crew reports ATC immediately.

Taxiway 2 should be used only for helicopter taxiing.

2. Take-off and landing

Before the flight, the crew should establish radio communication with «Tengiz-Tower» ATC on 119.2 MHz

frequency, report aircraft stand number, receive actual information about weather and ATC clearance for take-off.

Take-off should be carried out from the start of the runway only.

Take-off and landing with tailwind, considering wind speed restrictions, should be cleared if it requested by crew or initiated by ATC. Captain is responsible for take-off or landing decision in such cases.

Runway is usually assigned by «Tengiz-Tower» ATC considering take-off or landing against the wind.

Aircraft crew should take-off immediately after take-off clearance is obtained. If the crew is not able to execute the command, it is necessary to report it and expected delay time «Tengiz-Tower» ATC before taxiing to line-up.

When weather conditions are out of aerodrome operational minima, final decision for take-off and landing should be taken by captain. In this case, ATC clearance for take-off or landing is not compulsory to perform it, and captain is responsible for final decision and result of take-off and landing.

Take-off and landing should be carried out only on runway-in-use.

3. Helicopters flights

Takeoff with running and landing with rolling, takeoff and landing of helicopters under IFR (special IFR at night) should be carried out from/to runway only.

When meteorological conditions or smoke reduce visibility on the part of the runway to values below the specified weather minima for VFR flights (special VFR), it is allowed to perform landing onto that part of the runway, where weather conditions correspond to minima (start / end). In this cases helicopter captain is responsible for landing.

Helicopter takeoff and landing from heliport that equipped for night start are allowed vertically only.

Air taxiing of helicopters with skid landing gear from parking stand to take-off position and backward should be carried out according to the marking via route instructed by "Tengiz tower" ATC, in compliance with the established distances to obstacles, under the responsibility of the helicopter captain.

4. Low visibility procedures

Not applicable

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

IFR training and check flights should be carried out according to established procedures for instrumental takeoff and landing approach. After takeoff, crew should maintain ATC instructions of entry to approach procedure.

Depending on intensity of flights and actual restrictions, supervisor has the right to restrict the number of training aircraft and allow only one aircraft on the altitude or flight level, and to suspend or prohibit training flights.

Flight checks of ground radio facilities should be carried out according to established programs at any time and minima, which provides the flight check of the facilities and not below established aerodrome minima.

Area, located south-east of ARP, is available for helicopter trainings, by agreement of flight supervisor and if no aircraft take-off and land on the runway, according to aerodrome minima:

- cloud ceiling – 500 FT;
- visibility – 2000 m, in accordance with established intervals and distances to obstacles.

Movement (hover taxiing) to (from) the pad, hovering training (height) and take-off and landing from (to) the pad should be performed with clearance of "Tengiz-Tower" controller only. Helicopter pilot is responsible for safety during movement (taxiing) to (from) the pad, hovering training (height maintenance), takeoff and landing from (to) the pad.

6. Runway and helipad use at Tengiz aerodrome

Except for emergency, runway and helipad use is allowed at Tengiz aerodrome for other airlines if preliminary agreement with Tengiz aerodrome operator administration is obtained:
Prime Aviation JSC

Phone:+7 (712302) 3370
Phone:+7 (777) 552 6195
AFS:UATZPKZX
Email:opstng@tengizchevroil.com

UATZ AD 2.21 Noise Abatement Procedures

NIL

UATZ AD 2.22 Flight procedures

GENERAL PROVISIONS

IFR and VFR flights are allowed in Tengiz aerodrome area.

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

- have permission from ATC unit received prior to entering the area of responsibility
- report the location if requested by ATC
- follow the ATS instructions
- have and continuously maintain two-way radio communication in VHF range.

IFR and VFR flights should be carried out at assigned flight levels (heights) in accordance with rules of vertical separation, and only one aircraft is allowed to be on the flight level (height).

IFR flights have an advantage over VFR flights.

If it is necessary, arriving aircrafts can be sent to holding area in order to ensure time separation.

In case of flight safety hazard, it is allowed to change assigned altitude (flight level) and deviate from the line of the route. When aircraft deviates from assigned route or flight level (altitude), captain should immediately report it ATC, under whose control the aircraft is.

Information about activities of restricted, prohibited and danger areas, within the area of the aerodrome in real time, permission to overfly or bypass route should be given by «Tengiz Tower».

IFR FLIGHTS WITHIN AERODROME CONTROL ZONE

Take-off and initial climb should be carried out according to standard routes indicated on Standard Instrument Departure Chart (SID) Runway 18/ Runway 36.

Arrival should be carried out according to standard routes indicated on Standard Instrument arrival Chart Runway 18/ Runway 36 or via routes assigned by ATC.

Aircraft crew must maintain established Standard Departure (SID) and arrival (STAR) routes and in case of deviation return to assigned route immediately.

The crew must maintain the established speed limit, unless otherwise instructed by ATC. Aircraft indicated airspeed control can be applied to control air traffic flows in order to ensure intervals, required for landing, considering aircraft characteristics.

VFR FLIGHTS WITHIN AERODROME CONTROL ZONE

Permission for departing and arriving aircraft for entry to aerodrome control zone, route and altitude, holding area until the aircraft receives permission for entry to flight circle is given by Tengiz Tower.

Aerodrome traffic circuit is established for VFR flights: Runway 18 — right circle, Runway 36 – left circle.

Traffic circuit altitude is instructed by “Tengiz Tower” ATC.

IFR minima for runway 18/36 take-offs and landings:

- cloud ceiling: 500 FT (true airspeed 162 Kt and less), 1000 FT (true airspeed 163-243 Kt runway 18/36)
- meteorological visibility range: 2000 meters (true speed 162 Kt and less), 5000 meters (163-243 Kt runway 18/36)

Minima for runway 18/36 take-offs and landings under special VFR and IFR at daytime:

- cloud ceiling – 330 FT;
- meteorological visibility range – 1000 meters.

Minima for runway 18/36 take-offs and landings under special VFR and IFR at nighttime for healthcare organizations flights, search and rescue, emergency works and training flights:

- cloud ceiling – 1000 FT;
- meteorological visibility range – 4000 meters.

RADAR PROCEDURES IN AERODROME CONTROL ZONE

Not applicable

RADIOCOMMUNICATION LOSS (FAILURE)

Warning: procedures for radio communication loss (failure) have differences with standards recommended by practice and rules of the ICAO (ICAO Appendix 2).

In case of radio communication loss, crew must:

- turn on the “Distress” signal, set code 7600;
- use emergency frequency of 121.5 MHz, radio communication with other aircrafts and ATC units;
- listen to DVOR TGZ frequency (113.9 MHz) for information and ATC instructions;
- in case of communication loss after take-off, the aircraft must land or proceed to destination aerodrome in accordance with ATC instructions or fly on flight levels FL140, FL150 or FL240, FL250 specially established for flights without radio communication, depending on direction of flight;
- approach and landing should be carried out according to established approach scheme;
- in case of flight without radio communication at night, the aircraft must indicate the location by periodically turning on the landing lights or by flashing side lights.

EMERGENCY LANDING PROCEDURE

In case of emergency on aircraft at take-off stage, the aircraft captain is responsible for necessary maneuver in order to ensure safety.

GROUND MOVEMENT PROCEDURES

The order of aircraft movement on the aerodrome

Taxiing to/from parking stand should be carried out according to signals of responsible person of aerodrome operator service.

Taxiing speed should be set up by aircraft captain depending on airfield surface condition, obstacle presence, aircraft weight, winds and visibility conditions.

In case of visibility less than 2 kilometers, aircraft towing should be carried out at reduced speed with switched

on marker and aeronautical lights and with compliance with increased precautionary measures.

Removal of disabled aircraft from aerodrome maneuvering area

Removal of disabled aircraft is carried out by aerodrome owner and aerodrome and aircraft operators as well.

Information about technical means and equipment used in rescue and fire fighting.

Fire and rescue crews have a fire equipment provided in table 1.

Table 1: Available fire-fighting equipment at Tengiz airport

Name, type of fire truck	Quantity	Main location of basing	Remark
"DARLEY CHALLENGER" fire truck	1	TCO fire and emergency service garage №3	Used for duty at collecting point №3 of TCO fire and emergency service
"E-ONE" RESCUE-3 fire truck	1	TCO fire and emergency service garage №3	Used for duty at collecting point №3 of TCO fire and emergency service
Iveco-Magirus (AVIA) Impact×6ARFF 12000	1	TCO fire and emergency service garage №3	Used for duty at the airport

UATZ 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 ornithological situation in the Tengiz aerodrome area is significantly influenced by the proximity of the north-eastern coast of the Caspian Sea.

The spring and autumn seasons are characterized by migration of various species of migratory birds, as well as the beginning of nesting period. The main directions of spring and autumn migrations of birds are northern and north-eastern directions and back.

Bird migrations take place at altitudes of 200 meters or above. The greatest activity of birds is observed in the period from 06:00 to 10:00 in the morning, and in the afternoon from 16:00 to 19:00.

The winter period is characterized by a low presence and poor species variety of birds.

Information about bird flocks and their flight direction.

Bird migrations take place at altitudes of 200 meters or above. The greatest activity of birds is observed in the period from 06:00 to 10:00 in the morning, and in the afternoon from 16:00 to 19:00. Distinctive flight direction from northeast to southwest in the aerodrome area in the period from 10:00 to 12:00 and from 16:00 to 17:00 in back direction is shown by grey doves in flocks with from 7 to 12 birds, at height up to 50 meters.

Sometimes in winter period, flocks of grey doves with up to 50 birds are detected in aerodrome area, and flocks of herring gulls with up to 50 birds as well.

UATZ AD 2.24 Charts Related To An Aerodrome

Name	Page
Aerodrome Chart - ICAO	UATZ AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart - ICAO	UATZ AD 2.24.3-1
Standard Departure Chart Instrument (SID) RWY 18 ICAO	UATZ AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 36 ICAO	UATZ AD 2.24.7-2-1
Standard Departure Chart Instrument (SID) RWY 18 ICAO	UATZ AD 2.24.7-3-1
Standard Departure Chart Instrument (SID) RWY 36 ICAO	UATZ AD 2.24.7-4-1
Standard Arrival Chart Instrument (STAR) RWY 18 ICAO	UATZ AD 2.24.9-1-1
Standard Arrival Chart Instrument (STAR) RWY 36 ICAO	UATZ AD 2.24.9-2-1
Standard Arrival Chart Instrument (STAR) RWY 18 ICAO	UATZ AD 2.24.9-3-1
Standard Arrival Chart Instrument (STAR) RWY 36 ICAO	UATZ AD 2.24.9-4-1
Standard Arrival Chart Instrument (STAR) RWY 18 ICAO	UATZ AD 2.24.9-5-1
Standard Arrival Chart Instrument (STAR) RWY 36 ICAO	UATZ AD 2.24.9-6-1
Instrument Approach Chart – VOR/DME RWY 18 ICAO	UATZ AD 2.24.11-1-1
Instrument Approach Chart – VOR/DME RWY 36 ICAO	UATZ AD 2.24.11-2-1
Instrument Approach Chart – NDB RWY 18 ICAO	UATZ AD 2.24.11-3-1
Instrument Approach Chart – BC NDB RWY 36 ICAO	UATZ AD 2.24.11-4-1
Instrument Approach Chart – RNP RWY 18 ICAO	UATZ AD 2.24.11-5-1
Instrument Approach Chart – RNP RWY 36 ICAO	UATZ AD 2.24.11-6-1
Visual Approach chart – ICAO	UATZ AD 2.24.12-1

3	Capability for removal of disabled aircraft	There are possibilities of evacuation of aircraft with an empty equipped aircraft weight of up to 40 tons, types A-320, B-737. The equipment is available around the clock Phone: +7 (7253) 352900 Phone: +7 702 0470769 Email: ramp@hsairport.kz
4	Remarks	The possibility of increasing the required level of fire protection up to 8 categories on request.

UAIT AD 2.7 Seasonal Availability - Clearing

1	Types of clearing equipment	3 plow-brush equipment with turbo-blowing, 1 screw-rotor, 1 trailed reagent sprayer, 1 tractor with attachments, Other modern snow removal equipment
2	Clearance priorities	1. RWY 2. TWY 3. Stands
3	Remarks	(Seasonal availability: All seasons, caution advised in winter during snow conditions) U-turns on the RWY 05/23 for the aircraft code letter D and higher are allowed only at the ends of the RWY.

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

1	Apron surface and strength	STANDS		SURFACE	STRENGTH
		1, 2		CONC	PCN 60/R/A/W/T
		3-7, 3A, 4A, 8, 8A		CONC+ASPH	PCN 80/F/C/W/T
2	Taxiway width, surface and strength	TWY	WIDTH (M)	SURFACE	STRENGTH
		A	23	CONC+ASPH	PCN 80/F/C/W/T
		B	23	CONC+ASPH	PCN 80/F/C/W/T
3	Altimeter checkpoint location and elevation	Nil			
4	VOR checkpoints	Nil			
5	INS checkpoints	Nil			
6	Remarks	At the end sections of the RWY there are widenings for turning the aircraft. Width 95m. The surface is concrete. PCN 60 R/A/W/T.			

UAIT 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, apron
2	RWY and TWY markings and LGT	Markings of thresholds, touchdown zones, centre line, fixed distance markers, RWY edges, RWY designations, undershoot area
3	Stop bars	Nil
4	Other runway protection measures	Nil
5	Remarks	RWY 05/23 turning bay blue lights has low intensity at nighttime and in low visibility conditions.

UAIT AD 2.10 Aerodrome Obstacles

NIL

UAIT AD 2.11 Meteorological Information Provided

1	Associated MET Office	Meteorological service Turkistan
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation: Periods of validity	Meteorological service Turkistan, 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	Nil
9	ATS units provided with information	Briefing, TWR
10	Additional information	Nil

UAIT AD 2.12 Runway Physical Characteristics

Designation s RWY NR	TRUE BRG	Dimension s 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
05	55,68°	3300 X 45	80/F/C/W/T CONC+ASPH	431810.00N 0683200.99E - -135.1 FT	THR 912.7 FT	0.7%
23	235.70°	3300 X 45	80/F/C/W/T CONC+ASPH	431910.27N 0683401.98E - 134.5 FT	THR 988.5 FT	0.7%

SWY dimensions (M)	CWY dimension s (M)	Strip dimensions (M)	RESA dimensions (M)	Location and description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
Nil	200 X 160	3600 X 300	240 X 150	Nil	Nil	The RWY turn pad length is 200 m, the total width of the RWY turn pad is 95 m. Refer to AIP section 2.24.1
Nil	300 X 160	3600 X 300	240 X 150	Nil	Nil	The RWY turn pad length is 200 m, the total width of the RWY turn pad is 95 m. Refer to AIP section 2.24.1

UAIT AD 2.13 Declared Distances

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
05	3300	3500	3300	3300	Nil
23	3300	3600	3300	3300	Nil
TWY A - 05	1650	1850	1650	Nil	Nil
TWY B - 05	1086	1286	1086	Nil	Nil
TWY A - 23	1650	1950	1650	Nil	Nil
TWY B - 23	2214	2514	2214	Nil	Nil

UAIT 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
05	CAT I (FALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	3300, spacing 60m, 0-2700 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
23	CAT I (FALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	3300, spacing 60m, 0-2700 white, last 600m yellow	RED Nil	Nil	Nil

UAIT AD 2.15 Other Lighting, Secondary Power Supply

1	ABN/IBN location, characteristics and hours of operation	
2	LDI location and LGT Anemometer location and LGT	LDI: 117m from centerline of the RWY, 492.4m from THR 23 Anemometer: Nil
3	TWY edge and centre line lighting	TWY A EDGE: BLU TWY B EDGE: BLU
4	Secondary power supply/switch-over time	AVBL, 0 SEC
5	Remarks	Nil

UAIT AD 2.16 Helicopter Landing Area

NIL

UAIT AD 2.17 ATS Airspace

1	Designation and lateral limits	TURKISTAN CTR 433342N 0684843E - 431734N 0690339E - 425724N 0682312E - 431121N 0680459E - 432101N 0680856E - 433342N 0684843E
2	Vertical limits	6000 FT ALT / GND
3	Airspace classification	C
4	ATS unit call sign Language(s)	TURKISTAN TOWER EN TURKISTAN VYSHKA RU
5	Transition altitude	10000 FT
6	Hours of applicability	H24
7	Remarks	Nil

UAIT 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
TWR	TURKISTAN TOWER (EN) TURKISTAN VYSHKA (RU)	131,3 MHZ	Nil	Nil	H24	Nil

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	TURKISTAN TRANZIT (EN) TURKISTAN TRANZIT (RU)	121.35 MHZ	Nil	Nil	H24	Nil
ATIS	TURKISTAN ATIS (EN) TURKISTAN ATIS (RU)	124,4 MHZ 118,3 MHZ	Nil	Nil	H24	Nil

UAIT 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 05 I/D/2	ITR	110.7 MHZ	H24	431924.6N 0683430.8E	1000 FT	Nil	Nil
GP 05 I/C/2		330.2 MHZ		431811.7N 0683214.3E			
DME 05	ITR	CH 44X		431811.7N 0683214.3E			
ILS LOC 23 I/D/2	ITK	111.3 MHZ	H24	431800.6N 0683142.1E	1000 FT	Nil	Nil
GP 23 I/C/2		332.3 MHZ		431900.6N 0683352.3E			
DME 23	ITK	CH 50X		431900.6N 0683352.3E			
DVOR/DME (6°E/2019)	TRK	114,6 MHZ CH 93X	H24	431932.3N 0683446.1E	1000 FT	Nil	Nil

UAIT AD 2.20 Local Traffic Regulations**1. Airport regulations**

Movement of aircraft about the aerodrome shall be carried out under its power or by towing with special vehicles. Taxiing and towing shall be carried out strictly along taxi center lines. Distributing of stands shall be carried out by dispatcher service according to apron load and availability of vacant stands, involved in maintenance. The speed of taxiing shall be chosen by a pilot-in-command depending on the condition of taxiways and apron, presence of obstacles, aircraft weight, and horizontal visibility conditions. The speed of taxiing in all cases must not exceed the speed established by the Flight Crew Operational Manual. ATS air traffic controller is responsible for the taxiway route assignment, the pilot-in-command is responsible for the observance of taxiing rules and a person, guiding the taxiing on the segment assigned to him, is responsible for the safety of taxiing. Taxiing of ACFT with index 4 and 5 into RWY from TWY A and TWY B and out of RWY to TWY shall be carried out at reduced speed with the flight crew's increased caution and with the observance of safety interval between the landing gear and edges. For De-icing on stand 8, 8A for aircraft with code designations D and higher, strictly under the accompaniment of aircraft technicians, taxiing from the TWY A side.

2. Taxiing/towing precautions with taking into account visibility conditions, surface condition of runway, apron, stands and taxiways.

Flight crew shall be notified about the surface condition of runway, apron, stands and taxiways by "Tower" air traffic controller according to work technique.

Taxiing onto the apron after runway vacation shall be carried out only after "Follow me" car.

Aircraft parking shall be carried out by the signals of marshaller.
Escorting by special vehicle from stands to holding position and from taxiways to stands shall be carried out when markings on the maneuvering area are invisible due to snow.

3. Taxiing into stands under own engines power and by towing.

Taxiing into stands 3-4 shall be carried out under own engines power.

Taxiing into stands 8, 8A shall be carried out by towing under the accompaniment of aircraft technicians with code designations D and higher

4. Taxiing out of stands under own engines power and by towing.

Taxiing out of stands 1, 2, 5, 6, 7, 3A, 4A, 8A shall be carried out by towing.

5. Parking area for small aircraft (General aviation)

Parking on stand 3-4 shall be carried out by the signals of marshaller

6. De-icing areas, sanitary area, engine start-up areas.

For De-icing on stand 8, 8A for aircraft with code designations D and higher, strictly under the accompaniment of aircraft technicians, taxiing from the TWY A side.

7. The movement procedure of aircraft and vehicles in critical and sensitive zones of ILS during aerodrome operation on the minima I ICAO category.

The boundary of the critical area of the radio beacon system has daytime and nighttime markings on the TWY A. "Stop" and "ILS critical area" signs are set on the intersection of the airport roads and the critical area of the radio beacon system.

The intersection of critical zones of radio beacon landing system with aircraft, vehicles and other mobile facilities shall be carried out with the clearance of the "Tower" controller. The intersection of these areas with mentioned facilities during landing approach till landing is prohibited.

8. Restrictions in the operation of large aircraft including restrictions on the use of its own power for taxiing.

Aerodrome can be operated by aircraft with PCN/ACN ratio above or equal to 1. Weight and traffic intensity restriction of aircraft with non-equal PCN and ACN values are applied (Operation of aircraft of the MD-11 and B747-8F types with full weight with the intensity limitation to 20 (aircraft departures per day).

9. Taxiing of aircraft in the absence of visibility of marking lines on the maneuvering area.

Runway, apron, stands and taxiways are not equipped with centerline lights

In case of invisibility of taxiway due to packed snow aircraft escorting shall be carried out only after the "Follow-me" car equipped with a UHF communication with a two-way radio "ground-to-air" and "ground-ground" communication, flashing lights and the "Follow-me" panel and can be requested by the flight crew or by the shift deputy head of production and dispatcher service.

10. Disabled aircraft removal procedures.

It is possible to evacuate aircraft with an empty weight of loaded aircraft up to 40 tons, types A320, B-737.

11. Low Visibility Procedures.

Low Visibility Procedures (LVP) are effected when RVR is less than 550 m when manoeuvring area or part thereof is not visually monitored from the "Tower" control centre.

Low Visibility Procedures are initiated by the Air traffic Manager of Control Centre. The status of LVP is passed to pilots by ATIS broadcast or by ATC.

Before the introduction of the procedures of limited visibility, the air traffic controller of "Tower" Control centre (Tower ATC) begins to keep a record of vehicles and persons who are currently on the manoeuvring area, and continues to this account during the period of these procedures to promote security activities in this area and restricts the movement of vehicles airport services on the apron and manoeuvring area, writes the data in the logbook.

Tower ATC, received information about the beginning of the (termination) procedures in low visibility conditions to inform

adjacent control towers. The operation of LVP shall be reported by Tower ATC phrase: "LOW VISIBILITY PROCEDURES IN OPERATION".

Tower ATC restricts the movement of vehicles airport services on the apron and manoeuvring area during LVP procedures, produces control over the presence of obstacles on the runway and in the ILS critical area, on the reports of aircraft crew or reports of aerodrome service specialist, informs the flight crew about changes in the operational status of radio and lighting equipment.

Taxiing of departing aircraft shall be carried out after a follow-me car from stands to holding position. Taxiing to stand (apron) after RWY vacation shall be carried out after a follow-me car.

Upon receiving information that an aircraft or vehicle is lost or uncertain of its position on the manoeuvring area, Tower ATC takes action to ensure safety and to assist the aircraft or vehicle to determine its position.

If the Tower ATC cannot visually determine the aircraft RWY vacation, it requires the crew to report the vacation of the RWY.

12. Measurement of the friction coefficient of the runway pavement surface

Carried out using continuous friction measuring equipment Skiddometer BV 11.

UAIT AD 2.21 Noise Abatement Procedures

NIL

UAIT AD 2.22 Flight Procedures

1. 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 2000 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 2000 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	KILO (SE outskirts of Kosmezgil)	N432135 E0680637	270° 20.6 nm TRK DVOR/DME	Entry/exit
2	DELTA (southern outskirts of Kentau)	N432920 E0683248	346° 9.9 nm TRK DVOR/DME	Entry/exit

№	Waypoint name (visual reference)	Geographical coordinates	Radial (mag.) and distance from NAVAID (ARP)	Remarks
3	PAPA (SE outskirts of Kaynarbulak)	N431806 E0690402	088° 21.4 nm TRK DVOR/DME	Entry/exit
4	CHARLIE (Eastern coast of Sinakkol lake)	N430312 E0683445	174° 16.3 nm TRK DVOR/DME	Entry/exit
5	ALPHA (northern outskirts of Koshkorgan)	N432351 E0683011	316° 5.5 nm TRK DVOR/DME	Holding
6	BRAVO (southern outskirts of Ibata)	N431519 E0683808	144° 4.9 nm TRK DVOR/DME	Holding

UAIT 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

In the Turkistan region have been registered 377 bird species.

During the warm season, the highest concentration of birds is observed near the Shoshkakul lakes, Koksaray, Bugun and Shardarinsky reservoirs, the Bugun river, Syr Darya, Arys, Badam, and aerodrome areas, where they make random flights up to an altitude of 600-1000 meters.

Spring migration of birds occurs from late February to March, and autumn migration from September to November. The main direction of migrating birds passes through Shardarinsky reservoir, a group of Shushkakul lakes, through Karatau to the North of the region, crossing sections of the route, which sharply increases the risk of collision with birds at altitudes up to 3000 meters.

The main directions of bird's migration in the spring from south to north. In autumn, from north to south.

UAIT AD 2.24 Charts Related To An Aerodrome

Name	Page
Aerodrome Chart ICAO	UAIT AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UAIT AD 2.24.3-1
Aerodrome Obstacle Chart – ICAO – Type A	UAIT AD 2.24.4-1
Area Chart ICAO	UAIT AD 2.24.6-1
Standard Departure Chart Instrument (SID) RWY 05 ICAO	UAIT AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 23 ICAO	UAIT AD 2.24.7-2-1
Standard Arrival Chart Instrument (STAR) RWY 05 ICAO	UAIT AD 2.24.9-1-1
Standard Arrival Chart Instrument (STAR) RWY 23 ICAO	UAIT AD 2.24.9-2-1
ATC Surveillance Minimum Altitude Chart ICAO	UAIT AD 2.24.10-1
Instrument Approach Chart – ILS/DME RWY 05 ICAO	UAIT AD 2.24.11-1-1
Instrument Approach Chart – ILS/DME RWY 23 ICAO	UAIT AD 2.24.11-2-1
Instrument Approach Chart – VOR/DME RWY 05 ICAO	UAIT AD 2.24.11-3-1
Instrument Approach Chart – VOR/DME RWY 23 ICAO	UAIT AD 2.24.11-4-1
Instrument Approach Chart – LOC/DME RWY 05 ICAO	UAIT AD 2.24.11-5-1
Instrument Approach Chart – LOC/DME RWY 23 ICAO	UAIT AD 2.24.11-6-1
Visual Approach chart – ICAO	UAIT AD 2.24.12-1
VFR Departure/Arrival Chart	UAIT AD 2.24.14-1

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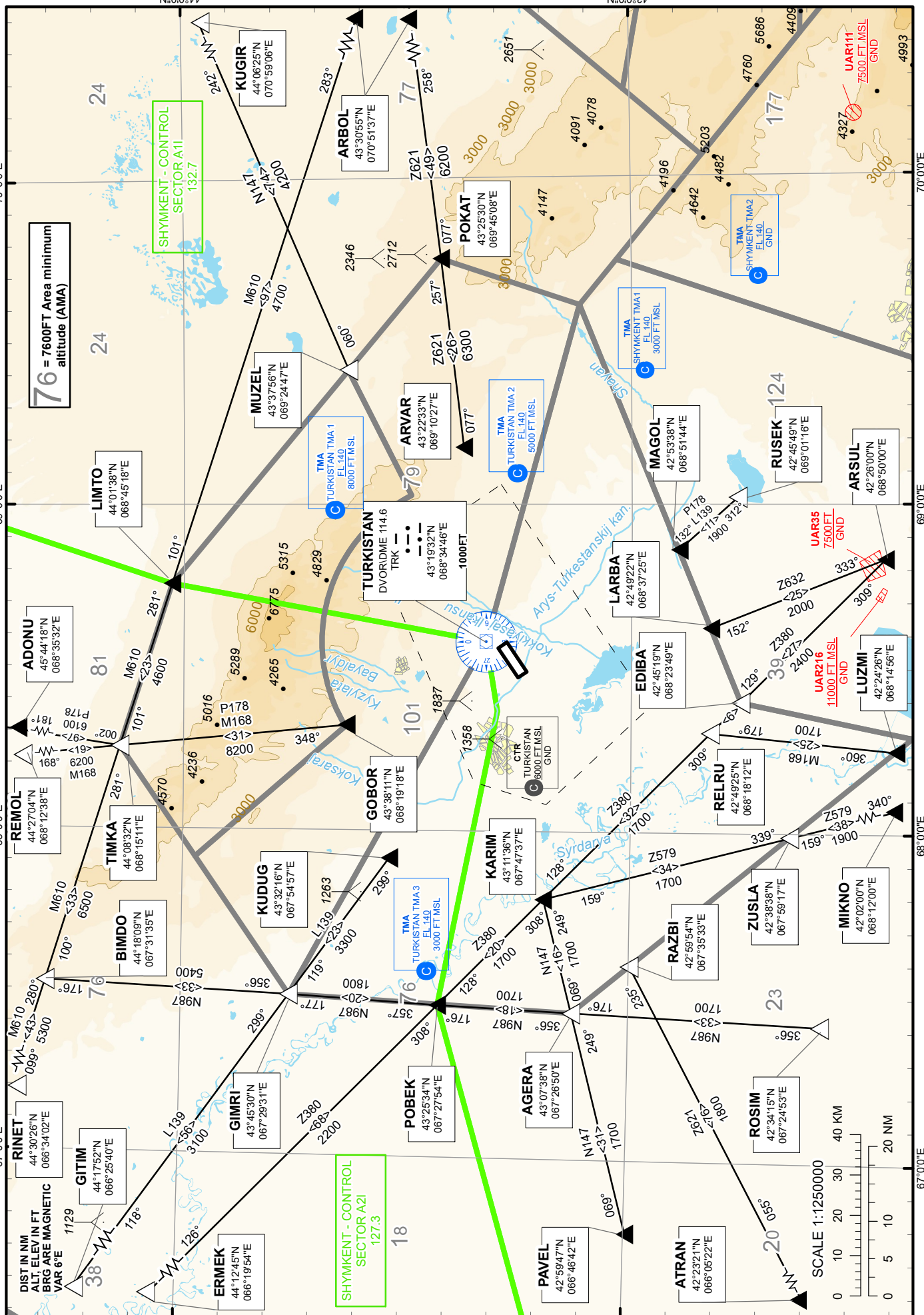
AREA CHART
ICAO

TMA TURKISTAN

TRANSITION ALTITUDE
10000 FT

TURKISTAN TOWER 131.3
TURKISTAN ATIS (EN) 124.4
TURKISTAN ATIS (RU) 118.3

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2	Clearance priorities	1. RWY 2. TWY 3. Stands
3	Remarks	Nil

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

1	Apron surface and strength	STANDS		SURFACE	STRENGTH
		1-4		CONC+ASPH	PCN 56/R/B/X/T
		5-7, 10-12		CONC+ASPH	PCN 57/F/C/X/T
		15-17		CONC+ASPH	PCN 53/F/C/X/U
		18-21		CONC+ASPH	PCN 40/F/C/X/U
		22		CONC+ASPH	PCN 72/F/C/X/T
2	Taxiway width, surface and strength	TWY	WIDTH (M)	SURFACE	STRENGTH
		MAIN TWY from TWY A to TWY B	23	CONC+ASPH	PCN 57/F/C/X/T
		MAIN TWY from TWY B to TWY D	21	CONC+ASPH	PCN 35/F/C/Y/T
		A	23	CONC+ASPH	PCN 55/R/B/X/T
		B	23	CONC+ASPH	PCN 57/F/C/X/T
		C	21	CONC+ASPH	PCN 35/F/C/Y/T
		D	21	CONC+ASPH	PCN 35/F/C/Y/T
3	Altimeter checkpoint location and elevation	Stands: 3 - 287m/942ft 4 - 286m/940ft 15,16 - 286m/941ft			
4	VOR checkpoints	On the MAIN TWY opposite the Stand 18			
5	INS checkpoints	Nil			
6	Remarks	Segment of main TWY from stand 22 till TWY D, TWY C and TWY D unusable. During the take-off and landing operations from RWY 12 and RWY 30, it is PROHIBITED: <ul style="list-style-type: none">taxiing aircraft in the area from stand 10 to taxiway Athe movement of special vehicles in the area of stand 10 to taxiway A			

UASK 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-boards at entrance of RWYs, guidance sign designating taxiways, marking taxi route on the apron
2	RWY and TWY markings and LGT	Markings of threshold, touchdown zones, centre line, fixed distance markers, RWY edges, RWY designations. TWY: Taxi-holding position marking, edge line and center line.
3	Stop bars	Nil
4	Other runway protection measures	Nil
5	Remarks	Opportunity to use the «Follow me»

UASK AD 2.10 Aerodrome Obstacles

NIL

UASK AD 2.11 Meteorological Information Provided

1	Associated MET Office	Meteorological service Ust-Kamenogorsk Phone: +7 (7232) 293483
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation: Periods of validity	Meteorological service Ust-Kamenogorsk, 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, SWM+SWH, SWL of Kazakhstan;
8	Supplementary equipment AVBL for providing information	Doppler weather radar (DWR-C)
9	ATS units provided with information	Briefing, TWR
10	Additional information	Nil

UASK 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
12	130.60	2800 X 45	50/R/B/X/T CONC+ASPH	500238.21N 0822849.28E - -145.4 FT	THR 934.0 FT	+0.2% (0.0036)
30	310.62	2800 X 45	50/R/B/X/T CONC+ASPH	500139.20N 0823036.13E - -145.4 FT	THR 941.9 FT	-0.2% (0.0036)

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	3100 X 300	90 X 150	Nil	Nil	Turning Pad 140 x 90
Nil	Nil	3100 X 300	90 X 150	Nil	Nil	Turning Pad 140 x 90

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 30 I/D/2	ISI	109.7 MHZ	H24	500249.8N 0822828.4E	900 FT	Nil	Nil
GP 30 I/C/2		333.2 MHZ		500150.4N 0823029.0E			
DME 30	ISI	CH 34X		500150.4N 0823029.0E			
ILS LOC 12 I/D/2	IUS	111.7 MHZ	H24	500122.8N 0823105.8E	900 FT	Nil	Nil
GP 12 I/C/2		333.5 MHZ		500235.1N 0822906.6E			
DME 12	IUS	CH 54X		500235.1N 0822906.6E			

UASK AD 2.20 Local Aerodrome Regulations

RWY 12/30, TWY A, TWY B, ACFT Stands 1-4, 5-12, 15-22 are available for ACFT category D, types B767-300 and below.

UASK AD 2.21 Noise Abatement Procedures

NIL

UASK AD 2.22 Flight procedures.**1. Flight and ground movement procedures.**

Takeoff shall be performed from the starting point of RWY where runway physical characteristics complies required actual aircraft takeoff weight and takeoff conditions. Aircraft takeoff with tailwind is permitted in case when tailwind speed corresponds to the value: for all aircraft types not greater than value set by Flight Operational manual of each aircraft type, but not greater than 5m/sec; for helicopters - not greater than value set by Flight Operational manual of each aircraft type.

Aircraft ground movement on manoeuvring area shall be carried out by taxiing or towing. Taxiing and towing shall be carried out strictly along TWY centreline and apron guideline.

Hover taxiing of helicopters with skids from stands to takeoff area and back shall be carried out along taxiway markings.

Taxiing shall be carried out after received clearance, taxiing route, stand number and other information for safe taxiing from "Tower" ATC. Taxiing speed shall be set by pilot-in-command according to the condition of TWY, presence of obstacles, aircraft weight, wind conditions and visibility.

In all cases taxiing speed should not exceed speed set by Flight Operational manual of this type of aircraft.

Aircraft shall be followed by follow-me car when RVR is less than 550 m.

Crossing the ILS critical areas by aircraft, ground vehicles and other vehicles shall be carried out by the clearance of Tower ATC.

Crossing the ILS critical areas during autoland approach is prohibited.

Taxiing out of stands shall be carried out by marshaller's signals, in case of his absence – by pilot-in-command.

Taxiing during nighttime as well as in a daytime, when visibility is less than 2000 m shall be carried out with enabled navigational and landing lights.

Taxiing into stands shall be carried out by marshaller's signals.

Helicopter taxiing shall be carried out with wind limitations, according to Flight Operational manual, at constant visibility of landmarks located in front.

Hover taxiing with General flight rules observance shall be carried out in case of ground taxiing unavailability (poor ground surface conditions or helicopter design doesn't allow to ground taxi).

Take-off/landing shall be carried out from/to RWY 12/30, abeam TWY-A, if TWY-A was used for taxiing into/ out of apron 1.

Take-off/landing shall be carried out from/to RWY 12/30, abeam TWY-B, if TWY-B was used for taxiing into/ out of apron 2.

Helicopter take-off shall be carried out after:

- helicopter lining-up on RWY, soft-surface runway or on landing pad (in exceptional circumstance on helicopter stands 40-49);
- helicopter test hovering request from flight crew and obtained clearance from Tower ATC;
- performed test hovering.
- flight crew report about (forward or no-run) takeoff readiness and after obtained clearance for takeoff from Tower ATC.

Landing of helicopter after test hovering is not necessary for no-run takeoff. The height of test hovering shall be chosen by pilot-in-command, but, hovering helicopter shall not block landing and takeoff of other aircraft.

After instrument approach to RWY 12/30 and establishing visual contact with runway lights or guidelines, approaching or moving to landing area (for RWY 12 – abeam TWY-B, or TWY-A, for RWY-30 – abeam TWY-B) shall be carried out by decision of pilot-in-command.

Helicopter take-off and landing from/to RWY 12/30 on VFR shall be carried out from any direction, except sector 130°-304°, S=1.0 km, H= (120) m from apron and TWY-A intersection. Limit sector set in order to avoid the flight of helicopters over closely spaced aircraft parking and service buildings.

If there is a portion RWY 12/ 30 meteorological phenomena or the production of smoke, which could affect the visibility to below the minimum take-off (the largest of the two: the minimum for takeoff the commander of the helicopter and the minimum take-off of this type of helicopter from the airport of Ust-Kamenogorsk, established by FOM of airline), the commander of the helicopter, in coordination with the Tower ATC is allowed to take off from the part of RWY 12/ 30, where weather conditions match the specified minimum.

The movement of all types of special vehicles at the airport shall be carried out only at the set marked routes, according to the "Aircraft, special vehicles and mechanical equipment placement and movement chart".

180-degree turns for aircraft with index "D" and "E" are allowed only at threshold 12/30.

180-degree turns for aircraft with index "B" and "C" are permitted with clearance from ATC "TOWER".

2. Low Visibility Procedures.

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

The operation of LVP shall be reported by Tower ATC phrase: "LOW VISIBILITY PROCEDURES IN OPERATION".

Taxiing of aircraft shall be carried out after "Follow-me" car.

The placement of aircraft on the stands shall be carried out by marshaller's signals.

Taxiing of departing aircraft from stands to holding position shall be carried out after follow-me car.

Aircraft shall stop on holding position before CAT I sign, which marks ILS critical area.

If RVR value reduced below 550 m Air traffic manager transmits circular message: "Attention! Low visibility procedures in operation" to:

- meteorological specialist of primary observation station;
- shift personnel of Radiotechnical Department;
- head of shift of passengers handling service;
- lightning system maintenance engineer of aerodrome power, lighting, and technical service (via aerodrome radio);
- shift specialist of airfield service (via aerodrome radio).

Note: It is necessary to take all measures for timely notification in order to ensure the safety of ground movement procedures have been introduced before they start flying in conditions of reduced visibility. Introduction of procedures in low visibility conditions before confirmation should not be delayed.

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

Air traffic service in the control zone (CTR) of the Ust-Kamenogorsk aerodrome is carried out by the controller of the «TOWER» ATC unit. VFR flights in the control zone (CTR) are carried out at absolute altitudes according to the QNH pressure of the aerodrome. Flights 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. Aircraft crews are responsible for avoiding artificial obstacles. 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.

At Ust-Kamenogorsk aerodrome holding patterns are established at an absolute altitude to await the VFR approach order for the landing of category «A» aircraft and helicopters. The holding patterns (left/right turns) to be used are determined and reported to the aircraft crew by «TOWER» ATC unit. Exit to the final leg, crossing the runway course shall be made only with the permission of the «TOWER» ATC unit.

VFR transit flights through the control zone of Ust-Kamenogorsk are carried out along the route via control points and at altitudes agreed with the «TOWER» ATC unit.

Depending on the air or meteorological situation, the «TOWER» ATC unit, uses other visual landmarks for arrival, departure, overflight and waiting for aircraft, if necessary.

Visual Reference Points of VFR flights within Ust-Kamenogorsk CTR

№	Name	Type	Location	Geographic coordinates	DVOR / DME «UKM» radial and distance	
1	ALPHA	entry / exit	northwestern outskirts of the settlement Novomihailovka	501503N 0823709E	012°	13.8 NM
2	BRAVO	entry / exit	east of the settlement Vinnoe, visual landmark - railway	500358N 0825429E	076°	15.6 NM
3	CHARLIE	entry / exit	southeastern outskirts of the settlement Feklistovka	495444N 0830607E	101°	24.1 NM
4	DELTA	entry / exit	visual landmark - P-25 highway	495055N 0830752E	108°	26.5 NM
5	ECHO	entry / exit	visual landmark - railway / river Irtysh, west of the settlement Ognevka	494546N 0825804E	126°	24.1 NM

№	Name	Type	Location	Geographic coordinates	DVOR / DME «UKM» radial and distance	
6	FOXTROT	entry / exit	north of the settlement Izhgutyty Aitykov	493712N 0824153E	157°	25.9 NM
7	GOLF	entry / exit	southeastern outskirts of the settlement Aityrtau, visual landmark - A-3 highway	494907N 0821917E	203°	14.8 NM
8	HOTEL	entry / exit	visual landmark - the P-24 highway, to the east of the settlement. Gagarino	500925N 0815326E	281°	25.0 NM
9	INDIA	entry / exit	visual landmark - highway A-10, to the east of the settlement. Pervomaiskii	501529N 0820444E	303°	21.4 NM
10	JULIET	entry / exit	visual landmark - railway, to the north of the settlement. Verhneberezhovka	501924N 0821204E	320°	21.1 NM
11	OSCAR	holding		500746N 0823249E	008°	6.0 NM
12	LIMA	holding		500457N 0823803E	052°	5.7 NM
13	PAPA	holding		495359N 0823053E	172°	8.0 NM
14	ZULU	holding		495915N 0822122E	239°	6.5 NM

4. 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.

5. 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.

UASK 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. Bird concentration near airport.

The main migration direction in spring: from southwest to north-east; in autumn: in the counter direction.

In case of necessity, the aerodrome control point informs pilots about bird flights and approximate heights above ground level. The flight altitude of birds varies from 0 to 400 m above ground level

The mentioned above time intervals pilots are recommended, if design characteristics of airborne equipment allows, to switch on landing lights during the flights in aerodrome area, during take-off, approach, climbing, descent.

Bird concentration scattering measures include: periodical bird deterrence (shooting), effective measures regarding to scattering, removal of green plantations and ground covering, abandon garbage collection prevention of agricultural activity within the airport area.

UASK AD 2.24 Charts Related To An Aerodrome

Name	Page
Aerodrome Chart ICAO	UASK AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UASK AD 2.24.3-1
Aerodrome Obstacle Chart – ICAO – Type A	UASK AD 2.24.4-1
Area Chart - ICAO	UASK AD 2.24.6-1
Standard Departure Chart Instrument (SID) - RWY 30 ICAO	UASK AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) - RWY 12 ICAO	UASK AD 2.24.7-2-1
Standard Departure Chart Instrument (SID) - RWY 30 ICAO	UASK AD 2.24.7-3-1
Standard Departure Chart Instrument (SID) - RWY 12 ICAO	UASK AD 2.24.7-4-1
Standard Departure Chart Instrument (SID) RNAV - RWY 30 ICAO	UASK AD 2.24.7-5-1
Standard Departure Chart Instrument (SID) RNAV - RWY 30 ICAO	UASK AD 2.24.7-6-1
Standard Departure Chart Instrument (SID) RNAV - RWY 12 ICAO	UASK AD 2.24.7-7-1
Standard Departure Chart Instrument (SID) RNAV - RWY 12 ICAO	UASK AD 2.24.7-8-1
Standard Arrival Chart Instrument (STAR) - RWY 30 ICAO	UASK AD 2.24.9-2-1
Standard Arrival Chart Instrument (STAR) - RWY 12 ICAO	UASK AD 2.24.9-3-1
Standard Arrival Chart Instrument (STAR) RNAV - RWY 30 ICAO	UASK AD 2.24.9-4-1
Standard Arrival Chart Instrument (STAR) RNAV - RWY 30 ICAO	UASK AD 2.24.9-5-1
Standard Arrival Chart Instrument (STAR) RNAV - RWY 12 ICAO	UASK AD 2.24.9-6-1
Standard Arrival Chart Instrument (STAR) RNAV - RWY 12 ICAO	UASK AD 2.24.9-7-1
Standard Arrival Chart Instrument (STAR) RNAV - RWY 30 ICAO	UASK AD 2.24.9-8-1
Standard Arrival Chart Instrument (STAR) RNAV - RWY 30 ICAO	UASK AD 2.24.9-9-1
Standard Arrival Chart Instrument (STAR) RNAV - RWY 12 ICAO	UASK AD 2.24.9-10-1
Standard Arrival Chart Instrument (STAR) RNAV - RWY 12 ICAO	UASK AD 2.24.9-11-1
ATC Surveillance Minimum Altitude Chart - ICAO	UASK AD 2.24.10-1
Instrument Approach Chart - ILS/DME RWY 30 ICAO	UASK AD 2.24.11-1-1
Instrument Approach Chart - ILS/DME RWY 12 ICAO	UASK AD 2.24.11-2-1
Instrument Approach Chart - VOR/DME RWY 30 ICAO	UASK AD 2.24.11-3-1
Instrument Approach Chart - VOR/DME RWY 12 ICAO	UASK AD 2.24.11-4-1
Instrument Approach Chart – RNP RWY 30 ICAO	UASK AD 2.24.11-5-1
Instrument Approach Chart – RNP RWY 12 ICAO	UASK AD 2.24.11-6-1
Visual Approach chart – ICAO	UASK AD 2.24.12-1
VFR Departure/Arrival Chart	UASK AD 2.24.14-1

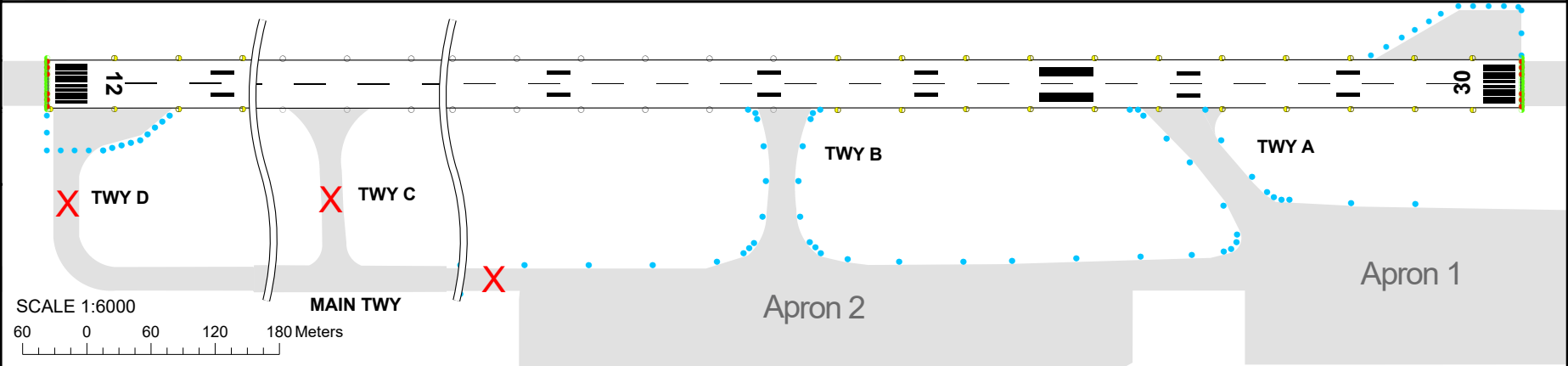
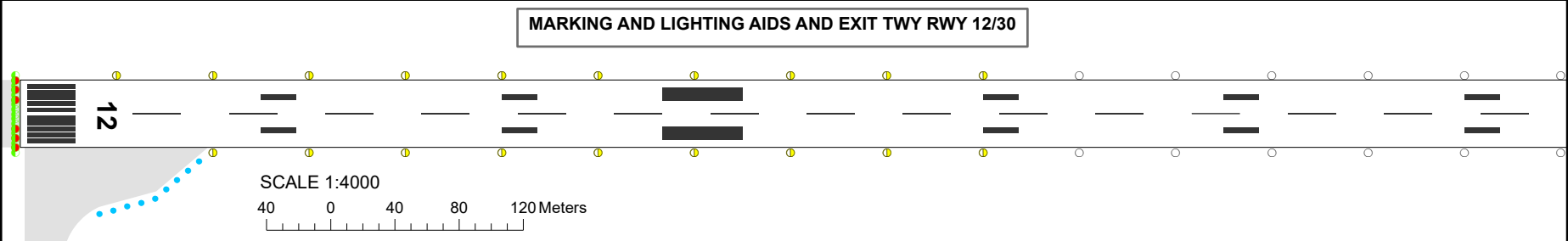
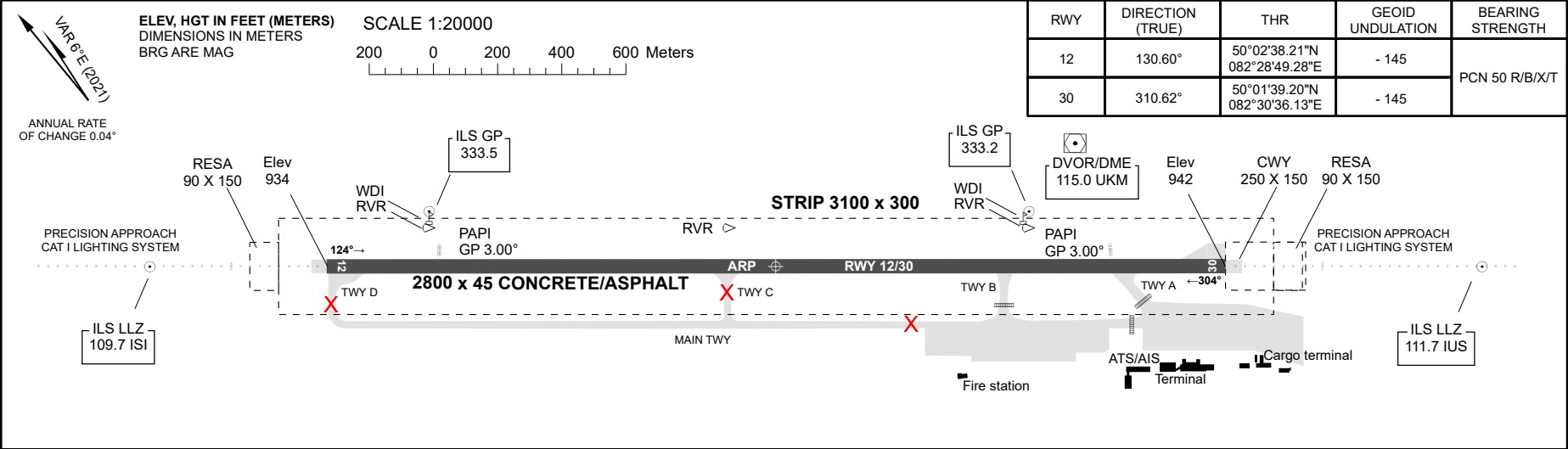
AERODROME
CHART - ICAO

AD ELEV
942FT (287m)

ARP 500209N
0822943E

TWR 130.1

UST-KAMENOGORSK



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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	The length of the turn pad on RWY 04 is 110 m, the total width of the turn pad on RWY 04 is 75 m. REF.AD 2.24.1.
Nil	400 X 160	2901 X 300	240 X 150	Nil	AVBL	The length of the turn pad on RWY 22 is 110 m, the total width of the turn pad on RWY 22 is 75 m. REF.AD 2.24.1.

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 2.20 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.

To perform a 180° turn on the RWY the decision is made by the PIC. During the summer period, the RWY width is 42 meters, during the winter period, the RWY width may be reduced—please refer to the SNOWTAM.

The following widenings are designed to perform a 180-degree turn on the runway:

- TURN PAD 75M AVAILABLE AT THR RWY 04;
- TURN PAD 75M AVAILABLE AT THR RWY 22

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.

No	Waypoint name (visual reference)	Geographical coordinates	Radial (mag.) and distance from NAVAID (ARP)	Remarks
1	ALPHA (Itaуз 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

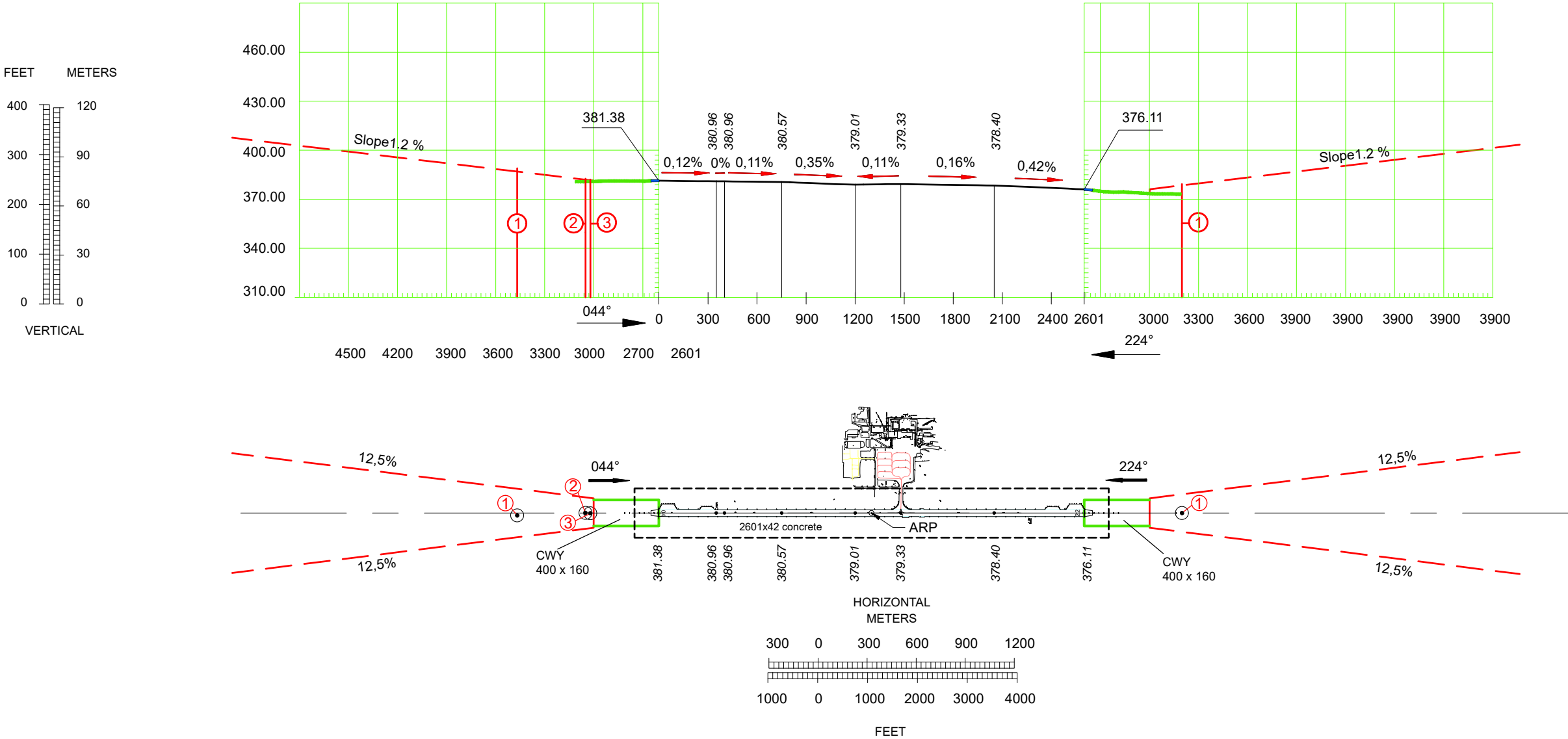
Name	Page
Aerodrome Chart ICAO	UAKD AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UAKD AD 2.24.3-1
Aerodrome Obstacle Chart – ICAO – Type A	UAKD AD 2.24.4-1
Standard Departure Chart Instrument (SID) RWY 04 ICAO	UAKD AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 22 ICAO	UAKD 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

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DIMENSIONS AND ELEVATIONS IN METERS MAG VAR 8°E (2013)

ORDER OF ACCURACY					
№	LAT	LON	H	Horizontal,m	Vertical,m
1	47°41'48.74" N	067°42'56.91" E	389.9	0.053	0.049
2	47°41'57.51" N	067°43'12.17" E	382.5	0.053	0.049
3	47°41'58.06" N	067°43'13.34" E	382.3	0.053	0.049

RWY 04/22 DECLARED DISTANCES		
RWY 04		RWY 22
2601	TAKE – OFF RUN AVAILABLE	2601
3001	TAKE – OFF DISTANCE AVAILABLE	3001
2601	ACCELERATE – STOP DISTANCE AVAILABLE	2601
2601	LANDING DISTANCE AVAILABLE	2601



LEGEND		
	Plan	Profile
Antenna, tower, power line metal	⑥	⑥

ORDER OF ACCURACY					
№	LAT	LON	H	Horizontal,m	Vertical,m
1	47°43'10.68" N	067°45'29.69" E	381.8	0.053	0.049

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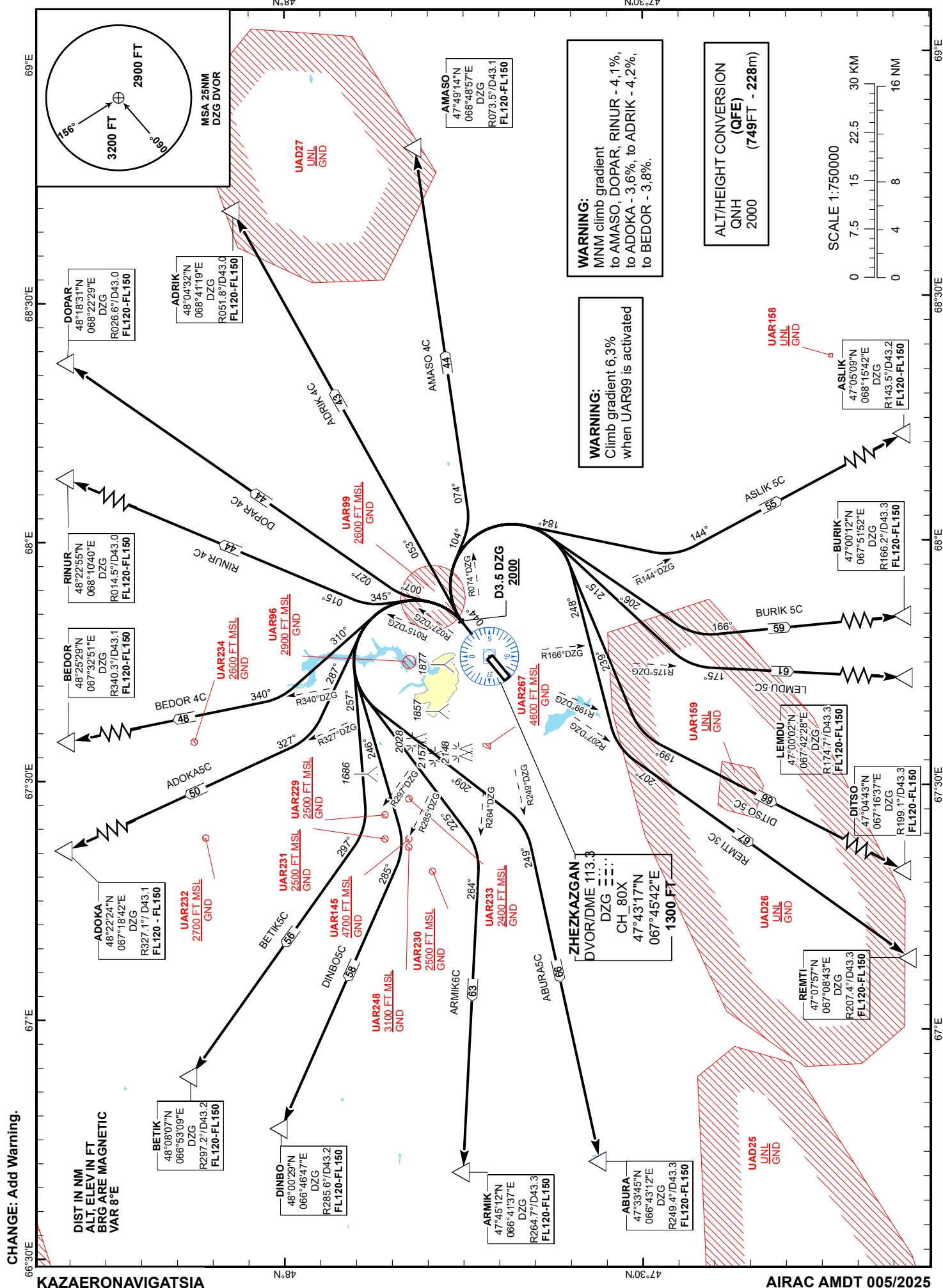
STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO

TRANSITION ALTITUDE
10000 FT

ZHEKZKAZGAN TOWER 127.1
ZHEKZKAZGAN ATIS (EN) 131.4
ZHEKZKAZGAN ATIS (RU) 122.4

ABURA 5C, ADOKA 5C, ADRIK 4C,
AMASO 4C, ARMIK 6C, ASLIK 5C,
BEDOR 4C, BETIK 5C, BURIK 5C,
DINBO 5C, DITSO 5C, DOPAR 4C,
LEMDO 5C, REMTI 3C, RINUR 4C.

ZHEKZKAZGAN
RWY 04



STANDARD DEPARTURE ROUTES – INSTRUMENT (SID) ZHEZKAZGAN RWY 04	
RINUR 4C After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn LEFT on track 345° until intercept R015°DZG, then proceed on track 015° to RINUR (R014.5° D43.0NM DZG). Cross RINUR at FL120 - FL150.	REMTI 3C After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn RIGHT on track 248° until intercept R207°DZG, then proceed on track 207° to REMTI (R207.4° D43.3NM DZG). Cross REMTI at FL120 - FL150.
DOPAR 4C After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn LEFT on track 007° until intercept R027°DZG, then proceed on track 027° to DOPAR (R026.6° D43.0NM DZG). Cross DOPAR at FL120 - FL150.	ABURA 5C After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn LEFT on track 209° until intercept R249°DZG, then proceed on track 249° to ABURA (R249.4° D43.3NM DZG). Cross ABURA at FL120 - FL150.
ADRIK 4C After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn RIGHT on track 053° to ADRIK (R051.8° D43.0NM DZG). Cross ADRIK at FL120 - FL150.	ARMIK 6C After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn LEFT on track 225° until intercept R264°DZG, then proceed on track 264° to ARMIK (R264.7° D43.3NM DZG). Cross ARMIK at FL120 - FL150.
AMASO 4C After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn RIGHT on track 104° until intercept R074°DZG, then proceed on track 074° to AMASO (R073.5° D43.1NM DZG). Cross AMASO at FL120 - FL150.	DINBO 5C After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn LEFT on track 246° until intercept R285°DZG, then proceed on track 285° to DINBO (R285.6° D43.2NM DZG). Cross DINBO at FL120 - FL150.
ASLIK 5C After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn RIGHT on track 184° until intercept R144°DZG, then proceed on track 144° to ASLIK (R143.5° D43.2NM DZG). Cross ASLIK at FL120 - FL150.	BETIK 5C After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn LEFT on track 257° until intercept R297°DZG, then proceed on track 297° to BETIK (R297.2° D43.2NM DZG). Cross BETIK at FL120 - FL150.
BURIK 5C After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn RIGHT on track 206° until intercept R166°DZG, then proceed on track 166° to BURIK (R166.2° D43.3NM DZG). Cross BURIK at FL120 - FL150.	ADOKA 5C After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn LEFT on track 287° until intercept R327°DZG, then proceed on track 327° to ADOKA (R327.1° D43.1NM DZG). Cross ADOKA at FL120 - FL150.
LEMDU 5C After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn RIGHT on track 215° until intercept R175°DZG, then proceed on track 175° to LEMDU (R174.7° D43.3NM DZG). Cross LEMDU at FL120 - FL150.	BEDOR 4C After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn LEFT on track 310° until intercept R340°DZG, then proceed on track 340° to BEDOR (R340.3° D43.1NM DZG). Cross BEDOR at FL120 - FL150.
DITSO 5C After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn RIGHT on track 239° until intercept R199°DZG, then proceed on track 199° to DITSO (R199.1° D43.3NM DZG). Cross DITSO at FL120 - FL150.	