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AIRAC AMDT 007/2024

Effective Date: **31 Oct 2024**

1. Amendment content:

GEN
GEN 2.5 Information updated
GEN 3.1 Information updated

ENR
ENR 3.2 Information updated
ENR 4.4 Information updated
ENR 6 Changes in Enroute chart

AD
AD 1.2 Information updated
UAAA 2.6, 2.8, 2.20 Information updated
UACC 2.21, 2.23 Information updated
UATG 2.21 Information updated
UACK 2.8 Information updated
UAUU 2.7, 2.21 Information updated
UASP 2.21 Information updated
UACP 2.8, 2.12 Information updated
UASS 2.21 Information updated
UADD 2.21 Information updated
UAIT 2.2, 2.4, 2.6 Information updated
UASU 2.21 Information updated
UASK 2.19, 2.21 Information updated
UAII 2.21 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:
K6020/24
NOTAM series A:
A4701/24
NOTAM incorporated to this AMDT will be cancelled by NOTAMC on the 15 NOV 2024
SUP:
Atyrau AD (UATG) - use of ILS on RWY 14
AIC:
Nil

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

Insert the following pages		Remove the following pages	
GEN 0.2 - 1/2	31 OCT 2024	GEN 0.2 - 1/2	23 FEB 2023
GEN 0.3 - 1/2	31 OCT 2024	GEN 0.3 - 1/2	05 SEP 2024
GEN 0.4 - 1/2	31 OCT 2024	GEN 0.4 - 1/2	05 SEP 2024
GEN 0.4 - 3/4	31 OCT 2024	GEN 0.4 - 3/4	05 SEP 2024
GEN 0.4 - 5/6	31 OCT 2024	GEN 0.4 - 5/6	05 SEP 2024
GEN 0.4 - 7/8	31 OCT 2024	GEN 0.4 - 7/8	05 SEP 2024
GEN 0.4 - 9/10	31 OCT 2024	GEN 0.4 - 9/10	05 SEP 2024
GEN 2.5 - 3/4	31 OCT 2024	GEN 2.5 - 3/4	08 AUG 2024
GEN 3.1 - 3/4	31 OCT 2024	GEN 3.1 - 3/4	16 MAY 2024
ENR 3.2 1 - 27/28	31 OCT 2024	ENR 3.2 1 - 27/28	11 JUL 2024
ENR 3.2 1 - 29/30	31 OCT 2024	ENR 3.2 1 - 29/30	11 JUL 2024
ENR 3.2 1 - 31/32	31 OCT 2024	ENR 3.2 1 - 31/32	11 JUL 2024
ENR 3.2 1 - 33/34	31 OCT 2024	ENR 3.2 1 - 33/34	11 JUL 2024
ENR 3.2 1 - 35/36	31 OCT 2024	ENR 3.2 1 - 35/36	11 JUL 2024
ENR 3.2 1 - 37/38	31 OCT 2024	ENR 3.2 1 - 37/38	11 JUL 2024
ENR 3.2 1 - 39/40	31 OCT 2024	ENR 3.2 1 - 39/40	11 JUL 2024
ENR 3.2 1 - 41/42	31 OCT 2024	ENR 3.2 1 - 41/42	11 JUL 2024
ENR 3.2 7 - 7/8	31 OCT 2024	ENR 3.2 7 - 7/8	10 AUG 2023
ENR 3.2 7 - 9/10	31 OCT 2024	ENR 3.2 7 - 9/10	10 AUG 2023
ENR 3.2 7 - 11/12	31 OCT 2024	ENR 3.2 7 - 11/12	10 AUG 2023
ENR 3.2 7 - 13/14	31 OCT 2024	ENR 3.2 7 - 13/14	10 AUG 2023
ENR 3.2 7 - 15/16	31 OCT 2024	ENR 3.2 7 - 15/16	10 AUG 2023
ENR 3.2 7 - 17/18	31 OCT 2024	ENR 3.2 7 - 17/18	10 AUG 2023
ENR 3.2 7 - 19/20	31 OCT 2024	ENR 3.2 7 - 19/20	10 AUG 2023
ENR 4.4 - 13/14	31 OCT 2024	ENR 4.4 - 13/14	11 JUL 2024
ENR 4.4 - 15/16	31 OCT 2024	ENR 4.4 - 15/16	11 JUL 2024
ENR 4.4 - 17/18	31 OCT 2024	ENR 4.4 - 17/18	11 JUL 2024
ENR 4.4 - 19/20	31 OCT 2024	ENR 4.4 - 19/20	11 JUL 2024
ENR 4.4 - 21/22	31 OCT 2024	ENR 4.4 - 21/22	11 JUL 2024
ENR 4.4 - 23/24	31 OCT 2024	ENR 4.4 - 23/24	11 JUL 2024
ENR 4.4 - 25/26	31 OCT 2024	ENR 4.4 - 25/26	11 JUL 2024
ENR 4.4 - 27/28	31 OCT 2024	ENR 4.4 - 27/28	11 JUL 2024
ENR 4.4 - 29/30	31 OCT 2024	ENR 4.4 - 29/30	11 JUL 2024
ENR 4.4 - 31/32	31 OCT 2024	ENR 4.4 - 31/32	11 JUL 2024
ENR 4.4 - 33/34	31 OCT 2024	ENR 4.4 - 33/34	11 JUL 2024
ENR 6.1 1 - 1/2	31 OCT 2024	ENR 6.1 1 - 1/2	05 SEP 2024
AD 1.2 - 1/2	31 OCT 2024	AD 1.2 - 1/2	04 NOV 2021
AD 1.2 - 3/4	31 OCT 2024	AD 1.2 - 3/4	04 NOV 2021
AD 1.2 - 5/6	31 OCT 2024	AD 1.2 - 5/6	26 JAN 2023
AD 1.2 - 7/8	31 OCT 2024		
AD 2 UAAA - 1/2	31 OCT 2024	AD 2 UAAA - 1/2	05 SEP 2024
AD 2 UAAA - 3/4	31 OCT 2024	AD 2 UAAA - 3/4	11 JUL 2024
AD 2 UAAA - 9/10	31 OCT 2024	AD 2 UAAA - 9/10	05 SEP 2024
AD 2 UAAA - 11/12	31 OCT 2024	AD 2 UAAA - 11/12	08 AUG 2024
AD 2 UAAA - 13/14	31 OCT 2024	AD 2 UAAA - 13/14	08 AUG 2024
AD 2 UAAA - 15/16	31 OCT 2024	AD 2 UAAA - 15/16	08 AUG 2024
AD 2 UAAA - 17/18	31 OCT 2024	AD 2 UAAA - 17/18	08 AUG 2024
AD 2 UAAA - 19/20	31 OCT 2024	AD 2 UAAA - 19/20	08 AUG 2024
AD 2 UAAA - 21/22	31 OCT 2024	AD 2 UAAA - 21/22	08 AUG 2024
AD 2 UAAA ADC 2 24 1 - 1/2	31 OCT 2024	AD 2 UAAA ADC 2 24 1 - 1/2	05 SEP 2024
AD 2 UAAA ADC 2 24 3 - 1/2	31 OCT 2024	AD 2 UAAA ADC 2 24 3 - 1/2	05 SEP 2024
AD 2 UAAA ADC 2 24 4 1 - 1/2	31 OCT 2024	AD 2 UAAA ADC 2 24 4 1 - 1/2	05 SEP 2024
AD 2 UAAA ADC 2 24 4 2 - 1/2	30 MAR 2017	AD 2 UAAA ADC 2 24 4 2 - 1/2	05 SEP 2024
AD 2 UAAA ADC 2 24 7 7 - 1/2	31 OCT 2024	AD 2 UAAA ADC 2 24 7 7 - 1/2	11 JUL 2024
AD 2 UAAA ADC 2 24 7 10 - 1/2	31 OCT 2024	AD 2 UAAA ADC 2 24 7 10 - 1/2	11 JUL 2024
AD 2 UAAA ADC 2 24 11 12 - 1/2	31 OCT 2024	AD 2 UAAA ADC 2 24 11 12 - 1/2	11 JUL 2024
AD 2 UACC - 1/2	31 OCT 2024	AD 2 UACC - 1/2	08 AUG 2024
AD 2 UACC - 5/6	31 OCT 2024	AD 2 UACC - 5/6	08 AUG 2024
AD 2 UACC - 9/10	31 OCT 2024	AD 2 UACC - 9/10	08 AUG 2024
AD 2 UACC - 11/12	31 OCT 2024	AD 2 UACC - 11/12	05 SEP 2024
AD 2 UACC - 13/14	31 OCT 2024	AD 2 UACC - 13/14	05 SEP 2024
AD 2 UACC - 15/16	31 OCT 2024	AD 2 UACC - 15/16	08 AUG 2024
AD 2 UACC ADC 2 24 1 - 1/2	31 OCT 2024	AD 2 UACC ADC 2 24 1 - 1/2	05 SEP 2024
AD 2 UACC ADC 2 24 11 8 - 1/2	31 OCT 2024	AD 2 UACC ADC 2 24 11 8 - 1/2	16 MAY 2024
AD 2 UATG - 1/2	31 OCT 2024	AD 2 UATG - 1/2	08 AUG 2024
AD 2 UATG - 9/10	31 OCT 2024	AD 2 UATG - 9/10	08 AUG 2024
AD 2 UATG - 11/12	31 OCT 2024	AD 2 UATG - 11/12	08 AUG 2024
AD 2 UATG - 13/14	31 OCT 2024	AD 2 UATG - 13/14	08 AUG 2024
AD 2 UATG - 15/16	31 OCT 2024	AD 2 UATG - 15/16	16 MAY 2024
		AD 2 UATG - 17/18	08 AUG 2024
AD 2 UATG ADC 2 24 7 4 - 1/2	31 OCT 2024	AD 2 UATG ADC 2 24 7 4 - 1/2	05 SEP 2024
AD 2 UATG ADC 2 24 11 1 - 1/2	31 OCT 2024	AD 2 UATG ADC 2 24 11 1 - 1/2	05 SEP 2024
AD 2 UATG ADC 2 24 11 2 - 1/2	31 OCT 2024	AD 2 UATG ADC 2 24 11 2 - 1/2	05 SEP 2024
AD 2 UATG ADC 2 24 11 3 - 1/2	31 OCT 2024	AD 2 UATG ADC 2 24 11 3 - 1/2	05 SEP 2024
AD 2 UATG ADC 2 24 11 4 - 1/2	31 OCT 2024	AD 2 UATG ADC 2 24 11 4 - 1/2	05 SEP 2024
AD 2 UACK - 3/4	31 OCT 2024	AD 2 UACK - 3/4	08 AUG 2024
AD 2 UACK - 5/6	31 OCT 2024	AD 2 UACK - 5/6	08 AUG 2024
AD 2 UACK - 7/8	31 OCT 2024	AD 2 UACK - 7/8	05 SEP 2024
AD 2 UACK - 9/10	31 OCT 2024	AD 2 UACK - 9/10	05 SEP 2024
AD 2 UACK ADC 2 24 7 1 - 1/2	31 OCT 2024	AD 2 UACK ADC 2 24 7 1 - 1/2	11 JUL 2024
AD 2 UACK ADC 2 24 7 2 - 1/2	31 OCT 2024	AD 2 UACK ADC 2 24 7 2 - 1/2	11 JUL 2024
AD 2 UACK ADC 2 24 7 3 - 1/2	31 OCT 2024	AD 2 UACK ADC 2 24 7 3 - 1/2	11 JUL 2024
AD 2 UACK ADC 2 24 7 4 - 1/2	31 OCT 2024	AD 2 UACK ADC 2 24 7 4 - 1/2	11 JUL 2024
AD 2 UACK ADC 2 24 9 2 - 1/2	31 OCT 2024	AD 2 UACK ADC 2 24 9 2 - 1/2	11 JUL 2024
AD 2 UACK ADC 2 24 9 3 - 1/2	31 OCT 2024	AD 2 UACK ADC 2 24 9 3 - 1/2	11 JUL 2024

Insert the following pages		Remove the following pages	
AD 2 UAUU - 1/2	31 OCT 2024	AD 2 UAUU - 1/2	08 AUG 2024
AD 2 UAUU - 9/10	31 OCT 2024	AD 2 UAUU - 9/10	05 SEP 2024
AD 2 UAUU - 11/12	31 OCT 2024	AD 2 UAUU - 11/12	05 SEP 2024
AD 2 UAUU - 13/14	31 OCT 2024	AD 2 UAUU - 13/14	05 SEP 2024
AD 2 UAUU ADC 2 24 1 - 1/2	31 OCT 2024	AD 2 UAUU ADC 2 24 1 - 1/2	23 FEB 2023
AD 2 UAUU ADC 2 24 3 - 1/2	31 OCT 2024	AD 2 UAUU ADC 2 24 3 - 1/2	06 OCT 2022
AD 2 UAOO ADC 2 24 11 1 - 1/2	31 OCT 2024	AD 2 UAOO ADC 2 24 11 1 - 1/2	11 JUL 2024
AD 2 UAOO ADC 2 24 11 3 - 1/2	31 OCT 2024	AD 2 UAOO ADC 2 24 11 3 - 1/2	11 JUL 2024
AD 2 UASP - 1/2	31 OCT 2024	AD 2 UASP - 1/2	08 AUG 2024
AD 2 UASP - 7/8	31 OCT 2024	AD 2 UASP - 7/8	05 SEP 2024
AD 2 UASP - 9/10	31 OCT 2024	AD 2 UASP - 9/10	05 SEP 2024
AD 2 UASP - 11/12	31 OCT 2024	AD 2 UASP - 11/12	05 SEP 2024
AD 2 UACP - 3/4	31 OCT 2024	AD 2 UACP - 3/4	08 AUG 2024
AD 2 UACP ADC 2 24 1 - 1/2	31 OCT 2024	AD 2 UACP ADC 2 24 1 - 1/2	25 JAN 2024
AD 2 UASS - 1/2	31 OCT 2024	AD 2 UASS - 1/2	08 AUG 2024
AD 2 UASS - 7/8	31 OCT 2024	AD 2 UASS - 7/8	05 SEP 2024
AD 2 UASS - 9/10	31 OCT 2024	AD 2 UASS - 9/10	05 SEP 2024
		AD 2 UASS - 11/12	05 SEP 2024
AD 2 UASS ADC 2 24 7 1 - 1/2	31 OCT 2024	AD 2 UASS ADC 2 24 7 1 - 1/2	11 JUL 2024
AD 2 UASS ADC 2 24 7 2 - 1/2	31 OCT 2024	AD 2 UASS ADC 2 24 7 2 - 1/2	11 JUL 2024
AD 2 UASS ADC 2 24 7 3 - 1/2	31 OCT 2024	AD 2 UASS ADC 2 24 7 3 - 1/2	11 JUL 2024
AD 2 UASS ADC 2 24 7 4 - 1/2	31 OCT 2024	AD 2 UASS ADC 2 24 7 4 - 1/2	11 JUL 2024
AD 2 UASS ADC 2 24 9 1 - 1/2	31 OCT 2024	AD 2 UASS ADC 2 24 9 1 - 1/2	08 AUG 2024
AD 2 UASS ADC 2 24 9 2 - 1/2	31 OCT 2024	AD 2 UASS ADC 2 24 9 2 - 1/2	11 JUL 2024
AD 2 UASS ADC 2 24 9 3 - 1/2	31 OCT 2024	AD 2 UASS ADC 2 24 9 3 - 1/2	11 JUL 2024
AD 2 UASS ADC 2 24 9 4 - 1/2	31 OCT 2024	AD 2 UASS ADC 2 24 9 4 - 1/2	11 JUL 2024
AD 2 UASS ADC 2 24 10 - 1/2	31 OCT 2024	AD 2 UASS ADC 2 24 10 - 1/2	11 JUL 2024
AD 2 UAII - 1/2	31 OCT 2024	AD 2 UAII - 1/2	08 AUG 2024
AD 2 UAII - 9/10	31 OCT 2024	AD 2 UAII - 9/10	08 AUG 2024
AD 2 UAII ADC 2 24 4 - 1/2	31 OCT 2024	AD 2 UAII ADC 2 24 4 - 1/2	05 SEP 2024
AD 2 UAII ADC 2 24 10 - 1/2	31 OCT 2024	AD 2 UAII ADC 2 24 10 - 1/2	05 SEP 2024
AD 2 UAII ADC 2 24 12 - 1/2	31 OCT 2024	AD 2 UAII ADC 2 24 12 - 1/2	05 SEP 2024
AD 2 UADD - 1/2	31 OCT 2024	AD 2 UADD - 1/2	08 AUG 2024
AD 2 UADD - 9/10	31 OCT 2024	AD 2 UADD - 9/10	08 AUG 2024
AD 2 UADD - 11/12	31 OCT 2024	AD 2 UADD - 11/12	05 SEP 2024
AD 2 UADD ADC 2 24 6 - 1/2	31 OCT 2024	AD 2 UADD ADC 2 24 6 - 1/2	05 SEP 2024
AD 2 UADD ADC 2 24 12 - 1/2	31 OCT 2024	AD 2 UADD ADC 2 24 12 - 1/2	05 SEP 2024
AD 2 UAIT - 1/2	31 OCT 2024	AD 2 UAIT - 1/2	08 AUG 2024
AD 2 UAIT - 3/4	31 OCT 2024	AD 2 UAIT - 3/4	11 JUL 2024
AD 2 UAIT ADC 2 24 6 - 1/2	31 OCT 2024	AD 2 UAIT ADC 2 24 6 - 1/2	04 NOV 2021
AD 2 UAIT ADC 2 24 11 1 - 1/2	31 OCT 2024	AD 2 UAIT ADC 2 24 11 1 - 1/2	08 AUG 2024
AD 2 UARR ADC 2 24 4 - 1/2	31 OCT 2024	AD 2 UARR ADC 2 24 4 - 1/2	05 SEP 2024
AD 2 UASU - 1/2	31 OCT 2024	AD 2 UASU - 1/2	16 MAY 2024
AD 2 UASU - 5/6	31 OCT 2024	AD 2 UASU - 5/6	16 MAY 2024
AD 2 UAAL - 7/8	31 OCT 2024	AD 2 UAAL - 7/8	08 AUG 2024
AD 2 UASK - 1/2	31 OCT 2024	AD 2 UASK - 1/2	08 AUG 2024
AD 2 UASK - 7/8	31 OCT 2024	AD 2 UASK - 7/8	05 SEP 2024
AD 2 UASK - 9/10	31 OCT 2024	AD 2 UASK - 9/10	05 SEP 2024
AD 2 UASK - 11/12	31 OCT 2024	AD 2 UASK - 11/12	05 SEP 2024
AD 2 UASK ADC 2 24 6 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 6 - 1/2	23 FEB 2023
AD 2 UASK ADC 2 24 7 1 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 7 1 - 1/2	23 FEB 2023
AD 2 UASK ADC 2 24 7 2 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 7 2 - 1/2	23 FEB 2023
AD 2 UASK ADC 2 24 7 3 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 7 3 - 1/2	23 FEB 2023
AD 2 UASK ADC 2 24 7 4 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 7 4 - 1/2	23 FEB 2023
AD 2 UASK ADC 2 24 7 5 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 7 5 - 1/2	11 JUL 2024
AD 2 UASK ADC 2 24 7 6 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 7 6 - 1/2	16 MAY 2024
AD 2 UASK ADC 2 24 7 7 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 7 7 - 1/2	05 SEP 2024
AD 2 UASK ADC 2 24 7 8 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 7 8 - 1/2	05 SEP 2024
AD 2 UASK ADC 2 24 9 2 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 9 2 - 1/2	23 FEB 2023
AD 2 UASK ADC 2 24 9 3 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 9 3 - 1/2	23 FEB 2023
AD 2 UASK ADC 2 24 9 4 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 9 4 - 1/2	11 JUL 2024
AD 2 UASK ADC 2 24 9 5 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 9 5 - 1/2	16 MAY 2024
AD 2 UASK ADC 2 24 9 6 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 9 6 - 1/2	11 JUL 2024
AD 2 UASK ADC 2 24 9 7 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 9 7 - 1/2	05 SEP 2024
AD 2 UASK ADC 2 24 9 8 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 9 8 - 1/2	11 JUL 2024
AD 2 UASK ADC 2 24 9 9 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 9 9 - 1/2	16 MAY 2024
AD 2 UASK ADC 2 24 9 10 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 9 10 - 1/2	16 MAY 2024
AD 2 UASK ADC 2 24 9 11 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 9 11 - 1/2	05 SEP 2024
AD 2 UASK ADC 2 24 10 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 10 - 1/2	15 JUN 2023
AD 2 UASK ADC 2 24 11 1 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 11 1 - 1/2	15 JUN 2023
AD 2 UASK ADC 2 24 11 2- 1/2	31 OCT 2024		
AD 2 UASK ADC 2 24 11 3 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 11 3 - 1/2	10 AUG 2023
AD 2 UASK ADC 2 24 11 4 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 11 4 - 1/2	23 FEB 2023
AD 2 UASK ADC 2 24 11 5 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 11 5 - 1/2	08 AUG 2024
AD 2 UASK ADC 2 24 11 6 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 11 6 - 1/2	08 AUG 2024
AD 2 UASK ADC 2 24 12 - 1/2	31 OCT 2024	AD 2 UASK ADC 2 24 12 - 1/2	10 AUG 2023
AD 2 UAKD - 9/10	31 OCT 2024	AD 2 UAKD - 9/10	05 SEP 2024
AD 2 UAKD ADC 2 24 11 1 - 1/2	31 OCT 2024		
AD 2 UAKD ADC 2 24 11 2 - 1/2	31 OCT 2024	AD 2 UAKD ADC 2 24 11 2 - 1/2	11 JUL 2024
AD 2 UAKD ADC 2 24 11 3 - 1/2	31 OCT 2024	AD 2 UAKD ADC 2 24 11 3 - 1/2	11 JUL 2024
AD 2 UAKD ADC 2 24 11 6 - 1/2	31 OCT 2024	AD 2 UAKD ADC 2 24 11 6 - 1/2	11 JUL 2024

Insert the following pages	Remove the following pages

GEN 0.2 RECORD OF AIP AMENDMENTS

AIRAC AIP AMENDMENT			
NR/Year	*Publication date*	*Effective date*	*Inserted by*
001/2017	16-Feb-2017	30-Mar-2017	
002/2017	13-Apr-2017	25-May-2017	
003/2017	08-Jun-2017	20-Jul-2017	
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	
004/2018	05-Jul-2018	16-Aug-2018	
005/2018	27-Sep-2018	08-Nov-2018	
001/2019	20-Dec-2018	31-Jan-2019	
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	
001/2021	14-Jan-2021	25-Feb-2021	
002/2021	08-Apr-2021	20-May-2021	
003/2021	03-Jun-2021	15-Jul-2021	
004/2021	01-Jul-2021	12-Aug-2021	
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			
NR/Year	*Publication date*	*Effective date*	*Inserted by*
003/2023	09-Mar-2023	20-Apr-2023	
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	

GEN 0.3 RECORD OF AIP SUPPLEMENTS

NR/Year	Subject	AIP Section(s) Affected	Period of Validity	Cancellation Record
003/2023	Astana AD (UACC) – taxiing restriction	UACC AD	From 15-JUN-2023 to 06-AUG-2025	
004/2023	Turkistan AD (UAIT) – restrictions on RWY	UAIT AD	From 15-JUN-2023 to 06-AUG-2025	
005/2023	Taraz AD (UADD) – taxiway restrictions	UADD AD	From 15-JUN-2023 to 05-AUG-2026	
007/2023	Changes due to antenna installation	ENR 6	From 30-NOV-2023 to 27-NOV-2024	
001/2024	Uralsk AD (UARR) – closure of taxiway and aircraft stands	UARR AD 2	From 25-JAN-2024 to 06-AUG-2025	
002/2024	THE CLOSURE OF RUNWAY 04/22 AT NURSULTAN NAZARBAYEV INTERNATIONAL AIRPORT	UACC AD	From 01-MAY-2024 to 24-DEC-2024	
004/2024	Atyrau AD (UATG) - use of ILS on RWY 14	UATG AD	From 22-Jul-2024 to 31-Dec-2026	

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GEN 0.4 CHECKLIST OF AIP PAGES

PART 1 - GENERAL (GEN)

GEN 0

Page	Date	Page	Date	Page	Date
GEN-0.1 - 1	30 JAN 2020	GEN-0.4 - 1	31 OCT 2024	GEN-0.4 - 9	31 OCT 2024
GEN-0.1 - 2	10 AUG 2023	GEN-0.4 - 2	31 OCT 2024	GEN-0.4 - 10	31 OCT 2024
GEN-0.1 - 3	30 JAN 2020	GEN-0.4 - 3	31 OCT 2024	GEN-0.5 - 1	30 MAR 2017
GEN-0.1 - 4	30 MAR 2017	GEN-0.4 - 4	31 OCT 2024	GEN-0.5 - 2	30 MAR 2017
GEN-0.2 - 1	23 FEB 2023	GEN-0.4 - 5	31 OCT 2024	GEN-0.6 - 1	10 SEP 2020
GEN-0.2 - 2	31 OCT 2024	GEN-0.4 - 6	31 OCT 2024	GEN-0.6 - 2	10 SEP 2020
GEN-0.3 - 1	31 OCT 2024	GEN-0.4 - 7	31 OCT 2024		
GEN-0.3 - 2	30 MAR 2017	GEN-0.4 - 8	31 OCT 2024		

GEN 1 NATIONAL REGULATIONS AND REQUIREMENTS

GEN-1.1 - 1	26 JAN 2023	GEN-1.3 - 1	07 NOV 2019	GEN-1.7 - 3	12 AUG 2021
GEN-1.1 - 2	26 JAN 2023	GEN-1.3 - 2	07 NOV 2019	GEN-1.7 - 4	12 AUG 2021
GEN-1.2 - 1	16 MAY 2024	GEN-1.4 - 1	25 FEB 2021	GEN-1.7 - 5	12 AUG 2021
GEN-1.2 - 2	16 MAY 2024	GEN-1.4 - 2	25 FEB 2021	GEN-1.7 - 6	12 AUG 2021
GEN-1.2 - 3	25 FEB 2021	GEN-1.5 - 1	07 NOV 2019	GEN-1.7 - 7	12 AUG 2021
GEN-1.2 - 4	25 FEB 2021	GEN-1.5 - 2	07 NOV 2019	GEN-1.7 - 8	05 OCT 2023
GEN-1.2 - 5	11 JUL 2024	GEN-1.6 - 1	07 NOV 2019	GEN-1.7 - 9	05 OCT 2023
GEN-1.2 - 6	11 JUL 2024	GEN-1.6 - 2	07 NOV 2019	GEN-1.7 - 10	05 OCT 2023
GEN-1.2 - 7	11 JUL 2024	GEN-1.7 - 1	12 AUG 2021		
GEN-1.2 - 8	25 FEB 2021	GEN-1.7 - 2	12 AUG 2021		

GEN 2 TABLES AND CODES

GEN-2.1 - 1	16 MAY 2024	GEN-2.4 - 2	08 AUG 2024	GEN-2.7 - 11	08 AUG 2024
GEN-2.1 - 2	11 JUL 2024	GEN-2.5 - 1	15 JUN 2023	GEN-2.7 - 12	08 AUG 2024
GEN-2.1 - 3	16 MAY 2024	GEN-2.5 - 2	08 AUG 2024	GEN-2.7 - 13	08 AUG 2024
GEN-2.1 - 4	25 FEB 2021	GEN-2.5 - 3	31 OCT 2024	GEN-2.7 - 14	08 AUG 2024
GEN-2.2 - 1	07 NOV 2019	GEN-2.5 - 4	23 FEB 2023	GEN-2.7 - 15	08 AUG 2024
GEN-2.2 - 2	03 DEC 2020	GEN-2.6 - 1	21 JUN 2018	GEN-2.7 - 16	08 AUG 2024
GEN-2.2 - 3	03 DEC 2020	GEN-2.6 - 2	30 MAR 2017	GEN-2.7 - 17	08 AUG 2024
GEN-2.2 - 4	03 DEC 2020	GEN-2.7 - 1	08 AUG 2024	GEN-2.7 - 18	08 AUG 2024
GEN-2.2 - 5	03 DEC 2020	GEN-2.7 - 2	20 MAY 2021	GEN-2.7 - 19	08 AUG 2024
GEN-2.2 - 6	03 DEC 2020	GEN-2.7 - 3	20 MAY 2021	GEN-2.7 - 20	08 AUG 2024
GEN-2.2 - 7	03 DEC 2020	GEN-2.7 - 4	11 JUL 2024	GEN-2.7 - 21	08 AUG 2024
GEN-2.2 - 8	07 NOV 2019	GEN-2.7 - 5	11 JUL 2024	GEN-2.7 - 22	08 AUG 2024
GEN-2.3 - 1	16 JUL 2020	GEN-2.7 - 6	26 JAN 2023	GEN-2.7 - 23	08 AUG 2024
GEN-2.3 - 2	30 MAR 2017	GEN-2.7 - 7	11 JUL 2024	GEN-2.7 - 24	08 AUG 2024
GEN-2.3 - 3	16 JUL 2020	GEN-2.7 - 8	08 AUG 2024	GEN-2.7 - 25	08 AUG 2024
GEN-2.3 - 4	16 AUG 2018	GEN-2.7 - 9	08 AUG 2024	GEN-2.7 - 26	08 AUG 2024
GEN-2.4 - 1	08 AUG 2024	GEN-2.7 - 10	08 AUG 2024		

GEN 3 SERVICES

GEN-3.1 - 1	16 MAY 2024	GEN-3.3 - 4	26 JAN 2023	GEN-3.5 - 7	08 AUG 2024
GEN-3.1 - 2	10 AUG 2023	GEN-3.4 - 1	16 MAY 2024	GEN-3.5 - 8	05 SEP 2024
GEN-3.1 - 3	16 MAY 2024	GEN-3.4 - 2	15 JUN 2023	GEN-3.5 - 9	05 SEP 2024
GEN-3.1 - 4	31 OCT 2024	GEN-3.4 - 3	15 JUN 2023	GEN-3.5 - 10	08 AUG 2024
GEN-3.2 - 1	16 MAY 2024	GEN-3.4 - 4	16 JUL 2020	GEN-3.5 - 11	10 AUG 2023
GEN-3.2 - 2	07 NOV 2019	GEN-3.5 - 1	10 AUG 2023	GEN-3.5 - 12	10 AUG 2023
GEN-3.2 - 3	15 JUN 2023	GEN-3.5 - 2	08 AUG 2024	GEN-3.6 - 1	26 JAN 2023
GEN-3.2 - 4	18 JUL 2019	GEN-3.5 - 3	08 AUG 2024	GEN-3.6 - 2	01 DEC 2022
GEN-3.3 - 1	16 MAY 2024	GEN-3.5 - 4	08 AUG 2024	GEN-3.6 - 3	01 DEC 2022
GEN-3.3 - 2	26 JAN 2023	GEN-3.5 - 5	08 AUG 2024	GEN-3.6 - 4	01 DEC 2022
GEN-3.3 - 3	26 JAN 2023	GEN-3.5 - 6	08 AUG 2024		

GEN 4 CHARGES FOR AERODROMES/HELIPORTS AND AIR NAVIGATION SERVICES

GEN-4.1 - 1	26 JAN 2023	GEN-4.1 - 4	30 NOV 2023	GEN-4.2 - 3	26 JAN 2023
GEN-4.1 - 2	30 NOV 2023	GEN-4.2 - 1	26 JAN 2023	GEN-4.2 - 4	07 NOV 2019
GEN-4.1 - 3	21 MAR 2024	GEN-4.2 - 2	07 NOV 2019		

PART 2 - EN-ROUTE (ENR)

ENR 0

ENR-0.1 - 1	30 MAR 2017	ENR-0.2 - 1	30 MAR 2017	ENR-0.3 - 1	30 MAR 2017
ENR-0.1 - 2	30 MAR 2017	ENR-0.2 - 2	30 MAR 2017	ENR-0.3 - 2	30 MAR 2017

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

ENR 4 RADIO NAVIGATION AIDS/SYSTEMS

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

ENR-6 - 1	15 JUL 2021	ENR-6 - 2	30 MAR 2017	ENR-6.1 - 1	31 OCT 2024

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ENR-6.1 - 2	07 NOV 2019				

PART 3 - AERODROMES (AD)

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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	26 JAN 2023	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	05 SEP 2024
AD-1.2 - 2	31 OCT 2024	AD-1.2 - 8	31 OCT 2024	AD-1.5 - 2	08 AUG 2024
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 2.24.11-4 - 1	05 SEP 2024	UATT AD 2.24.9-4 - 1	05 SEP 2024
AD-2-UATE - 2	23 FEB 2023	UATE AD 2.24.11-4 - 2	15 JUN 2023	UATT AD 2.24.9-4 - 2	11 AUG 2022
AD-2-UATE - 3	16 MAY 2024	UATE AD 2.24.11-5 - 1	02 NOV 2023	UATT AD 2.24.10 - 1	11 AUG 2022
AD-2-UATE - 4	05 SEP 2024	UATE AD 2.24.11-5 - 2	15 JUN 2023	UATT AD 2.24.10 - 2	30 MAR 2017
AD-2-UATE - 5	05 SEP 2024	UATE AD 2.24.11-6 - 1	02 NOV 2023	UATT AD 2.24.11-1 - 1	05 SEP 2024
AD-2-UATE - 6	05 SEP 2024	UATE AD 2.24.11-6 - 2	15 JUN 2023	UATT AD 2.24.11-1 - 2	25 FEB 2021
AD-2-UATE - 7	05 SEP 2024	UATE AD 2.24.11-7 - 1	15 JUN 2023	UATT AD 2.24.11-2 - 1	05 SEP 2024
AD-2-UATE - 8	05 SEP 2024	UATE AD 2.24.11-7 - 2	23 FEB 2023	UATT AD 2.24.11-2 - 2	25 FEB 2021
AD-2-UATE - 9	05 SEP 2024	UATE AD 2.24.11-8 - 1	15 JUN 2023	UATT AD 2.24.11-3 - 1	05 SEP 2024
AD-2-UATE - 10	11 JUL 2024	UATE AD 2.24.11-8 - 2	23 FEB 2023	UATT AD 2.24.11-3 - 2	25 FEB 2021
UATE AD 2.24.1 - 1	05 OCT 2023	UATE AD 2.24.11-9 - 1	05 SEP 2024	UATT AD 2.24.11-4 - 1	05 SEP 2024
UATE AD 2.24.1 - 2	30 MAR 2017	UATE AD 2.24.11-9 - 2	08 AUG 2024	UATT AD 2.24.11-4 - 2	25 FEB 2021
UATE AD 2.24.3 - 1	05 OCT 2023	UATE AD 2.24.11-10 - 1	05 SEP 2024	UATT AD 2.24.11-5 - 1	05 SEP 2024
UATE AD 2.24.3 - 2	30 MAR 2017	UATE AD 2.24.11-10 - 2	08 AUG 2024	UATT AD 2.24.11-5 - 2	11 AUG 2022
UATE AD 2.24.4 - 1	23 FEB 2023	UATE AD 2.24.12 - 1	23 FEB 2023	UATT AD 2.24.11-6 - 1	05 SEP 2024
UATE AD 2.24.4 - 2	11 AUG 2022	UATE AD 2.24.12 - 2	30 MAR 2017	UATT AD 2.24.11-6 - 2	11 AUG 2022
UATE AD 2.24.7-1 - 1	05 SEP 2024	UATE AD 2.24.14 - 1	23 FEB 2023	UATT AD 2.24.11-7 - 1	05 SEP 2024
UATE AD 2.24.7-1 - 2	23 FEB 2023	UATE AD 2.24.14 - 2	15 JUL 2021	UATT AD 2.24.11-7 - 2	04 NOV 2021
UATE AD 2.24.7-2 - 1	05 SEP 2024	AD-2-UATT - 1	08 AUG 2024	UATT AD 2.24.12 - 1	11 AUG 2022
UATE AD 2.24.7-2 - 2	23 FEB 2023	AD-2-UATT - 2	26 JAN 2023	UATT AD 2.24.12 - 2	30 MAR 2017
UATE AD 2.24.7-3 - 1	05 SEP 2024	AD-2-UATT - 3	16 MAY 2024	UATT AD 2.24.14 - 1	11 JUL 2024
UATE AD 2.24.7-3 - 2	23 FEB 2023	AD-2-UATT - 4	08 AUG 2024	UATT AD 2.24.14 - 2	15 JUL 2021
UATE AD 2.24.7-4 - 1	05 SEP 2024	AD-2-UATT - 5	08 AUG 2024	AD-2-UAAA - 1	05 SEP 2024
UATE AD 2.24.7-4 - 2	16 MAY 2024	AD-2-UATT - 6	08 AUG 2024	AD-2-UAAA - 2	31 OCT 2024
UATE AD 2.24.7-5 - 1	05 SEP 2024	AD-2-UATT - 7	08 AUG 2024	AD-2-UAAA - 3	31 OCT 2024
UATE AD 2.24.7-5 - 2	08 AUG 2024	AD-2-UATT - 8	08 AUG 2024	AD-2-UAAA - 4	31 OCT 2024
UATE AD 2.24.9-1 - 1	05 SEP 2024	AD-2-UATT - 9	08 AUG 2024	AD-2-UAAA - 5	08 AUG 2024
UATE AD 2.24.9-1 - 2	23 FEB 2023	AD-2-UATT - 10	08 AUG 2024	AD-2-UAAA - 6	08 AUG 2024
UATE AD 2.24.9-2 - 1	05 SEP 2024	AD-2-UATT - 11	05 SEP 2024	AD-2-UAAA - 7	05 SEP 2024
UATE AD 2.24.9-2 - 2	23 FEB 2023	AD-2-UATT - 12	05 SEP 2024	AD-2-UAAA - 8	05 SEP 2024
UATE AD 2.24.9-3 - 1	05 SEP 2024	UATT AD 2.24.1 - 1	11 AUG 2022	AD-2-UAAA - 9	05 SEP 2024
UATE AD 2.24.9-3 - 2	23 FEB 2023	UATT AD 2.24.1 - 2	30 MAR 2017	AD-2-UAAA - 10	31 OCT 2024
UATE AD 2.24.9-4 - 1	05 SEP 2024	UATT AD 2.24.3 - 1	24 FEB 2022	AD-2-UAAA - 11	31 OCT 2024
UATE AD 2.24.9-4 - 2	23 FEB 2023	UATT AD 2.24.3 - 2	12 AUG 2021	AD-2-UAAA - 12	31 OCT 2024
UATE AD 2.24.9-5 - 1	05 SEP 2024	UATT AD 2.24.4 - 1	26 JAN 2023	AD-2-UAAA - 13	31 OCT 2024
UATE AD 2.24.9-5 - 2	11 JUL 2024	UATT AD 2.24.4 - 2	30 MAR 2017	AD-2-UAAA - 14	31 OCT 2024
UATE AD 2.24.9-6 - 1	05 SEP 2024	UATT AD 2.24.7-1 - 1	05 SEP 2024	AD-2-UAAA - 15	31 OCT 2024
UATE AD 2.24.9-6 - 2	16 MAY 2024	UATT AD 2.24.7-1 - 2	20 MAY 2021	AD-2-UAAA - 16	31 OCT 2024
UATE AD 2.24.10 - 1	05 SEP 2024	UATT AD 2.24.7-2 - 1	05 SEP 2024	AD-2-UAAA - 17	31 OCT 2024
UATE AD 2.24.10 - 2	30 MAR 2017	UATT AD 2.24.7-2 - 2	20 MAY 2021	AD-2-UAAA - 18	31 OCT 2024
UATE AD 2.24.11-1 - 1	05 SEP 2024	UATT AD 2.24.9-1 - 1	05 SEP 2024	AD-2-UAAA - 19	31 OCT 2024
UATE AD 2.24.11-1 - 2	11 JUL 2024	UATT AD 2.24.9-1 - 2	25 FEB 2021	AD-2-UAAA - 20	31 OCT 2024
UATE AD 2.24.11-2 - 1	05 SEP 2024	UATT AD 2.24.9-2 - 1	05 SEP 2024	AD-2-UAAA - 21	31 OCT 2024
UATE AD 2.24.11-2 - 2	15 JUN 2023	UATT AD 2.24.9-2 - 2	25 FEB 2021	AD-2-UAAA - 22	31 OCT 2024
UATE AD 2.24.11-3 - 1	05 SEP 2024	UATT AD 2.24.9-3 - 1	05 SEP 2024	UAAA AD 2.24.1 - 1	31 OCT 2024
UATE AD 2.24.11-3 - 2	15 JUN 2023	UATT AD 2.24.9-3 - 2	11 AUG 2022	UAAA AD 2.24.1 - 2	30 MAR 2017

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UAAA AD 2.24.3 - 1	31 OCT 2024	UAAA AD 2.24.9-20 - 2	15 JUN 2023	UACC AD 2.24.7-1 - 1	16 MAY 2024
UAAA AD 2.24.3 - 2	31 OCT 2024	UAAA AD 2.24.9-22 - 1	11 JUL 2024	UACC AD 2.24.7-1 - 2	16 MAY 2024
UAAA AD 2.24.4-1 - 1	31 OCT 2024	UAAA AD 2.24.9-22 - 2	11 JUL 2024	UACC AD 2.24.7-2 - 1	16 MAY 2024
UAAA AD 2.24.4-1 - 2	30 MAR 2017	UAAA AD 2.24.9-23 - 1	11 JUL 2024	UACC AD 2.24.7-2 - 2	16 MAY 2024
UAAA AD 2.24.4-2 - 1	31 OCT 2024	UAAA AD 2.24.9-23 - 2	11 JUL 2024	UACC AD 2.24.7-3 - 1	10 AUG 2023
UAAA AD 2.24.4-2 - 2	30 MAR 2017	UAAA AD 2.24.9-24 - 1	11 JUL 2024	UACC AD 2.24.7-3 - 2	07 NOV 2019
UAAA AD 2.24.5-1 - 1	09 NOV 2017	UAAA AD 2.24.9-24 - 2	11 JUL 2024	UACC AD 2.24.7-4 - 1	10 AUG 2023
UAAA AD 2.24.5-1 - 2	30 MAR 2017	UAAA AD 2.24.9-25 - 1	11 JUL 2024	UACC AD 2.24.7-4 - 2	07 NOV 2019
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UARR AD 2.24.11-5 - 2	04 NOV 2021
UARR AD 2.24.12 - 1	11 JUL 2024
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UARR AD 2.24.14 - 1	20 APR 2023
UARR AD 2.24.14 - 2	15 JUL 2021
AD-2-UASU - 1	31 OCT 2024
AD-2-UASU - 2	05 OCT 2023
AD-2-UASU - 3	16 MAY 2024
AD-2-UASU - 4	16 MAY 2024
AD-2-UASU - 5	31 OCT 2024
AD-2-UASU - 6	16 MAY 2024
AD-2-UASU - 7	16 MAY 2024
AD-2-UASU - 8	16 MAY 2024
UASU AD 2.24.1 - 1	15 JUN 2023
UASU AD 2.24.1 - 2	01 FEB 2018
UASU AD 2.24.3 - 1	15 JUN 2023
UASU AD 2.24.3 - 2	15 JUN 2023
UASU AD 2.24.6 - 1	15 JUN 2023
UASU AD 2.24.6 - 2	11 AUG 2022
UASU AD 2.24.7-1 - 1	15 JUN 2023
UASU AD 2.24.7-1 - 2	01 FEB 2018
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UASU AD 2.24.7-2 - 2	01 FEB 2018
UASU AD 2.24.9-1 - 1	15 JUN 2023
UASU AD 2.24.9-1 - 2	01 FEB 2018
UASU AD 2.24.11-1 - 1	15 JUN 2023
UASU AD 2.24.11-1 - 2	15 JUN 2023
UASU AD 2.24.12 - 1	15 JUN 2023
UASU AD 2.24.12 - 2	01 FEB 2018
UASU AD 2.24.14 - 1	23 FEB 2023
UASU AD 2.24.14 - 2	11 AUG 2022
AD-2-UAAL - 1	23 FEB 2023
AD-2-UAAL - 2	05 OCT 2023
AD-2-UAAL - 3	05 OCT 2023
AD-2-UAAL - 4	23 FEB 2023
AD-2-UAAL - 5	21 MAR 2024
AD-2-UAAL - 6	08 AUG 2024
AD-2-UAAL - 7	31 OCT 2024
AD-2-UAAL - 8	08 AUG 2024
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UAAL AD 2.24.1 - 2	09 NOV 2017
UAAL AD 2.24.3 - 1	05 OCT 2023
UAAL AD 2.24.3 - 2	23 FEB 2023
UAAL AD 2.24.6 - 1	10 AUG 2023
UAAL AD 2.24.6 - 2	01 DEC 2022
UAAL AD 2.24.7-1 - 1	23 FEB 2023
UAAL AD 2.24.7-1 - 2	09 NOV 2017
UAAL AD 2.24.7-2 - 1	23 FEB 2023
UAAL AD 2.24.7-2 - 2	09 NOV 2017
UAAL AD 2.24.7-3 - 1	05 SEP 2024
UAAL AD 2.24.7-3 - 2	16 MAY 2024
UAAL AD 2.24.7-4 - 1	05 SEP 2024
UAAL AD 2.24.7-4 - 2	16 MAY 2024
UAAL AD 2.24.9-1 - 1	23 FEB 2023
UAAL AD 2.24.9-1 - 2	09 NOV 2017
UAAL AD 2.24.9-2 - 1	23 FEB 2023
UAAL AD 2.24.9-2 - 2	09 NOV 2017
UAAL AD 2.24.9-3 - 1	16 MAY 2024
UAAL AD 2.24.9-3 - 2	11 JUL 2024
UAAL AD 2.24.9-4 - 1	16 MAY 2024
UAAL AD 2.24.9-4 - 2	11 JUL 2024
UAAL AD 2.24.11-1 - 1	10 AUG 2023
UAAL AD 2.24.11-1 - 2	23 FEB 2023
UAAL AD 2.24.11-2 - 1	10 AUG 2023
UAAL AD 2.24.11-2 - 2	23 FEB 2023
UAAL AD 2.24.11-3 - 1	10 AUG 2023
UAAL AD 2.24.11-3 - 2	23 FEB 2023
UAAL AD 2.24.11-4 - 1	10 AUG 2023
UAAL AD 2.24.11-4 - 2	23 FEB 2023
UAAL AD 2.24.11-5 - 1	16 MAY 2024
UAAL AD 2.24.11-5 - 2	11 JUL 2024
UAAL AD 2.24.11-6 - 1	16 MAY 2024
UAAL AD 2.24.11-6 - 2	11 JUL 2024
UAAL AD 2.24.12 - 1	23 FEB 2023
UAAL AD 2.24.12 - 2	09 NOV 2017
UAAL AD 2.24.14 - 1	15 JUN 2023
UAAL AD 2.24.14 - 2	01 DEC 2022
AD-2-UASK - 1	31 OCT 2024
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AD-2-UASK - 3	08 AUG 2024
AD-2-UASK - 4	08 AUG 2024
AD-2-UASK - 5	08 AUG 2024
AD-2-UASK - 6	05 SEP 2024
AD-2-UASK - 7	31 OCT 2024
AD-2-UASK - 8	31 OCT 2024
AD-2-UASK - 9	31 OCT 2024
AD-2-UASK - 10	31 OCT 2024
AD-2-UASK - 11	31 OCT 2024
AD-2-UASK - 12	31 OCT 2024
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UASK AD 2.24.6 - 2	11 AUG 2022
UASK AD 2.24.7-1 - 1	31 OCT 2024
UASK AD 2.24.7-1 - 2	11 AUG 2022
UASK AD 2.24.7-2 - 1	31 OCT 2024
UASK AD 2.24.7-2 - 2	11 AUG 2022
UASK AD 2.24.7-3 - 1	31 OCT 2024
UASK AD 2.24.7-3 - 2	11 AUG 2022
UASK AD 2.24.7-4 - 1	31 OCT 2024
UASK AD 2.24.7-4 - 2	11 AUG 2022
UASK AD 2.24.7-5 - 1	31 OCT 2024
UASK AD 2.24.7-5 - 2	16 MAY 2024
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UASK AD 2.24.7-6 - 2	11 JUL 2024
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UASK AD 2.24.9-6 - 2	11 JUL 2024
UASK AD 2.24.9-7 - 1	31 OCT 2024
UASK AD 2.24.9-7 - 2	11 JUL 2024
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UASK AD 2.24.9-8 - 2	11 JUL 2024
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UASK AD 2.24.11-2 - 2	31 OCT 2024
UASK AD 2.24.11-3 - 1	31 OCT 2024
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UASK AD 2.24.11-4 - 1	31 OCT 2024
UASK AD 2.24.11-4 - 2	24 FEB 2022
UASK AD 2.24.11-5 - 1	31 OCT 2024
UASK AD 2.24.11-5 - 2	11 JUL 2024
UASK AD 2.24.11-6 - 1	31 OCT 2024
UASK AD 2.24.11-6 - 2	11 JUL 2024
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AD-2-UASZ - 2	05 SEP 2024
AD-2-UASZ - 3	05 SEP 2024
AD-2-UASZ - 4	05 SEP 2024
AD-2-UASZ - 5	05 SEP 2024
AD-2-UASZ - 6	05 SEP 2024
AD-2-UASZ - 7	05 SEP 2024
AD-2-UASZ - 8	16 MAY 2024
UASZ AD 2.24.1 - 1	05 SEP 2024

Page	Date	Page	Date	Page	Date
UASZ AD 2.24.1 - 2	01 FEB 2018				
UASZ AD 2.24.3 - 1	05 SEP 2024				
UASZ AD 2.24.3 - 2	04 NOV 2021				
UASZ AD 2.24.6 - 1	11 AUG 2022				
UASZ AD 2.24.6 - 2	11 AUG 2022				
UASZ AD 2.24.7-1 - 1	11 AUG 2022				
UASZ AD 2.24.7-1 - 2	01 FEB 2018				
UASZ AD 2.24.7-2 - 1	11 AUG 2022				
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UASZ AD 2.24.9-1 - 1	11 AUG 2022				
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UASZ AD 2.24.11-1 - 1	11 AUG 2022				
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UASZ AD 2.24.12 - 1	11 AUG 2022				
UASZ AD 2.24.12 - 2	01 FEB 2018				
UASZ AD 2.24.14 - 1	23 FEB 2023				
UASZ AD 2.24.14 - 2	11 AUG 2022				
AD-2-UAKD - 1	08 AUG 2024				
AD-2-UAKD - 2	24 FEB 2022				
AD-2-UAKD - 3	08 AUG 2024				
AD-2-UAKD - 4	05 SEP 2024				
AD-2-UAKD - 5	05 SEP 2024				
AD-2-UAKD - 6	05 SEP 2024				
AD-2-UAKD - 7	05 SEP 2024				
AD-2-UAKD - 8	05 SEP 2024				
AD-2-UAKD - 9	05 SEP 2024				
AD-2-UAKD - 10	31 OCT 2024				
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UAKD AD 2.24.3 - 1	26 JAN 2023				
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UAKD AD 2.24.7-1 - 1	11 JUL 2024				
UAKD AD 2.24.7-1 - 2	04 NOV 2021				
UAKD AD 2.24.7-2 - 1	11 JUL 2024				
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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				
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UAKD AD 2.24.11-1 - 1	31 OCT 2024				
UAKD AD 2.24.11-1 - 2	31 OCT 2024				
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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				
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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				

Decode			
ID	**Station name**	**Aid**	**Purpose**
IUS	UST-KAMENOGORSK	ILS/DME 12	A
ZSN	ZAISAN	NDB	AE
DZG	ZHEZKAZGAN	DVOR/DME	AE
ZN	ZHEZKAZGAN	NDB	A
ZKN	ZHEZKAZGAN	NDB	A

Encode			
Station name	**Aid**	**ID**	**Purpose**
UST-KAMENOGORSK	ILS/DME 12	IUS	A
ZAISAN	NDB	ZSN	AE
ZHEZKAZGAN	DVOR/DME	DZG	AE
ZHEZKAZGAN	NDB	ZN	A
ZHEZKAZGAN	NDB	ZKN	A

(A) Aerodrome aid
(AE) Aerodrome and en-route aid

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NOTAMs Series K and N are published regarding information within three FIRs:

- Astana;
- Shymkent;
- Aktobe.

If the scope of NOTAM activities regards more than one FIR, NOTAM is issued in series N and K. Trigger NOTAM is published only in series K and N as well.

NOF issues NOTAMs:

- Series A and K using NOTAM service of European AIS Database (INO EAD);
- Series B and N using NOTAM service of automated system (AS NOTAM).

NOTAMs are distributed by aeronautical fixed telecommunication network (AFTN) and Internet. Upon prior request, AFTN address may be included in the distribution list to receive all issued NOTAM. Briefing units provide a selective distribution of NOTAMs by providing Pre-flight Information Bulletins (PIB).

Pre flight information bulletins (PIB) contain a summary of current NOTAM and other information of an urgent nature and of significance to the operator/flight crews. They are available at the Briefing units in English and Russian languages.

Checklist of valid NOTAM

Checklist of valid NOTAM for each series are issued monthly via AFTN. They contain the list of valid NOTAM and refer to the latest AIP Amendments, AIP Supplements, data sets and the internationally distributed AIC.

SNOWTAM

SNOWTAM is a special series NOTAM given in a standard format providing a surface condition report notifying the presence or cessation of hazardous conditions due to snow, ice, slush, frost, standing water or water associated with snow, slush, ice or frost on the movement area.

Distribution of aeronautical publications

The following aeronautical information is provided free of charge via Internet: AIP (including aeronautical charts), AIP AMDT, AIP SUP, AIC, data sets, electronic version of Aeronautical Chart - ICAO 1:500 000.

The following aeronautical information is provided free of charge via AFTN: NOTAMs, SNOWTAMs, checklists of valid NOTAM and “trigger” NOTAM.

AIP of Kazakhstan is available on the website – www.ans.kz in downloadable form, and via EAD web service.

Access to eAIP on the website is free of charge and no user login or subscription is required.

4. AIRAC SYSTEM

AIP amendment and, if possible, AIP supplement are provided according to the AIRAC system.

Aeronautical information regulation and control (AIRAC) system is based upon a series of common effective dates at intervals of 28 days and information provided does not change within this period.

Provided under the AIRAC system information is published at least 42 days in advance of the effective date (major changes - 56 days).

“Trigger” NOTAM is distributed not later than one cycle before the AIRAC effective date concerned and contains a brief description of the contents, the effective date and the reference number of the amendment or supplement. It comes into force at the same time with the amendment or supplement and remains valid for fourteen days. NIL notification is indicated in “trigger” NOTAM when information has not been submitted to the

AIRAC date.

A NIL notification to announce that an AIP amendment will not be published at the established interval or publication date is distributed by NOTAM checklist at least 28 days before the AIRAC effective date.

The table below indicates AIRAC effective dates for coming years.

2025	2026	2027	2028
23 JAN 25	22 JAN 26	21 JAN 27	20 JAN 28
20 FEB 25	19 FEB 26	18 FEB 27	17 FEB 28
20 MAR 25	19 MAR 26	18 MAR 27	16 MAR 28
17 APR 25	16 APR 26	15 APR 27	13 APR 28
15 MAY 25	14 MAY 26	13 MAY 27	11 MAY 28
12 JUN 25	11 JUN 26	10 JUN 27	08 JUN 28
10 JUL 25	09 JUL 26	08 JUL 27	06 JUL 28
07 AUG 25	06 AUG 26	05 AUG 27	03 AUG 28
04 SEP 25	03 SEP 26	02 SEP 27	31 AUG 28
02 OCT 25	01 OCT 26	30 SEP 27	28 SEP 28
30 OCT 25	29 OCT 26	28 OCT 27	26 OCT 28
27 NOV 25	26 NOV 26	25 NOV 27	23 NOV 28
25 DEC 25	24 DEC 26	23 DEC 27	21 DEC 28

5. PRE-FLIGHT INFORMATION SERVICE AT AERODROMES/HELIPORTS

Aeronautical information service for pre-flight planning purposes includes pre-flight Information bulletins (PIB) provision in Russian and English languages and access to AIPs published in the EAD system (PAMS).

These aeronautical information products are provided at the Briefing units of aerodromes specified in AD 1.3, excepting Usharal, Zaisan and Urdzhar aerodromes. Access to AIPs of other countries is not provided at the aerodromes - Taldykorgan, Urdzhar, Zaisan - due to absence of EAD software.

Pre-flight information is provided for all main directions inside and outside the State.

6. DIGITAL DATA SETS

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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
L736 **(RNAV 5)**						
▲ AKTAU DVOR/ DME (AKT)	435220N 0510352E					
	350° °	112.9 NM	FL 510 FL 220	Even		AKTOBE ACC 134.3 MHZ {C}
▲ AMOHA	454502N 0505523E **ATR** **195.0° 91.2 NM** **(0 FT)**					
	348° °	66.8 NM	FL 510 FL 220	Even		AKTOBE ACC 130.9 MHZ {C}
△ TUGLA	465142N 0505006E **ATR** **237.0° 43.2 NM** **(0 FT)**					
	349° °	132.1 NM	FL 510 FL 220	Even		AKTOBE ACC 130.9 MHZ {C}
▲ NAGAZ	490336N 0504220E **ATR** **330.0° 123.2 NM** **(0 FT)**					
	348° °	146.1 NM	FL 510 FL 220	Even		AKTOBE ACC 131.4 MHZ {C}
▲ ARISA (FIR BDRY)	512924N 0503254E **URL** **288.0° 42.7 NM** **(200 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
L855 (RNAV 5)						
△ TIPSA	433809N 0753149E **ATA** **278.4° 69.7 NM** **(2200 FT)**					
	278° 097°	54.4 NM	FL 510 FL 150	Even	Odd	ALMATY ACC 131.4 MHZ {C}
▲ ELENU (FIR BDRY)	435017N 0741838E **ATA** **278.8° 124.1 NM** **(2200 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
	270° 087°	105.8 NM	FL 510 FL 150	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ RISAS	435854N 0715247E **TAR** **016.0° 71.6 NM** **(2200 FT)**					
	275° 094°	39.4 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ KUGIR	440625N 0705906E **TAR** **344.0° 75.3 NM** **(2200 FT)**					
	274° 094°	25.7 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ GAMBU	441106N 0702401E **TAR** **328.0° 87.7 NM** **(2200 FT)**					
	274° 093°	65.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ TUROK	442214N 0685447E **TRK** **007.0° 64.3 NM** **(1000 FT)**					
	273° 092°	30.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ REMOL	442704N 0681238E **TRK** **340.0° 69.4 NM** **(1000 FT)**					
	272° 091°	29.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ LUKUR	443112N 0673226E **TRK** **321.0° 84.6 NM** **(1000 FT)**					
	271° 091°	40.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ DIKAM	443650N 0663555E **KZO** **089.0° 44.6 NM** **(500 FT)**					
	270° 089°	44.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
▲ KYZYLORDA DVOR/DME (KZO)	444145N 0653349E					

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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
	238° 057°	45.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
△ BADAS	442221N 0643656E **KZO** **237.0° 45.1 NM** **(500 FT)**					
	237° 057°	21.2 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ ERTUZ	441307N 0641019E **KZO** **238.0° 66.3 NM** **(500 FT)**					
	237° 056°	39.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ TIPEN	435532N 0632045E **KZO** **236.0° 106.1 NM** **(500 FT)**					
	236° 056°	25.0 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ ADAKA	434416N 0624955E **KZO** **236.0° 131.1 NM** **(500 FT)**					
	236° 056°	36.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ TIGTA (FIR BDRY)	432728N 0620446E **KZO** **235.0° 168.0 NM** **(500 FT)**					**For continuation, see AIP Uzbekistan**

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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
L864 (RNAV 5)						
▲ ITAKA (FIR BDRY)	435224N 0493000E **AKT** **262.0° 67.9 NM** **(100 FT)**					
	020°	60.7 NM	FL 510 FL 210	Odd		AKTOBE ACC 134.3 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
△ ATNUR	444559N 0500948E **AKT** **316.0° 66.2 NM** **(100 FT)**					
	349°	65.3 NM	FL 510 FL 220	Even		AKTOBE ACC 134.3 MHZ {C}
▲ URABU	455108N 0500407E **ATR** **214.4° 105.7 NM** **(0 FT)**					
	348°	45.5 NM	FL 510 FL 220	Even		AKTOBE ACC 130.9 MHZ {C}
△ DIMPA	463633N 0495959E **ATR** **238.2° 80.8 NM** **(0 FT)**					
	347°	149.0 NM	FL 510 FL 220	Even		AKTOBE ACC 130.9 MHZ {C}
▲ TOZIS	490511N 0494538E **URL** **198.7° 141.7 NM** **(200 FT)**					
	346°	121.9 NM	FL 510 FL 220	Even		AKTOBE ACC 131.4 MHZ {C}
▲ POMNI (FIR BDRY)	510638N 0493240E **URL** **258.0° 75.6 NM** **(200 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
L985 **(RNAV 5)**						
AKALI ▲ (FIR BDRY)	440829N 0611937E **ARL** **175.0° 161.5 NM** **(300 FT)**					**Before, see AIP Uzbekistan**
	358° 178°	45.5 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
LATNU △	445345N 0612553E **ARL** **175.0° 116.1 NM** **(300 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
	352° 171°	63.5 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
SANUR (FIR BDRY) ▲	455717N 0612446E **ARL** **180.0° 53.0 NM** **(300 FT)**					
	357° 177°	52.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
△ UZLOR	464915N 0613205E **ARL** **257.0° 3.4 NM** **(300 FT)**					
	357° 176°	96.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
ADLIK ▲	482457N 0614611E **ARL** **355.0° 95.7 NM** **(300 FT)**					
	354° 173°	135.9 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
RAVNI (FIR BDRY) ▲	504030N 0615807E **KST** **188.0° 162.1 NM** **(600 FT)**					
	356° 175°	158.2 NM	FL 510 FL 210	Even	Odd	ASTANA ACC 133.1 MHZ {C}
LODEZ △	531715N 0623004E **KST** **268.0° 38.7 NM** **(600 FT)**					
	355° 175°	48.8 NM	FL 510 FL 210	Even	Odd	ASTANA ACC 133.1 MHZ {C}
LANOR (FIR BDRY) ▲	540536N 0624042E **KST** **318.0° 63.0 NM** **(600 FT)**					**For continuation, see AIP Russia**

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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
L988 (RNAV 5)						

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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ OBATA (FIR BDRY)	462130N 0491148E **ATR** **236.0° 117.4 NM** **(0 FT)**					**Before, see AIP Russia**
	057° 237°	36.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ DIMPA	463633N 0495959E **ATR** **238.2° 80.8 NM** **(0 FT)**					
	057° 238°	37.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ TUGLA	465142N 0505006E **ATR** **237.0° 43.2 NM** **(0 FT)**					
	058° 239°	43.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ ATYRAU TOWER 118.1 MHZ {C}
▲ ATYRAU DVOR/ DME (ATR)	470838N 0514805E					
	059° 239°	43.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ ATYRAU TOWER 118.1 MHZ {C}
△ GISTO	472457N 0524654E **ATR** **059.0° 43.2 NM** **(0 FT)**					
	059° 240°	86.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ KODUM	475556N 0544537E **ATR** **061.0° 129.2 NM** **(0 FT)**					
	048° 229°	42.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
▲ ALABA	481845N 0553938E **AKB** **196.0° 131.5 NM** **(700 FT)**					
	060° 245°	284.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
▲ BEKOR (FIR BDRY)	494513N 0623050E **ARK** **247.0° 177.6 NM** **(1300 FT)**					
	065° 246°	87.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ LAMGI	500657N 0644154E **ARK** **251.0° 90.3 NM** **(1300 FT)**					
	068° 251°	134.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
▲ TUSEP	503136N 0680751E **ARK** **064.0° 44.4 NM** **(1300 FT)**					
	066° 248°	74.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ OSROL	504818N 0700112E **AST** **248.0° 55 NM** **(1200 FT)**					
	065° 245°	29.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ APTUS	505558N 0704601E **AST** **251.0° 25.6 NM** **(1200 FT)**					
	071° 251°	25.6 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ ASTANA DVOR/ DME (AST)	510006N 0712600E					
	065° 246°	58.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ BOLSU	511507N 0725620E **AST** **066.0° 58.9 NM** **(1200 FT)**					
	066° 248°	88.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
▲ ABELI	513524N 0751312E **PVL** **232.0° 79 NM** **(500 FT)**					
	074° 255°	62.6 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
△ EKTUS	514225N 0765305E **PVL** **185.0° 31.2 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
	075° 256°	11.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
△ ABRAS	514331N 0771053E **PVL** **165.0° 29.3 NM** **(500 FT)**					
	076° 256°	24.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
△ PIVAL	514549N 0775050E **PVL** **125.0° 38.7 NM** **(500 FT)**					
	076° 258°	52.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
▲ LAGMO (FIR BDRY)	514954N 0791500E **PVL** **098.0° 83 NM** **(500 FT)**					**For continuation, see AIP Russia**

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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
L992 (RNAV 5)	[illegible]					
▲ TIROM (FIR BDRY)	421434N 0531720E **AKT** **128.0° 138.3 NM** **(100 FT)**					**Before, see AIP Russia and CIS**
	009° 189°	48.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ ARNUS	430052N 0533509E **AKT** **107.0° 121.6 NM** **(100 FT)**					
	009° 189°	30.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ BAPER	433011N 0534642E **AKT** **094.0° 120.2 NM** **(100 FT)**					
	009° 189°	23.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
△ RINIT	435305N 0535549E **BNU** **202.0° 101.2 NM** **(0 FT)**					
	009° 189°	59.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ BODSI	445034N 0541914E **BNU** **220.0° 45.3 NM** **(0 FT)**					
	011° 191°	44.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ AGNIM	453221N 0543918E **BNU** **293.0° 23.1 NM** **(0 FT)**					
	011° 191°	18.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ NESDO	454926N 0544739E **BNU** **326.0° 32.2 NM** **(0 FT)**					
	011° 191°	62.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ PEMOL	464841N 0551720E **BNU** **356.0° 88.6 NM** **(0 FT)**					
	011° 191°	43.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ ODPUT	473004N 0553846E **BNU** **001.0° 131.5 NM** **(0 FT)**					
	011° 190°	33.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
▲ ABULU	480139N 0555532E **AKB** **189.0° 143.1 NM** **(700 FT)**					
	010° 190°	32.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ LOGTO	483204N 0561202E **AKB** **189.0° 110.7 NM** **(700 FT)**					
	010° 190°	72.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
△ TIKTO	494006N 0565014E **AKB** **190.0° 38.2 NM** **(700 FT)**					
	010° 190°	38.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 MHZ {C}
▲ AKTOBE DVOR/ DME (AKB)	501548N 0571055E					
	007° 187°	38.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 MHZ {C}
▲ SANIR (FIR BDRY)	505230N 0572942E **AKB** **007.0° 38.6 NM** **(700 FT)**					**For continuation, see AIP Russia**

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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
L993 **(RNAV 5)**						
KARAGANDA ▲ DVOR/DME (KRG)	494114N 0732226E					
	278° 092°	208.7 NM	FL 510 FL 250	Even	Odd	ASTANA ACC 124.1 MHZ {C}
TUSEP ▲	503136N 0680751E **ARK** **064.0° 44.4 NM** **(1300 FT)**					
	278° 090°	302.7 NM	FL 510 FL 250	Even	Odd	ASTANA ACC 133.1 MHZ {C}
LENTA (FIR BDRY) ▲	514854N 0602236E **KST** **221.0° 143.0 NM** **(600 FT)**					**For continuation, see AIP Russia**

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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
L994 **(RNAV 5)**						
▲ UST-KAMENOGORSK DVOR/DME (UKM)	500158N 0823031E					
	277° 095°	45.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ UST-KAMENOGORSK TOWER 130.1 MHZ {C}
▲ LIRNA	501159N 0812203E **SEM** **094.0° 44.2 NM** **(700 FT)**					
	275° 094°	44.6 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
▲ SOMIP	502106N 0801402E **SEM** **281.0° 0.4 NM** **(700 FT)**					
	278° 097°	43.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
△ ETORI	503208N 0790845E **SEM** **277.0° 43.6 NM** **(700 FT)**					
	277° 096°	38.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
▲ BAMAT (FIR BDRY)	504125N 0781025E **SEM** **276.0° 81.9 NM** **(700 FT)**					
	276° 095°	30.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ DILGI	504833N 0772303E **PVL** **164.0° 84.8 NM** **(500 FT)**					
	275° 094°	31.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ GOBSO	505523N 0763521E **PVL** **184.0° 79.6 NM** **(500 FT)**					
	268° 085°	137.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
△ EDANO	510858N 0725804E **AST** **072.0° 58.7 NM** **(1200 FT)**					
	252° 071°	58.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ ASTANA DVOR/ DME (AST)	510006N 0712600E					
	288° 106°	64.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ DIDAL	512908N 0695453E **AST** **286.0° 64.2 NM** **(1200 FT)**					
	287° 105°	64.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ ATBAN	515824N 0682152E **KTU** **197.0° 94.6 NM** **(900 FT)**					
	284° 103°	32.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ ATNON	521149N 0673350E **KTU** **215.0° 102.0 NM** **(900 FT)**					
	283° 102°	33.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ LATKO	522508N 0664427E **KTU** **229.0° 118.6 NM** **(900 FT)**					
	282° 100°	52.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ GITNA	524459N 0652518E **KST** **100.0° 72.4 NM** **(600 FT)**					
	281° 101°	8.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ DOKUT	524814N 0651230E **KST** **099.0° 63.9 NM** **(600 FT)**					
	280° 099°	64.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ KOSTANAY DVOR/DME (KST)	531113N 0633346E					
	268° 086°	38.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
△ LODEZ	531715N 0623004E **KST** **268.0° 38.7 NM** **(600 FT)**					
	266° 085°	48.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ TITUR (FIR BDRY)	532406N 0610924E **KST** **268.0° 87.6 NM** **(600 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
L998 **(RNAV 5)**						
△ IZIMA	432236N 0770503E **ATA** **332.2° 0.1 NM** **(2200 FT)**					
	333° 152°	14.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ BEDUR	433546N 0765739E **ATA** **332.7° 14.3 NM** **(2200 FT)**					
	332° 152°	13.6 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ DETAK	434823N 0765029E **ATA** **332.6° 28 NM** **(2200 FT)**					
	332° 152°	13.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ BAKIS	440031N 0764333E **ATA** **332.6° 41.1 NM** **(2200 FT)**					
	332° 152°	15.0 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ UMIRO	441421N 0763537E **ATA** **332.7° 56.1 NM** **(2200 FT)**					
	332° 152°	6.6 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ ALMATY APPROACH 124.8 MHZ {C}
▲ ETEDA	442024N 0763206E **ATA** **332.6° 62.6 NM** **(2200 FT)**					
	332° 151°	58.5 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
△ DODOK	451420N 0760011E **TDK** **268.0° 103.3 NM** **(2000 FT)**					
	331° 150°	31.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
▲ RITAB	454308N 0754239E **BLH** **150.0° 76.1 NM** **(1400 FT)**					
	330° 150°	32.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
△ TULPI	461318N 0752358E **BLH** **150.0° 43.3 NM** **(1400 FT)**					
	330° 150°	43.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
▲ BALKHASH DVOR/DME (BLH)	465259N 0745902E					
	315° 134°	52.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
△ BAGIL	473425N 0741044E **BLH** **314.0° 52.9 NM** **(1400 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
	314° 134°	40.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
▲ AGADI (FIR BDRY)	480559N 0733338E **BLH** **314.0° 93.2 NM** **(1400 FT)**					
	304° 118°	221.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ ASTIK	502734N 0691434E **ARK** **075.0° 85.7 NM** **(1300 FT)**					
	307° 125°	75.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ RUDAL	512154N 0675222E **ARK** **017.0° 70.7 NM** **(1300 FT)**					
	302° 118°	131.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ DOKUT	524814N 0651230E **KST** **099.0° 63.9 NM** **(600 FT)**					
	300° 117°	119.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ LANOR (FIR BDRY)	540536N 0624042E **KST** **318.0° 63.0 NM** **(600 FT)**					

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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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
	066° 247°	44.7 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
▲ MADEV	471857N 0770328E BLH 067.0° 88.9 NM (1400 FT)					
	067° 248°	57.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ IBDAS	473412N 0782432E AGZ 248.0° 85.4 NM (2200 FT)					
	068° 250°	85.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ AYAGUZ VOR/ DME (AGZ)	475552N 0802659E					
	137° 318°	47.2 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ NINKO	471748N 0810819E AGZ 137.3° 47.2 NM (2200 FT)					
	114° 295°	24.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ URDZHAR VYSHKA 123.0 MHZ {C}
▲ URDZHAR L (UGN)	470534N 0813933E					

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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z315 **(RNAV 5)**						
△ IZIMA	432236N 0770503E ATA 332.2° 0.1 NM (2200 FT)					
	051° 231°	22.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
△ TIRBA	433456N 0773031E ATA 050.8° 22.3 NM (2200 FT)					
	051° 231°	23.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ BAGNA	434754N 0775719E ATA 050.8° 45.7 NM (2200 FT)					
	086° 266°	7.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ ALUGI	434745N 0780816E ATA 055.7° 52.4 NM (2200 FT)					
	086° 267°	48.7 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
▲ GASBU	434640N 0791528E JRK 223.0° 40.5 NM (2600 FT)					
	116° 297°	28.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
▲ BERTO	433159N 0794824E JRK 184.0° 42.2 NM (2600 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z370 (RNAV 5)						
△ RISAS	435854N 0715247E TAR 016.0° 71.6 NM (2200 FT)					
	095° 277°	82.9 NM	FL 510 FL 150	Odd	Even	SHYMKENT ACC 132.7 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ TOMGO	434146N 0734454E TAR 060.0° 118.9 NM (2200 FT)					
	097° 278°	21.1 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ DEKED (FIR BDRY)	433653N 0741306E ATA 272.4° 126.0 NM (2200 FT)					
	098° 278°	25.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
△ AGLEK	433045N 0744744E ATA 270.4° 100.4 NM (2200 FT)					
	098° 279°	19.1 NM	FL 510 FL 140	Odd	Even	ALMATY ACC 131.4 MHZ {C}
△ BINRI	432607N 0751309E ATA 268.1° 81.7 NM (2200 FT)					
	099° 279°	14.6 NM	FL 510 FL 150	Odd	Even	ALMATY ACC 131.4 MHZ {C}
△ EKLAT	432230N 0753237E ATA 265.4° 67.5 NM (2200 FT)					
	084° 265°	67.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ IZIMA	432236N 0770503E ATA 332.2° 0.1 NM (2200 FT)					
	051° 231°	22.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ TIRBA	433456N 0773031E ATA 050.8° 22.3 NM (2200 FT)					
	051° 231°	23.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ BAGNA	434754N 0775719E ATA 050.8° 45.7 NM (2200 FT)					
	018° 198°	21.6 NM	FL 510 FL 140	Odd	Even	ALMATY ACC 131.4 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
△ DOTAL	440745N 0780904E TDK 186.0° 59.8 NM (2000 FT)					
	028° 209°	52.5 NM	FL 510 FL 160	Odd	Even	ALMATY ACC 133.1 MHZ {C}
△ ATPOR	445123N 0784955E TDK 126.0° 22.8 NM (2000 FT)					
	029° 209°	74.0 NM	FL 510 FL 160	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ RIKPI	455225N 0794910E TDK 047.0° 74.6 NM (2000 FT)					
	029° 210°	33.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ GIGDA	461942N 0801638E AGZ 178.0° 96.5 NM (2200 FT)					
	030° 210°	21.8 NM	FL 510 FL 150	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ INLUL	463730N 0803449E AGZ 170.0° 78.6 NM (2200 FT)					
	030° 210°	30.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ BURID	470234N 0810051E AGZ 151.0° 58.1 NM (2200 FT)					
	078° 258°	26.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ URDZHAR VYSHKA 123.0 MHZ {C}
▲ URDZHAR L (UGN)	470534N 0813933E					

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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z380 **(RNAV 5)**						

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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ SHYMKENT DVOR/DME (SMK)	422220N 0692631E					
	272° 092°	27.3 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)					
	309° 129°	27.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
△ EDIBA	424519N 0682349E TRK 187.0° 35.1 NM (1000 FT)					
	309° 129°	5.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
△ RELRU	424925N 0681812E TRK 195.0° 32.5 NM (1000 FT)					
	309° 128°	31.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ KARIM	431136N 0674737E TRK 250.0° 35.4 NM (1000 FT)					
	308° 128°	20.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ POBEK	432534N 0672754E TRK 270.0° 49.1 NM (1000 FT)					
	308° 126°	68.2 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ ERMEK	441245N 0661954E KZO 124.0° 43.9 NM (500 FT)					
	305° 124°	43.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ KYZYLORDA DVOR/DME (KZO)	444145N 0653349E					

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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z553 (RNAV 5)						
▲ KARAGANDA DVOR/DME (KRG)	494114N 0732226E					
	341° 161°	35.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ KARAGANDA TOWER 122.0 MHZ {C}
▲ DETOV	501555N 0731235E KRG 341.0° 35.3 NM (1800 FT)					
	341° 160°	53.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ EDANO	510858N 0725804E AST 072.0° 58.7 NM (1200 FT)					
	340° 160°	6.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ BOLSU	511507N 0725620E AST 066.0° 58.9 NM (1200 FT)					
	340° 158°	145.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ POBUR	533800N 0721400E KTU 069.0° 95.3 NM (900 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z554 **(RNAV 5)**						
▲ OKESO	411051N 0673608E SMK 223.0° 109.2 NM (1400 FT)					**Before, see AIP Uzbekistan**
	062° 242°	16.2 NM	FL 510 FL 40	Odd	Even	TASHKENT ACC {C}
▲ DIBAD	411700N 0675600E SMK 220.0° 94.0 NM (1400 FT)					
	076° 256°	39.6 NM	FL 510 FL 70	Odd	Even	TASHKENT ACC {C}
▲ DODUR (FIR BDRY)	412300N 0684800E SMK 200.0° 65.9 NM (1400 FT)					
	039° 219°	39.6 NM	FL 510 FL 80	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ BAMUT	415121N 0692445E SMK 176.0° 31.0 NM (1400 FT)					
	002° 182°	8.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
△ BEDNU	420007N 0692621E SMK 174.0° 22.2 NM (1400 FT)					
	355° 175°	22.2 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ SHYMKENT DVOR/DME (SMK)	422220N 0692631E					

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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z578 **(RNAV 5)**						
▲ LANOL	411133N 0685506E SMK 192.0° 74.6 NM (1400 FT)					
	330° 149°	12.6 NM	FL 510 FL 70	Even	Odd	TASHKENT ACC {C}
▲ DODUR (FIR BDRY)	412300N 0684800E SMK 200.0° 65.9 NM (1400 FT)					
	356° 175°	36.0 NM	FL 510 FL 70	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ ODORI	415901N 0684908E SMK 224.0° 36.3 NM (1400 FT)					
	355° 175°	27.0 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)					**For continuation, see AIP Uzbekistan**

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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z579 **(RNAV 5)**						
▲ MIKNO	420200N 0681200E SMK 243.0° 59.0 NM (1400 FT)					
	340° 159°	37.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
△ ZUSLA	423838N 0675917E TRK 206.0° 48.5 NM (1000 FT)					
	339° 159°	34.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ KARIM	431136N 0674737E TRK 250.0° 35.4 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z580 **(RNAV 5)**						
▲ OGRIP	405454N 0680500E SMK 209.0° 106.6 NM (1400 FT)					
	044° 224°	42.9 NM	FL 510 FL 70	Odd	Even	TASHKENT ACC {C}
▲ DODUR (FIR BDRY)	412300N 0684800E SMK 200.0° 65.9 NM (1400 FT)					
	039° 219°	39.6 NM	FL 510 FL 80	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ BAMUT	415121N 0692445E SMK 176.0° 31.0 NM (1400 FT)					
	039° 219°	25.6 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
△ ADESA	420940N 0694854E SMK 121.0° 20.9 NM (1400 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
	039° 219°	38.6 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ KOLAM	423702N 0702540E TAR 242.0° 40.7 NM (2200 FT)					
	064° 244°	8.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TARAZ APPROACH 122.1 MHZ {C}
△ ANESA	424006N 0703654E TAR 241.0° 31.9 NM (2200 FT)					
	062° 242°	31.9 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TARAZ APPROACH 122.1 MHZ {C}
▲ TARAZ DVOR/ DME (TAR)	425214N 0711654E					
	088° 268°	21.3 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TARAZ APPROACH 122.1 MHZ {C}
△ MIKDO	425058N 0714551E TAR 088.0° 21.3 NM (2200 FT)					
	085° 266°	76.7 NM	FL 510 FL 150	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ OGTOL (FIR BDRY)	424905N 0733002E TAR 087.0° 98.0 NM (2200 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z581 (RNAV 5)	(2) (3) For continuation, see AIP Russia					
▲ KERUL (FIR BDRY)	415128N 0520821E AKT 151.0° 129.8 NM (100 FT)					**Before, see AIP Russia and CIS**

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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
	333° 152°	46.1 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}
△ ADEDA	423438N 0514628E AKT 151.0° 83.7 NM (100 FT)					
	332° 152°	34.3 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}
▲ LUMUR	430639N 0512953E AKT 150.0° 49.5 NM (100 FT)					
	331° 150°	49.5 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ AKTAU DVOR/ DME (AKT)	435220N 0510352E					
	277° 095°	69.6 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ RALAN (FIR BDRY)	440812N 0493000E AKT 275.0° 69.6 NM (100 FT)					**For continuation, see AIP Russia**

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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z582 **(RNAV 5)**						
▲ KOSTANAY DVOR/DME (KST)	531113N 0633346E					
	191° 010°	63.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
△ DOPAN	521213N 0625401E KST 190.0° 63.8 NM (600 FT)					
	190° 010°	98.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ RAVNI (FIR BDRY)	504030N 0615807E KST 188.0° 162.1 NM (600 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z583 **(RNAV 5)**						
▲ USUGA	433600N 0761934E ATA 287.3° 35.8 NM (2200 FT)					
	356° 176°	22.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
▲ ADABA	435820N 0762009E ATA 312.8° 48.5 NM (2200 FT)					
	322° 142°	15.7 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ TUKTO	441136N 0760830E ATA 315.3° 64 NM (2200 FT)					
	323° 142°	51.0 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
△ DESER	445502N 0753100E ATA 319.2° 114.7 NM (2200 FT)					
	322° 142°	27.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
▲ MALOD	451812N 0751037E BLH 168.0° 95.2 NM (1400 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
	321° 141°	45.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
△ ABMIK	455616N 0743604E BLH 189.0° 58.9 NM (1400 FT)					
	321° 139°	102.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
▲ TOGDI	472143N 0731457E BLH 284.0° 76.7 NM (1400 FT)					
	308° 126°	56.8 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
▲ AZORI (FIR BDRY)	480139N 0721512E KRG 196.0° 109.1 NM (1800 FT)					
	306° 121°	220.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
▲ TUSEP	503136N 0680751E ARK 064.0° 44.4 NM (1300 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z584 (RNAV 5)						
▲ ADABA	435820N 0762009E ATA 312.8° 48.5 NM (2200 FT)					
	029° 209°	19.5 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ UMIRO	441421N 0763537E ATA 332.7° 56.1 NM (2200 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
	029° 209°	8.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ BIOTA	442124N 0764224E ATA 339.0° 61.2 NM (2200 FT)					
	029° 210°	81.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ KONAT	452754N 0774805E TDK 304.0° 34.2 NM (2000 FT)					
	030° 210°	62.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ LIPSI	461808N 0784001E TDK 002.0° 72.5 NM (2000 FT)					
	030° 211°	122.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ AYAGUZ VOR/ DME (AGZ)	475552N 0802659E					
	351° 170°	102.4 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ LUNOV	493800N 0801801E SEM 170.0° 43.1 NM (700 FT)					
	349° 169°	6.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
△ ROKOD	494408N 0801719E SEM 170.0° 36.9 NM (700 FT)					
	350° 169°	37.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
▲ SOMIP	502106N 0801402E SEM 281.0° 0.4 NM (700 FT)					
	307° 126°	49.4 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
▲ OBUNA (FIR BDRY)	505513N 0791803E SEM 307.0° 49.7 NM (700 FT)					
	306° 125°	30.6 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
EKTEN	513242N 0523030E	A122, M158, Z102	
EKTUS	514225N 0765305E	L988, M34	
ELENU	435017N 0741838E	L855	
ELSEB	463234N 0675439E	L147, M168	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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 UAII
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	
FAZUL	440916N 0613731E	M875, T916	
FINON	450211N 0773900E	P984	TMA UAAT
FULSA	453758N 0784751E	L135	TMA UAAT
GAGSU	522335N 0771018E		TMA UASP

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
GIGDA	461942N 0801638E	Z370	
GIGRI	441248N 0521256E	N37	
GIGUR	444920N 0645300E	M75, M610	
GIKON	531041N 0700822E		TMA UACK

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
GOMIR	501042N 0844206E	N143, M618, M993	
GONEL	483912N 0735912E	M993, N170	
GORBO	490316N 0761100E	M166, M993, W348	
GORIM	484905N 0672456E	L26, L86, M168, N987	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
INTAL	484345N 0702839E	W351	
IPLED	432348N 0493000E	G96, N37	RR-8
IPRAR	404431N 0683447E	M168	
IRGIT	485220N 0750436E	M993, Z160	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
KOMOS	424517N 0713537E		TMA UADD
KOMRE	455641N 0572649E	N37	
KONAT	452754N 0774805E	P984, Z160, Z584	
KONEK	460631N 0750443E	M149	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
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	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
LIGMO	504539N 0710837E	M75, T523, Z746	
LIKRU	431730N 0765447E		TMA UAAA
LIMTO	440138N 0684518E	M610	
LIPSI	461808N 0784001E	M618, Z584	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
LURIT	432931N 0761943E		TMA UAAA
LURUM	494127N 0564322E	N73	
LUSAM	511128N 0515127E		TMA UARR
LUSIR	510229N 0511911E		TMA UARR

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
MILSO	452519N 0604609E	M161, M610	RR-2, RR-5
MIMKA	502620N 0693328E	N990	
MIMRI	433808N 0634822E	L86, M75, P184	
MIRGA	452416N 0693051E	L145	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
NEMKU	485904N 0734736E	N170, W333	
NEPIL	434133N 0522455E	N73, N193, Z102	
NEPLA	470920N 0740031E	L26	
NESDO	454926N 0544739E	L992	
NESUN	460123N 0801738E	N993	
NETAT	403653N 0682413E	M168	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
OBATA	462130N 0491148E	L988	
OBIBU	445219N 0654502E		TMA UAOO
OBUNA	505513N 0791803E	W361, Z584	
ODAMA	503331N 0753513E	T649	
ODATU	505427N 0710518E		TMA UACC

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
OKESO	411051N 0673608E	Z554	
OKRAT	433034N 0765506E		TMA UAAA
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	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
POBEK	432534N 0672754E	N987, Z380	
POBUR	533800N 0721400E	M75, P179, Z553	
POKAT	432530N 0694508E	Z621	
POMNI	510638N 0493240E	L864	
RALAN	440812N 0493000E	A924, Z581	
RAVNI	504030N 0615807E	L985, T586, Z582	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
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	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
TIRBA	433456N 0773031E	L135, L855, M610, Z315, Z370	
TIROK	472456N 0655037E	L147, N161	
TIROM	421434N 0531720E	L992, Q161	RR-4
TIROP	421942N 0691234E		TMA UAII
TISRA	463851N 0564100E	L139	
TITIL	443944N 0543810E	N55, N161	
TITUR	532406N 0610924E	G111, L994, N985	RR-3

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
TUROK	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	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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
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	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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
ZURGO	441233N 0631012E	L162, T916	
ZUSLA	423838N 0675917E	Z579	

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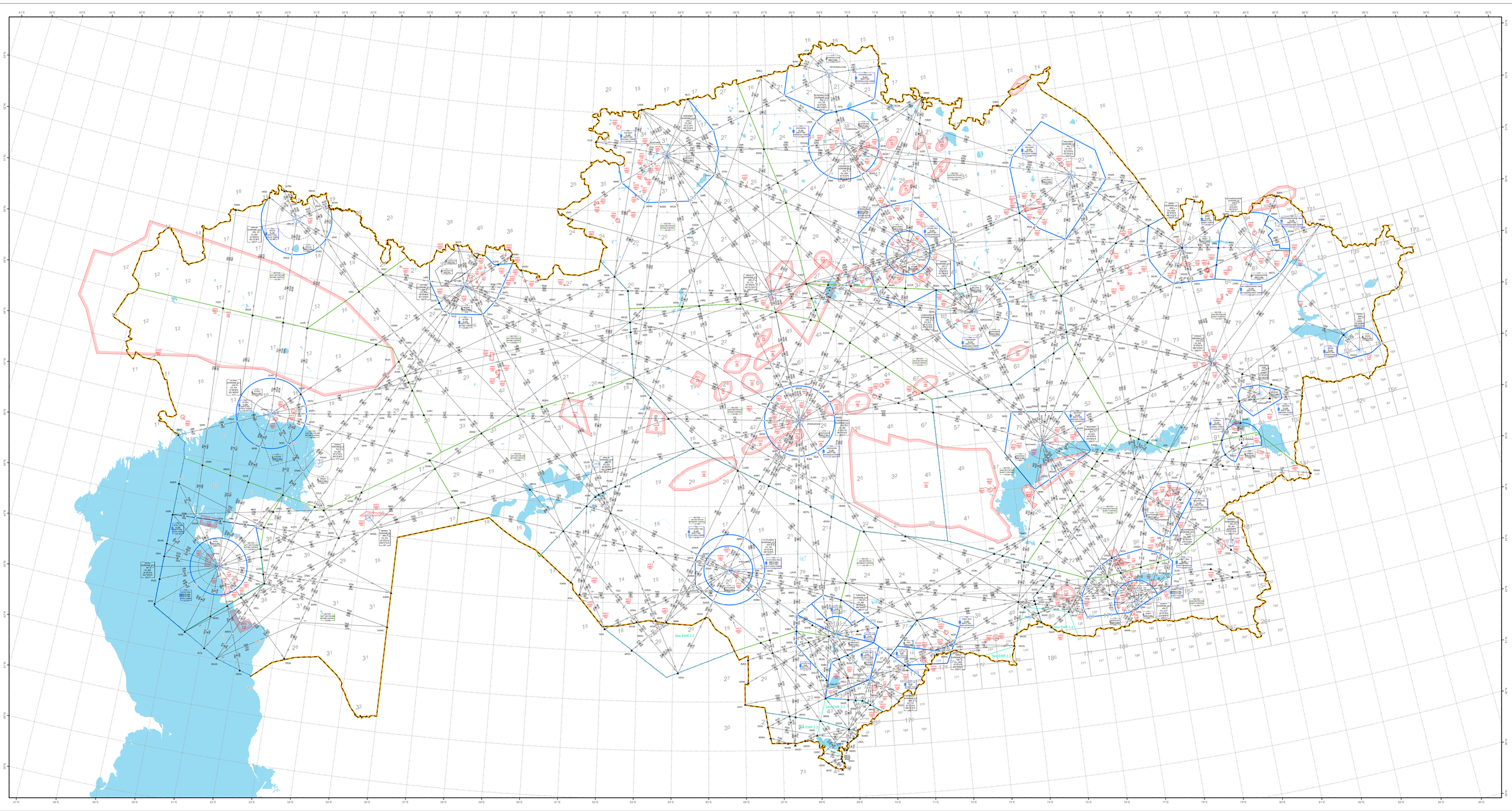
ENROUTE CHART

Change: Route L852, DEL SEGMENTS TIRSA---RISAS;ADD SEGMENTS TIPSA-ELENU-RISAS; Z370; ADD SEGMENT RISAS-TOMGO; ADD WPT
NAME BULGOL-LOR IAFK; MOCA 3000;N897,M166,W332 EFFCTV- VOR AKK MOCA 3000



0 15 30 60 90 120 150 180 210 240 270 300 NM
0 30 60 120 180 240 300 360 420 480 KM

DIST in NM
ALT and ELEV in FT
BRG are MAG

Legend

Reporting point

- On Request
- Compulsory
- Aerodrome

Radionavigation aids

- DME
- NDB
- VOR
- Compass rose
- FIR - Flight information region
- State Boundary

Airspace

- ATZ - Aerodrome traffic zone
- CTR - Control zone
- FIR SECTOR
- TMA - Terminal Control Area
- Danger; Prohibited; Restricted Areas
- Delegated Airspace
- Hydrography

Area minimum altitude (AMA)

Example: 18600 FT - 18^{6}

WGS84
Lambert Conformal Conic Projection
The chart is True North orientated

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AD 1.2 RESCUE AND FIRE FIGHTING SERVICES AND SNOW PLAN

1. RESCUE AND FIREFIGHTING SERVICES

1.1 Regulatory references

The requirements for RFF level of protection at certified aerodromes are established in paragraphs 454-470 of Civil aerodrome (heliport) standards Order of the Minister for Investment and Development of the Republic of Kazakhstan dated March 31, 2015 № 381

1.2 Determination of the RFFS level of protection

RFF level of protection of certified aerodromes is based on the overall length of the aircraft with the longest fuselage and the maximum width of the fuselage of the aircraft normally using at the airport.

If the number of movements of the aeroplanes in the highest category normally using the aerodrome is less than 700 the RFF level of protection can be decreased by one category of the determined category. The RFF level of protection for all certified aerodromes are given in section AD 2.6 for the respective aerodromes.

The amounts of water for foam, discharge rate and RFF vehicles are provided at certified aerodromes for the relevant airport category in compliance with the requirements of Annex 14, Volume 1 of ICAO. These requirements are described in the following table 1:

Table 1:

Minimum usable amounts of extinguishing agents						
Aerodrome category	Water (l)		Discharge rate l/m		Amount of RFF vehicles	
	ICAO Annex 14 vol.1	KZ Aerodrome Standard	ICAO Annex 14 vol.1	KZ Aerodrome Standard	ICAO Annex 14 vol.1	KZ Aerodrome Standard
1	350	745	350	360	1	1
2	1000	1580	800	840	1	1
3	1800	2420	1300	1200	1	1
4	3600	7500	2600	3840	1	2
5	8100	11160	4500	4800	1	2
6	11800	14140	6000	6000	2	3
7	18200	22320	7900	7980	2	3
8	27300	30340	10800	10800	3	4
9	36400	38130	13500	13560	3	5
10	48200	45105	16600	15600	3	5

All certified aerodromes on duties are keeping in readiness the required rescue, fire-fighting and other equipment available in case of use in emergency situations of the aerodrome responsible areas.

2. SNOW PLAN

2.1 Organization of the winter service

At all certified aerodromes, the list of which is given in AD 1.5, the aerodrome operator is responsible for the operational maintenance of the movement area of the aerodrome (removal of contaminants, conducting measurements, assessments of the condition and worthiness for operation), providing relevant information about the movement area.

2.2 Surveillance of movement areas

The aerodrome maintenance service controls the condition of the movement area during its operational hours, which are given in AD 2.3 for each certified aerodrome.

The validity period of any SNOWTAM is 8 hours, and the current SNOWTAM cannot be canceled, and therefore SNOWTAMs with an unexpired validity period may be valid at scheduled aerodromes during non-working hours. Such SNOWTAMs may not be relevant in the event of continued precipitation and other weather conditions that contribute to significant changes in runway surface conditions. In such cases, the aerodrome operator's AS specialist shall include information on the date and time of the next runway condition assessment in the "open text comments" section of the situational awareness section.

More detailed information of snow clearing procedures at aerodromes, in particular, the types of equipment used, priorities for precipitation removal are given in AD 2.7 for each certified aerodrome.

2.3 Measuring methods and measurements taken

2.3.1 Runway surface condition assessment

All certified aerodromes in Kazakhstan assess runway surface condition according principles laid down by ICAO taking into account the contaminant type, coverage and depth of the contaminants, as well as the pilot's reports on braking efficiency.

These elements are reported in a globally harmonized format and are more commonly known as the Global Reporting Format (GRF).

The GRF works as follows:
Each time there is a significant change in runway surface condition, the aerodrome operator assesses the surface condition for each third of the runway and produces a Runway condition report (RCR), containing a runway condition code (RWYCC) and a set of information describing the runway surface condition, including type of contamination, thickness, coverage for each third of runway.

The determination of the runway condition code is based on the Runway Condition Assessment Matrix (RCAM) which maps the runway surface condition description to aircraft braking performance.

The Runway Condition Assessment Matrix (RCAM) is shown in Table 2.

The runway length taken into account for the assessment and reporting of the runway surface condition is the physical length of the runway excluding runway end safety areas (RESAs), stopways and clearways.

The pilot uses the information disseminated in conjunction with performance data provided by the aircraft manufacturers to determine whether landing or take-off operations can be conducted safely.When the braking performances observed by the pilot do not correspond to that communicated, the pilots produce a braking action report (AIREP) which ATS communicates to the aerodrome operator with a view to a possible new assessment of the runway surface condition.This AIREP will be transmitted by the crew as soon as possible after landing, if possible before leaving the control frequency, in particular to be taken into account by the following crews.The transmission of the AIREP uses the conventional expressions agreed in the RCAM matrix.

Table 2: Runway Condition Assessment Matrix applicable at Kazakhstan aerodromes

Runway condition assessment matrix (RCAM)			
Assessment criteria		Downgrade assessment criteria	
Runway condition code	Runway surface description	Aeroplane deceleration or directional control observation	Pilot report of runway braking action
6	• DRY	-	-

Table 2: Runway Condition Assessment Matrix applicable at Kazakhstan aerodromes

Runway condition assessment matrix (RCAM)			
Assessment criteria		**Downgrade assessment criteria**	
Runway condition code	**Runway surface description**	**Aeroplane deceleration or directional control observation**	**Pilot report of runway braking action**
5	• FROST • WET (The runway surface is covered by any visible dampness or water up to and including 3 mm depth) **Up to and including 3 mm depth:** • SLUSH • DRY SNOW • WET SNOW	Braking deceleration is normal for the wheel braking effort applied AND directional control is normal.	GOOD
4	**−15ºC and Lower outside air temperature**: • COMPACTED SNOW	Braking deceleration OR directional control is between Good and Medium.	GOOD TO MEDIUM
3	• WET (“slippery wet” runway) • DRY SNOW or WET SNOW (any depth) ON TOP OF COMPACTED SNOW **More than 3 mm depth**: • DRY SNOW • WET SNOW **Higher than −15ºC outside air temperature**: • COMPACTED SNOW	Braking deceleration is noticeably reduced for the wheel braking effort applied OR directional control is noticeably reduced.	MEDIUM
2	**More than 3 mm depth of water or slush**: • STANDING WATER • SLUSH	Braking deceleration OR directional control is between Medium and Poor.	MEDIUM TO POOR
1	• ICE	Braking deceleration is significantly reduced for the wheel braking effort applied OR directional control is significantly reduced.	POOR
0	• WET ICE • WATER ON TOP OF COMPACTED SNOW • DRY SNOW or WET SNOW ON TOP OF ICE	Braking deceleration is minimal to non-existent for the wheel braking effort applied OR directional control is uncertain.	LESS THAN POOR

2.3.2 Measuring the depth of deposits

The average depth of the layer on each third of runway is measured with the precision of up to 04 mm for standing water, up to 03 mm for slush, wet snow and dry snow.

Measurements of the depth of these deposits are made on each third of the runway length at a distance of 5-10 m from its axis on the right and left, by triple measurements at the estimated points and calculating the arithmetic mean values of the measured depths on each third of the runway.

The depth of deposit is measured using a metal millimeter ruler, and the water layer is determined using an optical ruler OL-1.

The values of the deposit depth are measured and reported in millimeters.

In cases where there is no need for measurements, information about the depth of deposit is not reported.

When no information is to be reported, insert “NR” at its relevant position in the message of SNOWTAM to indicate to the user that no information exists

2.3.3 Friction measurements

At the aerodromes of Aktau, Aktobe, Almaty, Astana, Atyrau, Karaganda, Kostanay, Kokshetau, Pavlodar, Semey, Taldykorgan, Taraz, Tengiz, Ust-Kamenogorsk, Shymkent, an aerodrome brake trolley ATT-2 is used for the measurement of friction.

At the aerodromes of Kyzylorda, Uralsk, an aerodrome brake trolley ATT-RWY is used for the measurement of friction.

At the aerodromes of Petropavlovsk, Usharal, an aerodrome brake trolley ATT-2M is used for the measurement of friction.

At the aerodromes of Almaty, Astana, Atyrau, Balkhash, Zhezkazgan, Karaganda, Shymkent, electronic portable decelerometer DEP-5A is used for the measurement of friction.

At the aerodromes of Zaisan, Turkistan, Urdzhar, electronic portable decelerometer DE-01 is used for the measurement of friction.

At the aerodromes of Aktau, Turkistan, Skiddometer BV 11 is used for the measurement of friction.

The friction measurement is made on each third along the runway 5-10m on either side of the runway centerline.

When measuring the friction with a decelerometer, the number of measurements on each section should be at least 8 (4 to the right and left of the runway centerline).

If the conditions on the edges of the cleared runway area differ significantly from the conditions within basic measurement area, additional measurements will be made when necessary.

The values of the friction measurements coefficients are published in the situational awareness section of the Runway Condition Report (RCR), provided that the friciton measurements are used as part of the overall assessment of the runway surface covered with compacted snow or ice.

Friction measurements on loose dirt, in particular such as snow and slush, are unreliable and the values of the friction measurements coefficient are provided only at the request of the pilots.

Only the measured friction coefficient values are provided.

Table 3: Conversion of the measured friction coefficient values to the normative value of the friction coefficients for ATT-2.

Measured coefficient	0,1	0,15	0,18	0,2	0,25	0,26	0,29	0,3	0,35	0,39	0,4	0,45	0,5
Normative friction coefficient	0,26	0,29	0,3	0,32	0,34	0,35	0,36	0,37	0,39	0,41	0,42	0,45	0,49

The measured values of the decelerometer correspond to the normative values of the friction coefficient given in Table 3.

2.4 Actions taken to maintain the usability of movement areas

2.4.1 Runway width available

During the winter season the basic aim is to clear the runway up to the published runway width. The actual cleared runway width may be less than the published width.

2.4.2 Improvement of surface friction decrease drag effect for rolling

The intention is that the aerodrome operator, during the operation hours of the aerodrome, maintains the friction characteristics on the runway at level not lower than the medium braking efficiency, and also removes contaminants in order to decrease drag effect for rolling of the aircraft during take-off as far as weather conditions and traffic density allow.

These aims will be achieved in most cases by:

- Applications of plow-brush, screw-rotor snowplows, graders, bulldozers, wind machines for removing snow, slush, water.
- The use of thermal machines, chemical reagents and their combinations for the removal of ice, compacted snow.

The list of de-ice products are used by certified aerodromes is published in AIC A.

2.5 System and means of reporting

Reports on the condition of the runway are formed by aerodrome maintenance service specialists of certified aerodromes. Reports are transmitted to ATS and AIS.

Runway condition information is reported in a Runway Condition Report (RCR) which consists of 2 sections ordered as follows :

A section containing information necessary for the aeroplane performance calculation:

- aerodrome location indicator;
- date and time of the assessment;
- lowest runway designation number;
- runway condition code for each third of the runway;
- percentage contaminant coverage for each third of the runway;
- depth of loose contaminants;
- condition description for each runway third;
- width of the runway to which the RWYCC applies, if lower than the published width.

A situational awareness section containing additional information relevant to safe operations:

- reduced runway length where applicable;
- drifting snow on the runway;
- loose sand on the runway;
- chemical treatment on the runway;
- snowbanks on the runway;
- snowbanks on the taxiway;
- snowbanks adjacent to the runway;
- taxiway conditions;
- apron conditions;
- measured friction coefficient and friction measuring device;
- plain language remarks.

When the runway is wholly or partly contaminated by standing water, snow, slush, ice or frost, or is wet

associated with the clearing or treatment of snow, slush, ice or frost, the runway condition report should be disseminated through the AIS and ATS services.

When the runway is wet, not associated with the presence of standing water, snow, slush, ice or frost, the assessed information should be disseminated using the runway condition report through the ATS only

On the basis of the RCR produced by the aerodrome operator, ATS will disseminate this information to crews on the frequency and on the ATIS. This communication will be completed by the dissemination of a SNOWTAM in the cases provided for by the regulations.

2.6 The cases of runway closure

Weather conditions can change rapidly, and access to the runway may be limited due to the high intensity of flights. In cases where the state of the taxiway is identical to the runway, then the assessment of the runway condition can be carried out on the basis of an assessment of the surface condition of the exit and main taxiways, when access to the runway is limited due to take-off and landing operations performed on it, and weather conditions change rapidly.

When the condition of the runways no longer allows operations to be carried out safely in particular when the runway condition code is lower than 1 and/or the measured friction coefficients are lower than the minimum values given in Table 4. the aerodrome operator communicates the information available to him to the ATS and AIS, when present on the platform, in view of a possible suspension of operations on the movement area of the aerodrome.

In this case, this situation is reported to the crews by NOTAM, as well as on the frequency and on the ATIS.

When the need arises, a runway or the movement area or parts of it can be closed for a period of time required for the inspection of pavement conditions, snow and ice clearance or the measurement or the estimation of the friction level. The decision on the closure of a runway or another part of the movement area will be made by the aerodrome operator.

Table 4: The minimum level of friction established in Kazakhstan for various types of friction measurement equipment

ATT-2	Skiddometer	Decelerometer DAP-5A
0,18	0,18	0,30

2.7 Distribution of information about snow conditions

2.7.1 Seasonal snow plan

A seasonal plan (AIC A), which contains seasonal supplements and changes to the standing Snow plan (AIP, AD 1.2) will be issued annually before the normal onset of winter conditions.

2.7.2 Dissemination information about runway surface condition by ATS organizations

Runway surface condition information shall be passed to aircraft by the ATS during their hours of operation and aerodrome operator’s operation hours using frequency only in case crews haven’t already received all or part of the information from other sources, including SNOWTAMs, ATIS. The GRF information disseminated by ATS will be given in priority on the ATIS if available.

The communication of information by runway thirds by ATS units is done in the direction of landing or take-off operations.

The following information will be transmitted via ATIS for each third of the runway:

- operational runway in use at time of the issuance;
- RWYCC for operational RWY for each third in the operational direction;
- condition description, coverage and depth (for loose contaminant);
- width of operational RWY to which RWYCC apply if less than published;

- reduced length if less than published.

This transmission may be partial to take into account the congestion of the control frequency. However, all available information may be transmitted at the request of the crew.

2.7.3 Dissemination information about runway surface condition by AIS

This information concerning snow, slush, ice, frost, standing water or water associated with snow, slush, ice or frost on the movement area is also disseminated by means of SNOWTAM.

The AIS provider issues a SNOWTAM for a maximum validity of 8 hours for each RCR received.

When the runway is considered as "slippery wet", a NOTAM indicating the length of the degraded runway section is issued in addition to the preceding communications.

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UAAA AD 2

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

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@alaport.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

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.

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**	Warning: There are 7.5 strengthened shoulders on each side of RWY 05R/23L and RWY 05L/23R Turns on RWY 05R/23L for ACFT types B767 and heavier allowed at the thresholds and turning bay a only. Turnings at the THR of RWY 05R/23L for ACFT type AN-124 and B747-800 is prohibited Turning bays: 1. At THR RWY 05R has width 102m, U-turn available for code letter A, B, C, D, E ACFT. 2. At THR RWY 23L has width 75m, U-turn available for code letter A, B, C, D ACFT. 3. At THR RWY 23R has width 95m, U-turn available for code letter A, B, C, D, E ACFT. 4. At the RWY 05R/23L between TWY D and TWY E has width 75m, U-turn available for code letter A, B, C, D ACFT.

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

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		
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, before start-up (towing) to contact with “Almaty Taxiing” air traffic controller at the frequency of 121.700 MHz, to notify the index of current ATIS information, stand number and get the clearance for departure from the air traffic controller.

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.

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 preforms 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 according 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

NIL

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 124.800 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".

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

№	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
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.

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 bay 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 in 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, thorough 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

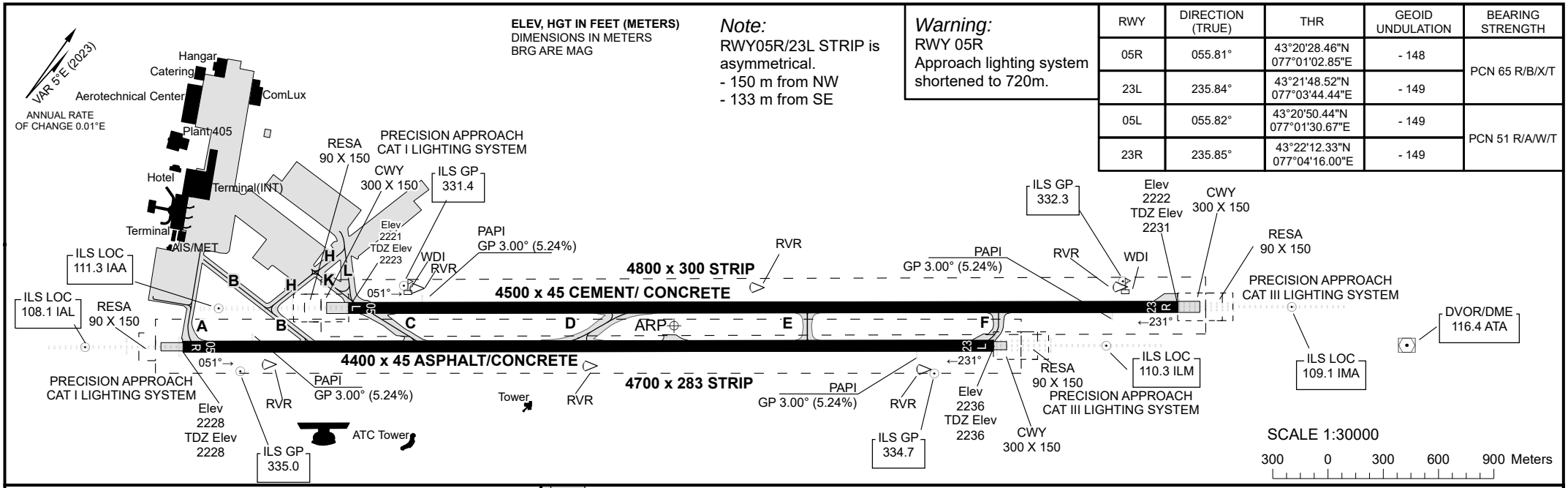
AERODROME CHART - ICAO

AD ELEV
2238FT (*682m*)

ARP 432120N
0770238E

TWR	119.4
GROUND	121.7

ALMATY

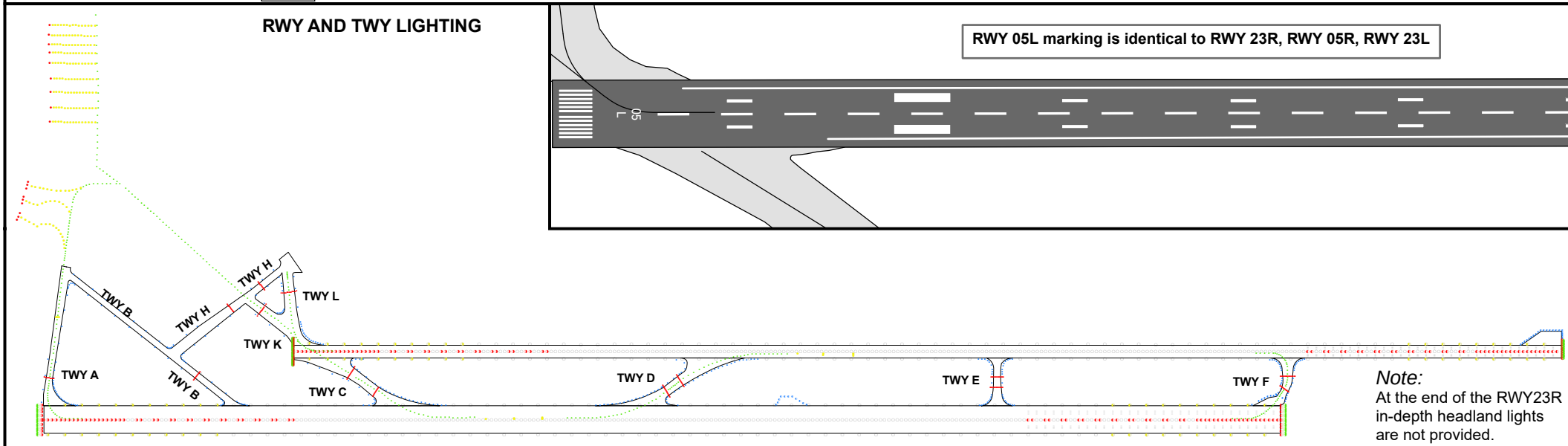


Note:
RWY05R/23L STRIP is asymmetrical.
- 150 m from NW
- 133 m from SE

Warning:
RWY 05R
Approach lighting system shortened to 720m.

RWY	DIRECTION (TRUE)	THR	GEOID UNDULATION	BEARING STRENGTH
05R	055.81°	43°20'28.46"N 077°01'02.85"E	- 148	PCN 65 R/B/X/T
23L	235.84°	43°21'48.52"N 077°03'44.44"E	- 149	
05L	055.82°	43°20'50.44"N 077°01'30.67"E	- 149	PCN 51 R/A/W/T
23R	235.85°	43°22'12.33"N 077°04'16.00"E	- 149	

RWY AND TWY LIGHTING



Note:
At the end of the RWY23R in-depth headland lights are not provided.

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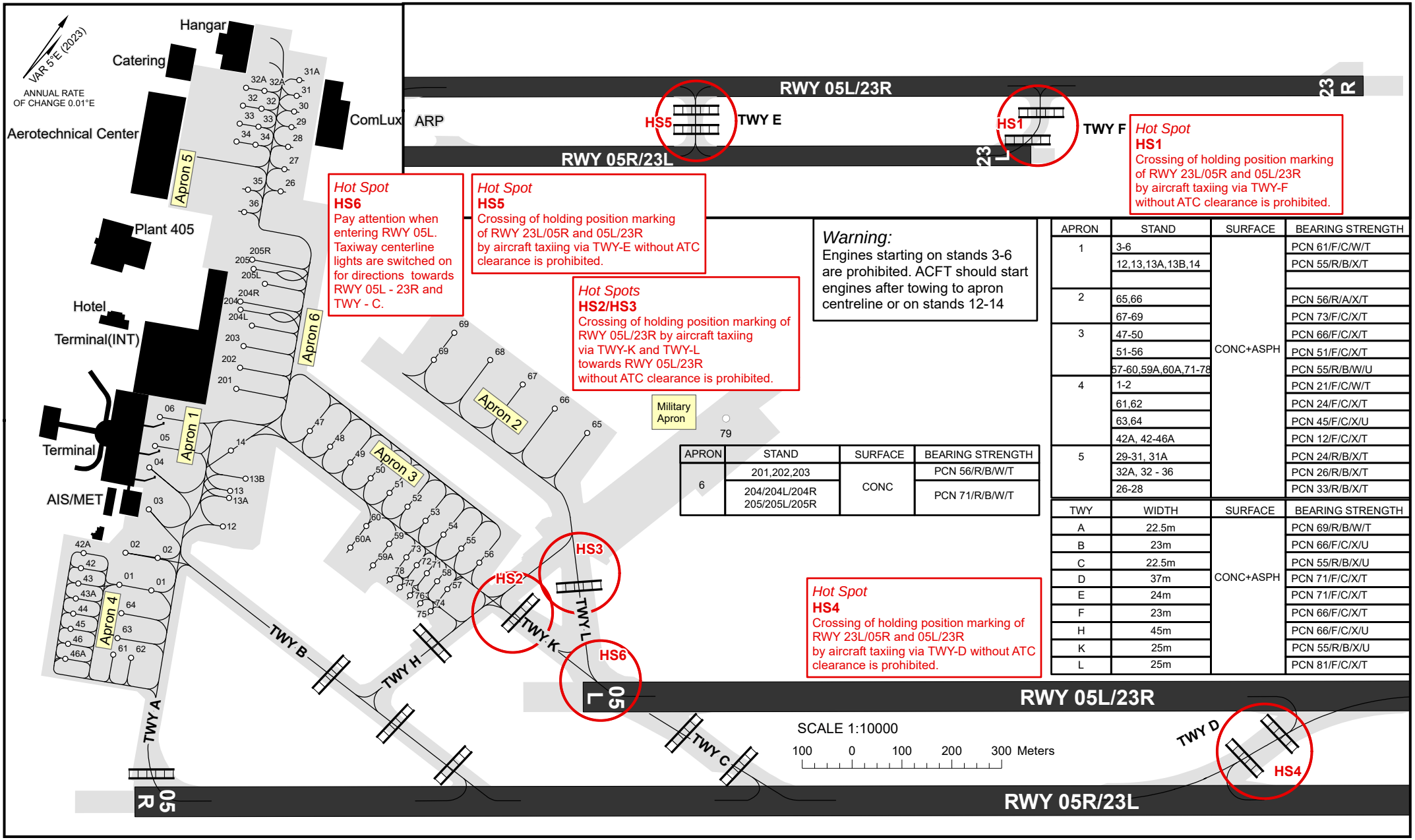
AERODROME GROUND MOVEMENT AND PARKING CHART - ICAO

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

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.

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.

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
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
6	201,202,203	CONC	PCN 56/R/B/W/T
	204/204L/204R 205/205L/205R		PCN 71/R/B/W/T

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

CHANGE: Stands 12, 13; Add stands 13A, 13B

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

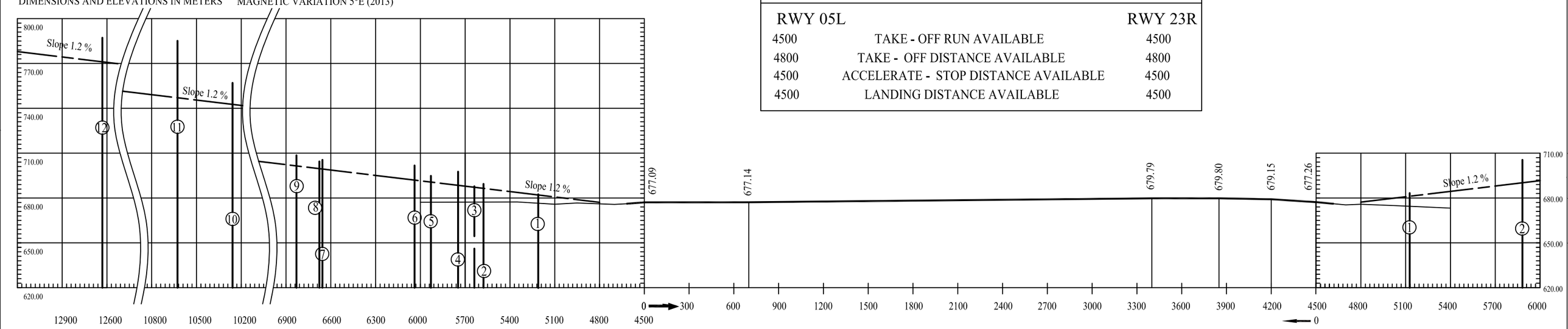
AERODROME OBSTACLE CHART - ICAO
TYPE A (OPERATING LIMITATIONS)

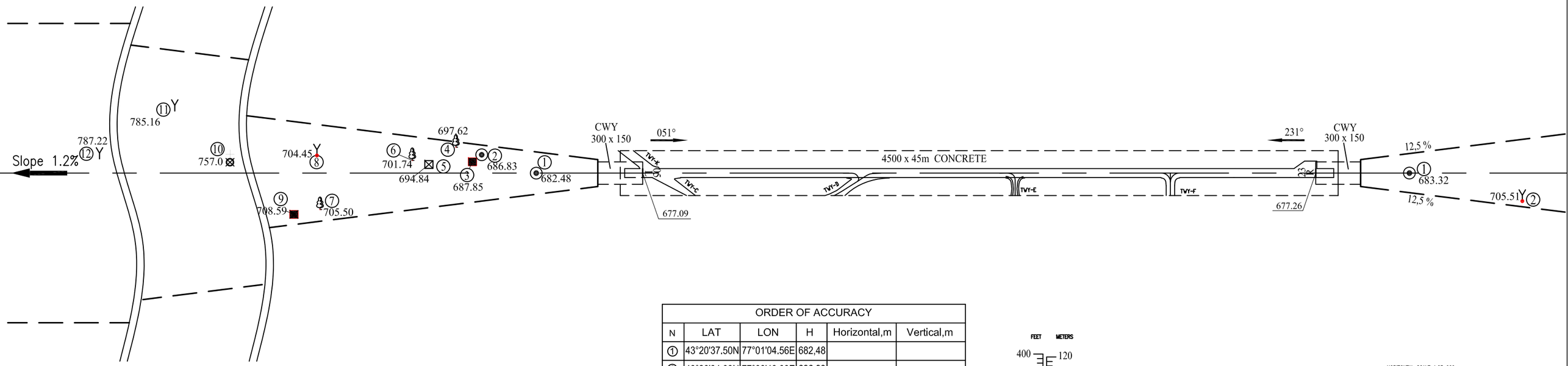
RWY 05L/23R

ALMATY/Almaty International Airport
RWY 05L/23R

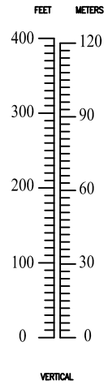
DIMENSIONS AND ELEVATIONS IN METERS MAGNETIC VARIATION 5°E (2013)

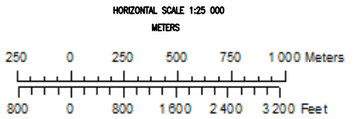
DECLARED DISTANCES		
RWY 05L		RWY 23R
4500	TAKE - OFF RUN AVAILABLE	4500
4800	TAKE - OFF DISTANCE AVAILABLE	4800
4500	ACCELERATE - STOP DISTANCE AVAILABLE	4500
4500	LANDING DISTANCE AVAILABLE	4500





ORDER OF ACCURACY					
N	LAT	LON	H	Horizontal,m	Vertical,m
①	43°20'37.50N	77°01'04.56E	682,48		
②	43°20'34.09N	77°00'48.03E	686,83		
③	43°20'31.73N	77°00'46.99E	687,85		
④	43°20'32.34N	77°00'40.47E	697,62		
⑤	43°20'25.92N	77°00'36.68E	694,84		
⑥	43°20'24.67N	77°00'31.97E	701,74		
⑦	43°20'04.64N	77°00'17.50E	705,50		
⑧	43°20'13.96N	77°00'07.76E	704,45		
⑨	43°20'00.57N	77°00'11.92E	708,59		
⑩	43°19'07.47N	76°57'57.39E	757,00		
⑪	43°19'09.91N	76°57'35.31E	785,16		
⑫	43°18'24.82N	76°56'29.78E	787,22		





ORDER OF ACCURACY					
N	LAT	LON	H	Horizontal,m	Vertical,m
①	43°22'23.71N	77°04'39.00E	683.32		
②	43°22'32.43N	77°05'11.41E	705.51		

LEGEND			
IDENTIFICATION NUMBER	①		
Antenna	⊙	Lantern	✱
Building	■	Church	○
Trees		Radiomast	Y
Pipe of thermal power station	◎	Hotel complex	⊠

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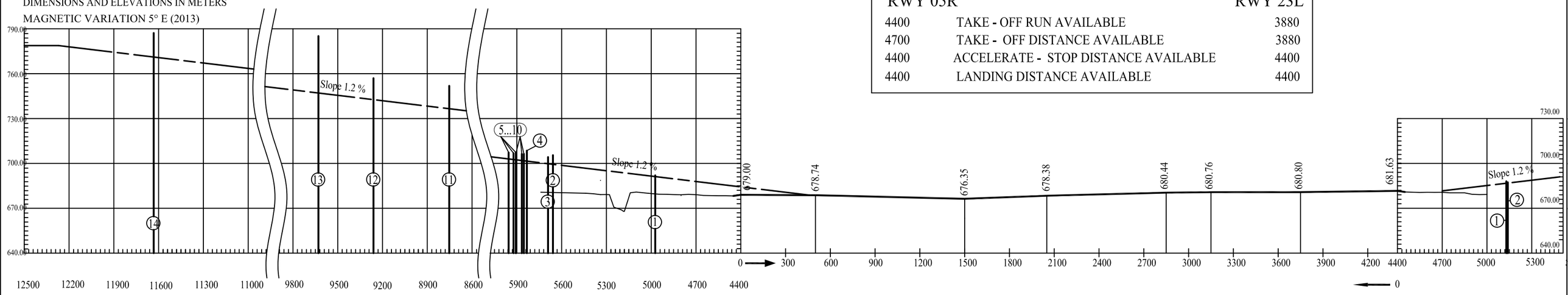
AERODROME OBSTACLE CHART - ICAO
TYPE A (OPERATING LIMITATIONS)

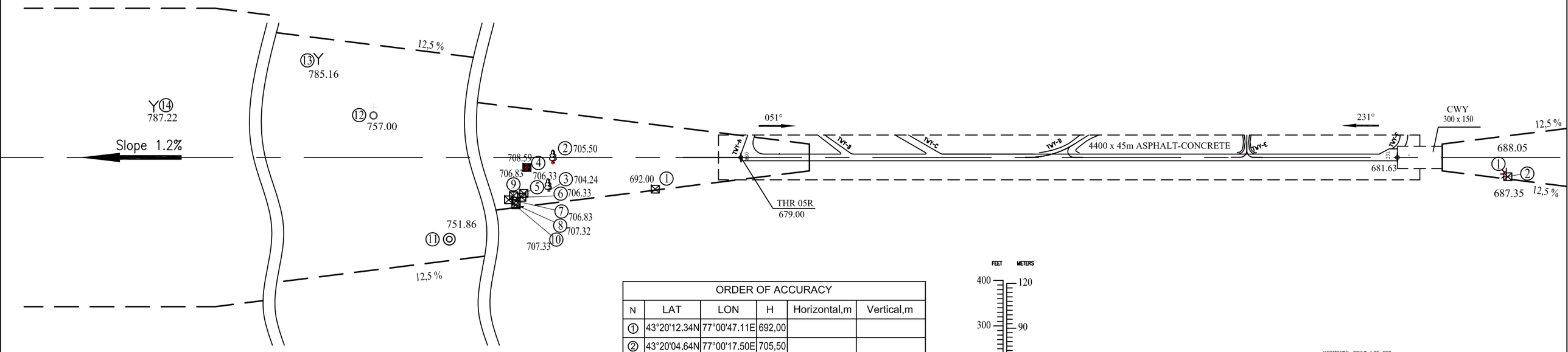
RWY 05R/23L

ALMATY/Almaty International Airport
RWY 05R/23L

DIMENSIONS AND ELEVATIONS IN METERS
MAGNETIC VARIATION 5° E (2013)

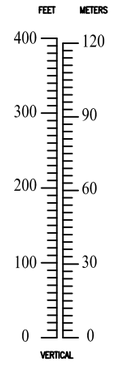
DECLARED DISTANCES		
RWY 05R		RWY 23L
4400	TAKE - OFF RUN AVAILABLE	3880
4700	TAKE - OFF DISTANCE AVAILABLE	3880
4400	ACCELERATE - STOP DISTANCE AVAILABLE	4400
4400	LANDING DISTANCE AVAILABLE	4400

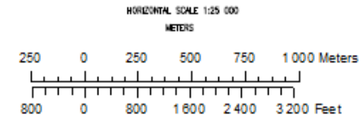




LEGEND		LEGEND	
IDENTIFICATION NUMBER	①		
Technical building	■	Mast of a projector	
Tree		Radiomast	Y
Pipe of thermal power station	◎	House	⊠
Church		Concrete pillar	

ORDER OF ACCURACY					
N	LAT	LON	H	Horizontal,m	Vertical,m
①	43°20'12.34N	77°00'47.11E	692,00		
②	43°20'04.64N	77°00'17.50E	705,50		
③	43°19'58.90N	77°00'21.11E	704,24		
④	43°20'00.57N	77°00'11.92E	708,59		
⑤	43°19'55.54N	77°00'15.53E	706,33		
⑥	43°19'54.59N	77°00'15.66E	706,33		
⑦	43°19'53.20N	77°00'14.88E	706,83		
⑧	43°19'52.54N	77°00'15.46E	707,32		
⑨	43°19'53.88N	77°00'13.37E	706,83		
⑩	43°19'52.54N	77°00'12.84E	707,33		
⑪	43°18'54.50N	76°58'36.73E	751,86		
⑫	43°19'07.47N	76°57'57.39E	757,00		
⑬	43°19'09.91N	76°57'35.31E	785,16		
⑭	43°18'24.82N	76°56'29.78E	787,22		





ORDER OF ACCURACY					
N	LAT	LON	H	Horizontal,m	Vertical,m
①	43°21'58.82N	77°04'14.04E	688,05		
②	43°21'58.53N	77°04'14.86E	687,35		

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STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

ALMATY APPROACH 118.3
ALMATY RADAR 126.8
ALMATY TOWER 119.4
ALMATY ATIS (EN) 129.8
ALMATY ATIS (RU) 135.1

TRANSITION ALT
10000 FT

(RNAV 1 SID BASED ON GNSS)
ALUGI 1A, DESOK 1B, DOTAL 1A

ALMATY
RWY 05L/05R

77°E 77°30'E 78°E
44°30'N 44°N 43°30'N

DIST IN NM
ALT, ELEV IN FT
BRG ARE MAGNETIC
VAR5°E

SID DESIGNATOR	RESTRICTIONS	CLIMB TO
ALUGI 1A	A MNM climb gradient of 7.1% is required until passing 9900 FT, due to airspace structure. If unable to comply, inform ATC.	11000 FT Expect further climb from ALMATY APP
DESOK 1B	A MNM climb gradient of 7.1% is required until passing 9900 FT, due to airspace structure. If unable to comply, inform ATC.	11000 FT Expect further climb from ALMATY APP
DOTAL 1A	A MNM climb gradient of 7.1% is required until passing 9900 FT, due to airspace structure. If unable to comply, inform ATC.	11000 FT Expect further climb from ALMATY APP

SURVEILLANCE RADAR REQUIRED

5600 FT
241°
083°
9500 FT
049°
17800 FT
MSA 25NM
ATA DVOR

UAR7 260 FL GND
UAR282 5300 FT MSL GND
UAD6 190 FL GND
UAR11 120 FL GND
UAR162 170 FL GND
UAR290 4700 FT MSL GND
UAR4 170 FL GND
UAR49 120 FL GND
UAR172 8300 FT MSL GND
UAP4 5000 FT MSL GND
UAR1 260 FL GND
UAP27 3600 FT MSL GND
UAR174 130 FL GND
UAP5 140 FL GND

DESOK 44°16'29"N 077°55'21"E FL200
DOTAL 44°07'45"N 078°09'04"E FL180
ALUGI 43°47'45"N 078°08'16"E FL150
BAGNA 43°47'54"N 077°57'19"E FL140
TIRBA 43°34'56"N 077°30'31"E 9000
LEGLA 43°28'26"N 077°16'54"E 11000
AA008 43°24'32"N 077°08'59"E

DESOK 1B
DOTAL 1A
ALUGI 1A
28.5 352° (357.2°T)
21.8 018° (023.2°T)
7.9 086° (091.1°T)
11.9 052° (056.8°T)
23.2 051° (056.5°T)
7.0 051° (056.1°T)
1.0 052° (056.9°T)

R074° D27.2 ATA FL190
R217° D15.8 ATA FL190

43°27'33"N 077°41'45"E

ALMATY
DVOR/DME 116.4
ATA
CH_111X
43°22'29"N 077°05'07"E
2200 FT

0 5 10 20 Kilometers
0 4 8 16 Nautical Miles

CHANGE: Editorial.

TABULAR DESCRIPTION

ALUGI 1A RWY 05L/05R											
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	AA008	-	51(55.9)	5.12	4	-	+3500	-250	2.8	RNAV1
20	TF	LEGLA	-	51(56.1)	5.12	7	-	-11000		2.8	RNAV1
30	TF	TIRBA	-	52(56.8)	5.12	11.8	-	+9000		2.8	RNAV1
40	TF	BAGNA	-	51(56.5)	5.12	23.4	-	+FL140		2.8	RNAV1
50	TF	ALUGI	-	86(91.1)	5.12	7.9	R	+FL150		1.9	RNAV1

WAYPOINT LIST

ALUGI 1A RWY 05L/05R		
Waypoint Identifier	**Coordinates**	
DER	432217.76N	0770427.01E
AA008	432432.33N	0770858.98E
LEGLA	432825.52N	0771654.27E
COORD	432825.52N	0771654.27E
TIRBA	433456.00N	0773031.00E
BAGNA	434754.00N	0775719.00E
ALUGI	434745.00N	0780816.00E

TABULAR DESCRIPTION

DESOK 1B RWY 05L/05R											
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	AA008	-	51(55.9)	5.12	4		+3500	-250	2.8	RNAV1
20	TF	LEGLA	-	51(56.1)	5.12	7	-	-11000		2.8	RNAV1
30	TF	TIRBA	-	52(56.8)	5.12	11.8	-	+9000		2.8	RNAV1
40	TF	BAGNA	-	51(56.5)	5.12	23.4	-	+FL140		2.8	RNAV1
50	TF	DESOK	-	352(357.2)	5.12	28.6	L	+FL200		1.9	RNAV1

WAYPOINT LIST

DESOK 1B RWY 05L/05R		
Waypoint Identifier	**Coordinates**	
DER	432217.76N	0770427.01E
AA008	432432.33N	0770858.98E
LEGLA	432825.52N	0771654.27E
COORD	432825.52N	0771654.27E
TIRBA	433456.00N	0773031.00E
BAGNA	434754.00N	0775719.00E
DESOK	441629.00N	0775521.00E

TABULAR DESCRIPTION

DOTAL 1A RWY 05L/05R											
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	AA008	-	51(55.9)	5.12	4	-	+3500	-250	2.8	RNAV1
20	TF	LEGLA	-	51(56.1)	5.12	7	-	-11000		2.8	RNAV1
30	TF	TIRBA	-	52(56.8)	5.12	11.8	-	+9000		2.8	RNAV1
40	TF	BAGNA	-	51(56.5)	5.12	23.4	-	+FL140		2.8	RNAV1
50	TF	DOTAL	-	18(23.2)	5.12	21.6	L	+FL180		1.9	RNAV1

WAYPOINT LIST

DOTAL 1A RWY 05L/05R		
Waypoint Identifier	**Coordinates**	
DER	432217.76N	0770427.01E
AA008	432432.33N	0770858.98E
LEGLA	432825.52N	0771654.27E
COORD	432825.52N	0771654.27E
TIRBA	433456.00N	0773031.00E
BAGNA	434754.00N	0775719.00E
DOTAL	440745.00N	0780904.00E

STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALT
10000 FT

ALMATY APPROACH 118.3
ALMATY RADAR 126.8
ALMATY TOWER 119.4
ALMATY ATIS (EN) 129.8
ALMATY ATIS (RU) 135.1

(RNAV 1 SID BASED ON GNSS)
DESOK 1E, DOTAL 1F, GOGDO 1A

ALMATY
RWY 23L/23R

DIST IN NM
ALT, ELEV IN FT
BRG ARE MAGNETIC
VAR5°E

SID DESIGNATOR	RESTRICTIONS	CLIMB TO
DOTAL 1F	A MNM climb gradient of 4.7% is required until passing 11000 FT, due to separation from arrival traffic. If unable to comply, inform ATC. MAX speed 240 KT IAS during first turn	10000 FT Expect further climb from ALMATY APP
DESOK 1E	A MNM climb gradient of 4.7% is required until passing 11000 FT, due to separation from arrival traffic. If unable to comply, inform ATC. MAX speed 240 KT IAS during first turn	10000 FT Expect further climb from ALMATY APP
GOGDO 1A	A MNM climb gradient of 4.7% is required until passing 11000 FT, due to separation from arrival traffic. If unable to comply, inform ATC. MAX speed 240 KT IAS during first turn	10000 FT Expect further climb from ALMATY APP

SURVEILLANCE RADAR REQUIRED

MSA 25NM
ATA DVOR
5600 FT
241°
083°
9500 FT
049°
17800 FT

GOGDO
44°25'24"N
077°26'18"E
FL220

DESOK
44°16'29"N
077°55'21"E
FL230

AA214
44°03'55"N
077°22'21"E
FL180

AA216
44°05'16"N
077°38'11"E
FL200

DOTAL
44°07'45"N
078°09'04"E
FL250

AA212
43°41'52"N
077°18'20"E
FL130

AA210
43°36'55"N
077°08'05"E
11000

AA208
43°27'29"N
076°48'38"E
10000

AA203
43°18'50"N
076°57'28"E
3000

43°27'33"N
077°41'45"E

R074° D27.2 ATA FL190

43°10'42"N
076°50'41"E

R238° D24.5 ATA FL190

R217° D15.8 ATA FL190

ALMATY
DVOR/DME 116.4
ATA
CH_111X
43°22'29"N
077°05'07"E
2200 FT

UAD6
190 FL
GND

UAR18
220 FL
GND

UAR11
120 FL
GND

UAR282
5300 FT MSL
GND

UAR162
170 FL
GND

UAR290
4700 FT MSL
GND

UAR4
170 FL
GND

UAR172
8300 FT MSL
GND

UAR49
120 FL
GND

UAP4
5000 FT MSL
GND

UAR1
260 FL
GND

UAR3
260 FL
GND

UAR2
160 FL
GND

UAP27
3600 FT MSL
GND

UAR174
130 FL
GND

UAR178
8500 FT MSL
GND

UAP5
140 FL
GND

3458 4173 4268 4091 3615 4564 5026 2264 2493 2428 2365 2277 2304 2831 2570 2886 3458 3406 4775 6946 10469 11119

3000 6000 9000 12000

0 5 10 20 Kilometers
0 3 6 12 Nautical Miles

77°E 77°30'E 78°E
44°30'N 44°N 43°30'N

CHANGE: Editorial.

TABULAR DESCRIPTION

DESOK 1E RWY 23L /23R

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	AA203	Y	231(235.8)	5.12	3.4	-	+3000	-240	2.7	RNAV1
20	DF	AA208	-		5.12	12.4	R	-10000	-	2.7	RNAV1
30	TF	AA210	-	51(56.4)	5.12	17	R	+11000	-	2.7	RNAV1
40	TF	AA212	-	51(56.5)	5.12	8.9	-	+FL130	-	2.7	RNAV1
50	TF	AA214	-	2(7.5)	5.12	22.2	L	+FL180	-	1.9	RNAV1
60	TF	AA216	-	78(83.4)	5.12	11.5	R	+FL200	-	1.9	RNAV1
70	TF	DESOK	-	43(47.9)	5.12	16.7	L	+FL230	-	1.9	RNAV1

WAYPOINT LIST

DESOK 1E RWY 23L /23R

Waypoint Identifier	Coordinates	
DER	432044.98N	0770119.63E
AA203	431849.98N	0765727.89E
AA208	432728.82N	0764838.42E
A210	433655.42N	0770804.67E
AA212	434151.85N	0771820.09E
AA214	440355.00N	0772220.69E
AA216	440515.61N	0773810.75E
DESOK	441629.00N	0775521.00E

TABULAR DESCRIPTION

DOTAL 1F RWY 23L /23R

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	AA203	Y	231(235.8)	5.12	3.4	-	+3000	-240	2.7	RNAV1
20	DF	AA208	-		5.12	12.4	R	-10000	-	2.7	RNAV1
30	TF	AA210	-	51(56.4)	5.12	17	R	+11000	-	2.7	RNAV1
40	TF	AA212	-	51(56.5)	5.12	8.9	-	+FL130	-	2.7	RNAV1
50	TF	AA214	-	2(7.5)	5.12	22.2	L	+FL180	-	1.9	RNAV1
60	TF	AA216	-	78(83.4)	5.12	11.5	R	+FL200	-	1.9	RNAV1
70	TF	DOTAL	-	79(83.8)	5.12	22.4	-	+FL250	-	1.9	RNAV1

WAYPOINT LIST

DOTAL 1F RWY 23L /23R

Waypoint Identifier	Coordinates	
DER	432044.98N	0770119.63E
AA203	431849.98N	0765727.89E
AA208	432728.82N	0764838.42E
A210	433655.42N	0770804.67E
AA212	434151.85N	0771820.09E
AA214	440355.00N	0772220.69E
AA216	440515.61N	0773810.75E
DOTAL	440745.00N	0780904.00E

TABULAR DESCRIPTION

GOGDO 1A RWY 23L /23R

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	AA203	Y	231(235.8)	5.12	3.4	-	+3000	-240	2.7	RNAV1
20	DF	AA208	-		5.12	12.4	R	-10000	-	2.7	RNAV1
30	TF	AA210	-	51(56.4)	5.12	17	R	+11000	-	2.7	RNAV1
40	TF	AA212	-	51(56.5)	5.12	8.9	-	+FL130	-	2.7	RNAV1
50	TF	AA214	-	2(7.5)	5.12	22.2	L	+FL180	-	1.9	RNAV1
60	TF	GOGDO	-	2(7.6)	5.12	21.7	-	+FL220	-	1.9	RNAV1

WAYPOINT LIST

GOGDO 1A RWY 23L /23R

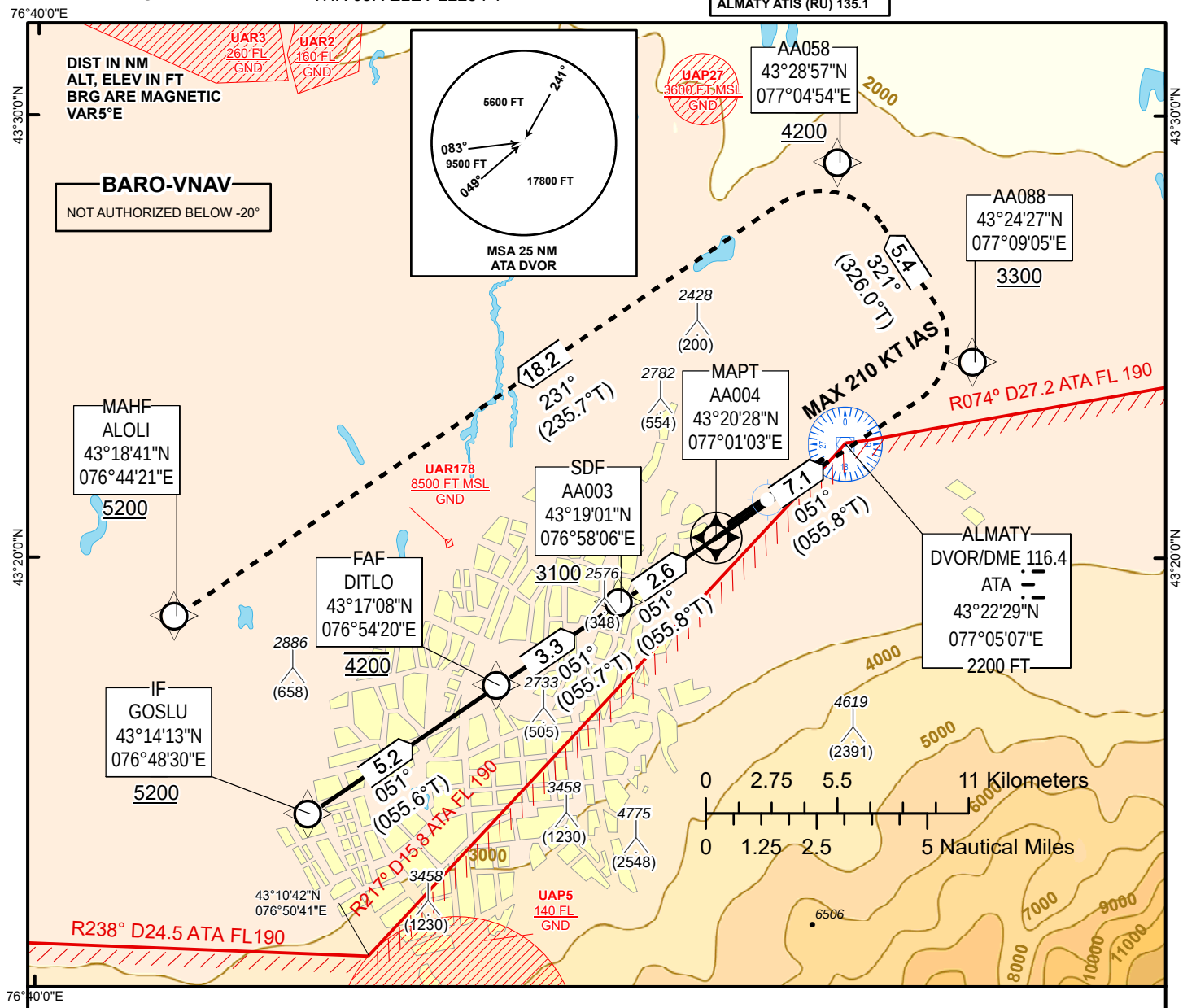
Waypoint Identifier	Coordinates	
DER	432044.98N	0770119.63E
AA203	431849.98N	0765727.89E
AA208	432728.82N	0764838.42E
AA210	433655.42N	0770804.67E
AA212	434151.85N	0771820.09E
AA214	440355.00N	0772220.69E
GOGDO	442524.00N	0772618.00E

INSTRUMENT APPROACH CHART - ICAO

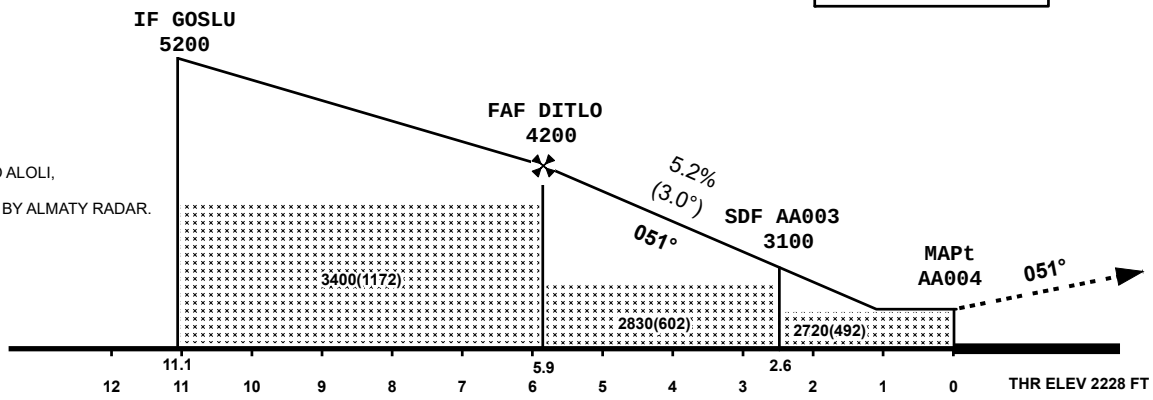
AERODROME ELEV *2238 FT*
HEIGHTS RELATED TO
THR 05R ELEV 2228 FT

ALMATY APPROACH 118.3
ALMATY RADAR 126.8
ALMATY TOWER 119.4
ALMATY ATIS (EN) 129.8
ALMATY ATIS (RU) 135.1

ALMATY
RNP RWY 05R



TRANSITION ALT 10000 FT



MISSED APPROACH

CLIMB TO AA088,
TRACK TO AA058,
CONTINUE TRACK TO ALOLI,
CLIMBING TO 5200.
EXPECT VECTORING BY ALMATY RADAR.
MAX 210 KT IAS

Aircraft Category	A	B	C	D
LNAV OCA (OCH)	2720 (492)			
LNAV/VNAV OCA (OCH)	2530 (302)	2550 (322)	2550 (322)	2560 (332)

GS	Kt	80	100	120	140	160	180
Rate of descent	ft/min	420	530	630	740	840	950

CHANGE: Editorial.

ALMATY

AERONAUTICAL DATA TABULATION

TABULAR DESCRIPTION

IAP RWY 05R

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation (°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°) FT	Navigation Specifica-tion
010	IF	GOSLU						+5200	-210		RNP APCH
020	TF	DITLO	-	51(55.6)	5.12	5.2	-	@4200	-180		RNP APCH
030	TF	AA003	-	51(55.7)	5.12	3.3	-	+3100	-180	-3	RNP APCH
040	TF	AA004	+	51(55.8)	5.12	2.6	-	@2277	-180	-3	RNP APCH
050	TF	AA088	-	51(55.8)	5.12	7.1	-	+3300	-210	1.4	RNP APCH
060	TF	AA058	-	321(326.0)	5.12	5.4	L	+4200	-210	1.4	RNP APCH
070	TF	ALOLI	-	231(235.7)	5.12	18.2	L	+5200	-210	1.4	RNP APCH

WAYPOINT LIST

IAP RWY 05R

Waypoint Identifier	Coordinates	
GOSLU	431413.06N	0764829.77E
DITLO	431708.11N	0765419.55E
AA003	431900.75N	0765806.1E
AA004	432028.46N	0770102.85E
AA088	432426.77N	0770904.56E
AA058	432857.49N	0770453.51E
ALOLI	431840.90N	0764420.60E

UACC AD 2

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

UACC AD 2.1 Aerodrome Location Indicator And Name

UACC - ASTANA

UACC AD 2.2 Aerodrome Geographical And Administrative Data

1	ARP coordinates and site at AD	510121N 0712758E At the centre of RWY
2	Direction and distance from (city)	168°, 6.5 NM of Astana center
3	Elevation/Reference temperature	1166 FT / 25° C
4	Geoid undulation at AD ELEV PSN	-106 FT
5	MAG VAR/Annual Change	10° E (2023) / 0.03°
6	AD Administration, address, telephone, telefax, telex, AFS	Post: Authority of Airport 010014 Astana, Kabanbay batyr ave.,119 JSC "Nursultan Nazarbayev International Airport" Republic of Kazakhstan Phone: +7 (7172) 777222 Fax: +7 (7172) 777952 AFS: UACCAPBF SITA: NQZAPXH Email: astanaairport@kepter.kz
7	Types of traffic permitted (IFR/VFR)	IFR-VFR
8	Remarks	Nil

UACC AD 2.3 Operational Hours

1	AD Operator	H24 Phone: +7 (7172) 777697 Fax: +7 (7172) 777997
2	Customs and immigration	H24 Phone: +7 (7172) 286437 Phone: +7 (7172) 286438 Phone: +7 (7172) 286000 Phone: +7 (7172) 286030
3	Health and sanitation	H24 Phone: +7 (7172) 777185
4	AIS Briefing Office	H24
5	ATS Reporting Office (ARO)	H24 Phone: +7 (7172) 773541 Fax: +7 (7172) 773731
6	MET Briefing Office	H24 Phone: +7 (7172) 773478
7	ATS	H24

8	Fuelling	H24 Phone: +7 (7172) 777897
9	Handling	H24 Email: marketing@astanaairport.kz
10	Security	H24
11	De-icing	H24 Email: ias@astanaairport.kz
12	Remarks	Nil

UACC AD 2.4 Handling Services And Facilities

1	Cargo-handling facilities	Handling up to 30 tonnes weight
2	Fuel/oil types	TS-1, RT(equivalent to Jet A-1) / MS-8
3	Fuelling facilities/capacity	Modern tankers (18000-60000 liters) Mobile fuel filter AVBL
4	De-icing facilities	AVBL
5	Hangar space for visiting aircraft	NOT AVBL for visiting aircraft
6	Repair facilities for visiting aircraft	Minor repairs
7	Remarks	Engine pneumatic start facilities AVBL External power source rated at 140 kW 208V 400Hz AVBL Tow/push back facilities AVBL (up to 400 tones) 2-5.6m height entrance stairs AVBL

UACC AD 2.5 Passenger Facilities

1	Hotels	Airport hotel, city hotel
2	Restaurants	AVBL
3	Transportation	Buses, taxis, rent a car
4	Medical facilities	Aid post at airport Terminal, ambulance service, hospitals in Astana
5	Bank and Post Office	AVLB
6	Tourist Office	AVLB and in the city Astana
7	Remarks	Nil

UACC 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.

2	**Taxiway width, surface and strength**	**TWY**	**WIDTH (M)**	**SURFACE**	**STRENGTH**
		A	23	CONC+ASPH	PCN 71/F/C/W/U
		B	23	CONC+ASPH	PCN 47/F/C/X/T
		C	23	CONC+ASPH	PCN 71/F/C/X/U
		D	23	CONC+ASPH	PCN 71/F/C/X/U
		E	23	CONC+ASPH	PCN 71/F/C/X/U
		F	20	CONC+ASPH	PCN 48/F/C/Y/T
		G	32	CONC+ASPH	PCN 91/F/C/W/T
		H	23	CONC+ASPH	PCN 71/F/C/X/U
		J	23	CONC+ASPH	PCN 76/F/C/W/T
		K	23	CONC+ASPH	PCN 42/F/C/X/T
		L	23	CONC+ASPH	PCN 60/F/C/X/U
		M	23	CONC+ASPH	PCN 76/F/C/W/T
		P1	23	CONC+ASPH	PCN 71/F/C/W/U
		P2	23	CONC+ASPH	PCN 71/F/C/W/U
		P3	23	CONC+ASPH	PCN 71/F/C/W/U
		P4	23	CONC+ASPH	PCN 71/F/C/W/U
		Q	11	CONC+ASPH	PCN 47/R/B/X/T
		W	23	CONC	PCN 31/R/B/X/T
		Y	18	CONC+ASPH	PCN 46/F/C/X/T
3	**Altimeter checkpoint location and elevation**	Nil			
4	**VOR checkpoints**	Nil			
5	**INS checkpoints**	Nil			
6	**Remarks**	1. When precipitation falls and during the autumn-spring periods, ground elements of the airfield are subject to disintegration 2. Aircraft taxiing via apron D by ATC clearance only. Prior permission required.			

UACC 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 Visual docking guidance system at stands 7L, 7, 7R, 8L, 8, 8R, 9L, 9, 9R
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**	TWY A, TWY B, TWY C, TWY D, TWY P before TWY E
4	**Other runway protection measures**	Nil
5	Remarks	Nil

UACC AD 2.10 Aerodrome Obstacles

NIL

UACC AD 2.11 Meteorological Information Provided

1	**Associated MET Office**	Meteorological service Astana Phone: +7 (7172) 773478
2	**Hours of service MET Office outside hour**	H24
3	**Office responsible for TAF preparation: Periods of validity**	Meteorological service Astana, 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 (WRM-200)
9	**ATS units provided with information**	Briefing, TWR, APP, ACC
10	**Additional information**	Nil

UACC AD 2.12 Runway Physical Characteristics

Designations 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	44.52°	3500 X 45	71/F/C/W/U CONC+ASPH	510040.87N 0712655.41E - -106.2 FT	THR 1164.7 FT TDZ 1166 FT	0.125%
22	224.55°	3500 X 45	71/F/C/W/U CONC+ASPH	510201.65N 0712901.44E - -106.1 FT	THR 1158.1 FT TDZ 1161 FT	0.125%

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	3800 X 300	90 X 160	Nil	AVBL	Nil
Nil	400 X 150	3800 X 300	90 X 160	Nil	AVBL	Nil

Service designation	Call sign	Frequency	SATVOICE number(s)	Logon address	Hours of operation	Remarks
1	2	3	4	5	6	7
TWR	ASTANA TOWER (EN) ASTANA VYSHKA (RU)	118.7 MHZ	Nil	Nil	H24	Nil
ATIS	ASTANA ATIS (EN) ASTANA ATIS (RU)	129.5 MHZ 128.3 MHZ	Nil	Nil	H24	EN RU

UACC 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 (10°E/2013)	AST	114.4 MHZ CH 91X	H24	510005.6N 0712600.4E	1200 FT	Nil	Nil
ILS LOC 04 III/E/4	IMO	109,5 MHZ	H24	510224.7N 0712937.4E		Nil	Nil
GP 04 III/T/4		332,6 MHZ		510045.5N 0712712.0E			
DME 04	IMO	CH 32X		510045.5N 0712712.0E	1200 FT		
ILS LOC 22 III/E/4	IAK	111,7 MHZ	H24	510018.8N 0712621.0E		Nil	Nil
GP 22 III/T/4		333,5 MHZ		510151.0N 0712854.3E			
DME 22	IAK	CH 54X		510151.0N 0712854.3E	1200 FT		
NDB	M	654 KHZ	H24	510013.2N 0712612.3E	Nil	Nil	Nil

UACC AD 2.20 Local Aerodrome Regulations

The Bozshakol flight area. The Bozshakol flight area is intended for exercising piloting techniques, flights at Low Altitudes/Heights and Extremely Low Altitudes/Heights, for landing on a platform (apron) with independent selection from the air, for performing search and rescue work over land in hovering mode day and night, flights with a undersling load day and night (with a helibucket), flights day and night in Simple Meteorological Conditions and Complex Meteorological Conditions, on operating ceiling, for simple and complex aerobatics, group flights, as well as helicopter's test flights. Its area is a circle of 5 km radius with a center on the Bozshakol settlement (505440N 0713843E). The nearest border of the area is 13.0 km, the furthest one is 23.0 km. Restrictive bearings from AST: Magnetic Radio Bearing = 280° - 309°. The altitude/height of flight aerobatic area is from actual height = 15 m to flight level = 6100 m (FL200), Minimum safety altitude = 900 m in QNH pressure.

The Borlykol flight area. The Borlykol flight area is intended for exercising piloting techniques, flights at Low Altitudes/Heights and Extremely Low Altitudes/Heights, landing on a platform (apron) with independent selection from the air, for performing search and rescue work over land in hovering mode day and night, flights with a undersling load day and night (with a helibucket), flights day and night in Simple Meteorological Conditions and Complex Meteorological Conditions, on operating ceiling, for simple and complex aerobatics, group flights, as well as helicopter's test flights. Its area is a circle of 5 km radius with a center on the Borlykol lake (505251N 0715305E). The nearest border of the area is 29.0 km, the furthest one is 39.0 km. Restrictive bearings from AST: Magnetic Radio Bearing = 274° - 290°. The altitude/height of flight aerobatic area is from actual height = 15 m to flight level = 6100 m (FL200), Minimum safety altitude = 900 m in QNH pressure.

The Saryadyr flight area. The Saryadyr flight area is intended for exercising piloting techniques, flights at Low Altitudes/Heights and Extremely Low Altitudes/Heights, landing on a platform (apron) with independent selection from the air, for performing search and rescue work over land in hovering mode day and night, flights with a undersling load day and night (with a helibucket), flights day and night in Simple Meteorological Conditions and Complex Meteorological Conditions, on operating ceiling, for simple and complex aerobatics, group flights, as well as helicopter's test flights. Its area is a circle of 5 km radius with a center on the Saryadyr settlement (505012N 0713354E). The nearest border of the area is 17.0 km, the furthest one is 26.5 km. Restrictive bearings from AST: Magnetic Radio Bearing = 311° - 337°. The altitude/height of flight aerobatic area is from actual height = 15 m to flight level = 6100 m (FL200), Minimum safety altitude = 900 m in QNH pressure.

The Maibalyk flight area. The Maibalyk flight area is intended for exercising piloting techniques, flights at Low Altitudes/Heights and Extremely Low Altitudes/Heights, landing on a platform (apron) with independent selection from the air, flights day and night in Simple Meteorological Conditions and Complex Meteorological Conditions, group flights, for performing search and air-sea rescue operations over water day and night, flights with a undersling load day and night (with a helibucket), helicopter's test flights, as well as for holding patterns. Its area is a circle of 3 km radius with a center on the Maibalyk lake (505805N 0713229E). The nearest border of the area is 5.3 km, the furthest one is 11.3 km. Restrictive bearings from AST: Magnetic Radio Bearing = 267° - 305°. The altitude/height of flight aerobatic area is from actual height = 15 m to actual height = 200 m, Minimum safety altitude = 900 m in QNH pressure.

Due to the absence of required AGL system and on TWY-G and presence of unacceptable slopes on its unpaved part, following limitations are in place:
Movements of aircrafts on TWY-G when visibility is lower than 800 meters is prohibited;
Movements of aircrafts on TWY-G only by towing when night time and visibility is less than 2000 meters.

UACC AD 2.21 Noise Abatement Procedures

NIL

UACC AD 2.22 Flight Procedures

1. General

RWY 04/22 approved for CAT II and CAT IIIA operations.

2. Low Visibility Procedures during CAT II operations.

Low Visibility Procedures (LVP) are initiated at Astana aerodrome:

a. during CAT II and CAT IIIA approaches when RVR is less than 550 m;

b. during take-off, when RVR is less than 550 m. The status of LVP is reported through ATIS or the broadcast of RTF with the following phrase: "LOW VISIBILITY PROCEDURES IN OPERATION"

The controller shall verify that ILS sensitive area is clear of known traffic before Aircraft reaches 15 km distance from touchdown point.

During approach, the controller informs pilots of:

- unserviceability or downgrading of aids or facilities;
- change of surface wind;
- change of RVR;
- change of cloud base (vertical visibility).

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

3. Arriving Aircraft

The report on the vacation of the runway is made on the TWY only after the release of the ILS critical zones. Taxiing on the taxiways is carried out by the TWY centerline lights before coupling with the apron. Taxiing on the apron is allowed only behind the follow me car. Parking of the aircraft in the stands is carried out according to the signals of the ground personnel.

Taxing via TWY shall be carried out along TWY centerlines lights until junction with apron. It is permitted to taxi on the apron only under guidance of a "follow-me" car. Parking to the stands is assisted by a marshaller.

4. Departing Aircraft

Aircraft taxiing for take-off from the aircraft stands to the TWY are accompanied by the follow me car. Taxiing on the taxiway is carried out by the TWY centerline lights to the runway holding positions. At the runway holding positions, the aircraft must stop in front of an aerodrome sign of the critical zone (Runway designation of both extremities of the runway on a red background and the designation of the TWY on a black background).

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

Flights within the control zone are conducted at an absolute altitude of no less than 1700 feet, unless otherwise instructed by the controller of the "Radar" ATC unit. Absolute flight altitudes are assigned by the controller of the "Radar" ATC unit without considering obstacles. Crews of aircraft independently perform the avoidance of obstacles. Within the control zone, flights over populated, prohibited, restricted, and dangerous areas are tobe avoided. For VFR flights of aircraft with certificated take-off mass of up to 5700 kg and helicopters flying at speeds of no more than 140 knots, at Astana aerodrome the flight circuit is established for Runway 22 (left)and Runway 04 (right) at an altitude of 2000 feet. The width of the rectangular flight path is 3 nautical miles.The controller of the "Radar" ATC unit determines and communicates the utilized traffic circuit to the aircraft crew. Entering the traffic circuit, crossing the runway alignment is made only with the permission of the air traffic controller of the "Radar" ATC unit. Entry/Exit into the control zone is carried out through designated waypoints.
Note: In all cases, the controller of the "Radar" ATC unit assigns altitudes in accordance with the table of the "Minimum Safe True Flight Altitudes for ATS Routes and SID" published in Appendix 5 to the Rules for Aircraft Operations in Civil Aviation of the Republic of Kazakhstan.

№	Waypoint name	Type	Visual reference	Geographical coordinates	Radial (mag.) from DVOR/ DME AST	Distance from DVOR/DME AST
1	KOIANDY	Exit	Northeastern outskirts of the settlement Koyandy	511821N 0714116E	018°	20.6 NM
2	KOSTOMAR	Entry	Eastern outskirts of the locality Kostomar	511319N 0714922E	038°	19.8 NM
3	TANAKOL	Exit	To the north-east of Lake Tanakol	510912N 0715557E	054°	21.0 NM
4	ZHALTYRKOL	Entry	Western outskirts of the locality Zhaltyrkol	505951N 0714824E	081°	14.2 NM
5	KARIER	Exit	South of the sand quarry	505626N 0714517E	097°	12.7 NM
6	NURA	Entry	Northern outskirts of the locality Nura	504723N 0712505E	173°	12.7 NM
7	KARATOMAR	Exit	Southeastern outskirts of the locality Karatomar	505127N 0710534E	226°	15.6 NM
8	ZHANAYDAR	Entry	-	510334N 0710850E	278°	11.4 NM
9	URKER	Exit	Northwest outskirts of the residential area Urker	510853N 0711310E	308°	12.0 NM
10	INTER	Intermediate	Northern outskirts of the microdistrict International, intersection with the Astana-Karaganda highway	510750N 0713550E	029°	9.9 NM

№	Waypoint name	Type	Visual reference	Geographical coordinates	Radial (mag.) from DVOR/ DME AST	Distance from DVOR/DME AST
11	IPPODROM	Holding	West of the horse racecourse	510435N 0712226E	324°	5.0 NM
12	MAIBALYK	Holding	Southern shore of Lake Maybalyk	505659N 0713015E	129°	4.1 NM

6. 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. After contact with appropriate CTR established, ATC issues approach clearance: “CLEARED ILS APPROACH RUNWAY (NUMBER)”. With this clearance pilot should proceed via cleared waypoint(s) to intercept ILS.

12. 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.

13. 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.

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

UACC 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
Point 440. Standards of Aerodromes (Heliports) Operation Civil Aviation Republic Kazakhstan	Power supply of electric power receivers of special group of the first category (OK) for RWY equipped according to III category is carried out to one of the following options: 1) from two external independent sources (via two cable lines through two transformers) and a diesel-electric unit, while consumers are connected via battery uninterruptible power supplies; 2) from two external independent sources (via two cable lines through two transformers) and a diesel generator uninterruptible power supply, that is force started when category III weather conditions occur.	Nil	ELoS has been approved from 22.04.2022 till 22.04.2024

2. Bird concentration near airport.

The intensive flights of flocks of ducks, geese, cormorants, silver and lake gulls, blue pigeon, black and gray crows take place daily during 1-2 hours before and after sunset, when birds fly from the lake (1000 km south-east of the RWY) across the RWY and approach area of RWY 22 and RWY 04 to feeding zones near rivers north and north-west of the airport.

The highest intensity of spring and autumn bird flights are observed in predawn hours. Within 3-4 hours and after sunrise. In the evening, 2-3 hours before sunset, the intensity of the flight increases sharply again and remains high for several hours after dark. In some places, especially in coastal areas, intensive bird flight is observed throughout the night.

Regular bird flights from Lake Maybalyk through the airfield are observed from April till October, around the 215 approach course of RWY22.

An hour or two hours before sunset, birds make a return flight to their resting place. In spring, the majority of birds fly at an altitude of up to 500 m. At the same time, about 20% of birds move at altitudes up to 10 m, from 10 to 50 m – 50%, from 50 to 100 m – 20%, the remaining 10% fly above 100 m.

The main directions of migration in spring are from southwest to northeast; in autumn in the opposite direction. In autumn, a large number of rooks, crows, silver and lake gulls accumulate in the area of the airfield and at the airfield, which pose a great danger to flights from sunrise to sunset.

In case of necessity, the aerodrome control point informs pilots about bird flights and approximate heights above ground level.

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

Bird concentration scattering measures include:
periodical deterrence of birds, effective measures regarding to scavering, removal of green plantations and

ground covering, termination of agricultural activity within the airport area.

UACC AD 2.24 Charts Related To An Aerodrome

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AERODROME CHART - ICAO

AD ELEV 1166FT (*355m*)

ARP 510121N 0712758E

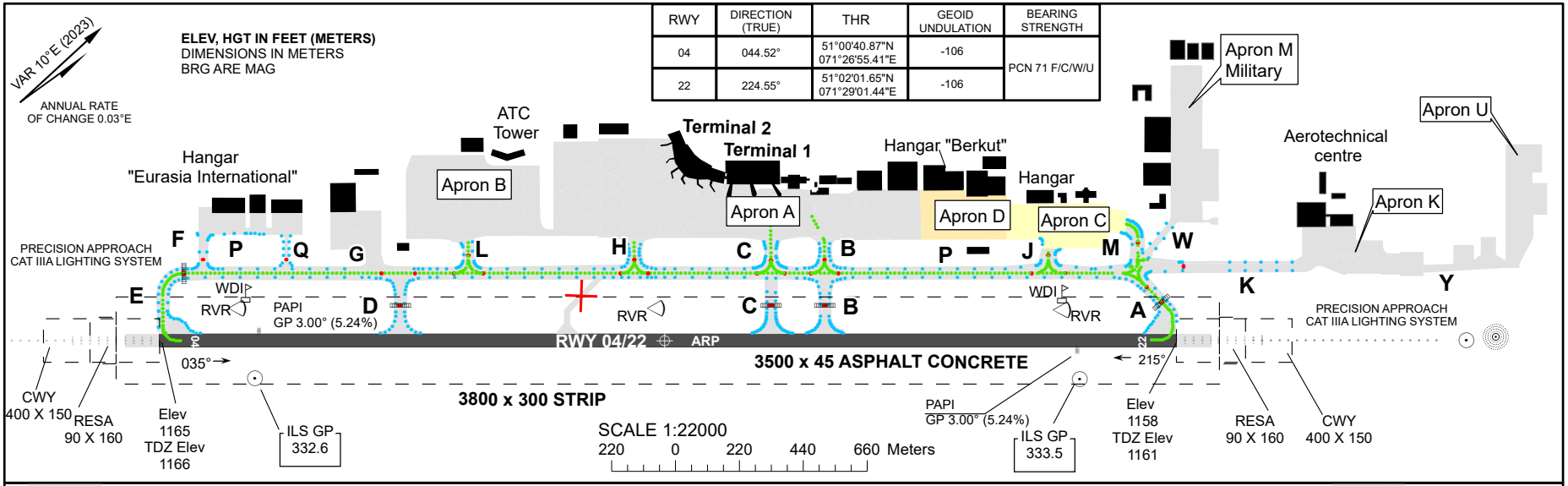
TWR 118.7
GROUND 119.6

ASTANA NURSULTAN NAZARBAYEV INTERNATIONAL AIRPORT

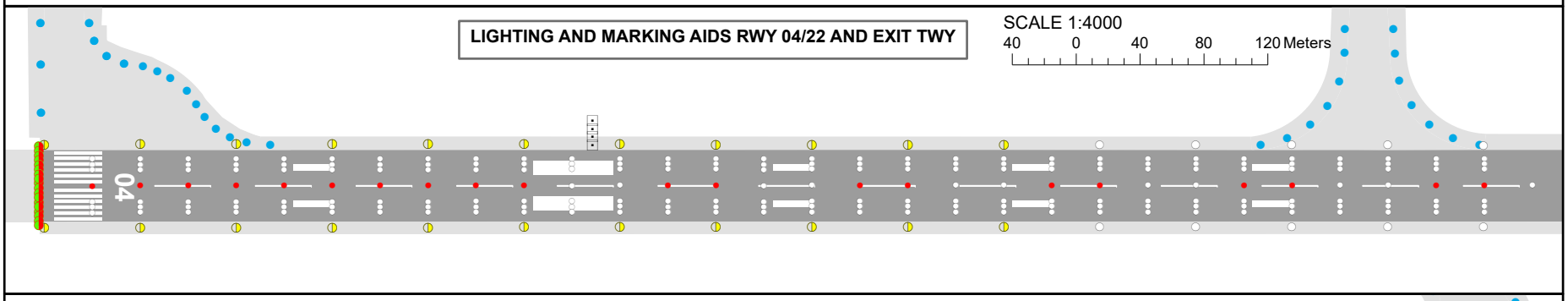
RWY	DIRECTION (TRUE)	THR	GEOID UNDULATION	BEARING STRENGTH
04	044.52°	51°00'40.87"N 071°26'55.41"E	-106	PCN 71 F/C/W/U
22	224.55°	51°02'01.65"N 071°29'01.44"E	-106	

VAR 10°E (2023)
ANNUAL RATE OF CHANGE 0.03°E

ELEV, HGT IN FEET (METERS)
DIMENSIONS IN METERS
BRG ARE MAG



LIGHTING AND MARKING AIDS RWY 04/22 AND EXIT TWY



CHANGE: Edit.

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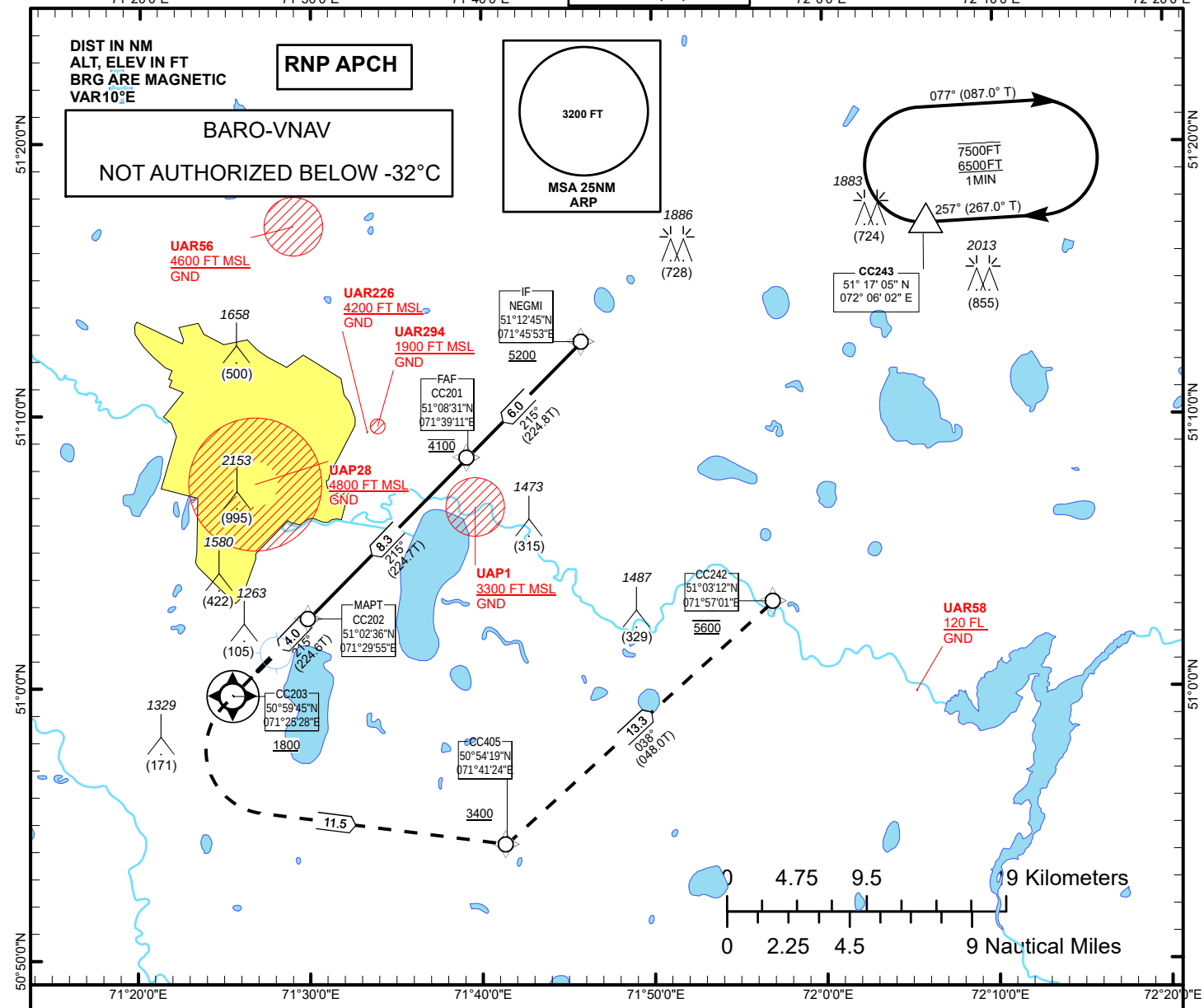
INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV *1166 FT*
HEIGHTS RELATED TO
THR 22 ELEV 1158 FT

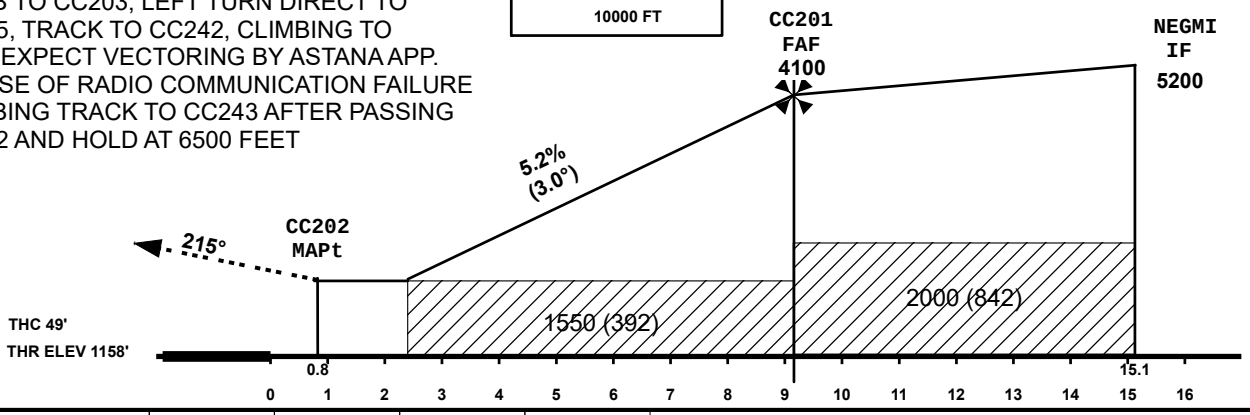
ASTANA TOWER 118.7
ASTANA APPROACH 124.6
ASTANA RADAR 120.7
ASTANA GROUND 119.6
ASTANA ATIS(EN) 129.5
ASTANA ATIS(RU) 128.3

ASTANA/NURSULTAN NAZARBAYEV INTERNATIONAL AIRPORT
RNP RWY 22



MISSED APCH:
CLIMB TO CC203, LEFT TURN DIRECT TO CC405, TRACK TO CC242, CLIMBING TO 5600. EXPECT VECTORING BY ASTANA APP.
IN CASE OF RADIO COMMUNICATION FAILURE CLIMBING TRACK TO CC243 AFTER PASSING CC242 AND HOLD AT 6500 FEET

TRANSITION ALTITUDE
10000 FT



OCA (OCH)		A	B	C	D
Straight	LNAV	1550 (392)			
	LNAV/VNAV	1430 (272)	1450 (292)	1450 (292)	1460 (302)

For data tabulation see verso

GS	Kt	80	100	120	140	160	180
Rate of descent	ft/min	420	530	640	740	850	950
PFAF-MAPT 8.3 NM	min:sec	05:27	04:21	03:38	03:07	02:43	02:25

CHANGE: Editorial.

TABULAR DESCRIPTION
RNP APCH IAP
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
010	IF	NEGMI	-	-	10			+5200			RNP APCH
020	TF	CC201	-	215(224.8)	10	6	-	@4100	-230		RNP APCH
030	TF	CC202	-	215(224.7)	10	8.3	-	@1413	-185	-3.0	RNP APCH
040	CF	CC203	Y	215(224.6)	10	4	-	+1800	-185	+1.4	RNP APCH
050	DF	CC405	-		10	11.5	L	+3400	-210	+1.4	RNP APCH
060	TF	CC242	-	38(48.01)	10	13.3	L	@5600		+1.4	RNP APCH

WAYPOINT LIST

RNP APCH IAP RWY22		
Waypoint Identifier	**Coordinates**	
NEGMI	511245.30N	0714553.00E
CC201	510830.68N	0713910.95E
CC202	510235.81N	0712954.79E
CC203	505944.92N	0712528.24E
CC405	505418.51N	0714124.46E
CC242	510312.43N	0715700.84E

UATG AD 2

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

UATG AD 2.1 Aerodrome Location Indicator And Name

UATG - ATYRAU

UATG AD 2.2 Aerodrome Geographical And Administrative Data

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

UATG AD 2.3 Operational Hours

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

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

UATG AD 2.4 Handling Services And Facilities

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

UATG AD 2.5 Passenger Facilities

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

UATG AD 2.6 Rescue And Fire Fighting Services

1	**AD category for fire fighting**	CAT A8
2	**Rescue equipment**	AVBL
3	**Capability for removal of disabled aircraft**	Aircraft up to 100 tons, that have lost it capability to move, can be removed without destroying the landing gear. Phone: +7 (7122) 209254 Fax: +7 (7122) 209254 Email: cda@iaa-jsc.kz
4	**Remarks**	The possibility of increasing the required level of fire protection up to 9 categories on request.

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.

Pilot (crew) is given minimum of two 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.

When pointing for landing approach by radar vectoring the ACFT is moved to final approach leg no closer than 13.5 NM from the runway threshold.

Minimum interval between consecutive departing ACFT in law 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 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 13.5 NM

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.

LOSS (FAILURE) OF RADIOCOMMUNICATIONS

Warning: the procedures performed in case of loss (failure) of a radio communication have differences with the standards recommended by the practice and the rules of the ICAO (ICAO Appendix 2)

In the event of a loss of radio communications, the aircraft crew must:
- turn on the “Distress” signal, set code 7600;
- use the emergency frequency of 121.5 MHz, radio communication with other aircrafts and ATS units;
- guard the frequency DVOR ATR frequency (112.3 MHz) for getting information and instructions of air traffic controller;
- in case of out of communication after take-off, land or follow to the destination aerodrome in accordance with the conditions issued by the ATS unit or on flight levels FL140, FL150 or FL240, FL250 specially established for flights without radio communication, depending on the direction of flight;
- to approach the aerodrome and the landing approach according to the established approach scheme;
- when flying without radio communication at night, indicate the location of the aircraft by periodically turning on the landing lights or by flashing side lights.

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 -
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.

№	Waypoint name (visual reference)	Geographical coordinates	Radial (mag.) and distance from NAVAID (ARP)	Remarks
1	MIKE	N473036 E0514611	348˚22.0 nm ATR DVOR/DME	Entry/exit/ holding
2	KILO	N472621 E0520715	028˚22.0 nm ATR DVOR/DME	Entry/exit/ holding
3	SIERRA	N471708 E0521751	058˚22.0 nm ATR DVOR/DME	Entry/exit/ holding
4	PAPA	N470324 E0521922	095˚22.0 nm ATR DVOR/DME	Entry/exit/ holding
5	TANGO	N464848 E0520158	146˚22.0 nm ATR DVOR/DME	Entry/exit/ holding
6	DELTA	N464941 E0513142	203˚22.0 nm ATR DVOR/DME	Entry/exit/ holding
7	GOLF	N470231 E0511709	245˚22.0 nm ATR DVOR/DME	Entry/exit/ holding
8	BRAVO	N471414 E0511653	276˚22.0 nm ATR DVOR/DME	Entry/exit/ holding

CONTINUOUS DESCENT OPERATION

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

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

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

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

CDOs are authorized only when following conditions are respected:

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

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

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

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

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

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

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

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

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

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 coronel), appear by mid-March 15th. Visual observations show that migrations occur at altitudes up to 200 m and more. In the summer period, many sedentary and migratory birds nest. On the territory of Atyrau region, nesting of up to 100 species of birds has been recorded.

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

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

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

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

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

Aircraft crews receive information about the ornithological situation before taking off and landing at ATIS. In the absence of ATIS the information is transmitted by the air traffic controller of the "Atyrau Tower". In the event of a sudden complication of the ornithological situation, the air traffic controller of the "Atyrau Tower" will immediately transmit information to the crew.

Measures to prevent the accumulation of birds in the aerodrome area include scaring away birds with the help of equipment: noise gun «Stalker M90b», bioacoustics installations «Bird Gard Super Pro AMP», movable bird repeller "Glittei", repeller "Mirror ball", dynamic bird repeller “Condor”, inflatable bird repeller "Guardian", propane bird repeller "DBS-E" plastic decoy spikes, metal decoy spices, 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

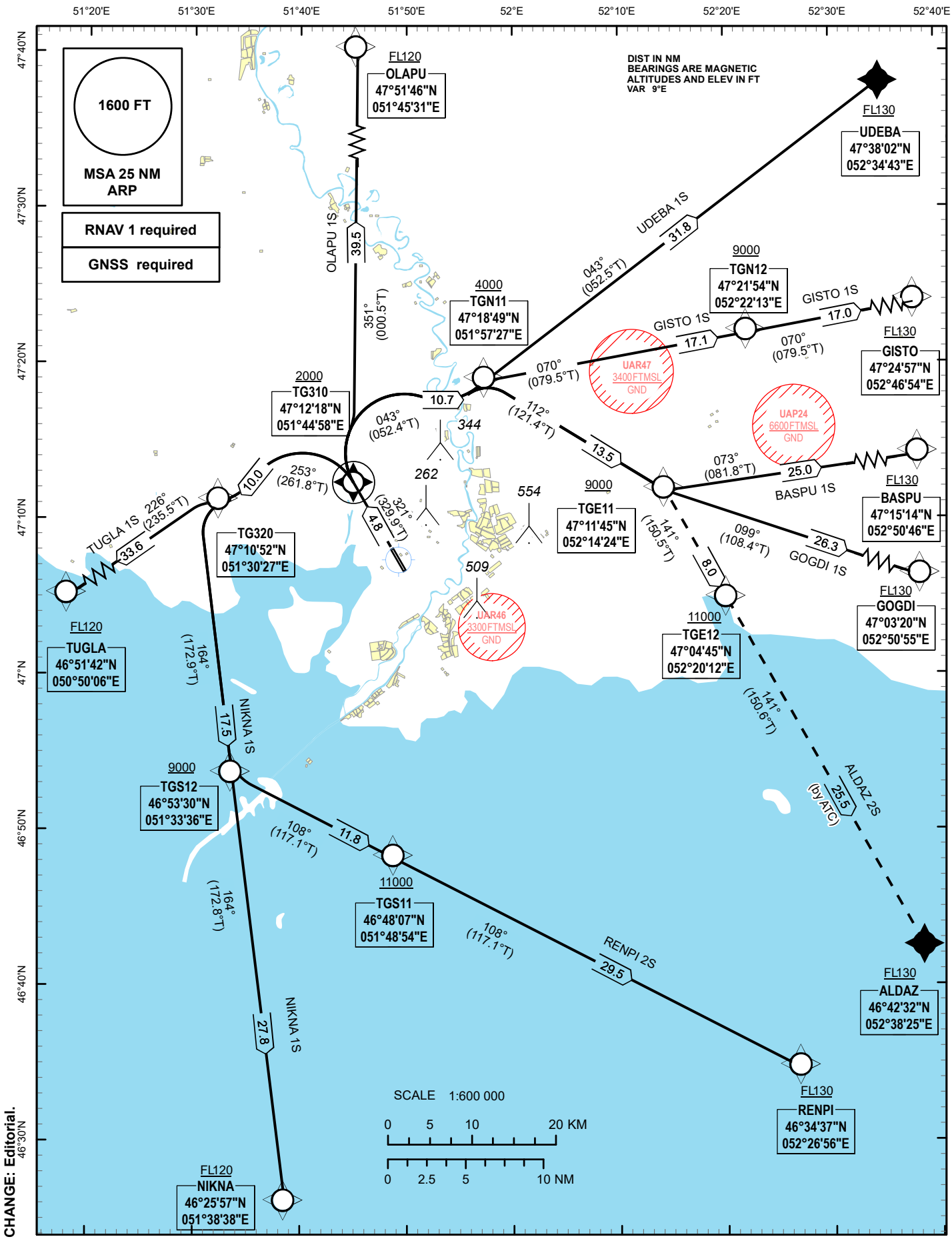
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

ATYRAU TOWER 118.1
ATYRAU ATIS (EN) 127.4
ATYRAU ATIS (RU) 126.6

ATYRAU
RWY 32

ALDAZ 2S, BASPU 1S, GISTO 1S, GOGDI 1S, NIKNA 1S, OLAPU 1S, RENPI 2S, TUGLA 1S, UDEBA 1S



CHANGE: Editorial.

TABULAR DESCRIPTION

ALDAZ 2S

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
10	CF	TG310	Y	321(329.9)	+9.2	4.8	-	+2000	-	4	RNAV 1
20	TF	TGN11	-	043(052.4)	+9.2	10.7	R	+4000	-	1.3	RNAV 1
30	TF	TGE11	-	112(121.4)	+9.2	13.5	R	+9000	-	3.5	RNAV 1
40	TF	TGE12	-	141(150.5)	+9.2	8.0	R	+FL 110	-	2.3	RNAV 1
50	TF	ALDAZ	-	141(150.6)	+9.2	25.5	-	+FL 130	-	0.7	RNAV 1

TABULAR DESCRIPTION

BASPU 1S

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
10	CF	TG310	Y	321(329.9)	+9.2	4.8	-	+2000	-	4	RNAV 1
20	TF	TGN11	-	043(052.4)	+9.2	10.7	R	+4000	-	1.3	RNAV 1
30	TF	TGE11	-	112(121.4)	+9.2	13.5	R	+9000	-	3.5	RNAV 1
40	TF	BASPU	-	073(081.8)	+9.2	25.0	L	+FL 130	-	1.5	RNAV 1

TABULAR DESCRIPTION

GISTO 1S

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
10	CF	TG310	Y	321(329.9)	+9.2	4.8	-	+2000	-	4	RNAV 1
20	TF	TGN11	-	043(052.4)	+9.2	10.7	R	+4000	-	1.4	RNAV 1
30	TF	TGN12	-	070(079.5)	+9.2	17.1	R	+9000	-	2.8	RNAV 1
40	TF	GISTO	-	070(079.5)	+9.2	17.0	-	+FL 130	-	2.2	RNAV 1

TABULAR DESCRIPTION

GOGDI 1S

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
10	CF	TG310	Y	321(329.9)	+9.2	4.8	-	+2000	-	4	RNAV 1
20	TF	TGN11	-	043(052.4)	+9.2	10.7	R	+4000	-	1.3	RNAV 1
30	TF	TGE11	-	112(121.4)	+9.2	13.5	R	+9000	-	3.5	RNAV 1
40	TF	GOGDI	-	099(108.4)	+9.2	26.3	L	+FL 130	-	1.4	RNAV 1

TABULAR DESCRIPTION

NIKNA 1S

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
10	CF	TG310	Y	321(329.9)	+9.2	4.8	-	+2000	-	4	RNAV 1
20	TF	TG320	-	253(261.8)	+9.2	10.0	L	-	-	-	RNAV 1
30	TF	TGS12	-	164(172.9)	+9.2	17.5	L	+9000	-	2.2	RNAV 1
40	TF	NIKNA	-	164(172.8)	+9.2	27.8	-	+FL 120	-	1	RNAV 1

TABULAR DESCRIPTION

OLAPU 1S

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
10	CF	TG310	Y	321(329.9)	+9.2	4.8	-	+2000	-	4	RNAV 1
20	TF	OLAPU	-	351(000.5)	+9.2	39.5	R	+FL 120	-	2.4	RNAV 1

TABULAR DESCRIPTION

RENPI 2S

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
10	CF	TG310	Y	321(329.9)	+9.2	4.8	-	+2000	-	4	RNAV 1
20	TF	TG320	-	253(261.8)	+9.2	10.0	L	-	-	-	RNAV 1
30	TF	TGS12	-	164(172.9)	+9.2	17.5	L	+9000	-	2.2	RNAV 1
40	TF	TGS11	-	108(117.1)	+9.2	11.8	L	+FL 110	-	1.6	RNAV 1
50	TF	RENPI	-	108(117.1)	+9.2	29.5	-	+FL 130	-	0.6	RNAV 1

TABULAR DESCRIPTION

TUGLA 1S

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
10	CF	TG310	Y	321(329.9)	+9.2	4.8	-	+2000	-	4	RNAV 1
20	TF	TG320	-	253(261.8)	+9.2	10.0	L	-	-	-	RNAV 1
30	TF	TUGLA	-	226(235.5)	+9.2	33.6	L	+FL 120	-	2.1	RNAV 1

TABULAR DESCRIPTION

UDEBA 1S

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
10	CF	TG310	Y	321(329.9)	+9.2	4.8	-	+2000	-	4	RNAV 1
20	TF	TGN11	-	043(052.4)	+9.2	10.7	R	+4000	-	1.4	RNAV 1
30	TF	UDEBA	-	043(052.5)	+9.2	31.8	-	+FL 130	-	2.7	RNAV 1

WAYPOINT LIST

Waypoint Identifier	Coordinates	
ALDAZ	464232.00N	0523825.00E
BASPU	471514.00N	0525046.00E
DEP	470809.85N	0514829.51E
GISTO	472457.00N	0524654.00E
GOGDI	470320.00N	0525055.00E
NIKNA	462557.00N	0513838.00E
OLAPU	475146.00N	0514531.00E
RENPI	463437.00N	0522656.00E
TG310	471218.00N	0514458.00E
TG320	471052.00N	0513027.00E
TGE11	471145.00N	0521424.00E
TGE12	470445.00N	0522012.00E
TGN11	471849.00N	0515727.00E
TGN12	472154.00N	0522213.00E
TGS11	464807.00N	0514854.00E
TGS12	465330.00N	0513336.00E
TUGLA	465142.00N	0505006.00E
UDEBA	473802.00N	0523443.00E

INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV -72 FT
HEIGHTS RELATED TO
THR RWY 14 - ELEV -74 FT

ILS/DME
LLZ 109.9
ITY
GP 333.8
CH 36X

ATYRAU TOWER 118.1
ATYRAU ATIS (EN) 127.4
ATYRAU ATIS (RU) 126.6

ATYRAU
ILS/DME CAT I & II
RWY 14

51°30'E 51°40'E 51°50'E 52°0'E
47°20'N 47°10'N 47°0'N

DIST IN NM
ALT, ELEV IN FT
BRG ARE MAGNETIC
VAR9°E

SURVEILLANCE RADAR REQUIRED

1600
MSA 25NM
ATR DVOR

(IAF) BUDUL
R352°
D10.6 ATR
1600

(IF) GEGSI
D9.9 ITY
D9.2 ATR
1600

(IAF) AGMEN
R291°
D10.6 ATR
1600

FAP
D5.0 ITY
D4.3 ATR
47 12 19 N
051 44 57 E
1600

231°
R334° ATR
R308° ATR
051°
141°
10 NM ATR

344 (419)
262 (337)
554 (629)
509 (584)

ATYRAU
DVOR/DME 112.3
ATR
47 08 38 N
051 48 05 E

Holding
MNM 4000
1 Min
321°
141°

ATYRAU

UAR46
3300 FT MSL
GND

600

CASPIAN SEA

Alt SET: hPa (mm on req),
QNH (QFE on req)

ALT/HEIGHT CONVERSION

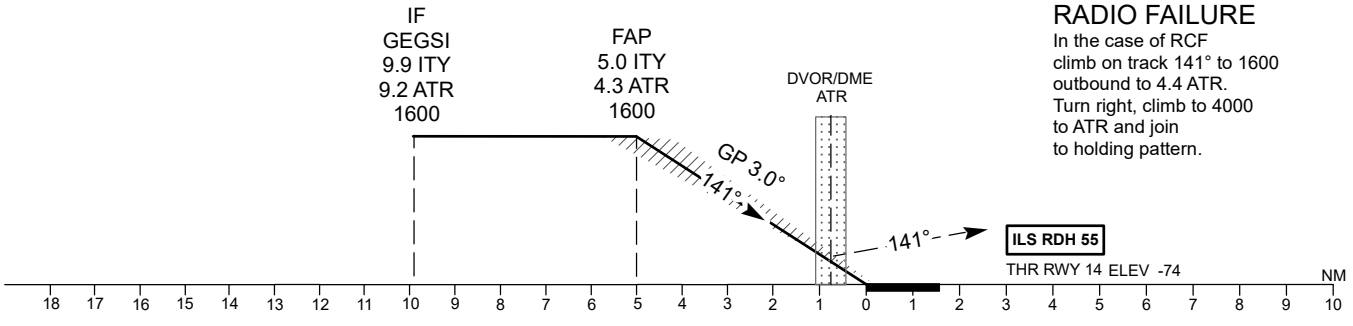
QNH	(QFE)
1600	(1674 - 510m)
600	(674 - 205m)

SCALE 1:300000
0 3 6 9 12 KM
0 1.6 3.2 6.4 NM

TRANSITION ALT
10000

MISSED APPROACH
Climb on track 141° to 1600.
After passing 600 radar vectoring will be provided.

RADIO FAILURE
In the case of RCF climb on track 141° to 1600 outbound to 4.4 ATR.
Turn right, climb to 4000 to ATR and join to holding pattern.



Aircraft Category		A	B	C	D	DIST to THR DME ITY	NM	1	2	3	4	5
Straight-in Approach OCA/H						DME ATR	NM	0.3	1.3	2.3	3.3	4.3
	CAT I	126(200)	126(200)	126(200)	126(200)	ALTITUDE	FT	300	621	944	1268	1600
	CAT II	37(111)	47(121)	57(131)	67(141)	HEIGHT	FT	(374)	(695)	(1018)	(1342)	(1674)

Aerodrome Operating Minima DH ft x RVR (CMV)					
	CAT I				
	CAT II				

DME ITY ZERO RANGED TO THR RWY 14

GS	Kt	80	100	120	140	160	180
Desc.Rate(5.2%)	ft/min	420	530	630	740	840	950

CHANGE: Missed approach.

ATYRAU
ILS/DME CAT I, II **AERONAUTICAL DATA TABULATION**

ILS approach to RWY14 from AGMEN, GEGSI, BUDUL	
Fix/point	**Coordinates**
ATR DVOR/DME	47° 08’ 38,2”N 051° 48’ 05,4”E
(FAP) ITY D5.0, ATR D4.3	47° 12’ 19,46”N 051° 44’ 56,88”E
GEGSI (IF) D9.2 ATR	47° 16’ 34,26”N 051° 41’ 19,19”E
AGMEN (IAF) R291°ATR, D10.6 ATR	47° 13’ 51,60”N 051° 34’ 27,75”E
BUDUL (IAF) R352°ATR, D10.6 ATR	47° 19’ 16,51”N 051° 48’ 11,32”E
THR RWY 14	47° 08’ 01.45”N 051° 48’ 36.66”E
ITY LOC	47° 06’ 19.6”N 051° 50’ 03.2”E

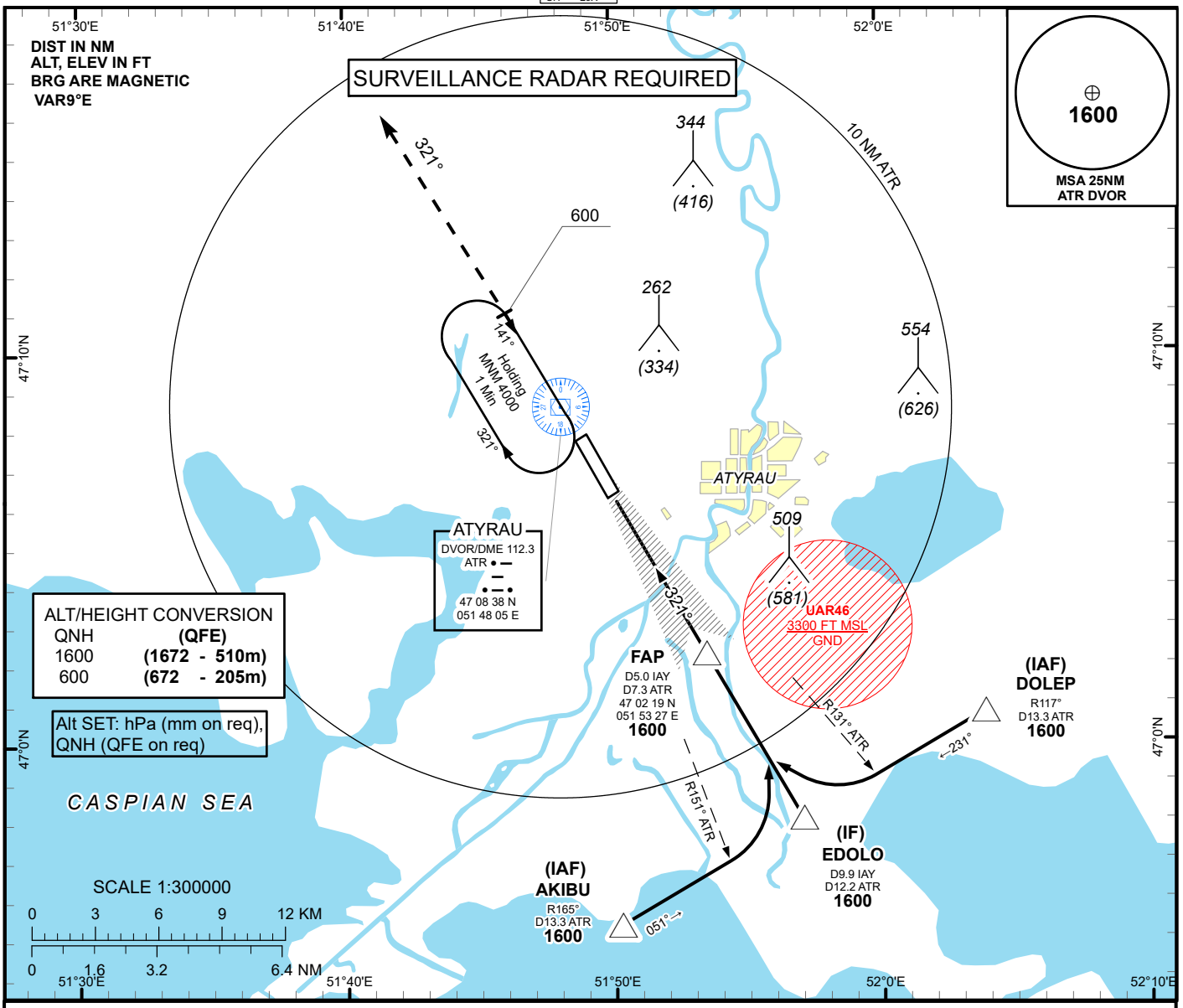
INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV -72 FT
HEIGHTS RELATED TO
THR RWY 32 - ELEV -72 FT

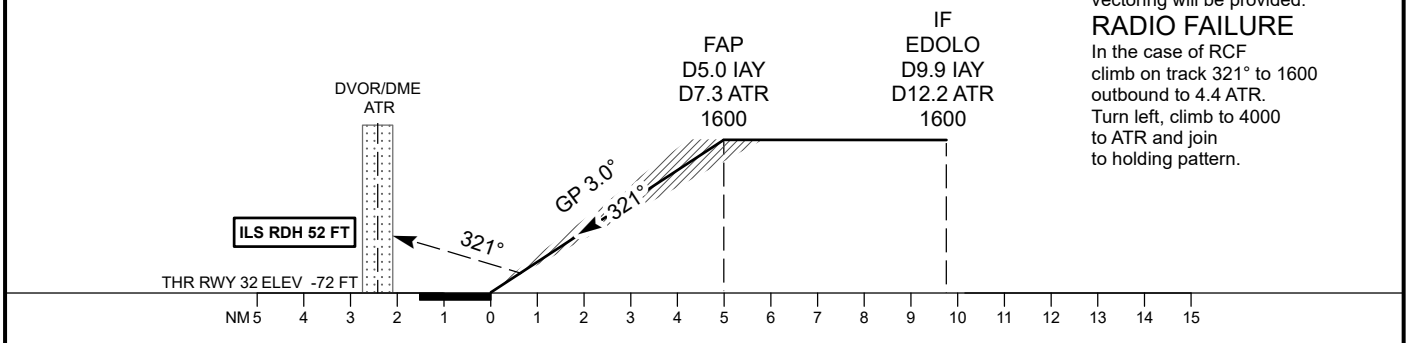
ILS/DME
LLZ 108.3
IAY
GP 334.1
CH 20X

ATYRAU TOWER 118.1
ATYRAU ATIS (EN) 127.4
ATYRAU ATIS (RU) 126.6

ATYRAU ILS/DME RWY 32



TRANSITION ALT
10000



MISSED APPROACH

Climb on track 321° to 1600.
After passing 600 radar vectoring will be provided.

RADIO FAILURE

In the case of RCF climb on track 321° to 1600 outbound to 4.4 ATR.
Turn left, climb to 4000 to ATR and join to holding pattern.

Aircraft Category		A	B	C	D	DIST to THR DME IAY	NM	1	2	3	4	5
Straight-in Approach OCA/H						DME ATR	NM	3.3	4.3	5.3	6.3	7.3
	CAT I	138(210)	138(210)	138(210)	138(210)	ALTITUDE	FT	299	620	943	1267	1600
						HEIGHT	FT	(371)	(692)	(1015)	(1339)	(1672)

Aerodrome Operating Minima DH ft x RVR (CMV)						DME IAY ZERO RANGED TO THR RWY 32							
	CAT I					GS	Kt	80	100	120	140	160	180
						Desc.Rate(5.2%)	ft/min	420	530	630	740	840	950

CHANGE: Missed approach.

ATYRAU
ILS/DME CAT I **AERONAUTICAL DATA TABULATION**

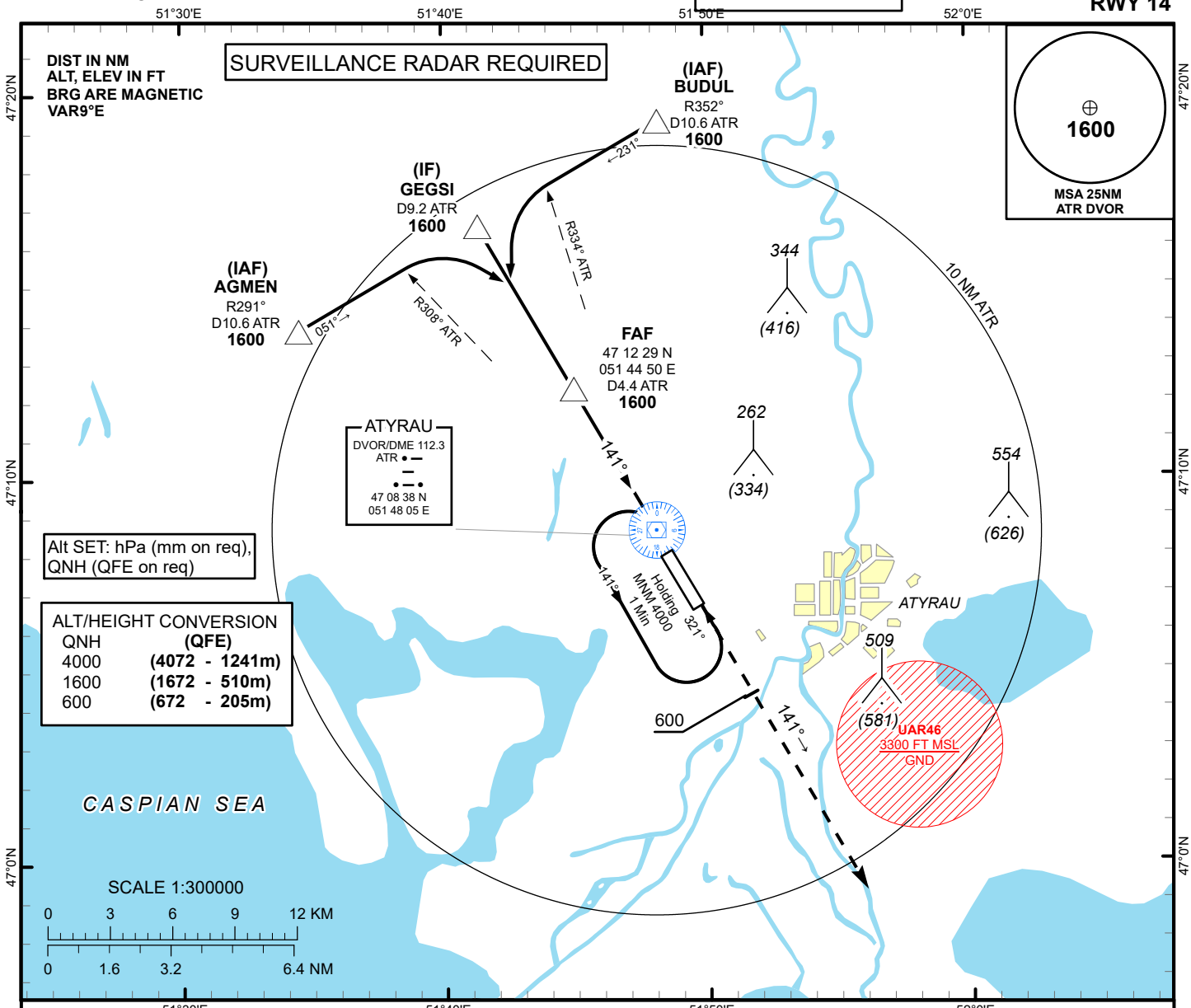
ILS approach to RWY32 from AKIBU, EDOLO, DOLEP	
Fix/point	**Coordinates**
ATR DVOR/DME	47° 08’ 38.2”N 051° 48’ 05.4”E
(FAP) IAY D5.0, ATR D7.3	47° 02’ 19.3”N 051° 53’ 26.6”E
EDOLO (IF) D12.2 ATR	46° 58’ 04.5”N 051° 57’ 01.8”E
AKIBU (IAF) R165°ATR, D13.3ATR	46° 55’ 21.9”N 051° 50’ 12.8”E
DOLEP (IAF) R117°ATR, D13.3ATR	47° 00’ 46.8”N 052° 03’ 51.6”E
THR RWY 32	47° 06’ 37.41”N 051° 49’ 48.05”E
IAY LOC	47° 08’ 20.0”N 051° 48’ 20.9”E

INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV -72 FT
HEIGHTS RELATED TO
AD ELEV

ATYRAU TOWER 118.1
ATYRAU ATIS (EN) 127.4
ATYRAU ATIS (RU) 126.6

ATYRAU VOR/DME Y RWY 14



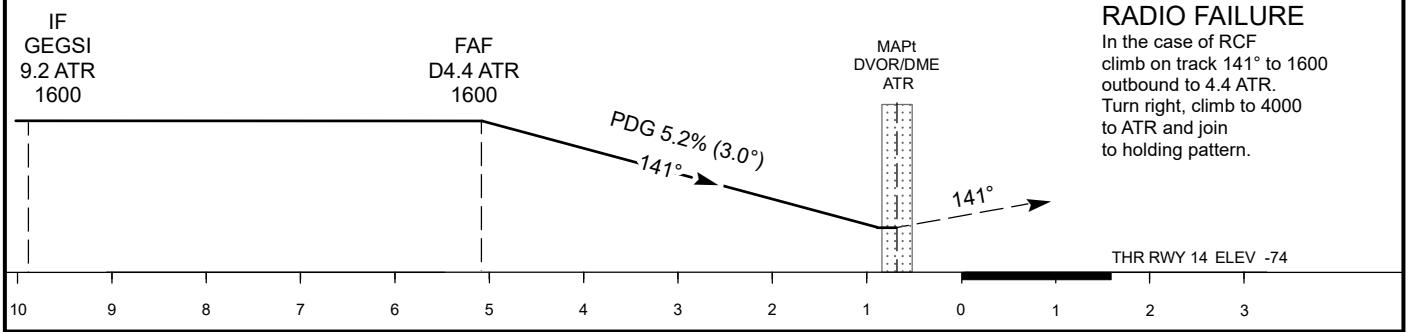
TRANSITION ALT
10000

MISSED APPROACH

Climb on track 141° to 1600.
After passing 600 radar vectoring will be provided.

RADIO FAILURE

In the case of RCF climb on track 141° to 1600 outbound to 4.4 ATR. Turn right, climb to 4000 to ATR and join to holding pattern.



Aircraft Category		A	B	C	D	DIST to THR	NM	5.1	4	3	2	1
Straight-in Approach OCA/H						DME ATR	NM	4.4	3.3	2.3	1.3	0.7
	VOR/DME	210(280)	210(280)	210(280)	210(280)	ALTITUDE	FT	1600	1268	944	621	300
						HEIGHT	FT	(1672)	(1340)	(1016)	(693)	(372)

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 (4.4 ATR)	min:sec	3:20	2:40	2:13	1:54	1:40	1:29

CHANGE: Missed approach.

ATYRAU
VOR/DME Y **AERONAUTICAL DATA TABULATION**

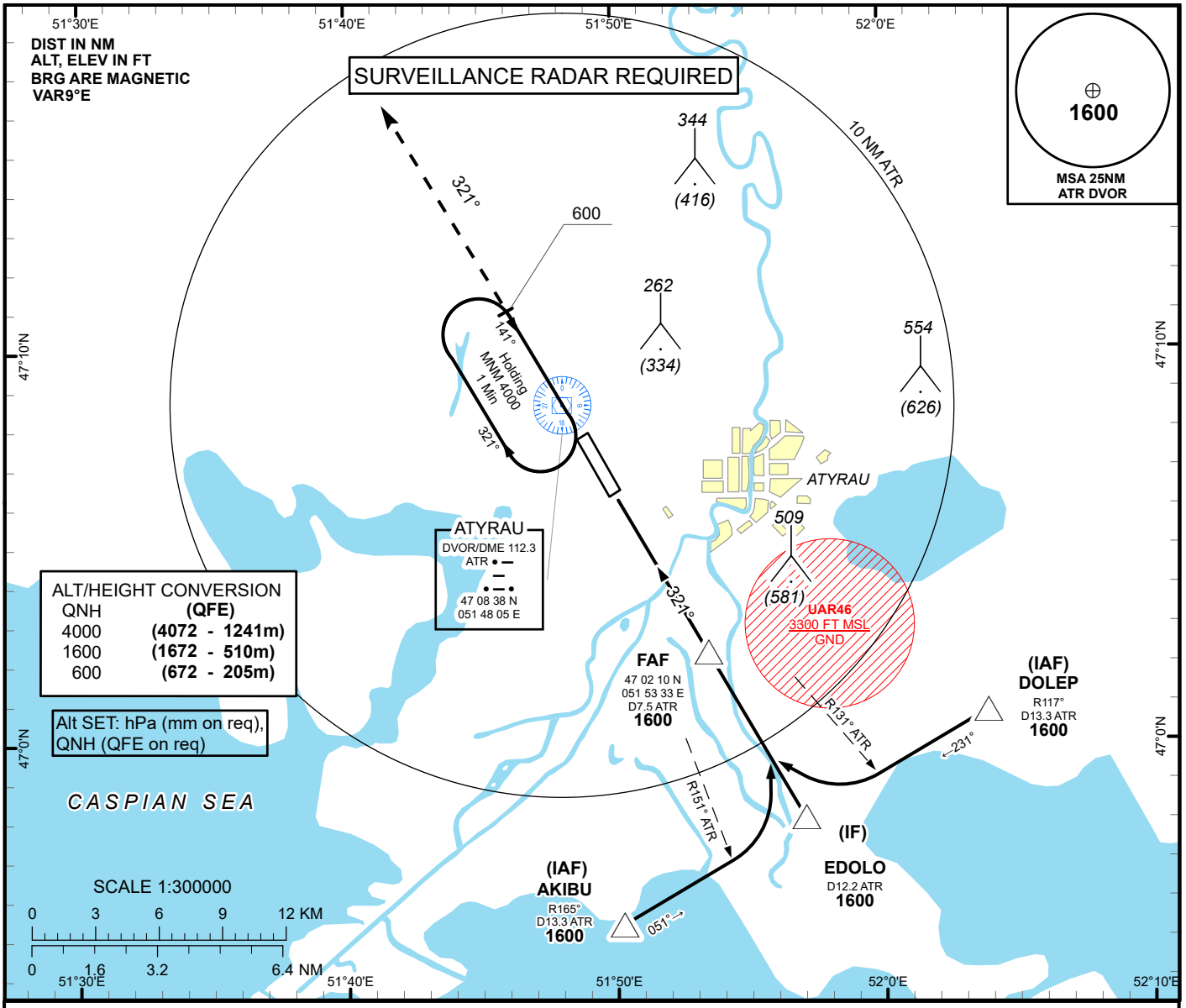
VOR/DME approach to RWY14 from AGMEN, GEGSI, BUDUL	
Fix/point	**Coordinates**
ATR DVOR/DME	47° 08’ 38,2”N 051° 48’ 05,4”E
(FAF) D4.4 ATR	47° 12’ 28,62”N 051° 44’ 50,14”E
GEGSI (IF) D9.2 ATR	47° 16’ 34,26”N 051° 41’ 19,19”E
AGMEN (IAF) R291°ATR, D10.6 ATR	47° 13’ 51,60”N 051° 34’ 27,75”E
BUDUL (IAF) R352°ATR, D10.6 ATR	47° 19’ 16,51”N 051° 48’ 11,32”E
THR RWY 14	47° 08’ 01.45”N 051° 48’ 36.66”E
Final approach descent angle is 3.0°	

INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV -72 FT
HEIGHTS RELATED TO
AD ELEV

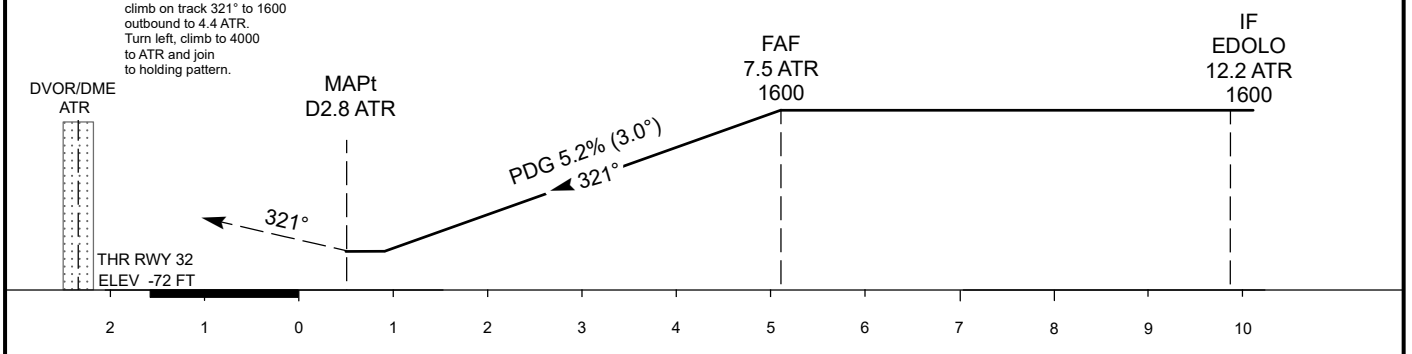
ATYRAU TOWER 118.1
ATYRAU ATIS (EN) 127.4
ATYRAU ATIS (RU) 126.6

ATYRAU VOR/DME Y RWY 32



MISSED APPROACH
Climb on track 321° to 1600.
After passing 600 radar vectoring will be provided.
RADIO FAILURE
In the case of RCF climb on track 321° to 1600 outbound to 4.4 ATR. Turn left, climb to 4000 to ATR and join to holding pattern.

TRANSITION ALT
10000



Aircraft Category		A	B	C	D	DIST to THR	NM	1	2	3	4	5.1
Straight-in Approach OCA/H						DME ATR	NM	3.4	4.4	5.4	6.4	7.5
	VOR/DME	280(350)	280(350)	280(350)	280(350)	ALTITUDE	FT	299	620	943	1267	1600
						HEIGHT	FT	(371)	(692)	(1015)	(1339)	(1672)

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 (4.7 NM)	min:sec	3:29	2:47	2:19	1:59	1:44	1:33

CHANGE: Missed approach.

ATYRAU
VOR/DME Y **AERONAUTICAL DATA TABULATION**

VOR/DME approach to RWY32 from AKIBU, EDOLO, DOLEP	
Fix/point	**Coordinates**
ATR DVOR/DME	47° 08’ 38,2”N 051° 48’ 05,4”E
(FAF) D7.5 ATR	47° 02’ 10,31”N 051° 53’ 32,86”E
EDOLO (IF) D12.2 ATR	46° 58’ 04,52”N 051° 57’ 01,84”E
AKIBU (IAF) R165°ATR, D13.3ATR	46° 55’ 21,86”N 051° 50’ 12,78”E
DOLEP (IAF) R117°ATR, D13.3ATR	47° 00’ 46,77”N 052° 03’ 51,58”E
THR RWY 32	47° 06’ 37.41”N 051° 49’ 48.05”E
Final approach descent angle is 3.0°	

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

Designations 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	Nil
Nil	400 X 200	3149 X 300	90150	Nil	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
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
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

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

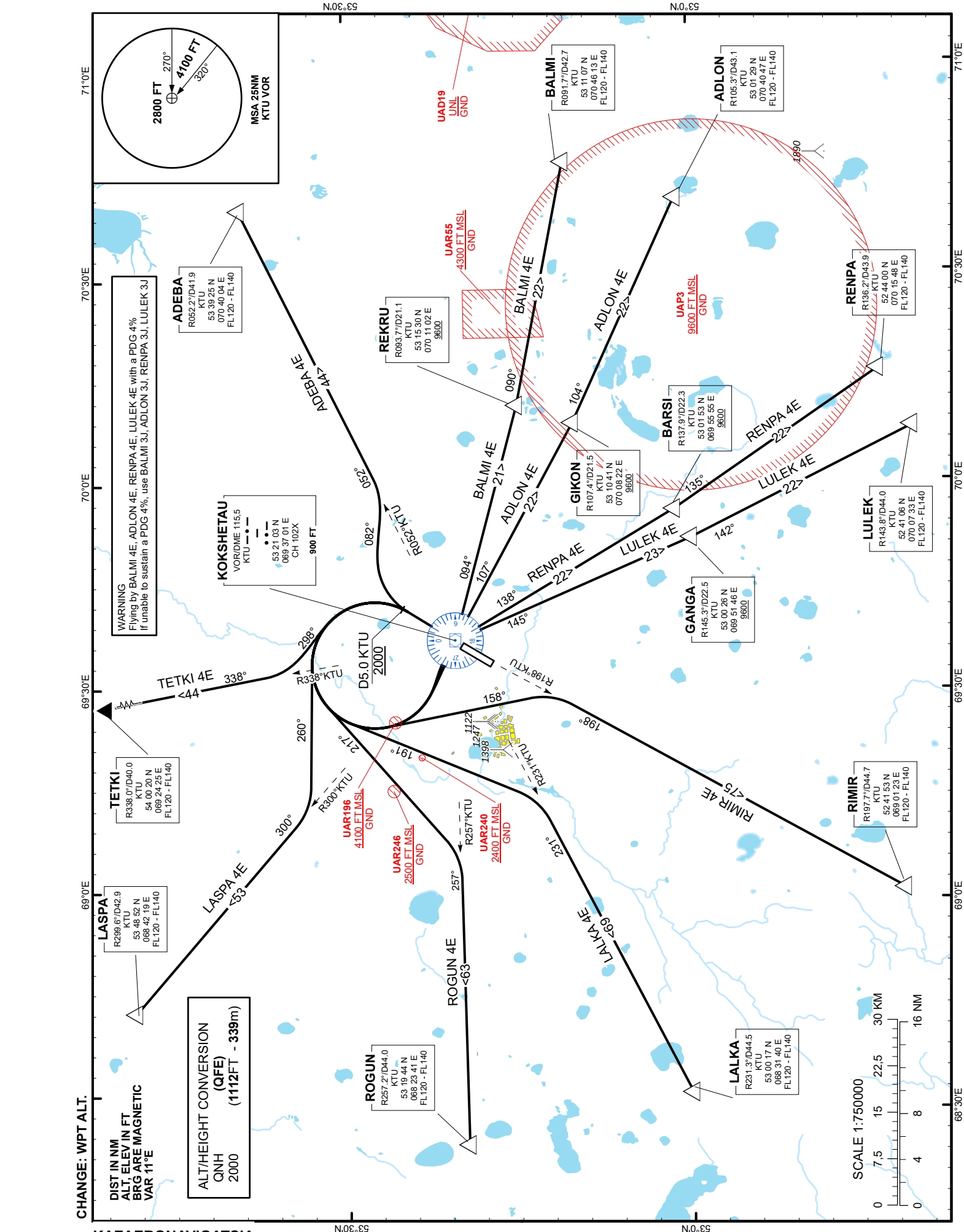
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

KOKSHETAU TOWER 127.9
KOKSHETAU ATIS (EN) 134.9
KOKSHETAU ATIS (RU) 126.0

ADEBA 4E, ADLON 4E, BALMI 4E, LASPA 4E, LULEK 4E, RENPA 4E, RIMIR 4E, LALKA 4E, ROGUN 4E, TETKI 4E.

KOKSHETAU RWY 02



STANDARD INSTRUMENT DEPARTURE ROUTES (SID) KOKSHETAU RWY 02

ADEBA 4E
After take-off climb straight ahead to 2000 or above. At D5.0 KTU, turn RIGHT on track 082° until intercept R052° KTU, then proceed on track 052° to ADEBA (R052.2° D41.9 KTU).
Cross ADEBA at FL120-FL140.

BALMI 4E
After take-off climb straight ahead to 2000 or above. At D5.0 KTU, turn LEFT to KTU, after crossing KTU proceed on track 094° to REKRU (R093.7° D21.1 KTU). After crossing REKRU turn LEFT on track 090° to BALMI (R091.7° D42.7 KTU).
Cross REKRU at 9600FT or above.
Cross BALMI at FL120-FL140.

ADLON 4E
After take-off climb straight ahead to 2000 or above. At D5.0 KTU, turn LEFT to KTU, after crossing KTU proceed on track 107° to GIKON (R107.4° D21.5 KTU). After crossing GIKON turn LEFT on track 104° to ADLON (R105.3° D43.1 KTU).
Cross GIKON at 9600FT or above.
Cross ADLON at FL120-FL140.

RENPA 4E
After take-off climb straight ahead to 2000 or above. At D5.0 KTU, turn LEFT to KTU, after crossing KTU proceed on track 138° to BARSI (R137.9° D22.3 KTU). After crossing BARSI turn LEFT on track 135° to RENPA (R136.2° D43.9 KTU).
Cross BARSI at 9600FT or above.
Cross RENPA at FL120-FL140.

LULEK 4E
After take-off climb straight ahead to 2000 or above. At D5.0 KTU, turn LEFT to KTU, after crossing KTU proceed on track 145° to GANGA (R145.3° D22.5 KTU). After crossing GANGA turn LEFT on track 142° to LULEK (R143.8° D44.0 KTU).
Cross GANGA at 9600FT or above.
Cross LULEK at FL120-FL140.

RIMIR 4E
After take-off climb straight ahead to 2000 or above. At D5.0 KTU, turn LEFT on track 158° until intercept R198° KTU, then proceed on track 198° to RIMIR (R197.7° D44.7 KTU).
Cross RIMIR at FL120-FL140.

LALKA 4E
After take-off climb straight ahead to 2000 or above. At D5.0 KTU, turn LEFT on track 191° until intercept R231° KTU, then proceed on track 231° to LALKA (R231.3° D44.5 KTU).
Cross LALKA at FL120-FL140.

ROGUN 4E
After take-off climb straight ahead to 2000 or above. At D5.0 KTU, turn LEFT on track 217° until intercept R257° KTU, then proceed on track 257° to ROGUN (R257.2° D44.0 KTU).
Cross ROGUN at FL120-FL140.

LASPA 4E
After take-off climb straight ahead to 2000 or above. At D5.0 KTU, turn LEFT on track 260° until intercept R300° KTU, then proceed on track 300° to LASPA (R299.6° D42.9 KTU).
Cross LASPA at FL120-FL140.

TETKI 4E
After take-off climb straight ahead to 2000 or above. At D5.0 KTU, turn LEFT on track 298° until intercept R338° KTU, then proceed on track 338° to TETKI (R338.0° D40.0 KTU).
Cross TETKI at FL120-FL140.

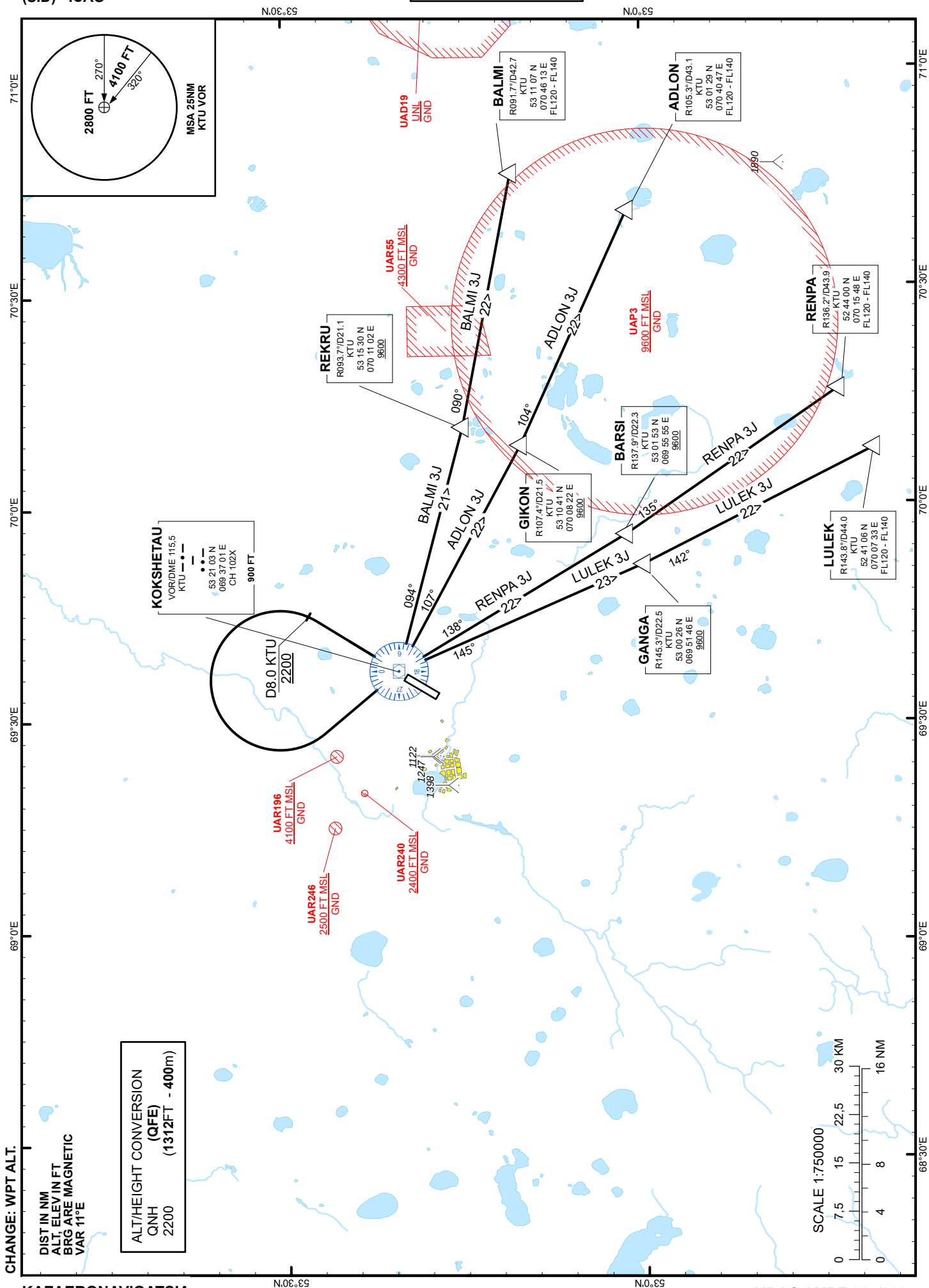
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

KOKSHETAU TOWER 127.9
KOKSHETAU ATIS (EN) 134.9
KOKSHETAU ATIS (RU) 126.0

ADLON 3J, BALMI 3J,
LULEK 3J, RENPA 3J.

KOKSHETAU
RWY 02



ALT/HEIGHT CONVERSION
QNH
2200
(QFE)
(1312FT - 400m)

CHANGE: WPT ALT.

DIST IN NM
ALT, ELEV IN FT
BRG ARE MAGNETIC
VAR 11°E

STANDARD INSTRUMENT DEPARTURE ROUTES (SID) KOKSHETAU RWY 02

BALMI 3J
After take-off climb straight ahead to 2200 or above. At D8.0 KTU, turn LEFT to KTU, after crossing KTU proceed on track 094° to REKRU (R093.7° D21.1 KTU). After crossing REKRU turn LEFT on track 090° to BALMI (R091.7° D42.7 KTU).
Cross REKRU at 9600FT or above.
Cross BALMI at FL120-FL140.

ADLON 3J
After take-off climb straight ahead to 2200 or above. At D8.0 KTU, turn LEFT to KTU, after crossing KTU proceed on track 107° to GIKON (R107.4° D21.5 KTU). After crossing GIKON turn LEFT on track 104° to ADLON (R105.3° D43.1 KTU).
Cross GIKON at 9600FT or above.
Cross ADLON at FL120-FL140.

RENPA 3J
After take-off climb straight ahead to 2200 or above. At D8.0 KTU, turn LEFT to KTU, after crossing KTU proceed on track 138° to BARSI (R137.9° D22.3 KTU). After crossing BARSI turn LEFT on track 135° to RENPA (R136.2° D43.9 KTU).
Cross BARSI at 9600FT or above.
Cross RENPA at FL120-FL140.

LULEK 3J
After take-off climb straight ahead to 2200 or above. At D8.0 KTU, turn LEFT to KTU, after crossing KTU proceed on track 145° to GANGA (R145.3° D22.5 KTU). After crossing GANGA turn LEFT on track 142° to LULEK (R143.8° D44.0 KTU).
Cross GANGA at 9600FT or above.
Cross LULEK at FL120-FL140.

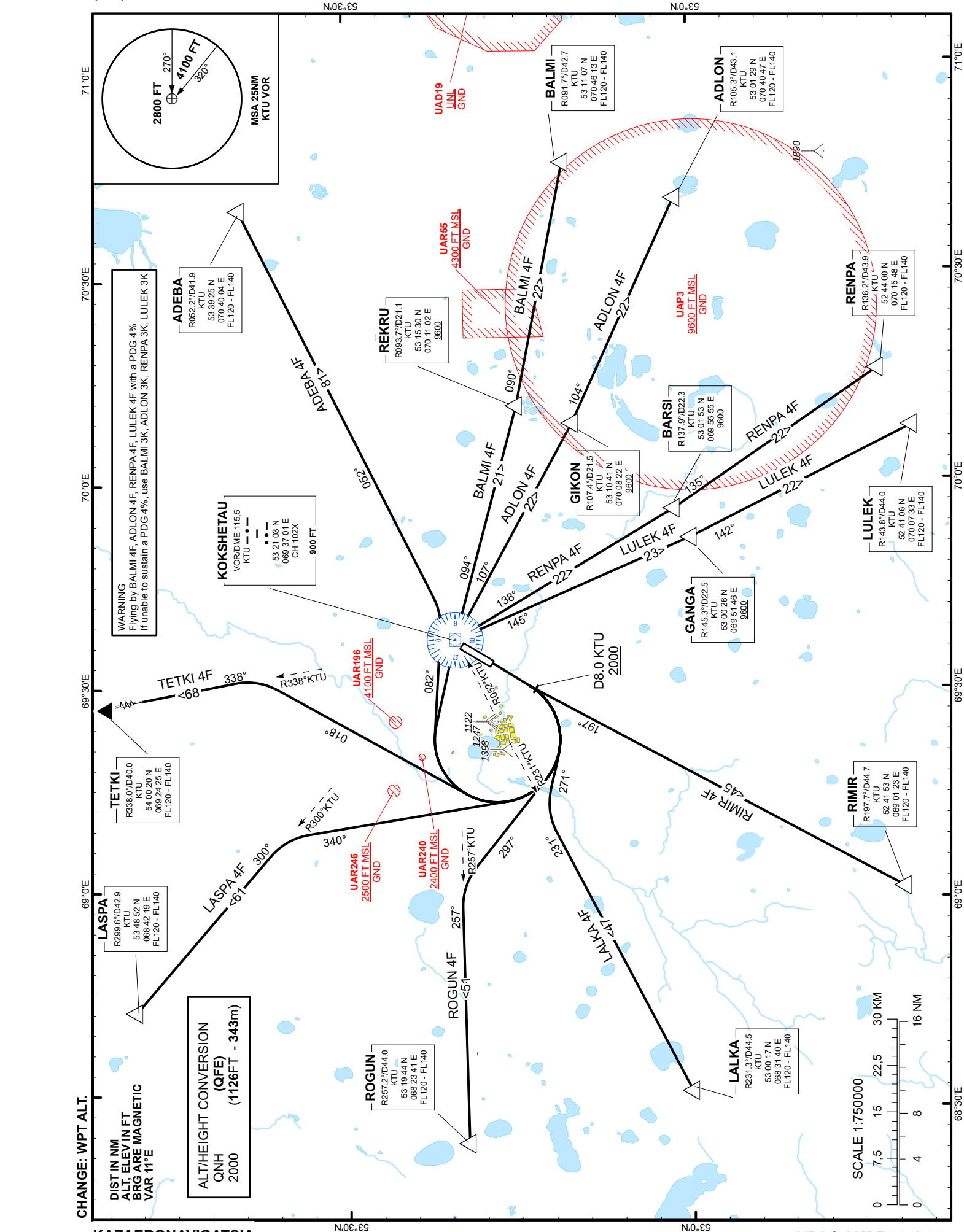
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

KOKSHETAU TOWER 127.9
KOKSHETAU ATIS (EN) 134.9
KOKSHETAU ATIS (RU) 126.0

ADEBA 4F, ADLON 4F, BALMI 4F, LASPA 4F, LULEK 4F, RENPA 4F, RIMIR 4F, LALKA 4F, ROGUN 4F, TETKI 4F.

KOKSHETAU RWY 20



STANDARD INSTRUMENT DEPARTURE ROUTES (SID) KOKSHETAU RWY 20

ADEBA 4F
After take-off climb straight ahead to 2000 or above. At D8.0 KTU, turn RIGHT on track 082° until intercept R052° KTU, then proceed on track 052° to ADEBA (R052.2° D41.9 KTU).
Cross ADEBA at FL120-FL140.

BALMI 4F
After take-off climb straight ahead to 2000 or above. At D8.0 KTU, turn RIGHT to KTU, after crossing KTU proceed on track 094° to REKRU (R093.7° D21.1 KTU). After crossing REKRU turn LEFT on track 090° to BALMI (R091.7° D42.7 KTU).
Cross REKRU at 9600FT or above.
Cross BALMI at FL120-FL140.

ADLON 4F
After take-off climb straight ahead to 2000 or above. At D8.0 KTU, turn RIGHT to KTU, after crossing KTU proceed on track 107° to GIKON (R107.4° D21.5 KTU). After crossing GIKON turn LEFT on track 104° to ADLON (R105.3° D43.1 KTU).
Cross GIKON at 9600FT or above.
Cross ADLON at FL120-FL140.

RENPA 4F
After take-off climb straight ahead to 2000 or above. At D8.0 KTU, turn RIGHT to KTU, after crossing KTU proceed on track 138° to BARSI (R137.9° D22.3 KTU). After crossing BARSI turn LEFT on track 135° to RENPA (R136.2° D43.9 KTU).
Cross BARSI at 9600FT or above.
Cross RENPA at FL120-FL140.

LULEK 4F
After take-off climb straight ahead to 2000 or above. At D8.0 KTU, turn RIGHT to KTU, after crossing KTU proceed on track 145° to GANGA (R145.3° D22.5 KTU). After crossing GANGA turn LEFT on track 142° to LULEK (R143.8° D44.0 KTU).
Cross GANGA at 9600FT or above.
Cross LULEK at FL120-FL140.

RIMIR 4F
After take-off climb straight ahead to 2000 or above. At D8.0 KTU, turn LEFT on track 197° to RIMIR (R197.7° D44.7 KTU).
Cross RIMIR at FL120-FL140.

LALKA 4F
After take-off climb straight ahead to 2000 or above. At D8.0 KTU, turn RIGHT on track 271° until intercept R231° KTU, then proceed on track 231° to LALKA (R231.3° D44.5 KTU).
Cross LALKA at FL120-FL140.

ROGUN 4F
After take-off climb straight ahead to 2000 or above. At D8.0 KTU, turn RIGHT on track 297° until intercept R257° KTU, then proceed on track 257° to ROGUN (R257.2° D44.0 KTU).
Cross ROGUN at FL120-FL140.

LASPA 4F
After take-off climb straight ahead to 2000 or above. At D8.0 KTU, turn RIGHT on track 340° until intercept R300° KTU, then proceed on track 300° to LASPA (R299.6° D42.9 KTU).
Cross LASPA at FL120-FL140.

TETKI 4F
After take-off climb straight ahead to 2000 or above. At D8.0 KTU, turn RIGHT on track 018° until intercept R338° KTU, then proceed on track 338° to TETKI (R338.0° D40.0 KTU).
Cross TETKI at FL120-FL140.

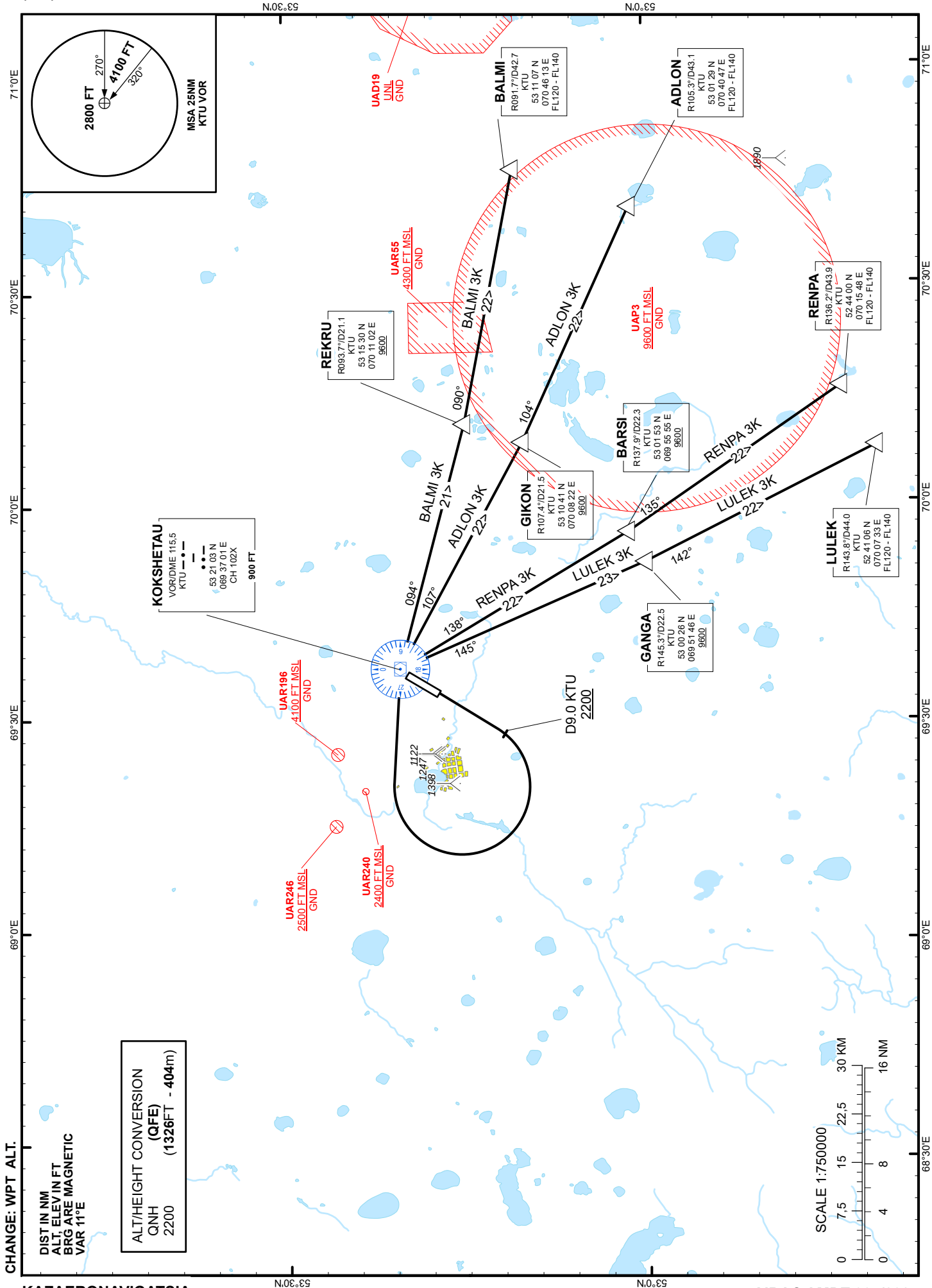
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE 10000 FT

KOKSHETAU TOWER 127.9
KOKSHETAU ATIS (EN) 134.9
KOKSHETAU ATIS (RU) 126.0

ADLON 3K, BALMI 3K, LULEK 3K, RENPA 3K.

KOKSHETAU RWY 20



CHANGE: WPT ALT.

DIST IN NM
ALT, ELEV IN FT
BRG ARE MAGNETIC
VAR 11°E

ALT/HEIGHT CONVERSION
QNH **(QFE)**
2200 **(1326FT - 404m)**

STANDARD INSTRUMENT DEPARTURE ROUTES (SID) KOKSHETAU RWY 20

BALMI 3K
After take-off climb straight ahead to 2200 or above. At D9.0 KTU, turn RIGHT to KTU, after crossing KTU proceed on track 094° to REKRU (R093.7° D21.1 KTU). After crossing REKRU turn LEFT on track 090° to BALMI (R091.7° D42.7 KTU).
Cross REKRU at 9600FT or above.
Cross BALMI at FL120-FL140.

ADLON 3K
After take-off climb straight ahead to 2200 or above. At D9.0 KTU, turn RIGHT to KTU, after crossing KTU proceed on track 107° to GIKON (R107.4° D21.5 KTU). After crossing GIKON turn LEFT on track 104° to ADLON (R105.3° D43.1 KTU).
Cross GIKON at 9600FT or above.
Cross ADLON at FL120-FL140.

RENPA 3K
After take-off climb straight ahead to 2200 or above. At D9.0 KTU, turn RIGHT to KTU, after crossing KTU proceed on track 138° to BARSI (R137.9° D22.3 KTU). After crossing BARSI turn LEFT on track 135° to RENPA (R136.2° D43.9 KTU).
Cross BARSI at 9600FT or above.
Cross RENPA at FL120-FL140.

LULEK 3K
After take-off climb straight ahead to 2200 or above. At D9.0 KTU, turn RIGHT to KTU, after crossing KTU proceed on track 145° to GANGA (R145.3° D22.5 KTU). After crossing GANGA turn LEFT on track 142° to LULEK (R143.8° D44.0 KTU).
Cross GANGA at 9600FT or above.
Cross LULEK at FL120-FL140.

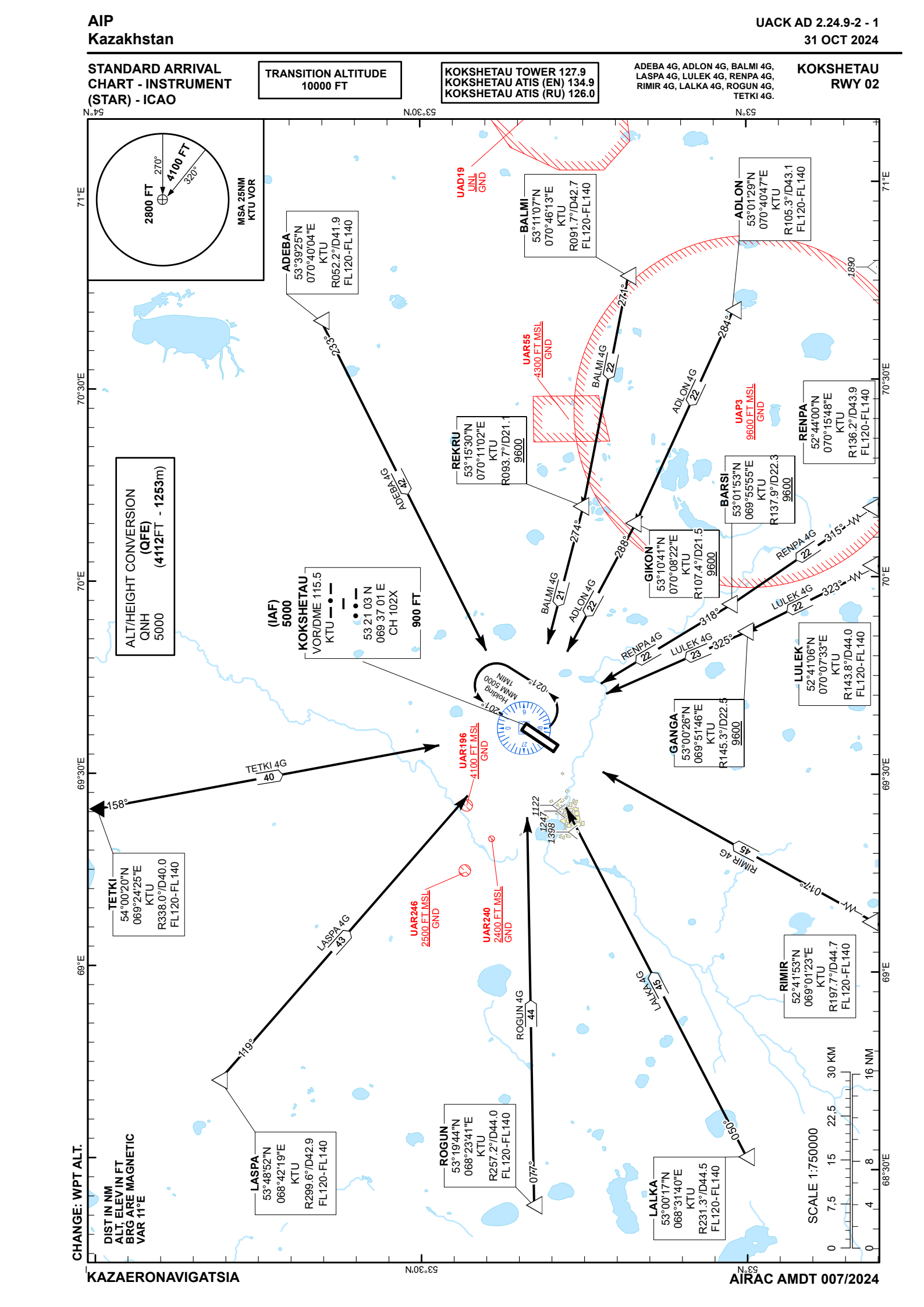
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

KOKSHETAU TOWER 127.9
KOKSHETAU ATIS (EN) 134.9
KOKSHETAU ATIS (RU) 126.0

ADEBA 4G, ADLON 4G, BALMI 4G, LASPA 4G, LULEK 4G, RENPA 4G, RIMIR 4G, LALKA 4G, ROGUN 4G, TETKI 4G.

KOKSHETAU
RWY 02



CHANGE: WPT ALT.
DIST IN NM
ALT, ELEV IN FT
BRG ARE MAGNETIC
VAR 11°E

STANDARD ARRIVAL ROUTES INSTRUMENT (STAR) KOKSHETAU RWY 02

TETKI 4G
After crossing TETKI (R338.0° D40.0 KTU), proceed on track 158° to VOR/DME KTU.
Cross TETKI at FL120-FL140.
Cross KTU at 5000FT.

ADEBA 4G
After crossing ADEBA (R052.2° D41.9 KTU), proceed on track 233° to VOR/DME KTU.
Cross ADEBA at FL120-FL140.
Cross KTU at 5000FT.

BALMI 4G
After crossing BALMI (R091.7° D42.7 KTU), proceed on track 271° to REKRU (R093.7° D21.1 KTU).
After crossing REKRU turn RIGHT on track 274° to VOR/DME KTU.
Cross BALMI at FL120-FL140.
Cross REKRU at 9600FT or above.
Cross KTU at 5000FT.

ADLON 4G
After crossing ADLON (R105.3° D43.1 KTU), proceed on track 284° to GIKON (R107.4° D21.5 KTU).
After crossing GIKON turn RIGHT on track 288° to VOR/DME KTU.
Cross ADLON at FL120-FL140.
Cross GIKON at 9600FT or above.
Cross KTU at 5000FT.

RENPA 4G
After crossing RENPA (R136.2° D43.9 KTU), proceed on track 315° to BARSI (R137.9° D22.3 KTU).
After crossing BARSI turn RIGHT on track 318° to VOR/DME KTU.
Cross RENPA at FL120-FL140.
Cross BARSI at 9600FT or above.
Cross KTU at 5000FT.

LULEK 4G
After crossing LULEK (R143.8° D44.0 KTU), proceed on track 323° to GANGA (R145.3° D22.5 KTU).
After crossing GANGA turn RIGHT on track 325° to VOR/DME KTU.
Cross LULEK at FL120-FL140.
Cross GANGA at 9600FT or above.
Cross KTU at 5000FT.

RIMIR 4G
After crossing RIMIR (R197.7° D44.7 KTU), proceed on track 017° to VOR/DME KTU.
Cross RIMIR at FL120-FL140.
Cross KTU at 5000FT.

LALKA 4G
After crossing LALKA (R231.3° D44.5 KTU), proceed on track 050° to VOR/DME KTU.
Cross LALKA at FL120-FL140.
Cross KTU at 5000FT.

ROGUN 4G
After crossing ROGUN (R257.2° D44.0 KTU), proceed on track 077° to VOR/DME KTU.
Cross ROGUN at FL120-FL140.
Cross KTU at 5000FT.

LASPA 4G
After crossing LASPA (R299.6° D42.9 KTU), proceed on track 119° to VOR/DME KTU.
Cross LASPA at FL120-FL140.
Cross KTU at 5000FT.

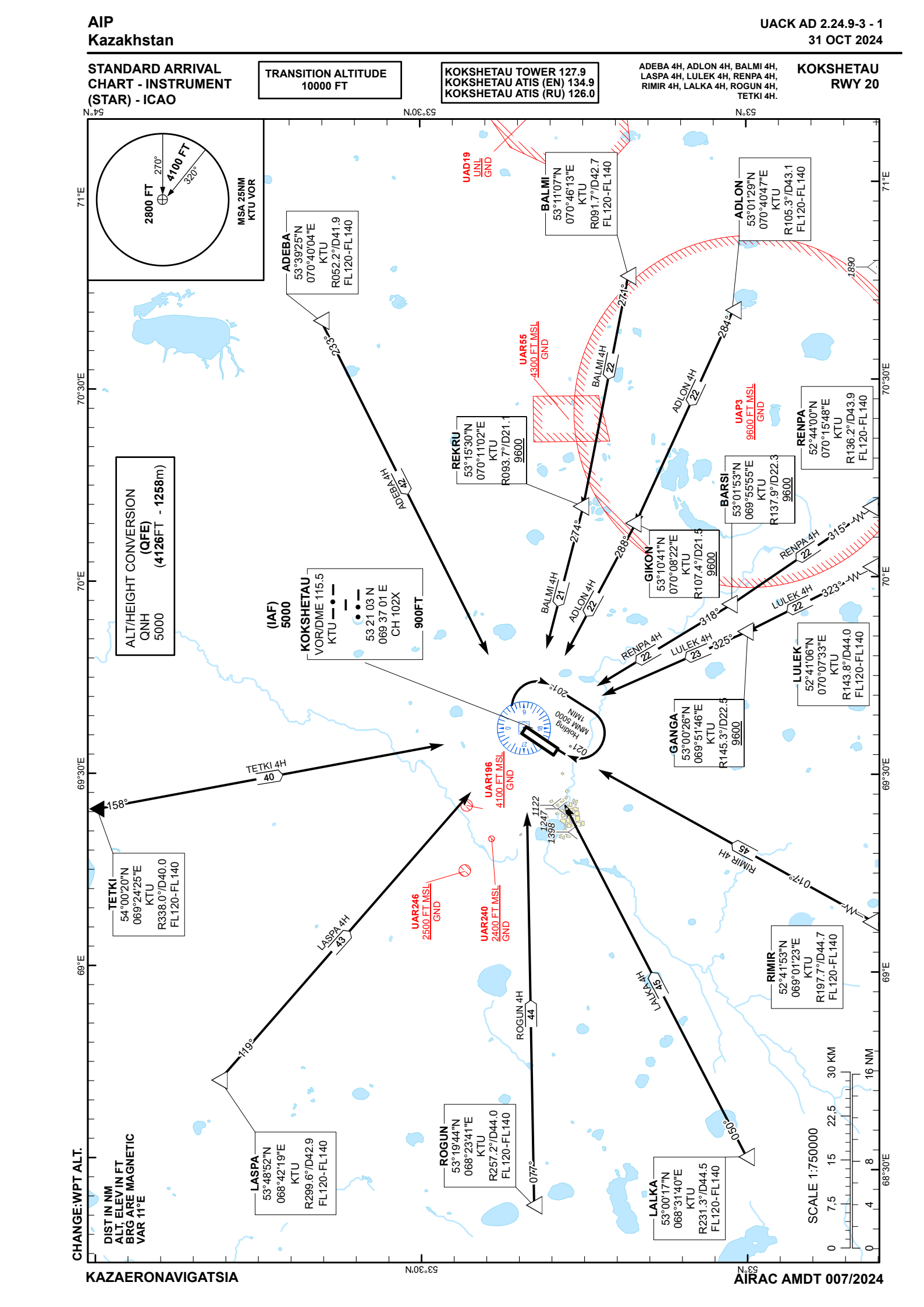
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

KOKSHETAU TOWER 127.9
KOKSHETAU ATIS (EN) 134.9
KOKSHETAU ATIS (RU) 126.0

ADEBA 4H, ADLON 4H, BALMI 4H, LASPA 4H, LULEK 4H, RENPA 4H, RIMIR 4H, LALKA 4H, ROGUN 4H, TETKI 4H.

KOKSHETAU
RWY 20



STANDARD ARRIVAL ROUTES INSTRUMENT (STAR) KOKSHETAU RWY 20

TETKI 4H
After crossing TETKI (R338.0° D40.0 KTU), proceed on track 158° to VOR/DME KTU.
Cross TETKI at FL120-FL140.
Cross KTU at 5000FT.

ADEBA 4H
After crossing ADEBA (R052.2° D41.9 KTU), proceed on track 233° to VOR/DME KTU.
Cross ADEBA at FL120-FL140.
Cross KTU at 5000FT.

BALMI 4H
After crossing BALMI (R091.7° D42.7 KTU), proceed on track 271° to REKRU (R093.7° D21.1 KTU).
After crossing REKRU turn RIGHT on track 274° to VOR/DME KTU.
Cross BALMI at FL120-FL140.
Cross REKRU at 9600FT or above.
Cross KTU at 5000FT.

ADLON 4H
After crossing ADLON (R105.3° D43.1 KTU), proceed on track 284° to GIKON (R107.4° D21.5 KTU).
After crossing GIKON turn RIGHT on track 288° to VOR/DME KTU.
Cross ADLON at FL120-FL140.
Cross GIKON at 9600FT or above.
Cross KTU at 5000FT.

RENPA 4H
After crossing RENPA (R136.2° D43.9 KTU), proceed on track 315° to BARSI (R137.9° D22.3 KTU).
After crossing BARSI turn RIGHT on track 318° to VOR/DME KTU.
Cross RENPA at FL120-FL140.
Cross BARSI at 9600FT or above.
Cross KTU at 5000FT.

LULEK 4H
After crossing LULEK (R143.8° D44.0 KTU), proceed on track 323° to GANGA (R145.3° D22.5 KTU).
After crossing GANGA turn RIGHT on track 325° to VOR/DME KTU.
Cross LULEK at FL120-FL140.
Cross GANGA at 9600FT or above.
Cross KTU at 5000FT.

RIMIR 4H
After crossing RIMIR (R197.7° D44.7 KTU), proceed on track 017° to VOR/DME KTU.
Cross RIMIR at FL120-FL140.
Cross KTU at 5000FT.

LALKA 4H
After crossing LALKA (R231.3° D44.5 KTU), proceed on track 050° to VOR/DME KTU.
Cross LALKA at FL120-FL140.
Cross KTU at 5000FT.

ROGUN 4H
After crossing ROGUN (R257.2° D44.0 KTU), proceed on track 077° to VOR/DME KTU.
Cross ROGUN at FL120-FL140.
Cross KTU at 5000FT.

LASPA 4H
After crossing LASPA (R299.6° D42.9 KTU), proceed on track 119° to VOR/DME KTU.
Cross LASPA at FL120-FL140.
Cross KTU at 5000FT.

UAUU AD 2

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

UAUU AD 2.1 Aerodrome Location Indicator And Name

UAUU - KOSTANAY

UAUU AD 2.2 Aerodrome Geographical And Administrative Data

1	ARP coordinates and site at AD	531231N 0633253E At the centre of RWY
2	Direction and distance from (city)	271°, 3 NM SW of center of Kostanay
3	Elevation/Reference temperature	601 FT/21° C
4	Geoid undulation at AD ELEV PSN	-70 FT
5	MAG VAR/Annual Change	13° E (2022) / 0.06°
6	AD Administration, address, telephone, telefax, telex, AFS	Post: Authority of Airport 110007 Kostanay, JSC "Kostanay International Airport" Republic of Kazakhstan Phone: +7 (7142) 576223 Fax: +7 (7142) 576018 AFS: UAUUAPDU Email: air_kst@mail.kz Email: air_kst@list.ru
7	Types of traffic permitted (IFR/VFR)	IFR-VFR
8	Remarks	Nil

UAUU AD 2.3 Operational Hours

1	AD Operator	See NOTAM Phone: +7 (7142) 576200
2	Customs and immigration	H24 Phone: +7 (7142) 576003 Phone: +7 (7142) 537050
3	Health and sanitation	H24 Phone: +7 (7142) 576208
4	AIS Briefing Office	H24
5	ATS Reporting Office (ARO)	H24 Phone: +7 (7142) 576069 Phone: +7 (7142) 576097
6	MET Briefing Office	H24 Phone: +7 (7142) 270182
7	ATS	ANY 02:00 - 00:00 UTC
8	Fuelling	Phone: +7 (7142) 576233
9	Handling	Phone: +7 (7142) 576200
10	Security	Phone: +7 (7142) 576205
11	De-icing	Phone: +7 (7142) 576200
12	Remarks	Nil

UAUU AD 2.4 Handling Services And Facilities

1	Cargo-handling facilities	Handling up to 5 tonnes weight
2	Fuel/oil types	TS-1, RT(equivalent to Jet A-1) / MS-20, MS-8
3	Fuelling facilities/capacity	AVBL without limitation
4	De-icing facilities	AVBL, Nordway
5	Hangar space for visiting aircraft	NOT AVBL for visiting aircraft
6	Repair facilities for visiting aircraft	Minor repairs at aircraft repair base
7	Remarks	2-5.6m height entrance stairs AVBL External power source rated at 30000W 200V 400Hz AVBL

UAUU AD 2.5 Passenger Facilities

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

UAUU AD 2.6 Rescue And Fire Fighting Services

1	AD category for fire fighting	CAT A6
2	Rescue equipment	AVBL
3	Capability for removal of disabled aircraft	AVBL
4	Remarks	Nil

UAUU AD 2.7 Seasonal Availability - Clearing

1	Types of clearing equipment	8 plunger brush cars, 1 heat engine, 2 rotor, 2 de-icing vehicle, 1 snow loader
2	Clearance priorities	1. RWY 2. TWY 3. Stands
3	Remarks	Nil

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 (6000 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 scavering, removal of green plantations and ground covering, abandon of agricultural activity within the airport area.

UAUU AD 2.24 Charts Related To An Aerodrome

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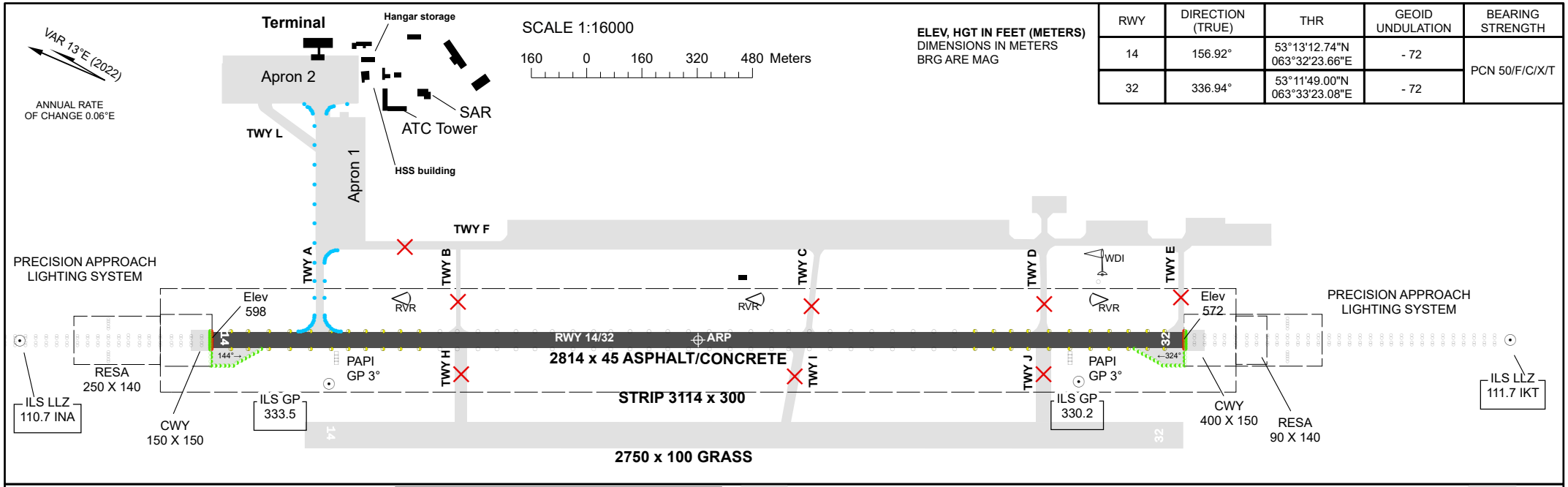
AERODROME CHART - ICAO

AD ELEV 601FT (*183m*)

ARP 531231N 0633253E

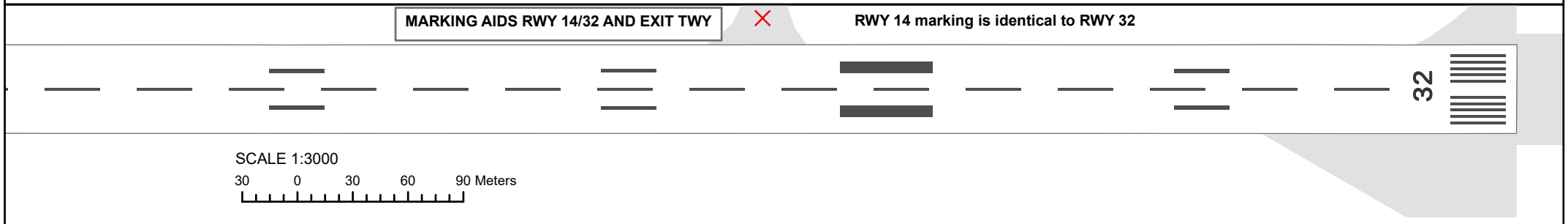
TWR 129.3

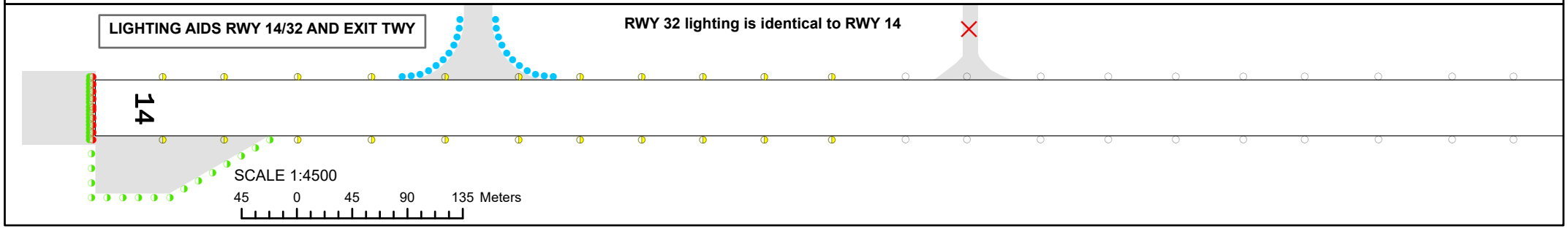
KOSTANAY



ELEV, HGT IN FEET (METERS)
DIMENSIONS IN METERS
BRG ARE MAG

RWY	DIRECTION (TRUE)	THR	GEOID UNDULATION	BEARING STRENGTH
14	156.92°	53°13'12.74"N 063°32'23.66"E	- 72	PCN 50/F/C/X/T
32	336.94°	53°11'49.00"N 063°33'23.08"E	- 72	





CHANGE: TWY B,C,D,E,H,I,J Closed.

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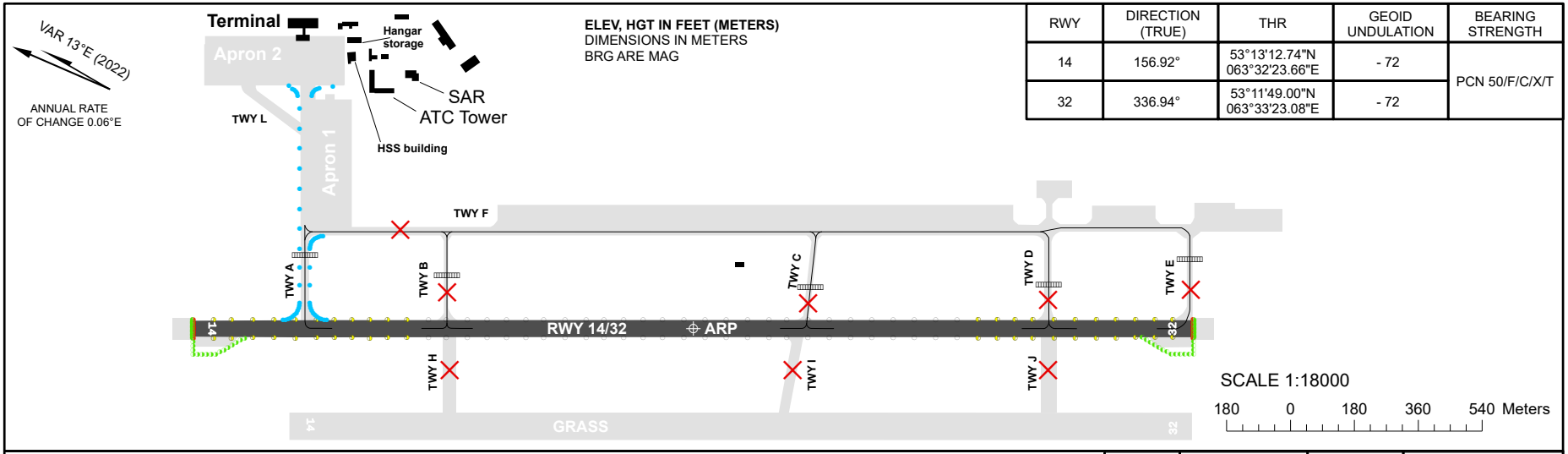
AERODROME GROUND MOVEMENT AND PARKING CHART - ICAO

APRON ELEV 597FT (*182m*)

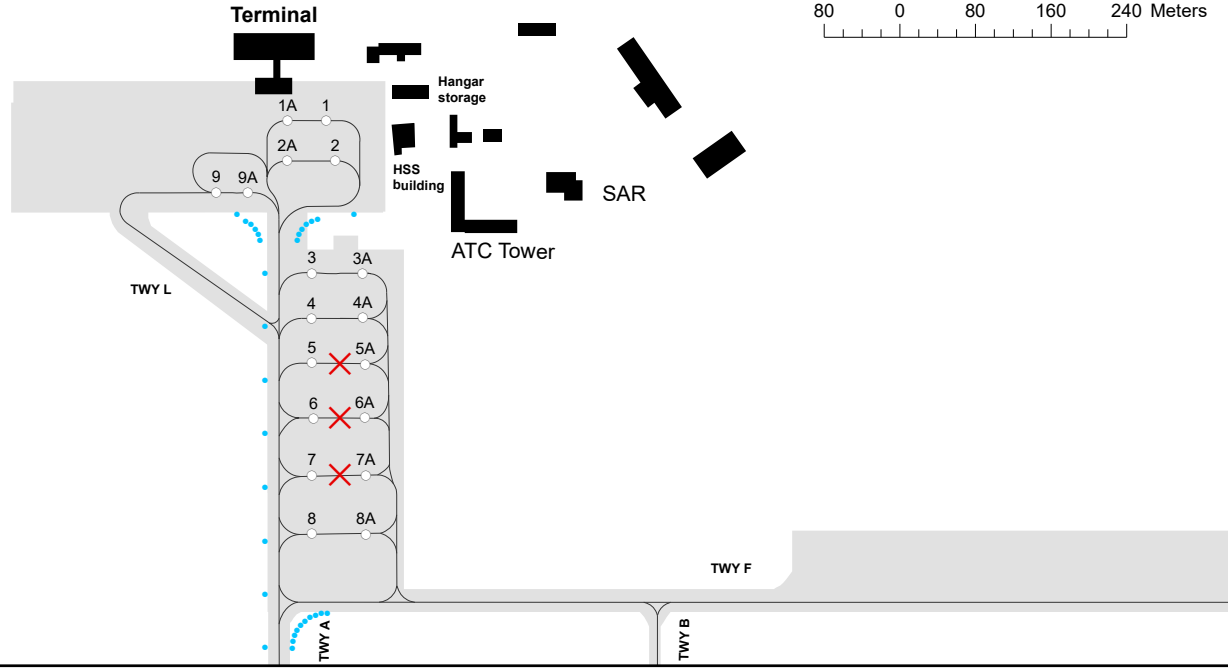
TWR 129.3

KOSTANAY



ELEV, HGT IN FEET (METERS)
DIMENSIONS IN METERS
BRG ARE MAG

RWY	DIRECTION (TRUE)	THR	GEOID UNDULATION	BEARING STRENGTH
14	156.92°	53°13'12.74"N 063°32'23.66"E	- 72	PCN 50/F/C/X/T
32	336.94°	53°11'49.00"N 063°33'23.08"E	- 72	



APRON	STAND	SURFACE	BEARING STRENGTH
2	1, 1A, 2, 2A	ASPH+CONC	PCN 56/F/C/X/T
1	3 - 8A		PCN 29/F/C/Y/T
2	9, 9A		PCN 24/F/C/Y/T

TWY	WIDTH	SURFACE	BEARING STRENGTH
A	23m	ASPH+CONC	PCN 56/F/C/X/T
B	12m		PCN 14/R/A/X/T
C	18m		PCN 32/F/C/Y/T
D	18m		PCN 14/R/A/X/T
E	16m		
H	30m	GRASS	NIL
I			NIL
J			NIL
L	22m	ASPH+CONC	PCN 32/F/C/Y/T
F from E to D	16m		PCN 14/R/A/X/T
F from C to A	22m		

CHANGE: TWY B,C,D,E,H,I,J Closed.

KOSTANAY / NARIMANOVKA **STANDS CHARACTERISTICS**

Apron	Stand	Coordinates	
		Latitude	Longitude
2	1	53 13 11.90N	063 33 10.12E
	1A	53 13 13.12N	063 33 09.26E
	2	53 13 11.07N	063 33 08.21E
	2A	53 13 12.58N	063 33 07.13E
1	3	53 13 10.30N	063 33 01.80E
	3A	53 13 08.70N	063 33 02.90E
	4	53 13 09.70N	063 32 59.40E
	4A	53 13 08.10N	063 33 00.60E
	5	53 13 09.10N	063 32 57.10E
	5A	53 13 07.40N	063 32 58.20E
	6	53 13 08.30N	063 32 54.20E
	6A	53 13 06.70N	063 32 55.40E
	7	53 13 07.60N	063 32 51.20E
	7A	53 13 05.90N	063 32 52.40E
	8	53 13 06.80N	063 32 48.10E
	8A	53 13 05.10N	063 32 49.30E
2	9	53 13 14.40N	063 33 03.90E
	9A	53 13 13.40N	063 33 04.60E

INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV ***433 FT***
HEIGHTS RELATED TO
THR RWY 05 - ELEV ***424 FT***

ILS
LLZ 111.1
IKZ
GP 331.7
CH 48X

KYZYLORDA TOWER 120.9
KYZYLORDA ATIS (EN) 134.9
KYZYLORDA ATIS (RU) 122.9

KYZYLORDA ILS/DME RWY 05

65°20'0"E 65°30'0"E 65°40'0"E 65°50'0"E

44°50'0"N 44°40'0"N 44°30'0"N

DIST IN NM
ALT, ELEV IN FT
BRG ARE MAG
VAR 7°E

906 (482) 942 (518)

KZO 10 NM

Alt SET: hPa (mm on req),
QNH (QFE on req)

SURVEILLANCE RADAR REQUIRED

KYZYLORDA
DVOR/DME **112.7**
KZO
CH_74X
44°41'45"N
065°33'49"E

⊕
2000
MSA 25NM
KZO DVOR

UAR213
7000 FT MSL
GND

(IAF)
BUSAB
R264° KZO
D10.8 KZO
2000

FAP
D4.1 KZO
D4.7 IKZ
44°39'46"N
065°28'46"E
2000

144°
R247°KZO
054°
234°
R221°KZO
324°

(IF)
ADLIM
D9.3 KZO
D9.9 IKZ
2000

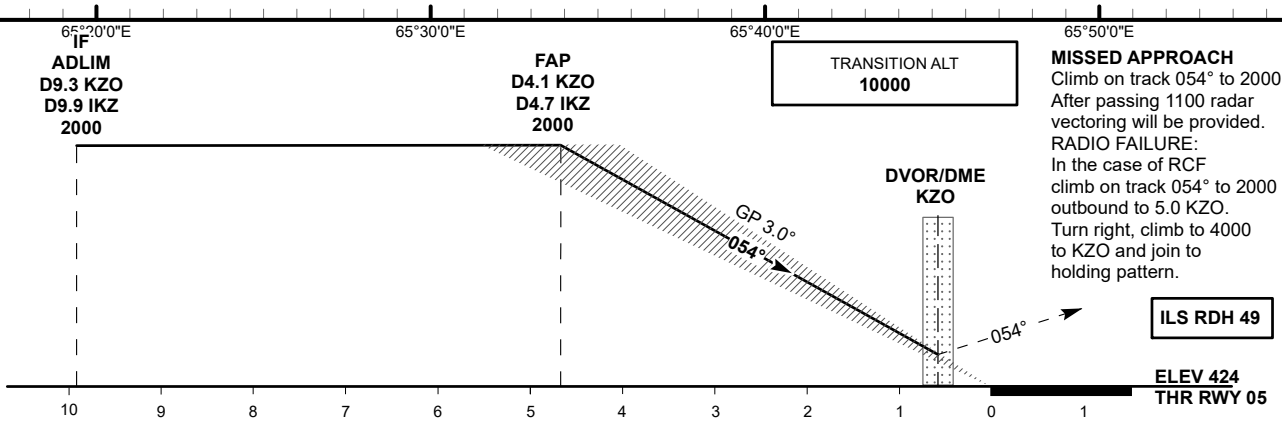
(IAF)
GISEK
R204° KZO
D10.8 KZO
2000

1100
505
(81)
234°
Holding
MNM 4000
1 Min
054°

UAR214
7100 FT MSL
GND

ALT/HEIGHT CONVERSION	
QNH	**(QFE)**
4000	**(3576FT - 1090 m)**
2000	**(1576FT - 480 m)**
1100	**(676FT - 206 m)**

SCALE 1:300 000
0 3 6 9 12 KM
0 1.5 3 6 NM



TRANSITION ALT
10000

MISSED APPROACH
Climb on track 054° to 2000.
After passing 1100 radar vectoring will be provided.
RADIO FAILURE:
In the case of RCF climb on track 054° to 2000 outbound to 5.0 KZO.
Turn right, climb to 4000 to KZO and join to holding pattern.

ILS RDH 49

ELEV 424
THR RWY 05

Aircraft Category		A	B	C	D	DIST to THR DME IKZ	NM	4.7	4.0	3.0	2.0	1.0
Straight-in Approach OCA/H						DME KZO	NM	4.1	3.4	2.4	1.4	0.4
	ILS CAT I	644(220)		644(220)		ALTITUDE	FT	2000	1760	1436	1113	792
						HEIGHT	FT	(1576)	(1336)	(1012)	(689)	(368)

DME IKZ ZERO RANGED TO THR RWY 05

Aerodrome Operating Minima DH ft x RVR(CMV)	ILS CAT I					GS	Kt	80	100	120	140	160	180
						Desc.Rate(5.2%)	ft/min	420	530	630	740	840	950

CHANGE: Missed approach, editorial.

KYZYLORDA
ILS/DME **AERONAUTICAL DATA TABULATION**

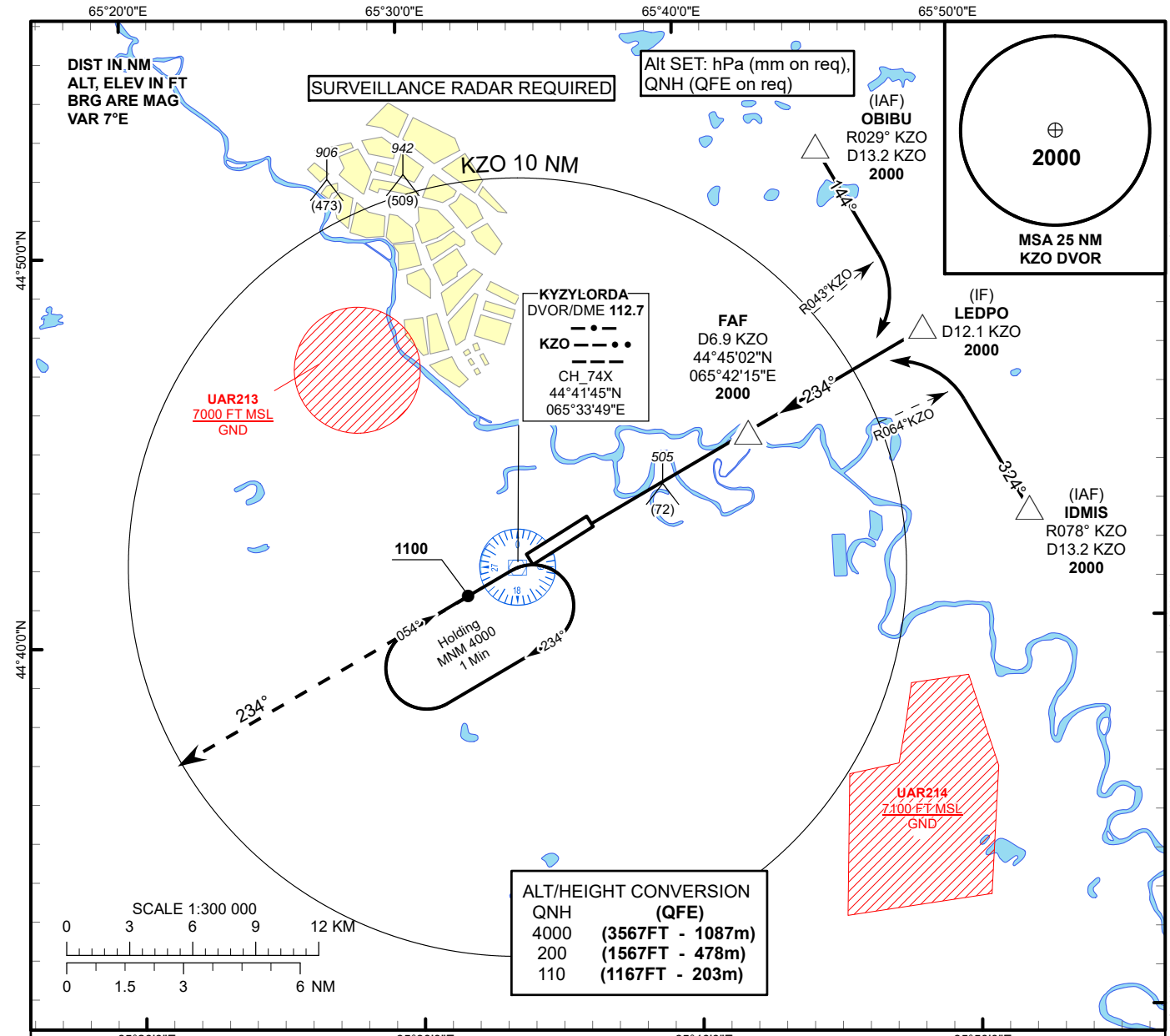
ILS approach to RWY05 from ADLIM, BUSAB, GISEK	
Fix/point	**Coordinates**
KZO DVOR/DME	44° 41’ 44,9”N 065° 33’ 49,3”E
IKZ D4.7 KZO D4.1 (FAP)	44° 39’ 46,1”N 065° 28’ 45,9”E
ADLIM (IF) KZO D9.3	44° 37’ 15,2”N 065° 22’ 21,8”E
BUSAB (IAF) R264°KZO D10.8KZO	44° 41’ 59,4”N 065° 18’ 43,8”E
GISEK (IAF) R204°KZO D10.8KZO	44° 32’ 31,0”N 065° 25’ 59,2”E
THR RWY 05	44° 42’ 01.89”N 065° 34’ 32.79”E
IKZ LOC	44° 42’ 58.5”N 065° 36’ 58.0”E

INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV ***433 FT***
HEIGHTS RELATED TO AD ELEV

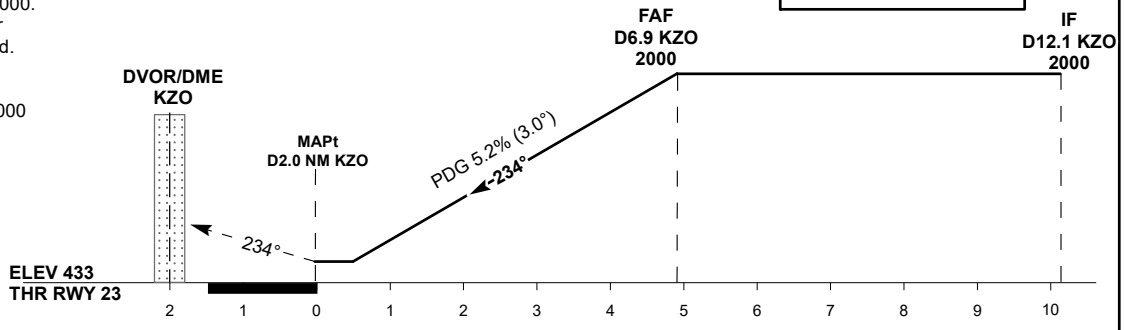
KYZYLORDA TOWER 120.9
KYZYLORDA ATIS (EN) 134.9
KYZYLORDA ATIS (RU) 122.9

KYZYLORDA VOR/DME Y RWY 23



MISSED APPROACH
Climb on track 234° to 2000.
After passing 1100 radar vectoring will be provided.
RADIO FAILURE:
In the case of RCF climb on track 234° to 2000 outbound to 5.0 KZO.
Turn left, climb to 4000 to KZO and join to holding pattern.

TRANSITION ALT
10000



Aircraft Category		A	B	C	D	DIST to THR	NM	1.0	2.0	3.0	4.0	4.8
Straight-in Approach OCA/H						DME KZO	NM	3.0	4.0	5.0	6.0	6.9
	VOR/DME	770(330)		770(330)		ALTITUDE	FT	800	1119	1437	1756	2000
						HEIGHT	FT	(367)	(686)	(1004)	(1323)	(1567)

Aerodrome Operating Minima MDH ft x RVR(CMV)	VOR/DME											
						GS	Kt	80	100	120	140	160	180
						FAF-MAPt (4.8)	min:sec	3:36	2:53	2:24	2:03	1:48	1:36
						Desc.Rate(5.2%)	ft/min	420	530	630	740	840	950

CHANGE: Missed approach, editorial.

KYZYLORDA
VOR/DME Y **AERONAUTICAL DATA TABULATION**

VOR approach to RWY23 from OBIBU, LEDPO, IDMIS	
Fix/point	**Coordinates**
(FAF) D6.9 KZO	**44° 45’ 02.1”N 065° 42’ 15.4”E**
LEDPO (IF) D12.1 KZO	**44° 47’ 34,9”N 065° 48’ 40,0”E**
OBIBU (IAF) R029°KZO D13.2 KZO	**44° 52’ 19,1”N 065° 45’ 01,5”E**
IDMIS (IAF) R078°KZO D13.2KZO	**44° 42’ 50,7”N 065° 52’ 17,8”E**
THR RWY 23	**44° 42’ 43.85”N 065° 36’ 20.40”E**
KZO DVOR/DME	**44° 41’ 44.9”N 065° 33’ 49.3”E**
Final approach descent angle is 3°	

UASP AD 2

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

UASP AD 2.1 Aerodrome Location Indicator And Name

UASP - PAVLODAR

UASP AD 2.2 Aerodrome Geographical And Administrative Data

1	ARP coordinates and site at AD	521143N 0770424E At the centre of RWY
2	Direction and distance from (city)	138°, 7.6 NM of Pavlodar center
3	Elevation/Reference temperature	411 FT/21,5° C
4	Geoid undulation at AD ELEV PSN	-125 FT
5	MAG VAR/Annual Change	9° E (2013)/ 0°
6	AD Administration, address, telephone, telefax, telex, AFS	Post: Authority of Airport 140001 Pavlodar, JSC "Pavlodar International Airport" Republic of Kazakhstan Phone: +7 (7182) 663511 Fax: +7 (7182) 663526 AFS: UASPAPDU Email: kense@airportpavlodar.kz
7	Types of traffic permitted (IFR/VFR)	IFR-VFR
8	Remarks	Nil

UASP AD 2.3 Operational Hours

1	AD Operator	See NOTAM Phone: +7 (7182) 663511
2	Customs and immigration	HO Phone: +7 (7182) 663543
3	Health and sanitation	HO Phone: +7 (7182) 663503
4	AIS Briefing Office	HO
5	ATS Reporting Office (ARO)	HO Phone: +7 (7182) 301436
6	MET Briefing Office	H24 Phone: +7 (7182) 491373
7	ATS	See NOTAM
8	Fuelling	Phone: +7 (7182) 663553
9	Handling	Phone: +7 (7182) 663553
10	Security	Phone: +7 (7182) 661059
11	De-icing	Phone: +7 (7182) 663553
12	Remarks	Nil

UASP AD 2.4 Handling Services And Facilities

1	Cargo-handling facilities	Handling up to 5 tonnes weight
2	Fuel/oil types	TS-1
3	Fuelling facilities/capacity	3 tankers, without limitation
4	De-icing facilities	AVBL
5	Hangar space for visiting aircraft	Not AVBL for visiting aircraft
6	Repair facilities for visiting aircraft	Nil
7	Remarks	(Maintenance service of aircraft AN-24, YAK-40 not provided)

UASP AD 2.5 Passenger Facilities

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

UASP AD 2.6 Rescue And Fire Fighting Services

1	AD category for fire fighting	CAT A7
2	Rescue equipment	AVBL
3	Capability for removal of disabled aircraft	There are tow driver of type Aircraft: YAK-40, YAK-42, AN-24, TU-134, TU-154, B-737, A-320(319, 321). Phone: +7 (7182) 601098 (ext. 420) Email: pochinok.f@airportpavlodar.kz
4	Remarks	Nil

UASP AD 2.7 Seasonal Availability - Clearing

1	Types of clearing equipment	4 plow brush machines, 1 rotor, 1 wind machine, 1 heat engine, 1 tractor for cleaning shafts of snow
2	Clearance priorities	1. RWY 2. TWY 3. Stands
3	Remarks	(Seasonal availability: All seasons, caution advised in winter during snow conditions)

UASP AD 2.20 Local Aerodrome Regulations

1. Movement procedure (towing, taxiing) of aircraft on the airfield.

Movement of the aircraft on the aerodrome is carried out by taxiing or towing by special vehicles. Taxiing and towing are performed along the centerline of runway, taxiways and stands.

2. Precautions for taxiing and towing aircraft, with regard to the visibility conditions and the condition of apron pavement, parking areas, taxiways.

Taxiing (towing) shall be carried out by clearance of the “Tower” air traffic controller. The pilot-in-command depending on the taxiway conditions, obstacles presence, aircraft weight, taxiing conditions, shall select the taxiing speed. In all cases, it must not exceed the speed established by the Flight Crew Operational Manual.

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

Taxiing out of stands under its own engines power and by towing and taxiing into stands under its own engines power and by towing is performed according to the signals of the person in charge of the aircraft operational maintenance area. Stands separation for arriving aircraft shall be carried out by the Operation and Dispatch service followed by informing the Engineering and Technical Service, not later than 20 minutes before landing. Engineering and Technical Service is responsible for the aircraft movement safety from stands and to the stands. There are no restrictions on the procedure for taxiing and parking aircraft.

Taxiing of YAK-42 aircraft into/out of stand №12 under its own engines power is prohibited. Parking of the YAK-42 aircraft at the stand №12 shall be carried out by towing.

4. Parking area for small aircraft (general aviation), in case, if such stands are available.

Stands №13, №14, №15, №16 are designated for the small aircraft (general aviation) with the dimensions 25m*23,7m.

5. Aircraft de-icing areas, main engines start up areas, deviation areas.

Stands №2, №3, №17 are designated for de-icing.
Main engines start-up is permitted at all stands.
Stands №1-№4 are designated as deviation areas.

6. The movement procedure of aircraft and vehicles in critical and sensitive areas of ILS during aerodrome operation on the minima I, II and III ICAO category.

Aircraft movement in the critical area shall be carried out with the increased attention of the crew and caution. Flight crew shall vacate the critical area as soon as possible, without exceeding recommended speed by the flight manual of this aircraft. Flight crew shall immediately report to the “Tower” air traffic controller after vacating the critical area.

Intersection of critical areas of radio-beacon landing system by aircraft, vehicles and other mobile facilities shall be carried out with the clearance of the “Tower” air traffic controller.

“Stop” and “ILS critical area” signs are installed on the intersection of the airport roads and the critical area of the radio-beacon system. Movement after these signs without air traffic controller clearance is prohibited; driver must stop and request clearance to cross this area. Vacating of this area shall be made rapidly with a further report to the air traffic controller.

When the aircraft performing a U-turn to the final approach and before landing, intersection these areas by the mentioned vehicles is prohibited.

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

Aircraft with a weight of 30000 kg and more shall make turns in turning bays (widening of the runway) on RWY 03/21 only.

For other aircraft the geometric dimensions of the runway and parking areas are suitable according to the Tactical and technical data, no restrictions.

8. Taxiing in winter conditions (apron), in case if some taxiways are not equipped with centerline lights,

they are may not be visible due to snow.

In case of low visibility of marking lines for aircraft movement at the apron (due to snow cover and other reasons), the escorting of aircraft shall be carried out by the follow-me car.

9. Removal of disabled aircraft from runways.

JSC “Pavlodar airport” can provide the activities of evacuation:

- In the standard form of towing (towing by the nose gear with a tow bar) from runway (in the absence of snow and ice) – YAK-40, YAK-42, AN-24, TU-134, TU-154, A-320, B-737. From soft surfaces of runway shoulder and stopway – YAK-40, AN-24.
- In the non-standard form of towing (towing by the main landing gear with ropes) from runway. From soft surfaces of runway shoulder and stopway – YAK-42.
- Transportation of aircraft with damaged nose gear or main gear due to belly landing is impossible due to the lack of necessary equipment.

UASP AD 2.21 Noise Abatement Procedures

NIL

UASP AD 2.22 Flight Procedures

1. Flight and ground movement procedures.

There are no deviations from the requirements and flight rules operating in the territory of the Republic of Kazakhstan.

Take-off not from the runway beginning shall be performed upon flight crew request, if according to the flight crew's calculations, the available runway length, depending on the actual take-off weight of the aircraft and take-off conditions, corresponds to the required length. Pilot-in-command is responsible for this decision. Tailwind take-off and landing in regard of braking action coefficient is permitted, if the tailwind speed component comply with the standards established by the Flight Operations Manual for each aircraft type.

Movement of aircraft on the aerodrome shall be carried out by taxiing or towing by special vehicles. Taxiing and towing shall be carried out along centerlines of runway, taxiways and stands. Taxiing from/into the stands is performed by the signals of the responsible person in charge of the aircraft operational maintenance area. Taxiing of aircraft, as well as the placement of aircraft on the apron and stands shall be carried out by the engineering and technical personnel of the Aviation Engineering Service in accordance with the instructions of the Operation and Dispatch Service, in conformity with the inflicted markings on the aerodrome pavement, as provided by the ground movement chart. Taxiing (towing) shall be carried out by the clearance of “Tower” air traffic controller. The pilot-in-command depending on the taxiway conditions, obstacles presence, aircraft weight, taxiing conditions, selects taxiing speed. In all cases, it must not exceed the speed established by the Flight Crew Operational Manual.

Helicopter taxiing shall be carried out with regard of limitations to the wind, according to the Flight Operational manual, with constant visibility of landmarks located in front. Pilot-in-command is responsible for taxiing rules compliance; the person in charge of taxiing in the assigned area is responsible for the safety of taxiing.

Heliport pad is not available. Helicopter take-off and landing area located over the ARP. Helicopter take-off and landing shall be carried out from the runway. Helicopter take-off and landing in the sector 260°-360° from ARP is prohibited. Helicopter take-off and landing equipped with a skid landing gear is allowed from stands №3, №4, №9 with observance of safety distance between the main rotor blades and aircraft on the stand (not less than two main rotor diameter). Helicopter landing at the designated stands is permitted by the clearance of the “Tower” air traffic controller in coordination with the Operation and Dispatch Service.

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

2. Low Visibility Procedures.

Low Visibility Procedures (LVP) are applied when RVR is less than 550 m, when all the manoeuvring area or part of it is not controlled visually from the “Tower” control centre.

Low Visibility Procedures are initiated by the Air traffic Manager (Tower ATC) after received information from the meteorological service about the RVR values less than 550 m.

Air traffic controller "Tower" should report when the Low Visibility Procedures are in force by the phrase: “LOW VISIBILITY PROCEDURES IN OPERATION”. The air traffic controller "Tower" informs flight crew about any changes in the operational radio status and lighting equipment, also, restricts the movement of airport service vehicles on the aprons and manoeuvring area during Low Visibility Procedures.

Aircraft should follow after the "Follow-me car" equipped with lighting equipment from the established point to the stand upon arrival and from the stand to the established point upon departure. Air Traffic Controller "Tower" monitors aircraft movement along the taxi route by the visual observing within the visibility limits, according to the reports of crew and aerodrome service specialist reports.

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 900 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 Berezovka)	N523133 E0765528	333° 20.0 nm PVL DVOR/DME	Exit
2	BRAVO (SW side of Efremovka, A-17 Highway)	N523053 E0771848	015° 20.0 nm PVL DVOR/DME	Entry/exit
3	CHARLIE (A-18 highway, railroad)	N522325 E0773305	048° 20.0 nm PVL DVOR/DME	Entry/exit
4	DELTA (SE outskirts of Novoyamyshevo, M-38 highway)	N515456 E0772051	143° 20.0 nm PVL DVOR/DME	Exit
5	ECHO (Western outskirts of Donentayev)	N515237 E0770445	173° 20.0 nm PVL DVOR/DME	Entry
6	FOXTROT (NE side of Bolshoy Kalkaman lake)	N520333 E0763645	234° 20.0 nm PVL DVOR/DME	Exit
7	GOLF (A-18 highway, railroad)	N520916 E0763339	252° 20.0 nm PVL DVOR/DME	Entry

№	Waypoint name (visual reference)	Geographical coordinates	Radial (mag.) and distance from NAVAID (ARP)	Remarks
8	HOTEL (southern side of Kyzylzhar)	N522538 E0764101	302° 20.0 nm PVL DVOR/DME	Entry
9	INDIA (Western side of Muyaldy)	N522341 E0770258	342° 11.2 nm PVL DVOR/DME	Exit
10	JULIET (Northern outskirts of Shandy)	N522043 E0771455	026° 9.9 nm PVL DVOR/DME	Entry/exit/ holding (circle and absolute altitudes by “Tower” ATC instructions)
11	KILO (Northern outskirts of Birlik)	N520726 E0770518	174° 5.2 nm PVL DVOR/DME	Exit
12	PAPA (SE outskirts of Aksu)	N520144 E0765742	195° 11.9 nm PVL DVOR/DME	Entry, holding (circle and absolute altitudes by “Tower” ATC instructions)
13	LIMA (Northern outskirts of Aksu)	N520859 E0765105	239° 9.7 nm PVL DVOR/DME	Exit
14	MIKE (NW outskirts of Karabay)	N521036 E0765029	249° 9.6 nm PVL DVOR/DME	Entry, holding (circle and absolute altitudes by “Tower” ATC instructions)
15	NOVEMBER (Western outskirts of Leninskiy)	N521359 E0764416	267° 13.3 nm PVL DVOR/DME	Entry, holding (circle and absolute altitudes by “Tower” ATC instructions)

UASP 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 gulls, starlings, ducks, crows, pigeons, etc. occur daily in the morning (23.00 - 03.00) and evening (10.00 - 02.00) hours. The altitude of the bird flights varies from 0 to 400 m. above ground level.

The main directions of bird migration in spring are from the south-west to the north-east, in autumn in the opposite direction.

As required, the aerodrome control unit inform pilots of such bird migration and approximate heights above ground level.

Measures to disperse of the bird aggregations include periodic scaring of birds, effective measures against the

garbage, removal of green spaces, as well as the installation of scaring objects (silhouettes of hunters, sparkling balls, "scaring eyes", etc).

UASP AD 2.24 Charts Related To An Aerodrome

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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

Designations 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	Nil
Nil	400 X 150	3101 X 300	150 x 250	Nil	AVBL	Nil

UACP AD 2.13 Declared Distances

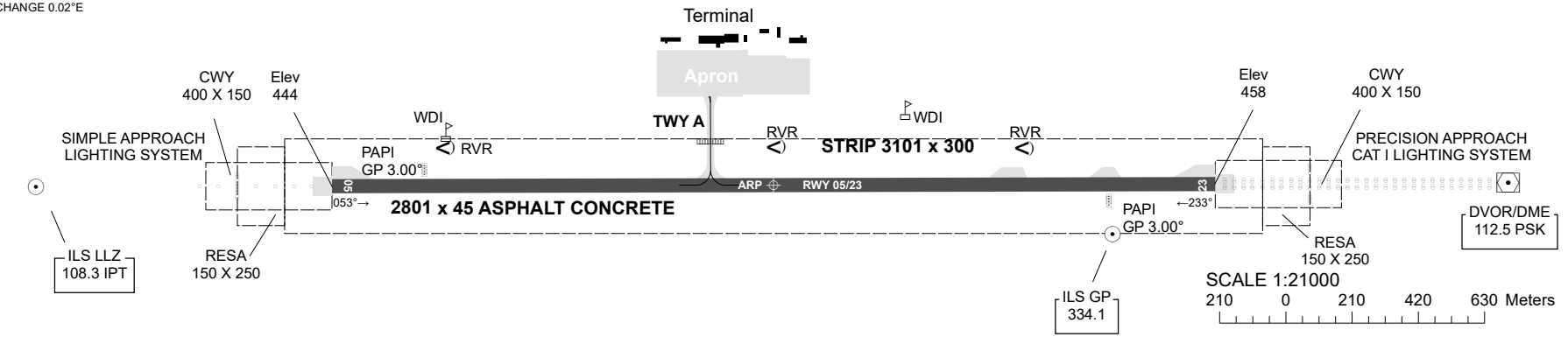
RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
05	2801	3201	2801	2801	Nil
23	2801	3201	2801	2801	Nil

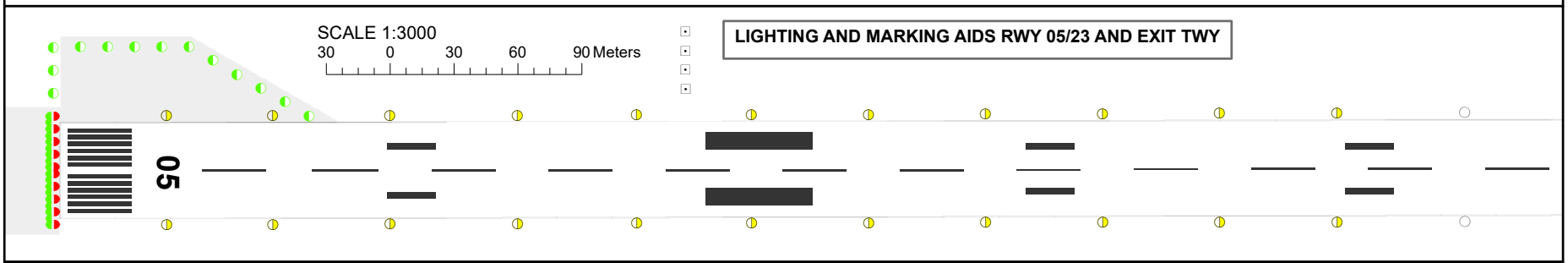
AERODROME CHART - ICAO | **AD ELEV 458FT (*140m*)** | **ARP 544632N 0691110E** | TWR 123.7 | **PETROPAVLOVSK**

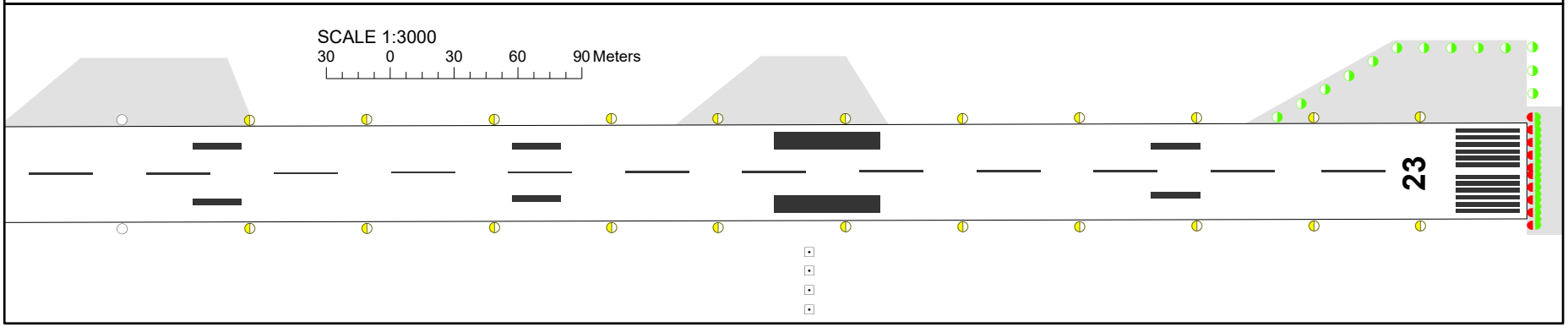
RWY	DIRECTION (TRUE)	THR	GEOID UNDULATION	BEARING STRENGTH
05	065.52°	54°46'12.89"N 069°09'58.74"E	- 82	PCN 63 F/D/X/T
23	245.55°	54°46'50.42"N 069°12'21.41"E	- 82	

VAR 12°E (2013)
ANNUAL RATE OF CHANGE 0.02°E

ELEV, HGT IN FEET (METERS)
DIMENSIONS IN METERS
BRG ARE MAG







CHANGE: RESA Dimensions.

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UASS AD 2

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

UASS AD 2.1 Aerodrome Location Indicator And Name

UASS - SEMEY

UASS AD 2.2 Aerodrome Geographical And Administrative Data

1	ARP coordinates and site at AD	502106N 0801402E At the centre of RWY
2	Direction and distance from (city)	190°, 3.3 NM from Semey center
3	Elevation/Reference temperature	759 FT/27° C
4	Geoid undulation at AD ELEV PSN	-145 FT
5	MAG VAR/Annual Change	7° E (2018) / 0.03°
6	AD Administration, address, telephone, telefax, telex, AFS	Post: Authority of Airport JSC "Semey International Airport" 071410 Semey, Republic of Kazakhstan Phone: +7 (7222) 360033 Phone: +7 (7222) 443951 Fax: +7 (7222) 360033 AFS: UASSAPDU AFS: UASSAPZT Email: airportsemey@mail.ru
7	Types of traffic permitted (IFR/VFR)	IFR-VFR
8	Remarks	Nil

UASS AD 2.3 Operational Hours

1	AD Operator	See NOTAM Phone: +7 (7222) 360033
2	Customs and immigration	AVBL
3	Health and sanitation	ANY 02:00 - 11:00 UTC Phone: +7 (7222) 360033
4	AIS Briefing Office	ANY 02:00 - 12:00 UTC
5	ATS Reporting Office (ARO)	ANY 02:00 - 12:00 UTC Phone: +7 (7222) 569134 AFS: UASSZTZX
6	MET Briefing Office	HO Phone: +7 (7222) 565117 Fax: +7 (7222) 565117 AFS: UASSYMYX
7	ATS	See NOTAM Phone: +7 (7222) 569034
8	Fuelling	ANY 02:00 - 11:00 UTC Phone: +7 (7222) 443951

9	Handling	ANY 02:00 - 11:00 UTC Phone: +7 (7222) 443951
10	Security	H24 Phone: +7 (7222) 363702
11	De-icing	ANY 02:00 - 11:00 Phone: +7 (7222) 443951
12	Remarks	Another time by request

UASS AD 2.4 Handling Services And Facilities

1	Cargo-handling facilities	Nil
2	Fuel/oil types	TS, RT/Nil
3	Fuelling facilities/capacity	AVBL without limitation
4	De-icing facilities	AVBL
5	Hangar space for visiting aircraft	NOT AVBL
6	Repair facilities for visiting aircraft	Minor repairs in the engineering and aviation service
7	Remarks	Nil

UASS AD 2.5 Passenger Facilities

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

UASS AD 2.6 Rescue And Fire Fighting Services

1	AD category for fire fighting	CAT A6
2	Rescue equipment	AVBL
3	Capability for removal of disabled aircraft	AVBL: Up to 90 tons Phone: +7 (7222) 443951
4	Remarks	Nil

UASS AD 2.7 Seasonal Availability - Clearing

1	Types of clearing equipment	2 wide snow plow, 1 rotor, 1 loader, 2 tractor
2	Clearance priorities	1. RWY 2. TWY 7 3. Stands
3	Remarks	Nil

UASS 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 26 I/D/2	ISP	110,3 MHZ	H24	502058.8N 0801214.2E		Nil	Nil
GP 26 I/C/2		335 MHZ		502104.5N 0801445.3E			
DME 26	ISP	CH 40X		502104.5N 0801445.3E	700 FT		
NDB	S	850 KHZ	H24	502116.3N 0801623.3E	Nil	Nil	Nil
DVOR/DME (7°E/2014)	SEM	115,3 MHZ CH 100X	H24	502058.7N 0801437.5E	700 FT	Nil	Nil

UASS AD 2.20 Local Aerodrome Regulations

When visibility 550 m or less TKOF should be carried out from RWY 26 DTHR.

Takeoff from RWY 26 THR available

UASS AD 2.21 Noise Abatement Procedures

NIL

UASS AD 2.22 Flight procedures

1. Flight and ground movement procedures.

Aircraft movement on the aerodrome is carried out by taxiing. Taxiing is carried out along centre lines of taxiway, apron and stands.

The aircraft is not towed on the aerodrome.

TWY 2 are designated for taxiing of State aviation aircraft into/out of stands.

TWY 7 is designated for taxiing of Civil aviation aircraft into/out of stands.

TWY 7 is designated for taxiing of ICAO 6 aircraft.

TWY 9 is suitable for aircraft taxiing with maximum weight less than 30 tons, in accordance with technical suitability, according to aircraft Flight Operational manual.

Aircraft following shall be carried out by specially intended for this purpose follow-me vehicle. Aircraft following shall be carried out in IMC when visibility is less than 400 m or in case if markings on maneuvering area are not visible (due to packed snow or in other cases), or by flight crew's request. In that case engineer of airfield service works as aircraft follower on duty.

Two-way radio communication shall be established on 166,350 MHz during aircraft following.

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

Aircraft following shall be carried out:

- by flight crew request;
- in IMC when visibility is less than 400 m.

Taxiing speed shall be chosen by pilot in-command of the aircraft depending on condition of taxing surface, the presence of obstacles and visibility.

Crossing the ILS critical areas by aircraft, ground vehicles and other vehicles shall be carried out by the clearance of ATC Tower. If an aircraft is entering the final approach track or it's finally approaching, crossing the ILS critical areas on the manoeuvring area is prohibited.

Taxiing into/out from aircraft stand №3 to aircraft stand №4 allowed via markings on apron

Taxiing into/out from aircraft stand №4 to aircraft stand №3 allowed via markings on apron

2. Low Visibility Procedures.

Low Visibility Procedures (LVP) are effected in IMC, during nighttime, which includes:

- engaging of aerodrome lighting facilities: during night flights – 15 minutes before sunset or estimated time of aircraft arrival, during aircraft departure after request for engine start-up.
- in daytime – when visibility less than 2000 m.
- in other cases – by flight crew request.
- During flights of general aviation RWY inspection shall be carried out by engineer of airfield service with further report about obstacle presence (absence) to controller of "Semey Tower" control centre.

When visibility 550 m or less TKOF should be carried out from RWY 26 DTHR

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 4000 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	ALPHA	N504042 E0801943	002° 20.0 nm SEM DVOR/DME	Exit

№	Waypoint name (visual reference)	Geographical coordinates	Radial (mag.) and distance from NAVAID (ARP)	Remarks
2	BRAVO	N503645 E0803352	031° 20.0 nm SEM DVOR/DME	Entrance
3	CHARLIE	N503046 E0804157	053° 20.0 nm SEM DVOR/DME	Exit
4	DELTA	N502627 E0804442	067° 20.0 nm SEM DVOR/DME	Entrance
5	ECHO (East side of Topkashi)	N502251 E0804545	077° 20.0 nm SEM DVOR/DME	Exit
6	FOXTROT (visual reference – P-24 highway)	N502010 E0804551	085° 20.0 nm SEM DVOR/DME	Entrance
7	GOLF (SW side of Kerevankol lake)	N500934 E0804015	117° 20.0 nm SEM DVOR/DME	Exit
8	HOTEL (visual reference – west of the railroad, M-38 highway)	N500637 E0803618	129° 20.0 nm SEM DVOR/DME	Entrance
9	INDIA (South side of Karakol)	N500250 E0800134	198° 20.0 nm SEM DVOR/DME	Exit
10	JULIET	N500740 E0795124	221° 20.0 nm SEM DVOR/DME	Entrance
11	KILO	N501711 E0794359	252° 20.0 nm SEM DVOR/DME	Exit
12	LIMA (visual reference - railway)	N502525 E0794410	276° 20.0 nm SEM DVOR/DME	Entrance
13	MIKE (east side of Bokenshi)	N502924 E0794616	288° 20.0 nm SEM DVOR/DME	Exit
14	TANGO (SE side of Zhylandy)	N503632 E0795457	314° 20.0 nm SEM DVOR/DME	Entrance
15	STARAIA KREPOST (Northern outskirts of Staraia Krepost)	N503013 E0800558	322° 10.8 nm SEM VOR/DME	Holding, circle and absolute altitudes by “Tower” ATC instructions
16	Ferma KERNEI	N501655 E0802746	109° 9.4 nm SEM DVOR/DME	Holding, circle and absolute altitudes by “Tower” ATC instructions
17	Zimovka STARIY KULTOBE	N501414 E0800601	212° 8.7 nm SEM DVOR/DME	Holding, circle and absolute altitudes by “Tower” ATC instructions

UASS 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 south-east to north-west; in autumn: in the counterdirection.

Morning migration from 05.00 to 09.00, evening migration from 17.00 to 20.00. Bird species include crows, jackdaws, sparrows, pigeons, kites. The flight altitudes varies from 100 to 400 m above ground level.

In case of necessity, the aerodrome control point 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 takeoff, approach, climbing, descent.

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

UASS AD 2.24 Charts Related To An Aerodrome

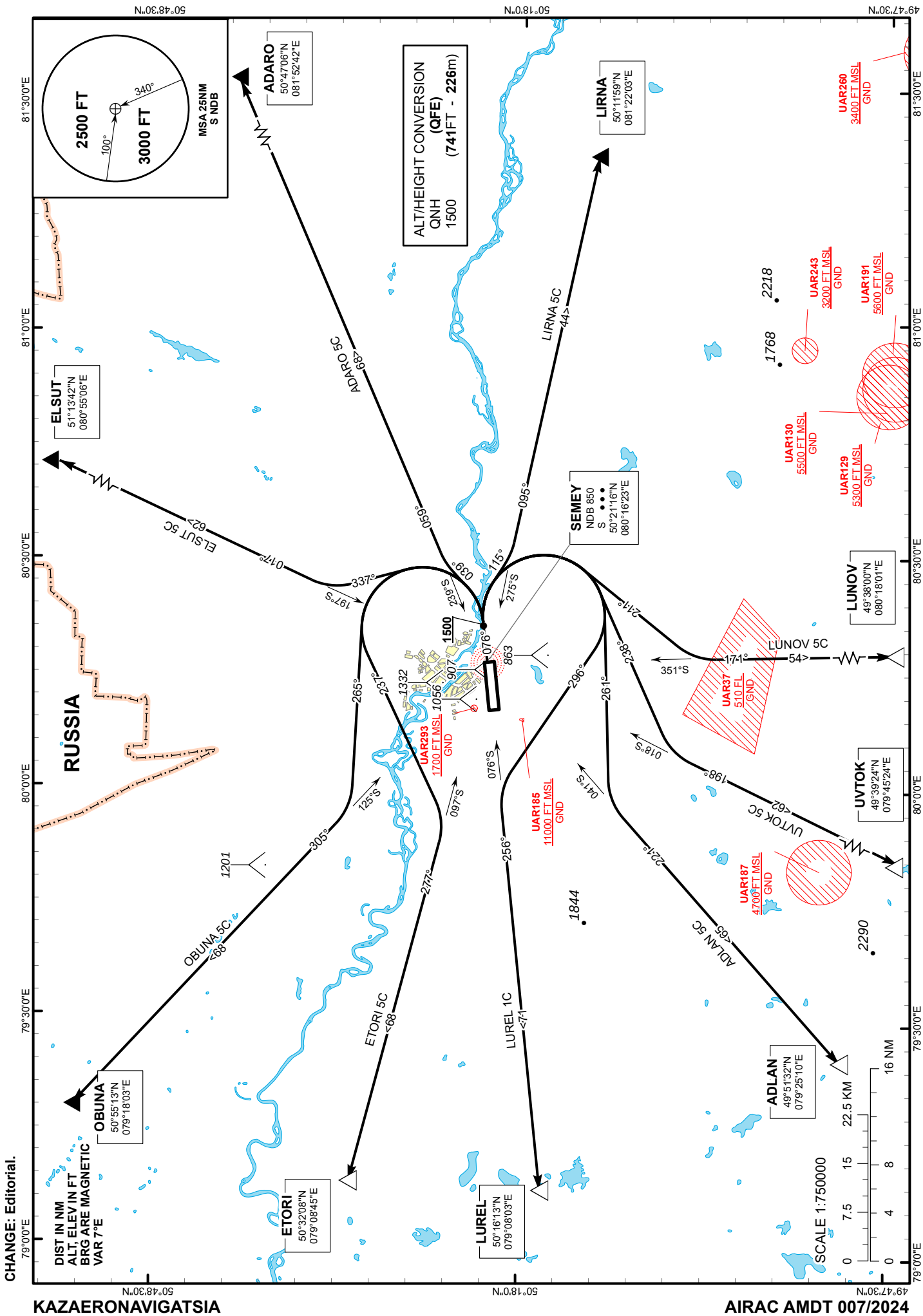
STANDARD DEPARTURE CHART INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

SEMEY TOWER 128.0
SEMEY ATIS (EN) 118.5
SEMEY ATIS (RU) 122.4

ADARO 5C, ADLAN 5C, ELSUT 5C, ETORI 5C, LIRNA 5C, LUNOV 5C, OBUNA 5C, LUREL 1C, UVTOK 5C

SEMEY RWY 08



STANDARD DEPARTURE ROUTES - INSTRUMENT (SID) SEMEY RWY 08
OBUNA 5C After take-off climb straight ahead to 1500 FT, turn LEFT on track 265° until intercept bearing 125°S, then proceed on track 305° to OBUNA (N505513 E0791803).
ELSUT 5C After take-off climb straight ahead to 1500 FT, turn LEFT on track 337° until intercept bearing 197°S, then proceed on track 017° to ELSUT (N511342 E0805506).
ADARO 5C After take-off climb straight ahead to 1500 FT, turn LEFT on track 039° until intercept bearing 239°S, then proceed on track 059° to ADARO (N504706 E0815242).
LIRNA 5C After take-off climb straight ahead to 1500 FT, turn RIGHT on track 115° until intercept bearing 275°S, then proceed on track 095° to LIRNA (N501159 E0812203).
LUNOV 5C After take-off climb straight ahead to 1500 FT, turn RIGHT on track 211° until intercept bearing 351°S, then proceed on track 171° to LUNOV (N493800 E0801801).
UVTOK 5C After take-off climb straight ahead to 1500 FT, turn RIGHT on track 238° until intercept bearing 018°S, then proceed on track 198° to UVTOK (N493924 E0794524).
ADLAN 5C After take-off climb straight ahead to 1500 FT, turn RIGHT on track 261° until intercept bearing 041°S, then proceed on track 221° to ADLAN (N495132 E0792510).
LUREL 1C After take-off climb straight ahead to 1500 FT, turn RIGHT on track 296° until intercept bearing 076°S, then proceed on track 256° to LUREL (N501613 E0790803).
ETORI 5C After take-off climb straight ahead to 1500 FT, turn LEFT on track 237° until intercept bearing 097°S, then proceed on track 277° to ETORI (N503208 E0790845).

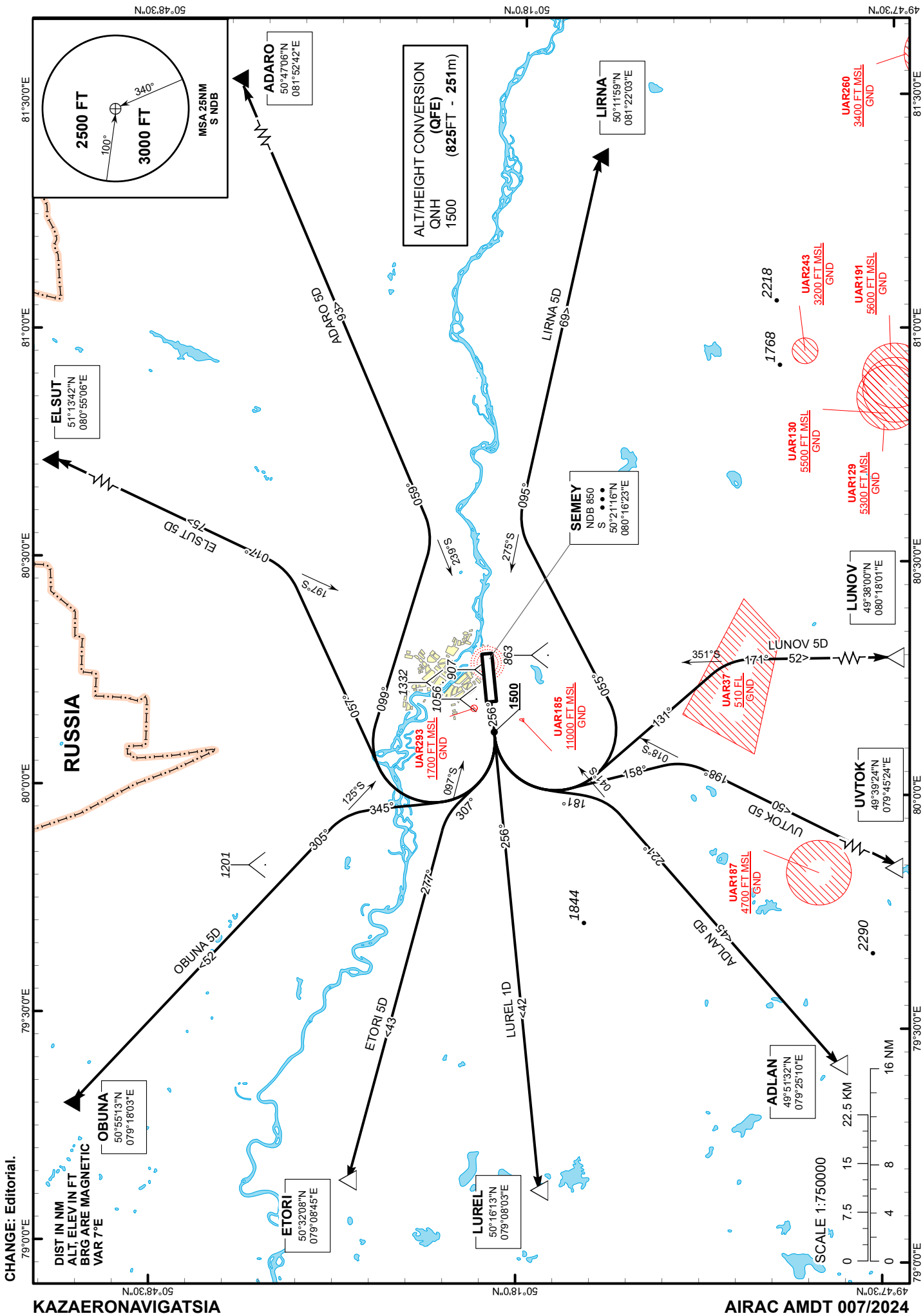
STANDARD DEPARTURE CHART INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

SEMEY TOWER 128.0
SEMEY ATIS (EN) 118.5
SEMEY ATIS (RU) 122.4

ADARO 5D, ADLAN 5D, ELSUT 5D, ETORI 5D, LIRNA 5D, LUNOV 5D, OBUNA 5D, LUREL 1D, UVTOK 5D

SEMEY RWY 26



STANDARD DEPARTURE ROUTES - INSTRUMENT (SID) SEMEY RWY 26
OBUNA 5D After take-off climb straight ahead to 1500 FT, turn RIGHT on track 345° until intercept bearing 125°S, then proceed on track 305° to OBUNA (N505513 E0791803).
ELSUT 5D After take-off climb straight ahead to 1500 FT, turn RIGHT on track 057° until intercept bearing 197°S, then proceed on track 017° to ELSUT (N511342 E0805506).
ADARO 5D After take-off climb straight ahead to 1500 FT, turn RIGHT on track 099° until intercept bearing 239°S, then proceed on track 059° to ADARO (N504706 E0815242).
LIRNA 5D After take-off climb straight ahead to 1500 FT, turn LEFT on track 055° until intercept bearing 275°S, then proceed on track 095° to LIRNA (N501159 E0812203).
LUNOV 5D After take-off climb straight ahead to 1500 FT, turn LEFT on track 131° until intercept bearing 351°S, then proceed on track 171° to LUNOV (N493800 E0801801).
UVTOK 5D After take-off climb straight ahead to 1500 FT, turn LEFT on track 158° until intercept bearing 018°S, then proceed on track 198° to UVTOK (N493924 E0794524).
ADLAN 5D After take-off climb straight ahead to 1500 FT, turn LEFT on track 181° until intercept bearing 041°S, then proceed on track 221° to ADLAN (N495132 E0792510).
LUREL 1D After take-off proceed on track 256° to LUREL (N501613 E0790803).
ETORI 5D After take-off climb straight ahead to 1500 FT, turn RIGHT on track 307° until intercept bearing 097°S, then proceed on track 277° to ETORI (N503208 E0790845).

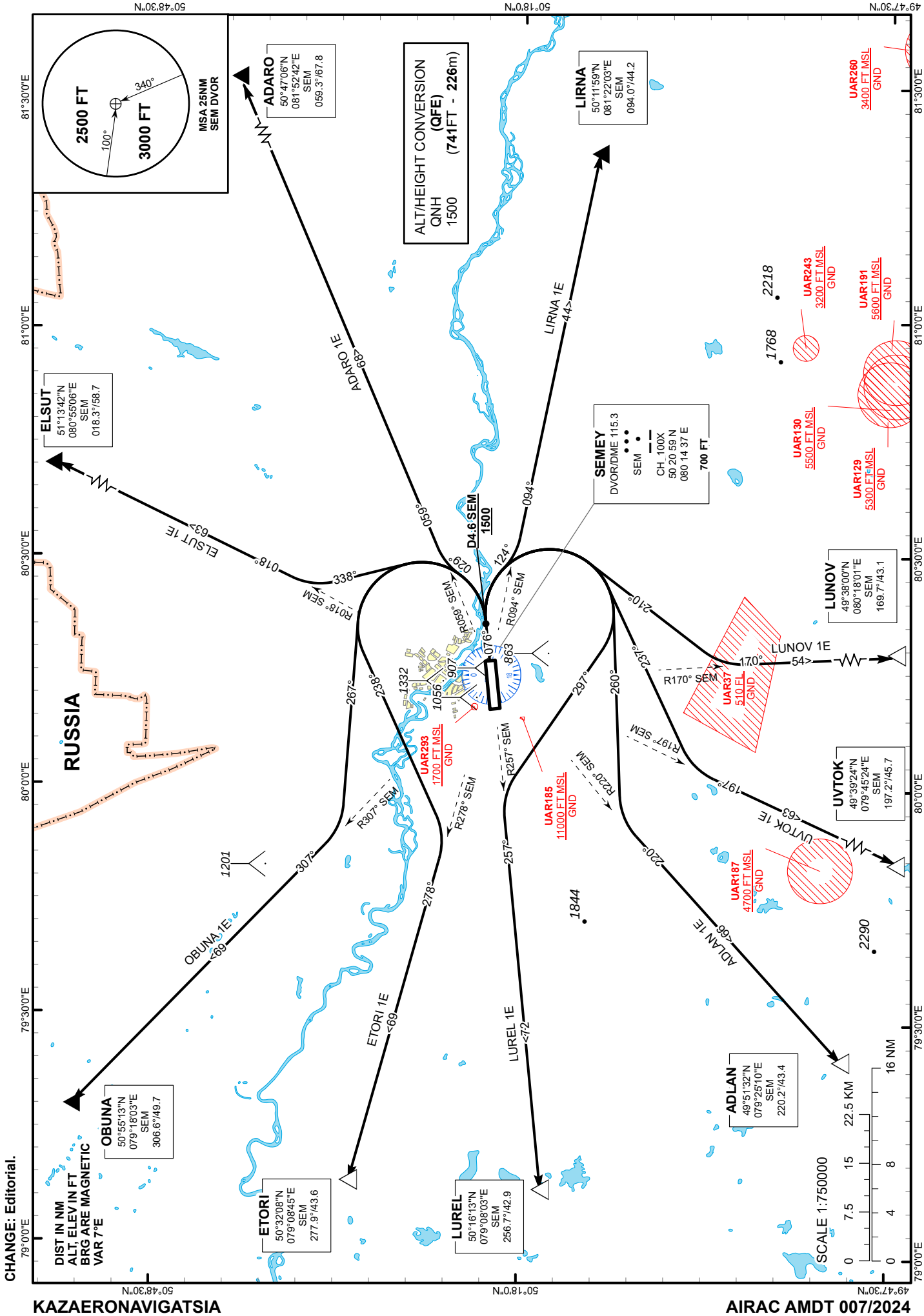
STANDARD DEPARTURE CHART INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

SEMEY TOWER 128.0
SEMEY ATIS (EN) 118.5
SEMEY ATIS (RU) 122.4

ADARO 1E, ADLAN 1E, ELSUT 1E, ETORI 1E, LIRNA 1E, LUNOV 1E, OBUNA 1E, LUREL 1E, UVTOK 1E

SEMEY RWY 08



STANDARD DEPARTURE ROUTES - INSTRUMENT (SID) SEMEY RWY 08
OBUNA 1E After take-off climb straight ahead to 1500 FT or above. At 4.6NM SEM turn LEFT on track 267° until intercept R307° SEM, then proceed on track 307° to OBUNA (R306.6° D49.7NM SEM).
ELSUT 1E After take-off climb straight ahead to 1500 FT or above. At 4.6NM SEM turn LEFT on track 338° until intercept R018° SEM, then proceed on track 018° to ELSUT (R018.3° D58.7NM SEM).
ADARO 1E After take-off climb straight ahead to 1500 FT or above. At 4.6NM SEM turn LEFT on track 029° until intercept R059° SEM, then proceed on track 059° to ADARO (R059.3° D67.8NM SEM).
LIRNA 1E After take-off climb straight ahead to 1500 FT or above. At 4.6NM SEM turn RIGHT on track 124° until intercept R094° SEM, then proceed on track 094° to LIRNA (R094.0° D44.2NM SEM).
LUNOV 1E After take-off climb straight ahead to 1500 FT or above. At 4.6NM SEM turn RIGHT on track 210° until intercept R170° SEM, then proceed on track 170° to LUNOV (R169.7° D43.1NM SEM).
UVTOK 1E After take-off climb straight ahead to 1500 FT or above. At 4.6NM SEM turn RIGHT on track 237° until intercept R197° SEM, then proceed on track 197° to UVTOK (R197.2° D45.7NM SEM).
ADLAN 1E After take-off climb straight ahead to 1500 FT or above. At 4.6NM SEM turn RIGHT on track 260° until intercept R220° SEM, then proceed on track 220° to ADLAN (R220.2° D43.4NM SEM).
LUREL 1E After take-off climb straight ahead to 1500 FT or above. At 4.6NM SEM turn RIGHT on track 297° until intercept R257° SEM, then proceed on track 257° to LUREL (R256.7° D42.9NM SEM).
ETORI 1E After take-off climb straight ahead to 1500 FT or above. At 4.6NM SEM turn LEFT on track 238° until intercept R278° SEM, then proceed on track 278° to ETORI (R277.9° D43.6NM SEM).

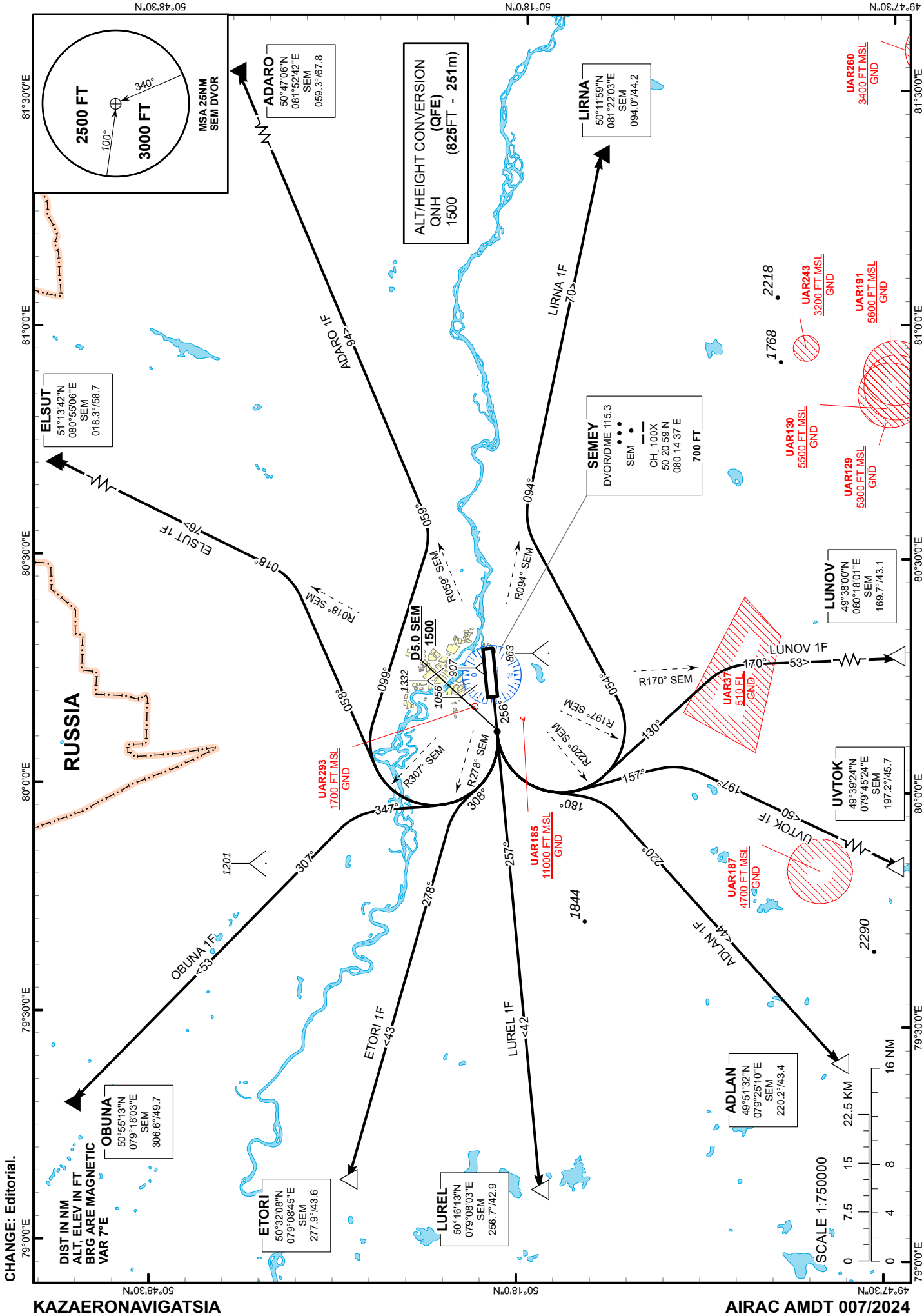
STANDARD DEPARTURE CHART INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

SEMEY TOWER 128.0
SEMEY ATIS (EN) 118.5
SEMEY ATIS (RU) 122.4

ADARO 1F, ADLAN 1F, ELSUT 1F, ETORI 1F, LIRNA 1F, LUNOV 1F, OBUNA 1F, LUREL 1F, UVTOK 1F

SEMEY RWY 26



CHANGE: Editorial.

DIST IN NM
ALT, ELEV IN FT
BRG ARE MAGNETIC
VAR 7°E

STANDARD DEPARTURE ROUTES - INSTRUMENT (SID) SEMEY RWY 26
OBUNA 1F After take-off climb straight ahead to 1500 FT or above. At 5.0NM SEM turn RIGHT on track 347° until intercept R307° SEM, then proceed on track 307° to OBUNA (R306.6° D49.7NM SEM).
ELSUT 1F After take-off climb straight ahead to 1500 FT or above. At 5.0NM SEM turn RIGHT on track 058° until intercept R018° SEM, then proceed on track 018° to ELSUT (R018.3° D58.7NM SEM).
ADARO 1F After take-off climb straight ahead to 1500 FT or above. At 5.0NM SEM turn RIGHT on track 099° until intercept R059° SEM, then proceed on track 059° to ADARO (R059.3° D67.8NM SEM).
LIRNA 1F After take-off climb straight ahead to 1500 FT or above. At 5.0NM SEM turn LEFT on track 054° until intercept R094° SEM, then proceed on track 094° to LIRNA (R094.0° D44.2NM SEM).
LUNOV 1F After take-off climb straight ahead to 1500 FT or above. At 5.0NM SEM turn LEFT on track 130° until intercept R170° SEM, then proceed on track 170° to LUNOV (R169.7° D43.1NM SEM).
UVTOK 1F After take-off climb straight ahead to 1500 FT or above. At 5.0NM SEM turn LEFT on track 157° until intercept R197° SEM, then proceed on track 197° to UVTOK (R197.2° D45.7NM SEM).
ADLAN 1F After take-off climb straight ahead to 1500 FT or above. At 5.0NM SEM turn LEFT on track 180° until intercept R220° SEM, then proceed on track 220° to ADLAN (R220.2° D43.4NM SEM).
LUREL 1F After take-off climb straight ahead to 1500 FT or above. At 5.0NM SEM proceed on track 257° to LUREL (R256.7° D42.9NM SEM).
ETORI 1F After take-off climb straight ahead to 1500 FT or above. At 5.0NM SEM turn RIGHT on track 308° until intercept R278° SEM, then proceed on track 278° to ETORI (R277.9° D43.6NM SEM).

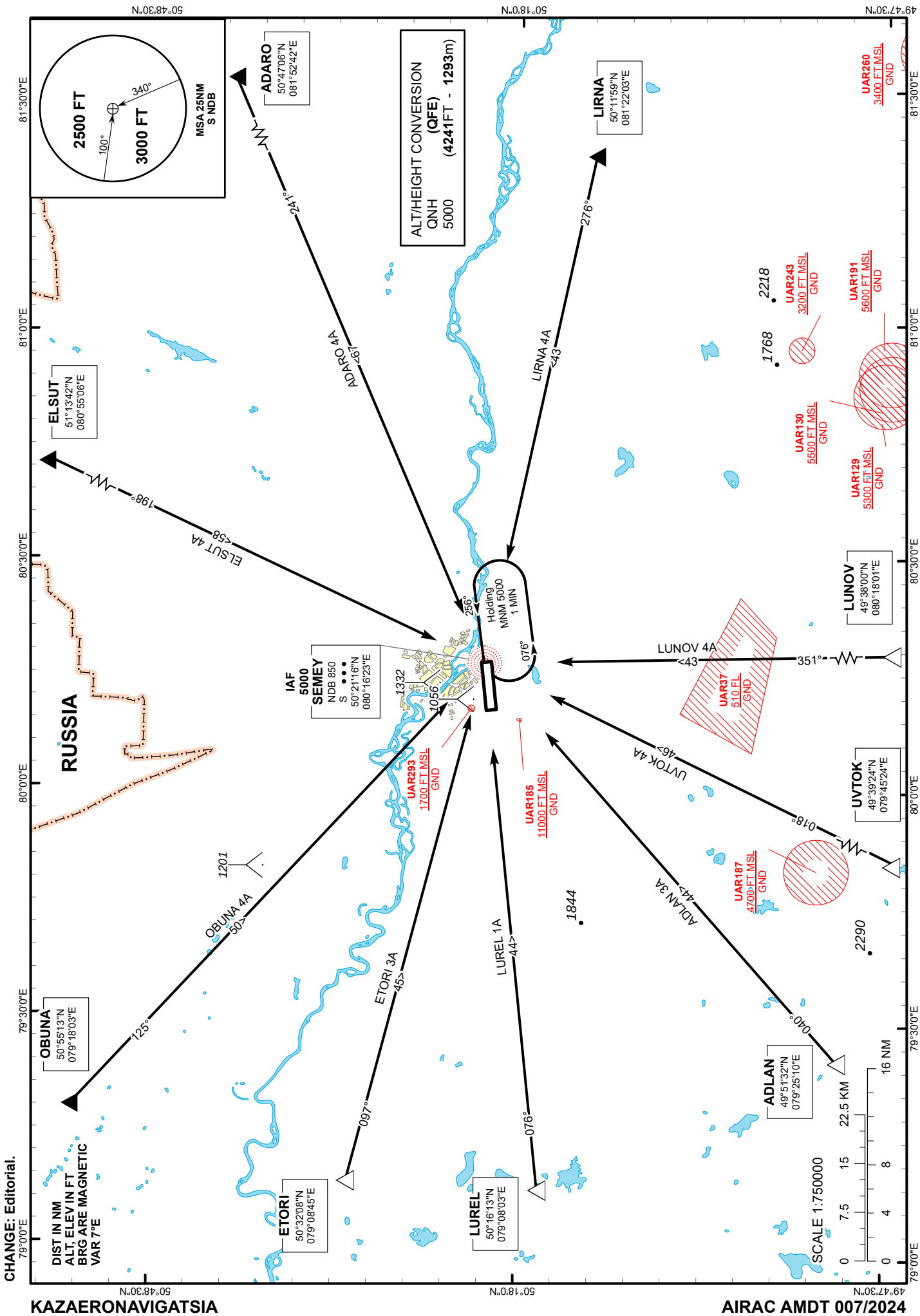
STANDARD ARRIVAL CHART INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

SEMEY TOWER 128.0
SEMEY ATIS (EN) 118.5
SEMEY ATIS (RU) 122.4

ADARO 4A, ADLAN 3A, ELSUT 4A, ETORI 3A, LIRNA 4A, LUNOV 4A, OBUNA 4A, LUREL 1A, UVTOK 4A

SEMEY
RWY 08



CHANGE: Editorial.

DIST IN NM
ALT, ELEV IN FT
BRG ARE MAGNETIC
VAR 7°E

STANDARD ARRIVAL ROUTES - INSTRUMENT (STAR) SEMEY RWY 08
ELSUT 4A After crossing ELSUT (N511342 E0805506), proceed on track 198° to LMM S. Cross S at 5000 FT.
ADARO 4A After crossing ADARO (N504706 E0815242), proceed on track 241° to LMM S. Cross S at 5000 FT.
LIRNA 4A After crossing LIRNA (N501159 E0812203), proceed on track 276° to LMM S. Cross S at 5000 FT.
LUNOV 4A After crossing LUNOV (N493800 E0801801), proceed on track 351° to LMM S. Cross S at 5000 FT.
UVTOK 4A After crossing UVTOK (N493924 E0794524), proceed on track 018° to LMM S. Cross S at 5000 FT.
ADLAN 3A After crossing ADLAN (N495132 E0792510), proceed on track 040° to LMM S. Cross S at 5000 FT.
LUREL 1A After crossing LUREL (N501613 E0790803), proceed on track 076° to LMM S. Cross S at 5000 FT.
ETORI 3A After crossing ETORI (N503208 E0790845), proceed on track 097° to LMM S. Cross S at 5000 FT.
OBUNA 4A After crossing OBUNA (N505513 E0791803). proceed on track 125° to LMM S. Cross S at 5000 FT.

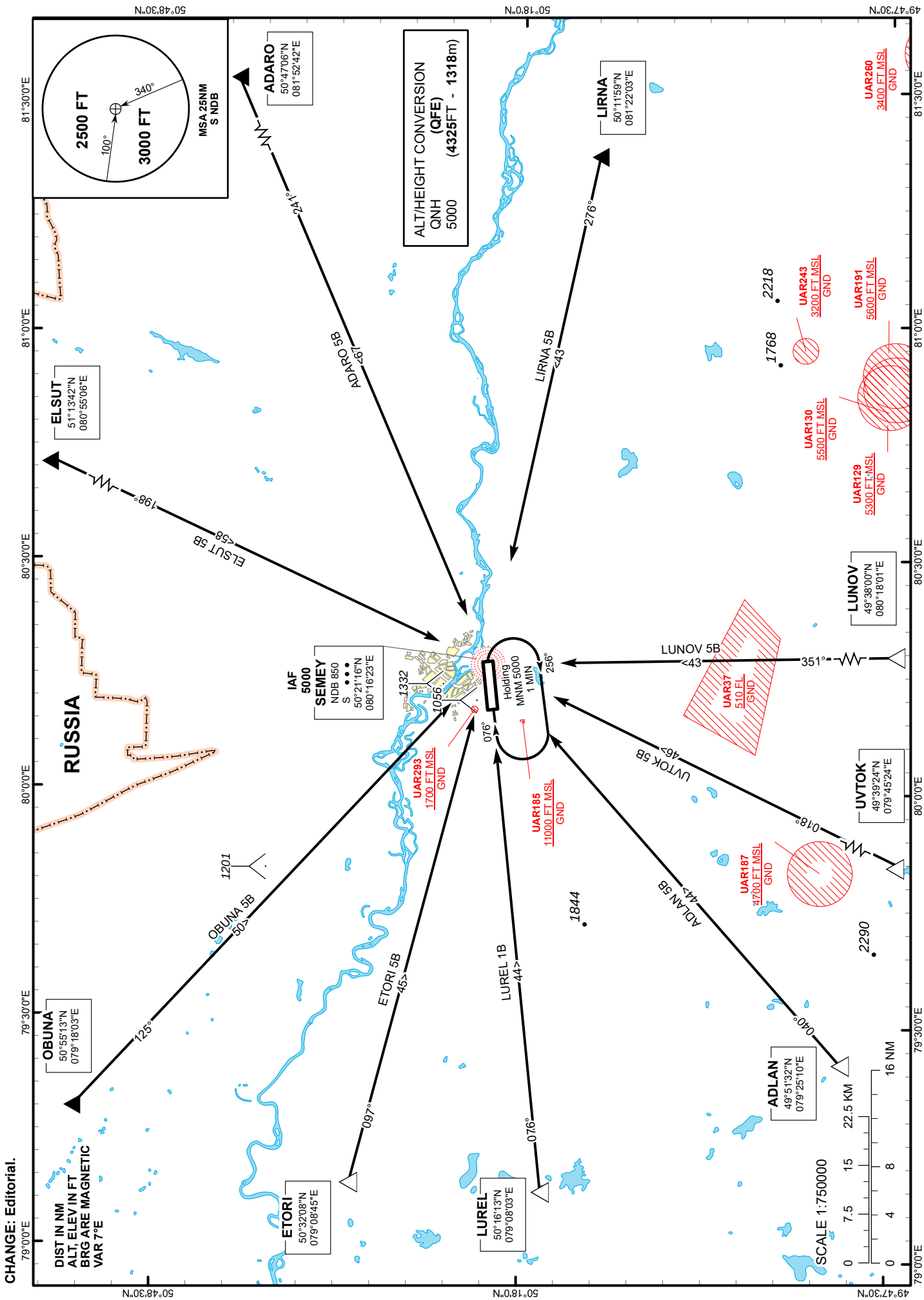
STANDARD ARRIVAL CHART INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

SEMEY TOWER 128.0
SEMEY ATIS (EN) 118.5
SEMEY ATIS (RU) 122.4

ADARO 5B, ADLAN 5B, ELSUT 5B, ETORI 5B, LIRNA 5B, LUNOV 5B, OBUNA 5B, LUREL 1B, UVTOK 5B

SEMEY
RWY 26



CHANGE: Editorial.

DIST IN NM
ALT, ELEV IN FT
BRG ARE MAGNETIC
VAR 7°E

STANDARD ARRIVAL ROUTES - INSTRUMENT (STAR) SEMEY RWY 26
ELSUT 5B After crossing ELSUT (N511342 E0805506), proceed on track 198° to LMM S. Cross S at 5000 FT.
ADARO 5B After crossing ADARO (N504706 E0815242), proceed on track 241° to LMM S. Cross S at 5000 FT.
LIRNA 5B After crossing LIRNA (N501159 E0812203), proceed on track 276° to LMM S. Cross S at 5000 FT.
LUNOV 5B After crossing LUNOV (N493800 E0801801), proceed on track 351° to LMM S. Cross S at 5000 FT.
UVTOK 5B After crossing UVTOK (N493924 E0794524), proceed on track 018° to LMM S. Cross S at 5000 FT.
ADLAN 5B After crossing ADLAN (N495132 E0792510), proceed on track 040° to LMM S. Cross S at 5000 FT.
LUREL 1B After crossing LUREL (N501613 E0790803), proceed on track 076° to LMM S. Cross S at 5000 FT.
ETORI 5B After crossing ETORI (N503208 E0790845), proceed on track 097° to LMM S. Cross S at 5000 FT.
OBUNA 5B After crossing OBUNA (N505513 E0791803). proceed on track 125° to LMM S. Cross S at 5000 FT.

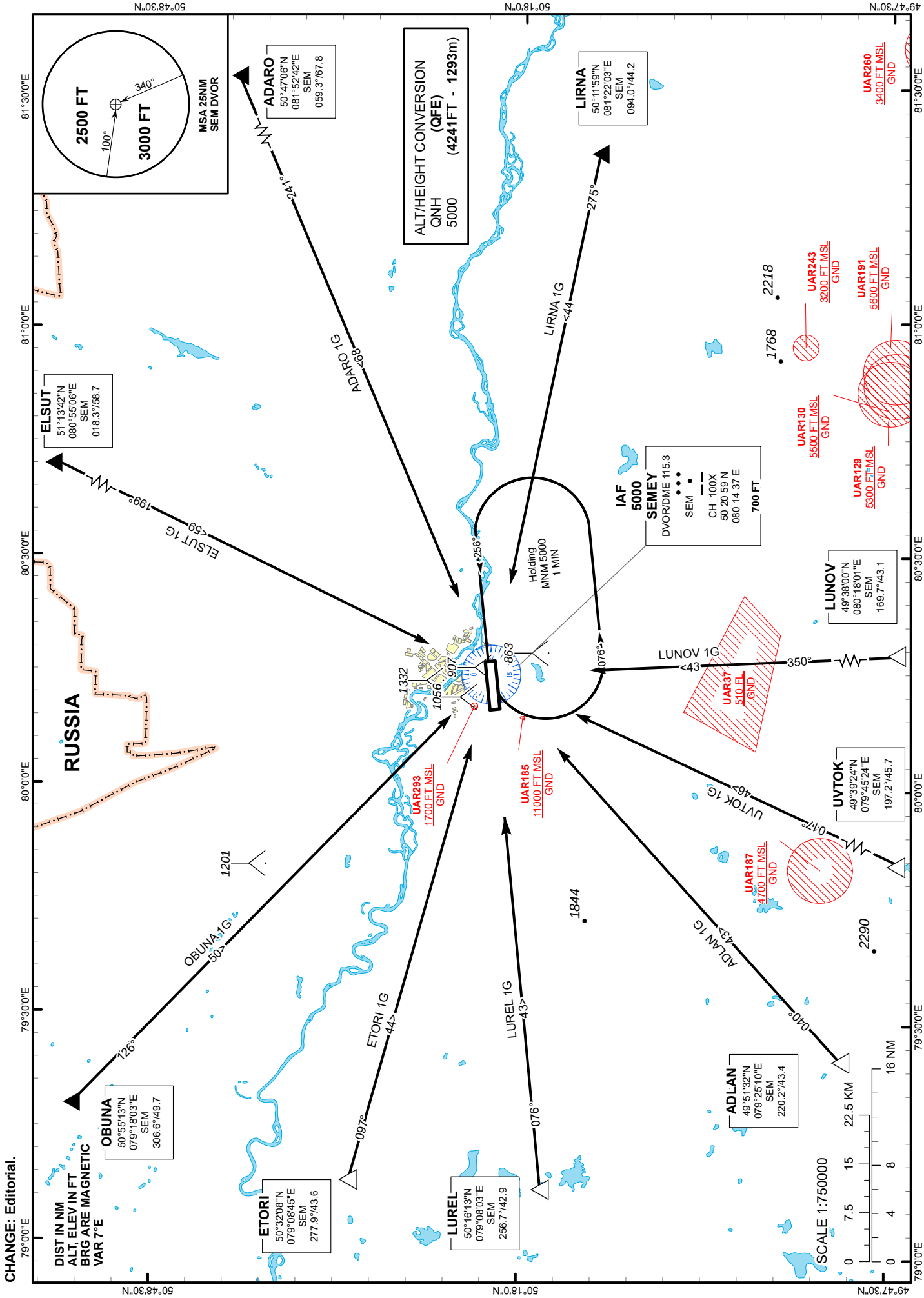
STANDARD ARRIVAL CHART INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

SEMEY TOWER 128.0
SEMEY ATIS (EN) 118.5
SEMEY ATIS (RU) 122.4

ADARO 1G, ADLAN 1G, ELSUT 1G, ETORI 1G, LIRNA 1G, LUNOV 1G, OBUNA 1G, LUREL 1G, UVTOK 1G

SEMEY
RWY 08



STANDARD ARRIVAL ROUTES - INSTRUMENT (STAR) SEMEY RWY 08
ELSUT 1G After crossing ELSUT (R018.3° D58.7NM SEM), proceed on track 199° to SEM. Cross SEM at 5000 FT
ADARO 1G After crossing ADARO (R059.3° D67.8NM SEM), proceed on track 241° to SEM. Cross SEM at 5000 FT
LIRNA 1G After crossing LIRNA (R094.0° D44.2NM SEM), proceed on track 275° to SEM. Cross SEM at 5000 FT
LUNOV 1G After crossing LUNOV (R169.7° D43.1NM SEM), proceed on track 350° to SEM. Cross SEM at 5000 FT
UVTOK 1G After crossing UVTOK (R197.2° D45.7NM SEM), proceed on track 017° to SEM. Cross SEM at 5000 FT
ADLAN 1G After crossing ADLAN (R220.2° D43.4NM SEM), proceed on track 040° to SEM. Cross SEM at 5000 FT
LUREL 1G After crossing LUREL (R256.7° D42.9NM SEM), proceed on track 076° to SEM. Cross SEM at 5000 FT
ETORI 1G After crossing ETORI (R277.9° D43.6NM SEM), proceed on track 097° to SEM. Cross SEM at 5000 FT
OBUNA 1G After crossing OBUNA (R306.6° D49.7NM SEM), proceed on track 126° to SEM. Cross SEM at 5000 FT

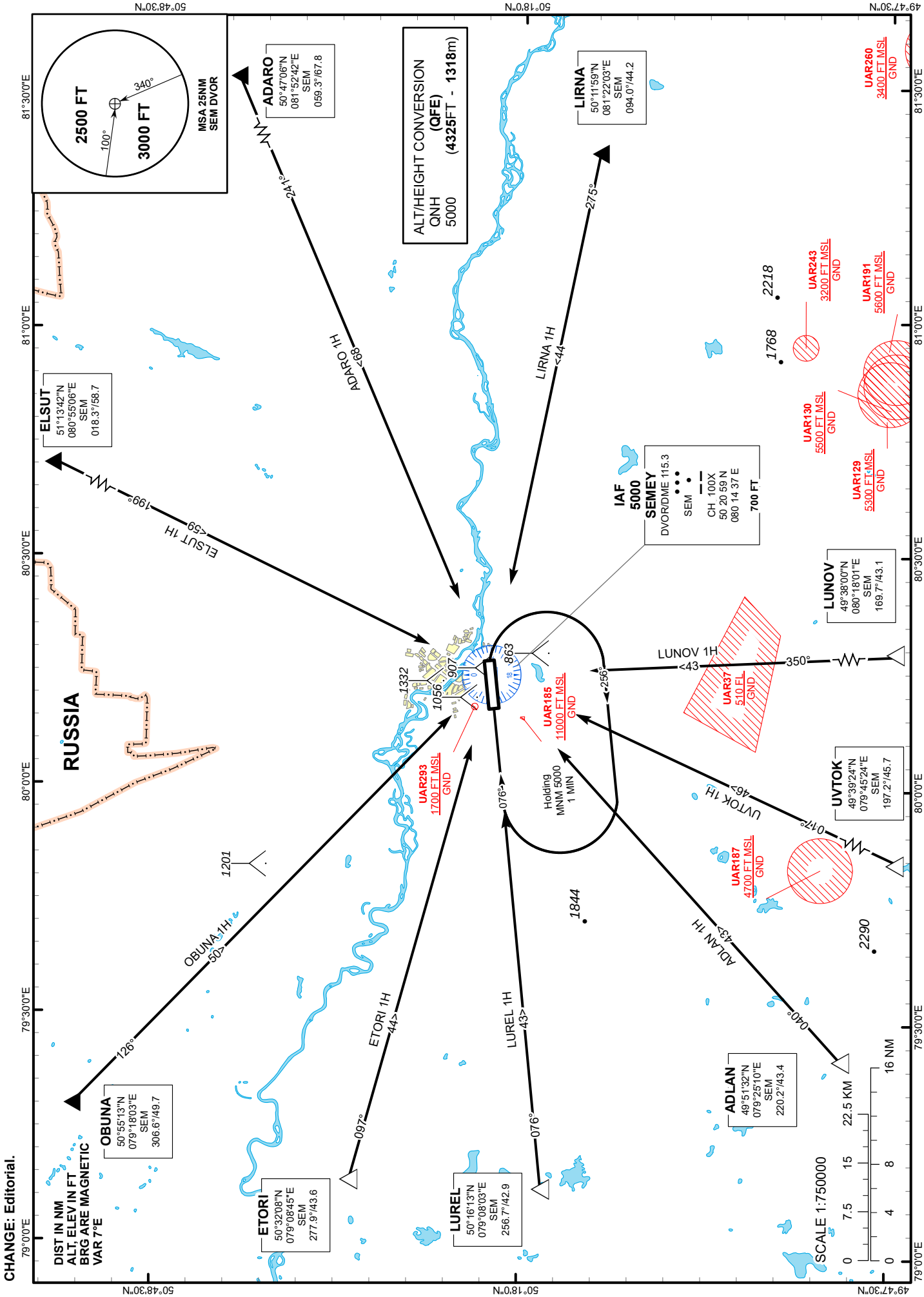
STANDARD ARRIVAL CHART INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

SEMEY TOWER 128.0
SEMEY ATIS (EN) 118.5
SEMEY ATIS (RU) 122.4

ADARO 1H, ADLAN 1H, ELSUT 1H, ETORI 1H, LIRNA 1H, LUNOV 1H, OBUNA 1H, LUREL 1H, UVTOK 1H

SEMEY
RWY 26



CHANGE: Editorial.

STANDARD ARRIVAL ROUTES - INSTRUMENT (STAR) SEMEY RWY 26
ELSUT 1H After crossing ELSUT (R018.3° D58.7NM SEM), proceed on track 199° to SEM. Cross SEM at 5000 FT
ADARO 1H After crossing ADARO (R059.3° D67.8NM SEM), proceed on track 241° to SEM. Cross SEM at 5000 FT
LIRNA 1H After crossing LIRNA (R094.0° D44.2NM SEM), proceed on track 275° to SEM. Cross SEM at 5000 FT.
LUNOV 1H After crossing LUNOV (R169.7° D43.1NM SEM), proceed on track 350° to SEM. Cross SEM at 5000 FT.
UVTOK 1H After crossing UVTOK (R197.2° D45.7NM SEM), proceed on track 017° to SEM. Cross SEM at 5000 FT.
ADLAN 1H After crossing ADLAN (R220.2° D43.4NM SEM), proceed on track 040° to SEM. Cross SEM at 5000 FT.
LUREL 1H After crossing LUREL (R256.7° D42.9NM SEM), proceed on track 076° to SEM. Cross SEM at 5000 FT.
ETORI 1H After crossing ETORI (R277.9° D43.6NM SEM), proceed on track 097° to SEM. Cross SEM at 5000 FT.
OBUNA 1H After crossing OBUNA (R306.6° D49.7NM SEM), proceed on track 126° to SEM. Cross SEM at 5000 FT.

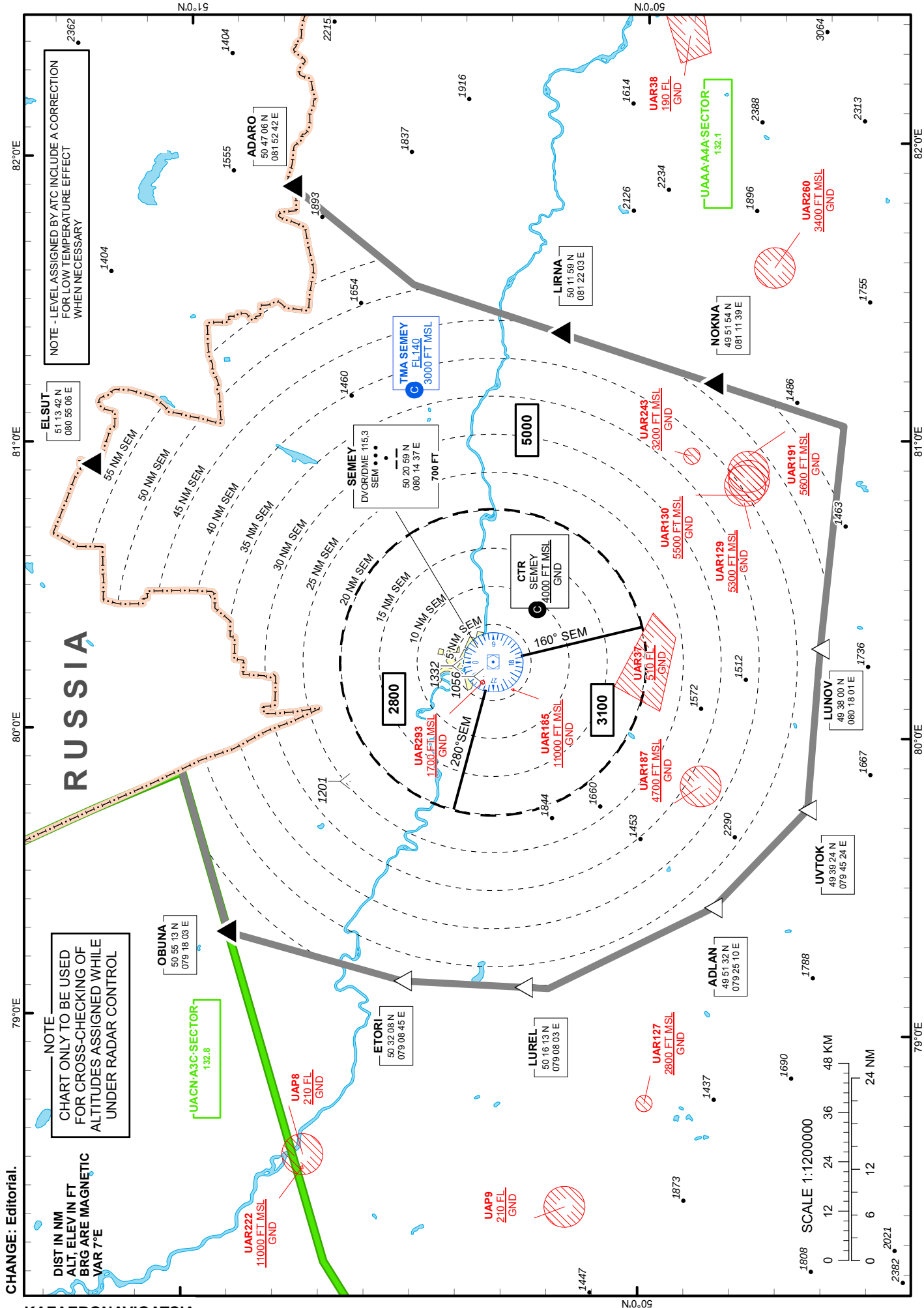
ATC Surveillance Minimum Altitude Chart - ICAO

TRANSITION ALTITUDE 10000 FT

AERODROME ELEV *759 FT*

SEMEY TOWER 128.0
SEMEY ATIS (EN) 118.5
SEMEY ATIS (RU) 122.4

SEMEY



CHANGE: Editorial.

DIST IN NM
ALT, ELEV IN FT
BRG ARE MAGNETIC
VAR 7°E

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UAII AD 2

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

UAII AD 2.1 Aerodrome Location Indicator And Name

UAII - SHYMKENT

UAII AD 2.2 Aerodrome Geographical And Administrative Data

1	ARP coordinates and site at AD	422154N 0692832E At the centre of RWY
2	Direction and distance from (city)	298°, 6.4 NM of Shymkent center
3	Elevation/Reference temperature	1387 FT/26° C
4	Geoid undulation at AD ELEV PSN	-141 FT
5	MAG VAR/Annual Change	6° E (2013) / 0.03°
6	AD Administration, address, telephone, telefax, telex, AFS	Post: Authority of Airport 160003 Shymkent, JSC "Shymkent Airport" Republic of Kazakhstan Phone: +7 (7252) 455033 (ext 10-15) Fax: +7 (7252) 455033 (ext 10-15) AFS: UAIIAPDU Email: reception@airserver.kz
7	Types of traffic permitted (IFR/VFR)	IFR-VFR
8	Remarks	Nil

UAII AD 2.3 Operational Hours

1	AD Operator	H24 Phone: +7 (7252) 455033 (ext 11-44) Email: pdsp@airserver.kz
2	Customs and immigration	H24 Phone: +7 (7252) 945162 Phone: +7 (7252) 455141
3	Health and sanitation	H24 Phone: +7 (7252) 455033 (ext 10-32)
4	AIS Briefing Office	H24
5	ATS Reporting Office (ARO)	H24 Phone: +7 (7252) 945133 Phone: +7 (7252) 945141 Email: shadp@ans.kz
6	MET Briefing Office	H24 Phone: +7 (7252) 945168
7	ATS	H24
8	Fuelling	H24 Phone: +7 (7252) 945097 Email: pdsp@airserver.kz

9	Handling	H24 Phone: +7 (7252) 945097 Email: pdsp@airserver.kz
10	Security	H24 Phone: +7 (7252) 945101 Email: sab@airserver.kz
11	De-icing	H24 Phone: +7 (7252) 945097 Email: pdsp@airserver.kz
12	Remarks	Nil

UAII AD 2.4 Handling Services And Facilities

1	Cargo-handling facilities	Handling up to 7 tonnes weight: transport loading platform, loading conveyor, vehicle with a lifting body, forklift.
2	Fuel/oil types	TS-1, RT (equivalent to Jet A-1) / MS-8P, MS-20, SM-4.5
3	Fuelling facilities/capacity	AVBL without limitation Kraz-TZ-22 (17,6 tonnes)- 4 pcs Volvo-T3A-45 (36 tonnes)- 1 pcs
4	De-icing facilities	AVBL deicing fluid TYPE - 1, TYPE - 4.
5	Hangar space for visiting aircraft	NOT AVBL for visiting aircraft
6	Repair facilities for visiting aircraft	AVBL for minor repair
7	Remarks	Nil

UAII AD 2.5 Passenger Facilities

1	Hotels	Near the AD and in the city
2	Restaurants	In the city Shymkent
3	Transportation	Buses, taxis
4	Medical facilities	Aid post at Airport Terminal, ambulance service, hospitals in Shymkent
5	Bank and Post Office	In the city Shymkent, post office, bank ATM
6	Tourist Office	AVBL
7	Remarks	Nil

UAII AD 2.6 Rescue And Fire Fighting Services

1	AD category for fire fighting	CAT A8
2	Rescue equipment	AVBL for B-747-200/300/400, B-737-300/400/500, A-319/ 320/321, Embraer-190, TU-154, IL-18, AN-24, YAK-40 5 fire engines with a total volume 53,000 liters of extinguishing agent.
3	Capability for removal of disabled aircraft	Available equipment: 1. A device for lifting an aircraft by the forward fuselage 2. A device for lifting an aircraft by the wing Phone: +7 (7252) 455030 (ext.1148) Email: spasop@airserver.kz

6. **Large aircraft operation restrictions, including aircraft own engines power restrictions.**

Take-off weight restriction – not more than 376 655kg, without traffic intensity restriction for B747-400

Traffic intensity restriction no more than 10 departures per day for B747-400

Taxiing out from stands 1,19A to the TWY A shall be carried out at minimum speed and minimum own engine power.

7. **In case of invisibility of taxiway centerlines in winter conditions, taxiing shall be carried out after the Follow me car.**

8. **Disabled aircraft removal procedures.**

In case of removal the disabled aircraft, the operator of the Shymkent airport - JSC "Shymkent Airport" and military unit No. 55652, together with the holders of the registration certificate of the aircraft, combine their efforts to evacuate the aircraft as soon as possible.

The holder of the registration number of the aircraft shall be notified via production and dispatcher service or via ATM of Shymkent branch of “Kazaeronavigatsia” RSE.

All removal works shall be carried out by aerodrome service with notification and coordination with ATM unit (“Tower”) of Shymkent branch of “Kazaeronavigatsia” RSE.

All necessary equipment and personnel shall be involved on first demand via production and dispatcher service or via other communication channels.

UAII AD 2.21 Noise Abatement Procedures

NIL

UAII AD 2.22 Flight Procedures

1. **Low Visibility Procedures.**

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

The start of LVP procedures is reported via ATIS or by an ATS dispatcher by radio with the following phrase: “**Low visibility procedures in operation**”.

Information about any changes in radio- and lighting systems includes in ATIS with further flight crew informing

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 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	VICTOR (bridge over Arys riv., outskirt of Kutarys)	N423545 E0693620	023° 15.3 nm SMK DVOR/DME	Entry/exit
2	WHISKEY (SE outskirts of Sastobe, road junction)	N423152 E0700113	064° 27.4 nm SMK DVOR/DME	Entry/exit
3	ZULU (NE outskirts of Shanak)	N420712 E0691431	205° 17.6 nm SMK DVOR/DME	Entry/exit
4	OSCAR (bridge over Arys riv., SW outskirts of Saryaryk)	N422751 E0685704	279° 22.5 nm SMK DVOR/DME	Entry/exit
5	HOTEL (south bank of the Bugun water basin)	N424227 E0690334	314° 26.3 nm SMK DVOR/DME	Entry/exit
6	INDIA (Western outskirts of Saryaryk)	N423226 E0693100	013° 10.6 nm SMK DVOR/DME	Holding
7	GOLF (south traverse of RWY 28 THR)	N421922 E0692647	171° 3.0 nm SMK DVOR/DME	Holding

UAII 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 6. Point 437. Standards of Aerodromes (Heliports) Operation Civil Aviation Republic Kazakhstan	Maximum switch-over time for lighting aids	Maximum switch-over time for lighting aids for precision approach category I runway exceeds the required.	An equivalent level of safety has been approved 05.04.2021 to 31.12.2022

2. Ornithological situation

Seasonal mass migration of birds (crows) at an altitude of up to 400 m in winter from November to March in the morning from dawn to 11 o'clock in the direction from northeast to southwest and in the evening from 16 o'clock to sunset from southwest to northeast.

To scare away birds, an air rifle, stuffed birds of prey, bioacoustic installations, aeromanes, gas cannons, a laser pistol, smoothbore weapons, a noise pistol and a hunter's signal are used.

The crew of the aircraft receive information about the ornithological situation before takeoff and landing by ATIS or from the ATS dispatcher.

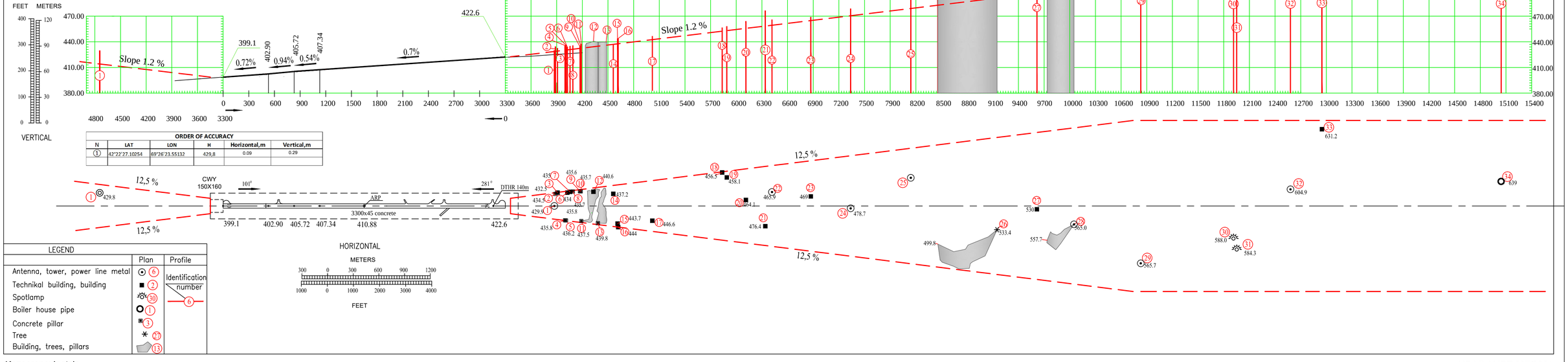
DIMENSIONS AND ELEVATIONS IN METERS MAG VAR 6°E (2013)

ORDER OF ACCURACY					
N	LAT	LON	H	Horizontal,m	Vertical,m
①	42°21'34.15111	69°30'04.77831	429,9	0.09	0.29
②	42°21'38.45187"	69°30'07.06342"	434,5	0.09	0.29
③	42°21'38.6855"C	69°30'08.2532"B	432,5	0.09	0.29
④	42°21'27.80145"C	69°30'7.98578"B	435,8	0.09	0.29
⑤	42°21'27.65943"C	69°30'8.40939"B	436,2	0.09	0.29
⑥	42°21'37.63567"C	69°30'13.05839"B	434,0	0.09	0.29
⑦	42°21'37.63029"C	69°30'14.53217"B	435,0	0.09	0.29
⑧	42°21'37.46477"	69°30'15.96735"	435,7	0.09	0.29
⑨	42°21'36.79276"C	69°30'19.50546"B	435,6	0.09	0.29
⑩	42°21'36.66616"C	69°30'19.82752"B	435,7	0.09	0.29
⑪	42°21'25.83220"C	69°30'15.86792"B	437,5	0.09	0.29
⑫	42°21'35.18362"C	69°30'26.00551"B	440,6	0.09	0.29
⑬	42°21'23.27097"	69°30'23.70456"	439,8	0.09	0.29
⑭	42°21'32.3152"C	69°30'35.4584"B	437,2	0.09	0.29
⑮	42°21'21.0266"C	69°30'33.2924"B	443,7	0.09	0.29
⑯	42°21'19.6568"C	69°30'33.1077"B	444,0	0.09	0.29
⑰	42°21'18.38669"	69°30'50.77109"	446,6	0.09	0.29

ORDER OF ACCURACY					
N	LAT	LON	H	Horizontal,m	Vertical,m
⑱	42°21'28.5319"C	69°31'31.9384"B	456,5	0.09	0.29
⑲	42°21'26.2359"C	69°31'33.4924"B	458,1	0.09	0.29
⑳	42°21'15.9979"C	69°31'39.6345"B	464,0	0.09	0.29
㉑	42°21'04.41000	69°31'45.40000	476,4	0.09	0.29
㉒	42°21'16.1233"C	69°31'53.5746"B	465,9	0.09	0.29
㉓	42°21'10.4091"C	69°32'11.9804"B	469,0	0.09	0.29
㉔	42°21'01.82000	69°32'29.84000	478,7	0.09	0.29
㉕	42°21'06.5487"C	69°33'03.7314"B	492,4	0.09	0.29
㉖	42°20'38.4824"C	69°33'38.5823"B	533,4	0.09	0.29
㉗	42°20'41.7096"C	69°34'01.0833"B	530,0	0.09	0.29
㉘	42°20'32.2487"C	69°34'17.1199"B	565,0	0.09	0.29
㉙	42°20'10.9587"C	69°34'44.2585"B	565,7	0.09	0.29
㉚	42°20'10.11000	69°35'33.29000	588,0	0.09	0.29
㉛	42°20'05.77000	69°35'33.28000	584,3	0.09	0.29
㉜	42°20'21.9512"C	69°36'08.3009"B	604,9	0.09	0.29
㉝	42°20'40.4919"C	69°36'32.3485"B	631,2	0.09	0.29
㉞	42°20'02.3687"C	69°37'52.7390"B	639,0	0.09	0.29

RUNWAY 10/28

DECLARED DISTANCES		
Runway 10		Runway 28
3300	TAKE – OFF RUN AVAILABLE	3300
3300	TAKE – OFF DISTANCE AVAILABLE	3450
3300	ACCELERATE – STOP DISTANCE AVAILABLE	3300
3300	LANDING DISTANCE AVAILABLE	3160



ORDER OF ACCURACY					
N	LAT	LON	H	Horizontal,m	Vertical,m
①	42°22'27.10254	69°26'23.55132	429,8	0.09	0.29

LEGEND	Plan	Profile
Antenna, tower, power line metal	⊙ 6	Identification number 6
Technikal building, building	■ 2	
Spotlamp	30	
Boiler house pipe	○ 1	
Concrete pillar	■ 3	
Tree	✳ 27	
Building, trees, pillars	13	

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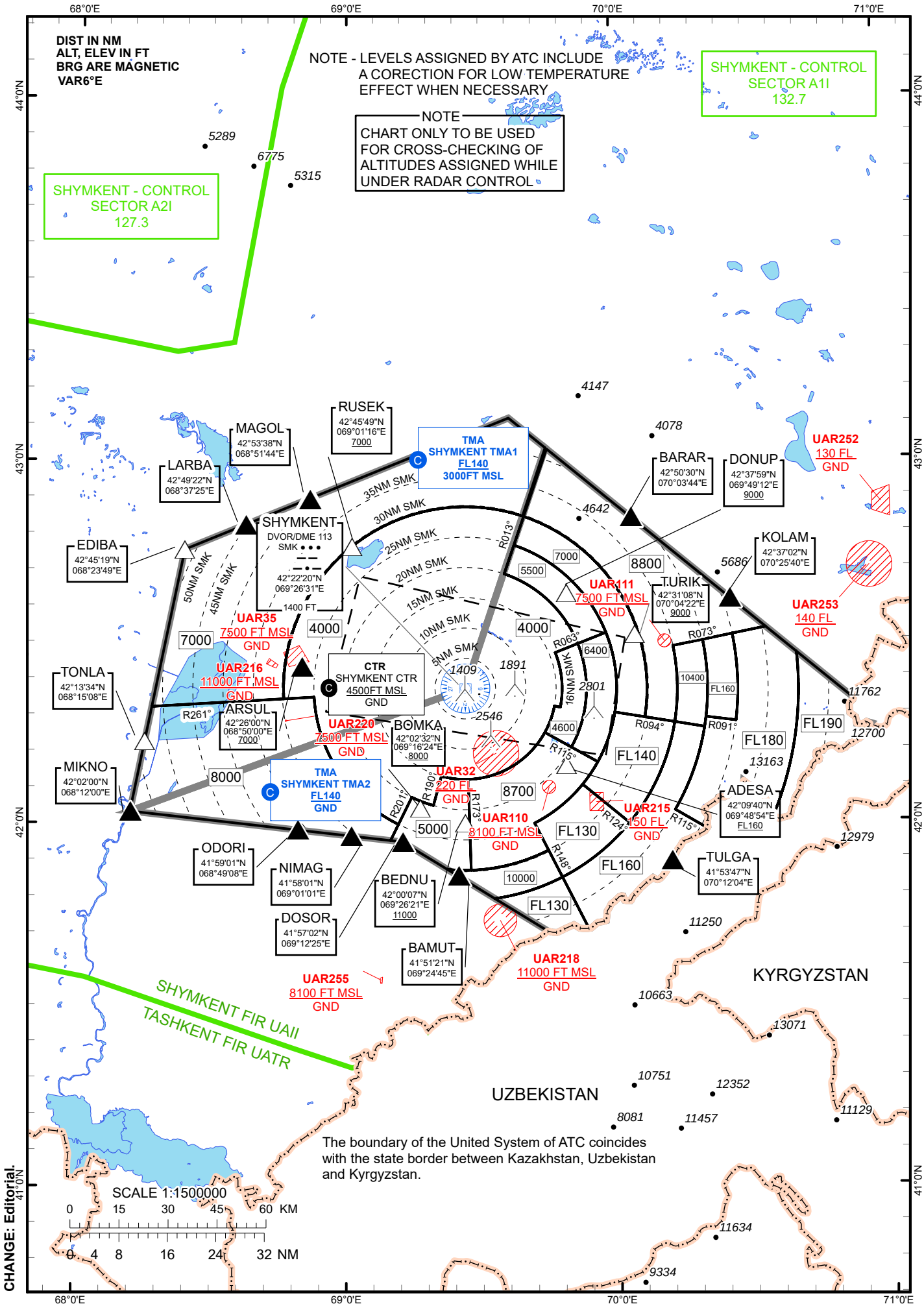
ATC Surveillance Minimum Altitude Chart ICAO

TRANSITION ALTITUDE
10000 FT

AERODROME ELEV *1387 FT*

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

SHYMKENT



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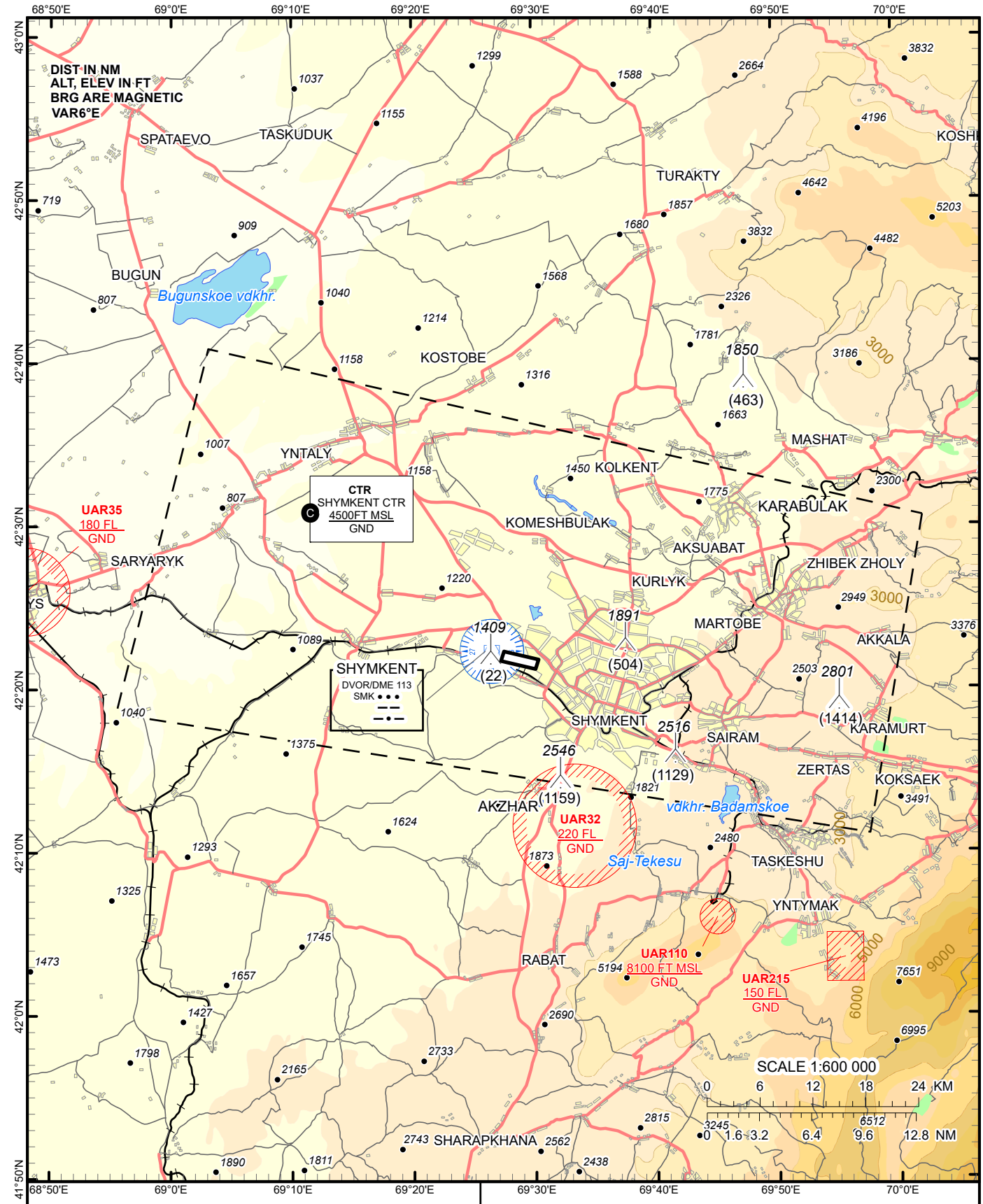
VISUAL APPROACH CHART - ICAO

AERODROME ELEV *1387 FT*
HEIGHTS RELATED TO AD ELEV

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

SHYMKENT



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UADD AD 2

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

UADD AD 2.1 Aerodrome Location Indicator And Name

UADD - TARAZ

UADD AD 2.2 Aerodrome Geographical And Administrative Data

1	ARP coordinates and site at AD	425116N 0711808E From THR 13 - 1749.9m
2	Direction and distance from (city)	230°, 4.3 NM of Taraz center
3	Elevation/Reference temperature	2190 FT/9,5° C
4	Geoid undulation at AD ELEV PSN	-132,9 FT
5	MAG VAR/Annual Change	6° E (2020) / 0,03
6	AD Administration, address, telephone, telefax, telex, AFS	Post: Authority of Airport 080000 Taraz, Airport, JSC "Aulie-ata International Airport" Republic of Kazakhstan Phone: +7 (7262) 542277 Phone: +7 (7262) 542244 Phone: +7 (7262) 941110 Fax: +7 (7262) 542255 AFS: UADDAPBF Email: ops@dmb.aero Email: reception@dmb.aero
7	Types of traffic permitted (IFR/VFR)	IFR-VFR
8	Remarks	Nil

UADD AD 2.3 Operational Hours

1	AD Operator	H24 Phone: +7 (7262) 542244 Phone: +7 (7262) 941110
2	Customs and immigration	H24 Phone: +7 (7262) 542244
3	Health and sanitation	H24 Phone: +7 (7262) 542244
4	AIS Briefing Office	HO
5	ATS Reporting Office (ARO)	H24 Phone: +7 (7262) 434995
6	MET Briefing Office	H24 Phone: +7 (7262) 436004
7	ATS	H24
8	Fuelling	H24 Phone: +7 (7262) 542244
9	Handling	H24 Phone: +7 (7262) 542244

10	Security	H24 Phone: +7 (7262) 542244
11	De-icing	H24 Phone: +7 (7262) 542244
12	Remarks	Nil

UADD AD 2.4 Handling Services And Facilities

1	Cargo-handling facilities	Handling up to 30 tonnes weight
2	Fuel/oil types	TS-1, RT/MS-20, MS-8PP
3	Fuelling facilities/capacity	Tanker 7.5t performance 30m3/hour Tanker 22t performance 60m3/hour Tanker 60t performance 140m3/hour
4	De-icing facilities	de-icing machine - 1 pcs
5	Hangar space for visiting aircraft	On request for light aircraft
6	Repair facilities for visiting aircraft	Minor repairs at aircraft repair base
7	Remarks	Nil

UADD 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 Taraz
5	Bank and Post Office	In the city Taraz, in the airport - bank ATM
6	Tourist Office	In the city Taraz
7	Remarks	Nil

UADD AD 2.6 Rescue And Fire Fighting Services

1	AD category for fire fighting	CAT A7
2	Rescue equipment	5 fire engines with a total volume fire extinguishing composition - 43 950 kg
3	Capability for removal of disabled aircraft	Lifting equipment 100 t (contract on the procedure for the removal of aircraft)
4	Remarks	The possibility of increasing the required level of fire protection up to 9 categories on request.

UADD AD 2.7 Seasonal Availability - Clearing

1	Types of clearing equipment	6 snow plow-brush machine, 1 rotor, 1 snow blower “KRAZ”
2	Clearance priorities	1. RWY 2. TWY 3. Stands
3	Remarks	Nil

Start up at the taxiways A, B, C, D, F, E is allowed in the presence of mobile fire-fighting appliances.

Deviation areas are absent.

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

In the period of flight operations at the aerodrome “Aulie-Ata” the work performance, the finding people and the movement of special vehicles within the boundaries of the critical zone is STRICTLY PROHIBITED.

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

There are not the restrictions on the use of its own power for taxiing.

9. The taxiing in winter conditions (apron), in cases if some taxiways are not equipped with center line lights or may be not visible due to snow.

In winter conditions when apron and taxiway can be covered with packed snow or ice, as well as on unequipped with center line lights of taxiway the taxiing on the crew request is leading by «Follow me» car.

The taxiing speed is chosen by pilot-in-command of the aircraft, but in all cases it must not exceed the speed established by the FCOM of the aircraft.

The crews of the aircraft in these conditions should be especially careful during taxiing.

10. The removing from the airfield of aircraft lost the ability to move on its own.

The airport provides activities on removing of aircraft, lost the ability to move on its own, special load-lifting, transport vehicles, ground support facilities, rigging, fire-fighting materials needed for packaging and transportation of equipment and parts of aircraft, as well as tare for gathering of drain petroleum product.

In cases when aircraft has lost the ability to move on its own, the aircraft from the runway, the security strip and taxiway is removed (evacuated) by dragging using specially adapted cables and tractor, in compliance with the measures on prevention the risk of fire, the damage of the equipment and ensuring the safety of people involved in these activities.

The removing of aircraft (evacuation) is performed by non-nominal calculation of AES.

If necessary, to involve specialists of other services and departments of “International Airport Aulie-Ata” JSC, as well as representatives of airlines - owner of aircraft and collaborating organizations.

UADD AD 2.21 Noise Abatement Procedures

NIL

UADD 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 “Approach” 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 “Approach” 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 “Approach” 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	DELTA (SE outskirts of Kokozek)	430946N 0714111E	040° 25.0 nm TAR DVOR/DME	Entry
2	HOTEL (NE outskirts of Akchulak)	430123N 0714835E	063° 25.0 nm TAR DVOR/DME	Exit
3	ALPHA (NE outskirts of Yernazar)	430900N 0705138E	307° 25.0 nm TAR DVOR/DME	Entry
4	BRAVO	431421N 0710100E	327° 25.0 nm TAR DVOR/DME	Exit
5	OSCAR (NW outskirts of Shaikoryk)	425739N 0711950E	016° 5.8 nm TAR DVOR/DME	Holding, circle and absolute altitude by “Approach” ATC instructions
6	INDIA (Southern outskirts of Sarykemer)	425736N 0712947E	055° 10.9 nm TAR DVOR/DME	Holding, circle and absolute altitude by “Approach” ATC instructions
7	TANGO (Northern outskirts of Aisha-Bibi)	425038N 0711228E	238° 3.6 nm TAR DVOR/DME	Holding, circle and absolute altitude by “Approach” ATC instructions

UADD 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. Data on the bird aggregations and the direction of their flight

The main directions of migration of birds in spring from south to north, in autumn from north to south (cranes, geese, ducks). There are migrations of birds such as magpies, crows and pigeons in different directions at heights from the ground up to 100 m.

The flight supervisor in the event of a dangerous ornithological situation informs the crew of the aircraft about

the presence of birds in the direction of take-off and landing, if necessary, gives recommendations on how to bypass the bird aggregations.

Measures to disperse the bird aggregations include periodic scaring of birds using technical means, removal of green space on the airfield, and termination of agricultural activities in the aerodrome area.

UADD AD 2.24 Charts Related To An Aerodrome

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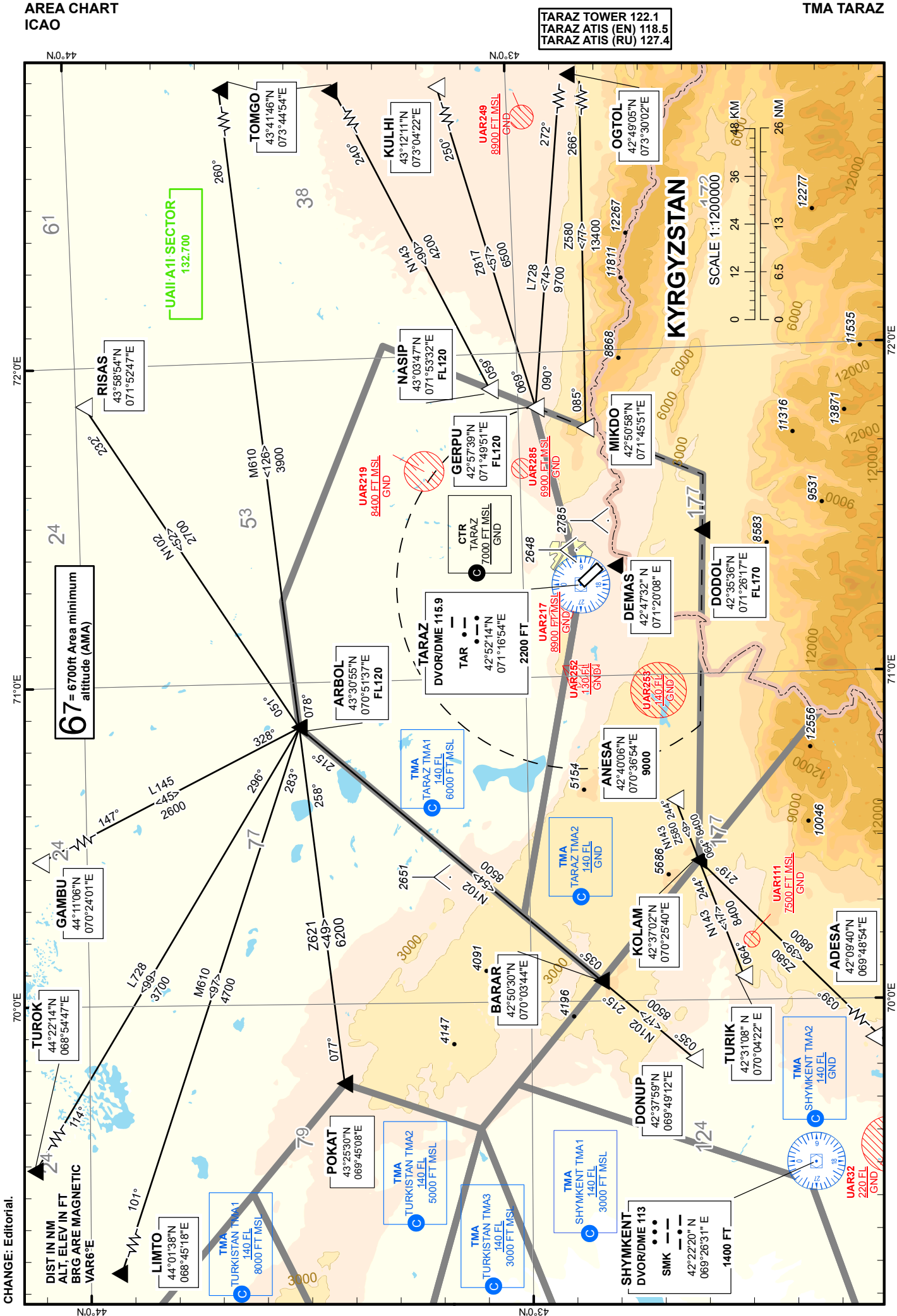
ICAO

TMA TARAZ



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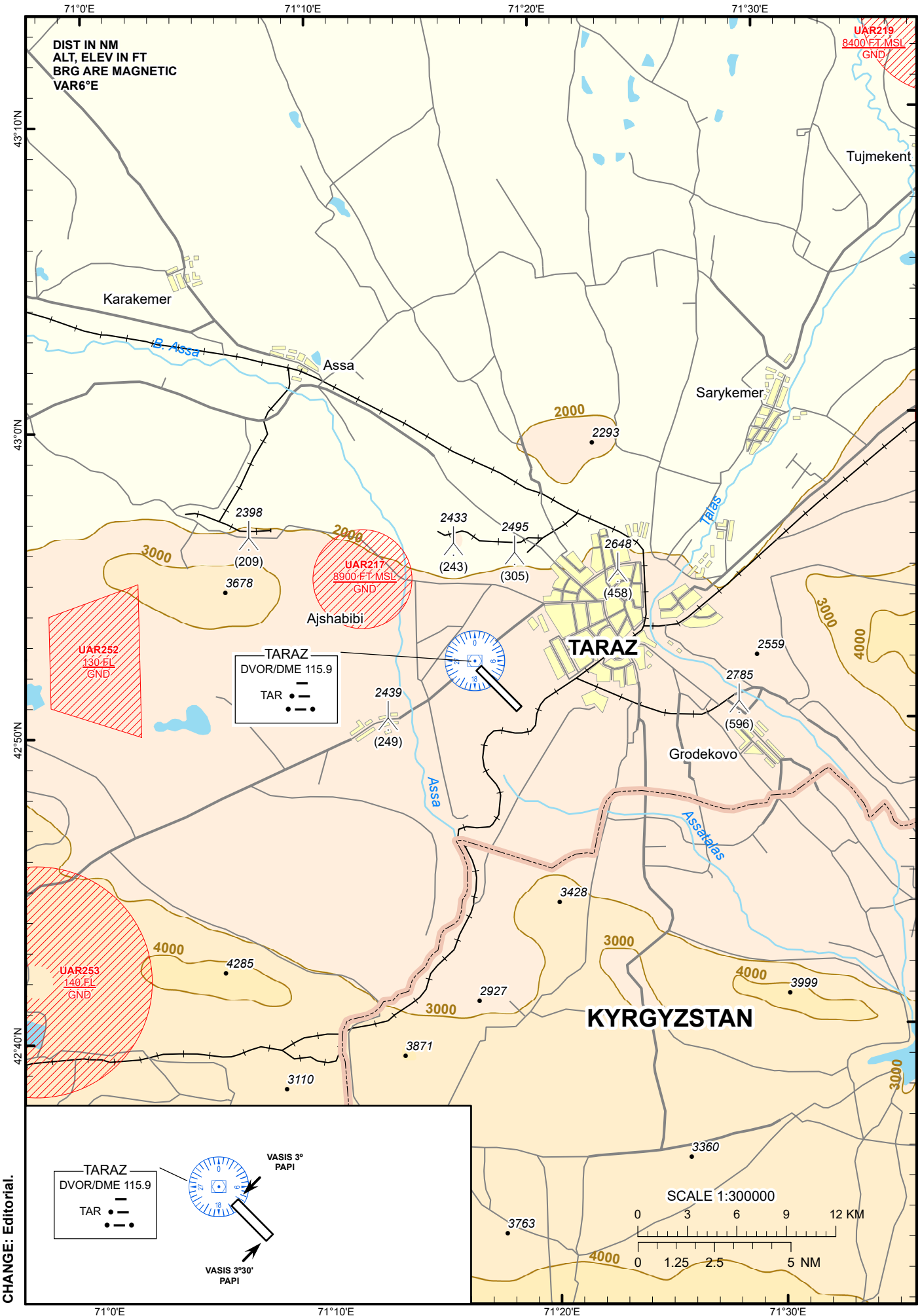
VISUAL APPROACH CHART - ICAO

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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UAIT AD 2

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

UAIT AD 2.1 Aerodrome Location Indicator And Name

UAIT - TURKISTAN

UAIT AD 2.2 Aerodrome Geographical And Administrative Data

1	ARP coordinates and site at AD	431840N 0683301E
2	Direction and distance from (city)	86°, 16 NM from Turkistan center
3	Elevation/Reference temperature	989 FT/34.4° C
4	Geoid undulation at AD ELEV PSN	-135 FT
5	MAG VAR/Annual Change	6° (2019)/0.06°
6	AD Administration, address, telephone, telefax, telex, e-mail address, AFS, website address	Post: Authority of Airport Turkistan region, Sauran district, Shaga rural district, Shaga village, block 070, building 284. 160000 Turkistan, JSC "Turkistan International Airport" Republic of Kazakhstan Phone: +7 (7253) 352900 Phone: +7 (702) 0470769 AFS: UAITZXRA AFS: UAITZYRA Email: office@hsairport.kz Email: pdsp@hsairport.kz
7	Types of traffic permitted (IFR/VFR)	IFR-VFR
8	Remarks	Nil

UAIT AD 2.3 Operational Hours

1	AD Operator	H24 Phone: +7 (7253) 352900
2	Customs and immigration	By prior request
3	Health and sanitation	H24 Phone: +7 (7252) 352903
4	AIS Briefing Office	H24
5	ATS Reporting Office (ARO)	H24 Phone: +7 (7252) 610537
6	MET Briefing Office	H24 Phone: +7 (7252) 610539
7	ATS	H24 Phone: +7 (7252) 610538
8	Fuelling	H24 Phone: +7 (7253) 352900
9	Handling	H24 Phone: +7 (72533) 52900
10	Security	H24

11	De-icing	H24 Phone: +7 (7253) 352900
12	Remarks	Nil

UAIT AD 2.4 Handling Services And Facilities

1	Cargo-handling facilities	Trepel Champ 350 loader-load capacity up to 35 tons; Trepel Champ 70U loader-load capacity up to 7 tons; Forklift truck-Doosan 10t - load capacity up to 10 tons; Forklift truck-Doosan 5t - load capacity up to 5 tons; Tape loader – TLD NBL - load capacity up to 250 kg (2 units.); Pallet truck – Timsan PD20000 – load capacity up to 20t (1ed.); Pallet truck – Timsan PD7000 – load capacity up to 7T (1ed.); Truck container – Timsan CD1800 – load capacity up to 1.8 tonnes (2 units.); Truck Luggage – Timsan BT2000 – load capacity up to 2T (6 units)
2	Fuel/oil types	TS-1, TS-1 RT / Oil: Nil
3	Fuelling facilities/capacity	2 tankers 20 cub. meters, 1200 l / min Mercedes Benz Actros by Mates 20м3 1 tanker 40 cub. meters, 2400 l / min MAN TGM by Mates MTT-2023- 272
4	De-icing facilities	Anti-icing liquid treatment machine (Type 1 Kilfrost DF Plus. Type 4 Kilfrost ABC-S Plus) Timsan MDI12000 with a maximum service height of up to 12 - 1 unit.
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Nil

UAIT AD 2.5 Passenger Facilities

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

UAIT AD 2.6 Rescue And Fire Fighting Services

1	AD category for fire fighting	CAT A7
2	Rescue equipment	4 fire trucks with a total volume of extinguishing agents – 38 200 kg., including foaming agent - 2 900 kg., total capacity - 280 kg/s

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

Designations 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	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%

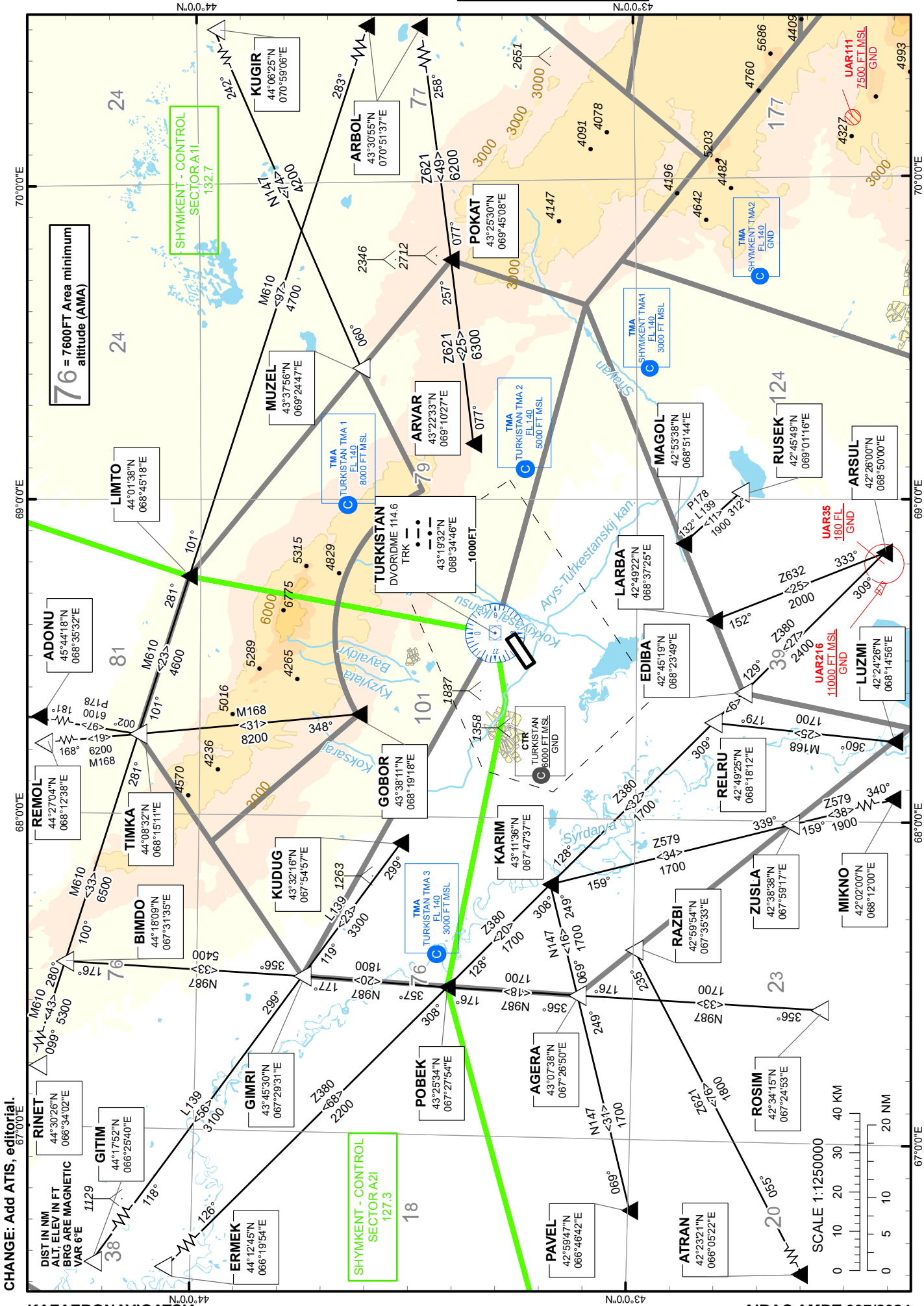
SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RESA dimensions (M)	Location and description of arresting system	OFZ	Remarks
8	**9**	**10**	**11**	**12**	**13**	**14**
Nil	200 X 160	3600 X 300	240 X 150	Nil	Nil	Nil
Nil	300 X 160	3600 X 300	240 X 150	Nil	Nil	Nil

AREA CHART ICAO

TRANSITION ALTITUDE
10000 FT

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

TMA TURKISTAN



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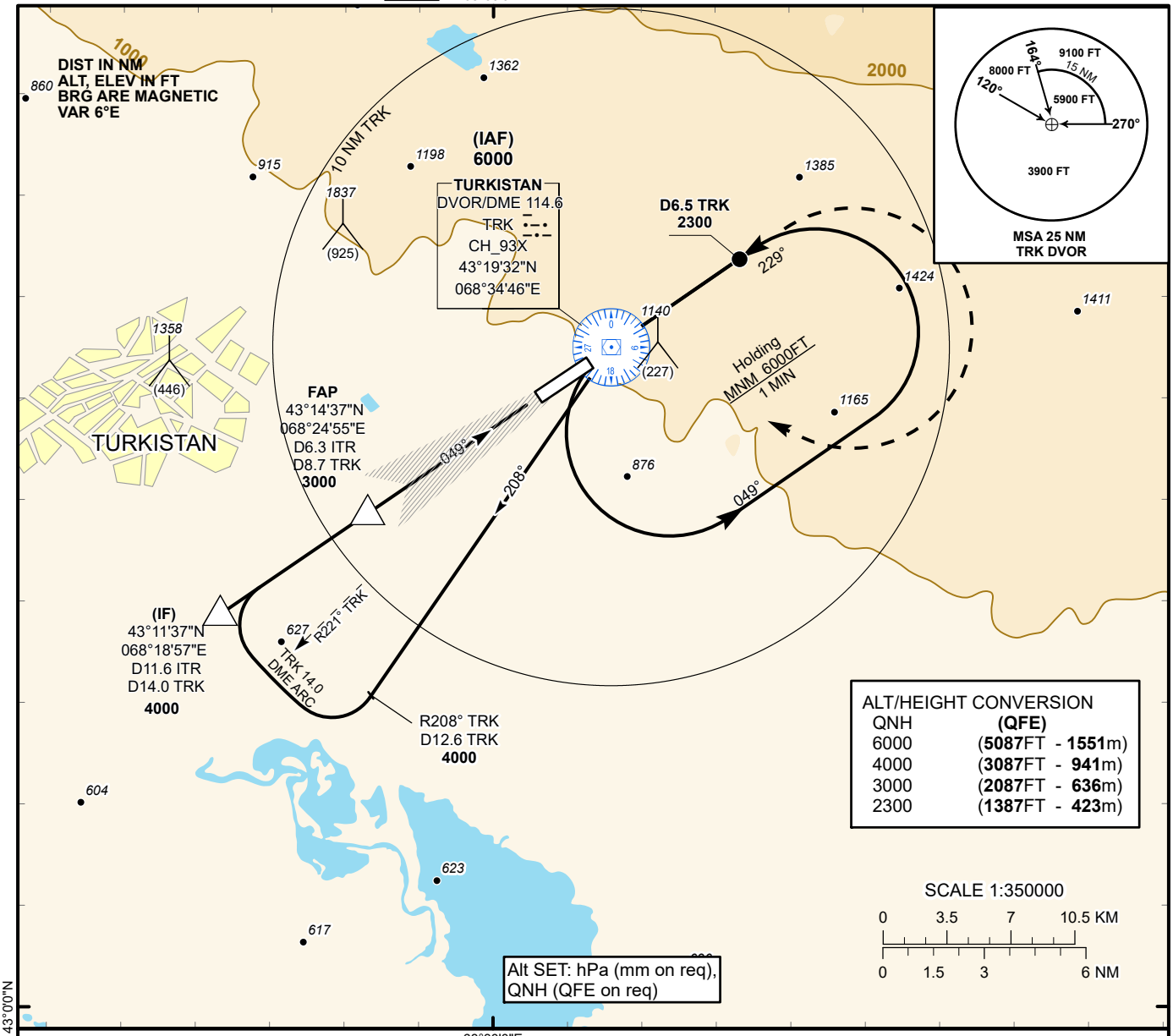
INSTRUMENT APPROACH CHART ICAO

ILS
LLZ 110.7
ITR
GP 330.2
CH 44X

AERODROME ELEV ***989 FT***
HEIGHTS RELATED TO
THR RWY 05 ELEV ***913 FT***

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

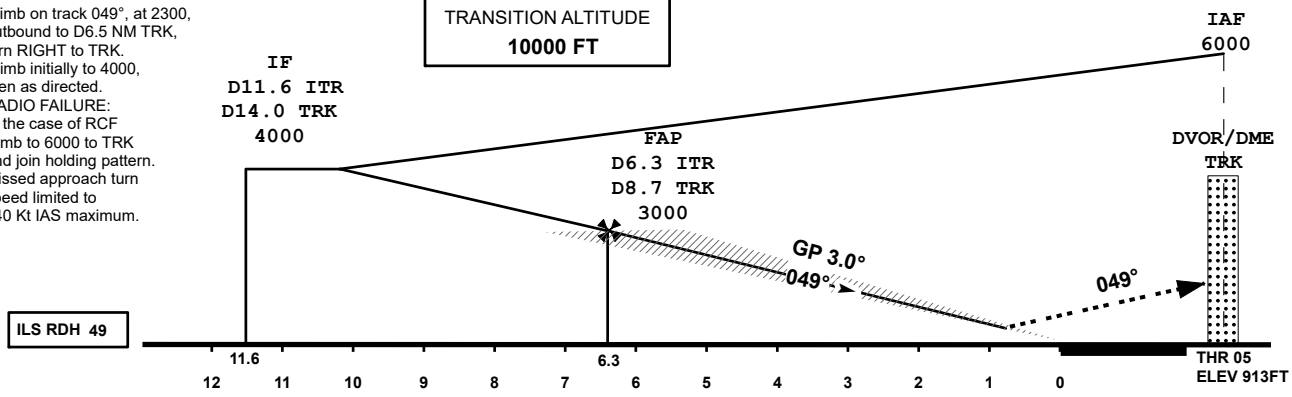
TURKISTAN ILS/DME RWY 05



MISSED APPROACH

Climb on track 049°, at 2300, outbound to D6.5 NM TRK, turn RIGHT to TRK. Climb initially to 4000, then as directed.
RADIO FAILURE:
In the case of RCF climb to 6000 to TRK and join holding pattern.
Missed approach turn speed limited to 240 Kt IAS maximum.

TRANSITION ALTITUDE
10000 FT



Aircraft Category		A	B	C	D	DIST to THR DME ITR	NM	6.3	5.0	4.0	3.0	2.0	1.0
Straight-in Approach OCA/H	ILS	1138(225)	1138(225)	1138(225)	1138(225)	DME TRK	NM	8.7	7.4	6.4	5.4	4.4	3.4
						ALTITUDE	FT	3000	2576	2249	1925	1602	1281
						HEIGHT	FT	2087	1663	1336	1012	689	368

DME ITR ZERO RANGED TO THR RWY 05

Aerodrome Operating Minima DH ft x RVR(CMV)						GS	Kt	80	100	120	140	160	180
						Desc.Rate(5.2%)	ft/min	420	530	630	740	840	950

CHANGE: Editorial.

TURKISTAN
ILS/DME RWY05 **AERONAUTICAL DATA TABULATION**

ILS approach to RWY05 from TRK DVOR/DME	
Fix/point	**Coordinates**
TRK DVOR/DME	**43° 19' 32.3"N 068° 34' 46.1"E**
(IF) D11.6 ITR, D14.0 TRK	**43° 11' 37.5"N 068° 18' 57.1"E**
(FAP) D6.3 ITR, D8.7 TRK	**43° 14' 36.6"N 068° 24' 54.5"E**
THR RWY05	**43° 18' 10.00"N 068° 32' 00.99"E**
ITR LLZ	**43° 19' 24.6"N 068° 34' 30.8"E**

AERODROME OBSTACLE CHART - ICAO
TYPE A (OPERATING LIMITATIONS)

URALSK/Oral International Airport
RWY 04/22

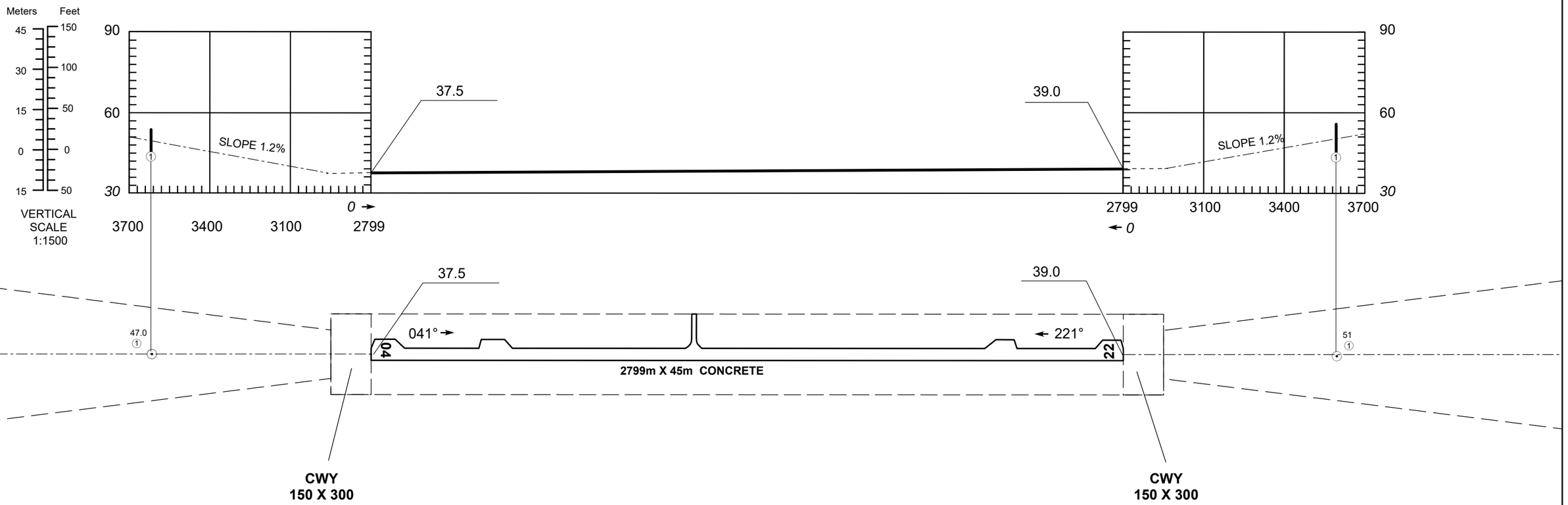
RWY 04/22

DIMENSIONS AND ELEVATIONS IN METERS
MAGNETIC VARIATION 11°E (2015)

ORDER OF ACCURACY					
№	LAT	LON	H	HORIZONTAL, m	VERTICAL, m
①	51°08'23.18" N	051°31'08.27" E	46.89	0.72	0.06

DECLARED DISTANCES		
RWY 04		RWY 22
2799	TAKE-OFF RUN AVAILABLE	2799
2949	TAKE-OFF DISTANCE AVAILABLE	2949
2799	ACCELERATE STOP DISTANCE AVAILABLE	2799
2799	LANDING DISTANCE AVAILABLE	2799

ORDER OF ACCURACY					
№	LAT	LON	H	HORIZONTAL, m	VERTICAL, m
①	51°09'50.9" N	051°34'07.4" E	51	0.3	0.5



LEGEND
ANTENNA ⊙

HORIZONTAL SCALE 1:15000

300 150 0 300 600 900 1200 Meters
1000 500 0 1000 2000 3000 4000 Feet

CHANGE: Edit scale bar.

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UASU AD 2

Note: The following sections in this chapter are intentionally left blank: AD-2.10, AD-2.14, AD-2.15, AD-2.20, AD-2.21

UASU AD 2.1 Aerodrome Location Indicator And Name

UASU - URDZHAR

UASU AD 2.2 Aerodrome Geographical And Administrative Data

1	ARP coordinates and site at AD	470531N 0814006E At the center of RWY
2	Direction and distance from (city)	2.7 NM E of Urdzhar
3	Elevation/Reference temperature	1702 FT/4° C
4	Geoid undulation at AD ELEV PSN	-160 FT
5	MAG VAR/Annual Change	5° E (2022) / 0.02°
6	AD Administration, address, telephone, telefax, telex, e-mail address, AFS, website address	Post: Authority of Airport JSC “Semey International Airport”, 071410 Semey, v.Urdzhar. Republic of Kazakhstan Phone: +7 (7222) 443951 Phone: +7 (7222) 600039 Fax: +7 (7222) 600002 AFS: UASSAPDU Email: semeyavia@mail.ru
7	Types of traffic permitted (IFR/VFR)	IFR-VFR
8	Remarks	Nil

UASU AD 2.3 Operational Hours

1	AD Operator	See NOTAM Phone:+7 (72230) 34331
2	Customs and immigration	Nil
3	Health and sanitation	HO
4	AIS Briefing Office	Nil
5	ATS Reporting Office (ARO)	Nil
6	MET Briefing Office	HO Phone: +7 (72230) 20137
7	ATS	See NOTAM
8	Fuelling	Nil
9	Handling	Nil
10	Security	ANY 02:00 - 11:00 UTC Phone: +7 (72230) 34331
11	De-icing	Nil
12	Remarks	Nil

UASU AD 2.4 Handling Services And Facilities

1	Cargo-handling facilities	Nil
2	Fuel/oil types	Nil
3	Fuelling facilities/capacity	Nil
4	De-icing facilities	Not available
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Nil

UASU AD 2.5 Passenger Facilities

1	Hotels	In the village Urdzhar
2	Restaurants	In the village Urdzhar
3	Transportation	Buses, taxis
4	Medical facilities	Ambulance service, hospitals in Urdzhar
5	Bank and Post Office	In the village Urdzhar
6	Tourist Office	In the village Urdzhar
7	Remarks	Nil

UASU AD 2.6 Rescue And Fire Fighting Services

1	AD category for fire fighting	CAT A4
2	Rescue equipment	AVBL
3	Capability for removal of disabled aircraft	Nil
4	Remarks	The possibility of increasing the required level of fire protection up to 5 categories on request.

UASU AD 2.7 Seasonal Availability - Clearing

1	Types of clearing equipment	2 motor grader, 1 rotor, 1 tractors “MTZ”, 1 truck “ZIL 130”
2	Clearance priorities	1. RWY 2. TWY 3. Stands
3	Remarks	In winter groomed snow

2	**Vertical limits**	7000 FT ALT / GND
3	**Airspace classification**	Nil
4	**ATS unit call sign Language(s)**	URDZHAR VYSHKA RU
5	**Transition altitude**	10000 FT
6	**Hours of applicability**	See NOTAM
7	**Remarks**	Radar in the aerodrome area is not provided. In the aerodrome area of takeoff and landing simultaneously must be no more than one aircraft. In the aerodrome area for IFR flights at the same level (height) must be no more than one aircraft

UASU 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	URDZHAR VYSHKA (RU)	123 MHZ	Nil	Nil	See NOTAM	Nil

UASU AD 2.19 Radio Navigation And Landing Aids

Type of aid, MAG VAR, ILS Classification, Type of supported OP (for VOR/ILS/MLS, give declination)	ID	Frequency, Channel number	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Service volume radius from the GBAS reference point	Remarks
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
NDB	UGN	460 KHZ	HO	470534.2N 0813932.8E	Nil	Nil	Nil

UASU AD 2.20 Local Aerodrome Regulations

NIL

UASU AD 2.21 Noise Abatement Procedures

NIL

UASU AD 2.22 Flight procedures.

1. Flight and ground movement procedures.

Aircraft takeoff with a tailwind is permitted in the case when tailwind speed corresponds to the value:

- for all aircraft types not greater than the value set by the Flight Operational manual of each aircraft type, but not greater than 5m/sec;
- for helicopters - not greater than the value set by the Flight Operational manual of each aircraft type.

Takeoff shall be performed from RWY beginning for all types of aircraft in both RWY directions.

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

Taxiing shall be carried out after received clearance from “Tower” ATC. Taxiing speed shall be set by the pilot-in-command according to the condition of TWY, presence of obstacles, aircraft weight, and conditions during taxi. In all cases taxiing speed should not exceed the speed set by the Flight Operational manual of this type of aircraft.

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

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”.

2. Low Visibility Procedures.

In low visibility conditions take-off and landing are not performed.

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

Air traffic service in the control zone (CTR) of the Urdzhar aerodrome is carried out by the controller of the «Urdzhar-Vyshka» 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 Urdzhar 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 «Urdzhar-Vyshka» ATC unit. Exit to the final leg, crossing the runway course shall be made only with the permission of the «Urdzhar-Vyshka» ATC unit.

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

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

Visual Reference Points of VFR flights within Urdzhar CTR

№	Name	Type	Location	Geographic coordinates	Distance from ARP Urdzhar
1	ALPHA	entry / exit, holding	southeastern outskirts of the settlement Tasaryk	470513N 0811947E	13.7 NM
2	BRAVO	entry / exit, holding	southwestern outskirts of the settlement Naualy	465925N 0814353E	6.6 NM

UAAL AD 2.24 Charts Related To An Aerodrome

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UASK AD 2

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

UASK AD 2.1 Aerodrome Location Indicator And Name

UASK - UST-KAMENOGORSK

UASK AD 2.2 Aerodrome Geographical And Administrative Data

1	ARP coordinates and site at AD	500209N 0822943E At the centre of RWY
2	Direction and distance from (city)	316° 7 NM of Ust- Kamenogorsk center
3	Elevation/Reference temperature	942 FT/26.4° C
4	Geoid undulation at AD ELEV PSN	-145.4 FT
5	MAG VAR/Annual Change	6° E (2021)/0.04°
6	AD Administration, address, telephone, telefax, telex, AFS	Post: Authority of Airport 070009 Ust- Kamenogorsk, JSC "Ust-Kamenogorsk Airport" st. Bazhova 566 Republic of Kazakhstan Phone: +7 (7232) 778100 Fax: +7 (7232) 778100 AFS: UASKAPDU URL: www.airport-uk.kz
7	Types of traffic permitted (IFR/VFR)	IFR-VFR
8	Remarks	Nil

UASK AD 2.3 Operational Hours

1	AD Operator	See NOTAM
2	Customs and immigration	HO Phone: +7 (7232) 778935
3	Health and sanitation	HO Phone: +7 (7232) 778129
4	AIS Briefing Office	HO
5	ATS Reporting Office (ARO)	HO Phone: +7 (7232) 293441
6	MET Briefing Office	H24 Phone: +7 (7232) 293483
7	ATS	See NOTAM
8	Fuelling	HO Phone: +7 (7232) 779228
9	Handling	HO
10	Security	H24
11	De-icing	HO Phone: +7 (7232) 778662
12	Remarks	Nil

UASK AD 2.4 Handling Services And Facilities

1	Cargo-handling facilities	Handling up to10 tonnes weiight
2	Fuel/oil types	TS-1, RT/Nil
3	Fuelling facilities/capacity	The maximum amount of fuel 600,000 liters 2 fuel tanker 22000, 1000 l/min 2 fuel tanker 7500, 500 l/min 1 fuel tanker 10000, 500 l/min
4	De-icing facilities	De-icing Machine liquid - 1 unit
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Minor repairs at aircraft repair base
7	Remarks	Nil

UASK AD 2.5 Passenger Facilities

1	Hotels	In the airport
2	Restaurants	AVAILABLE in airport terminal
3	Transportation	Buses, taxis
4	Medical facilities	Aid post at Airport Terminal, ambulance service, hospitals in Ust-Kamenogorsk
5	Bank and Post Office	In the city Ust-Kamenogorsk, in the airport bank ATM
6	Tourist Office	In the city Ust-Kamenogorsk
7	Remarks	Nil

UASK AD 2.6 Rescue And Fire Fighting Services

1	AD category for fire fighting	CAT A6
2	Rescue equipment	3 fire engines, technical and medical kit
3	Capability for removal of disabled aircraft	There is the ability to remove the Aircraft that have lost the ability to move, without destroying the landing gear. There is a taw rope and taw driver of type Aircraft A–319/321, E-190, B-737, CRJ-200, AN -24, YAK-40/42. Pneumatic-wheeled jib crane with a lifting capacity of 35 tons (according to the instructions for interaction with the Department of Emergency of East Kazakhstan Region) arrival time 3 hour. Phone: +7 (7232) 778662 Phone: +7 (7232) 779229 Email: aviaukk.kanc@bk.ru
4	Remarks	Nil

UASK AD 2.7 Seasonal Availability - Clearing

1	**Types of clearing equipment**	3 plow-brush machines, 3 augers, 1 wind machine, 4 tractors with plow-brush attachments, 2 front loaders, 2 bulldozers, 1 trailer spreader of granular reagent. To remove ice from airfield coverings, the anti-icing granular reagent “GreenWay” is used.

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

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 sector130°-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 RWY12/ 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 RWY12/ 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".

Turning by 180 degree shall be carried out only at the threshold 12/30

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
6	FOXTROT	entry / exit	north of the settlement Izgutty Aitykov	493712N 0824153E	157°	25.9 NM

№	Name	Type	Location	Geographic coordinates	DVOR / DME «UKM» radial and distance	
7	GOLF	entry / exit	southeastern outskirts of the settlement Aiyrtau, 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. Verhneberezovka	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.

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.

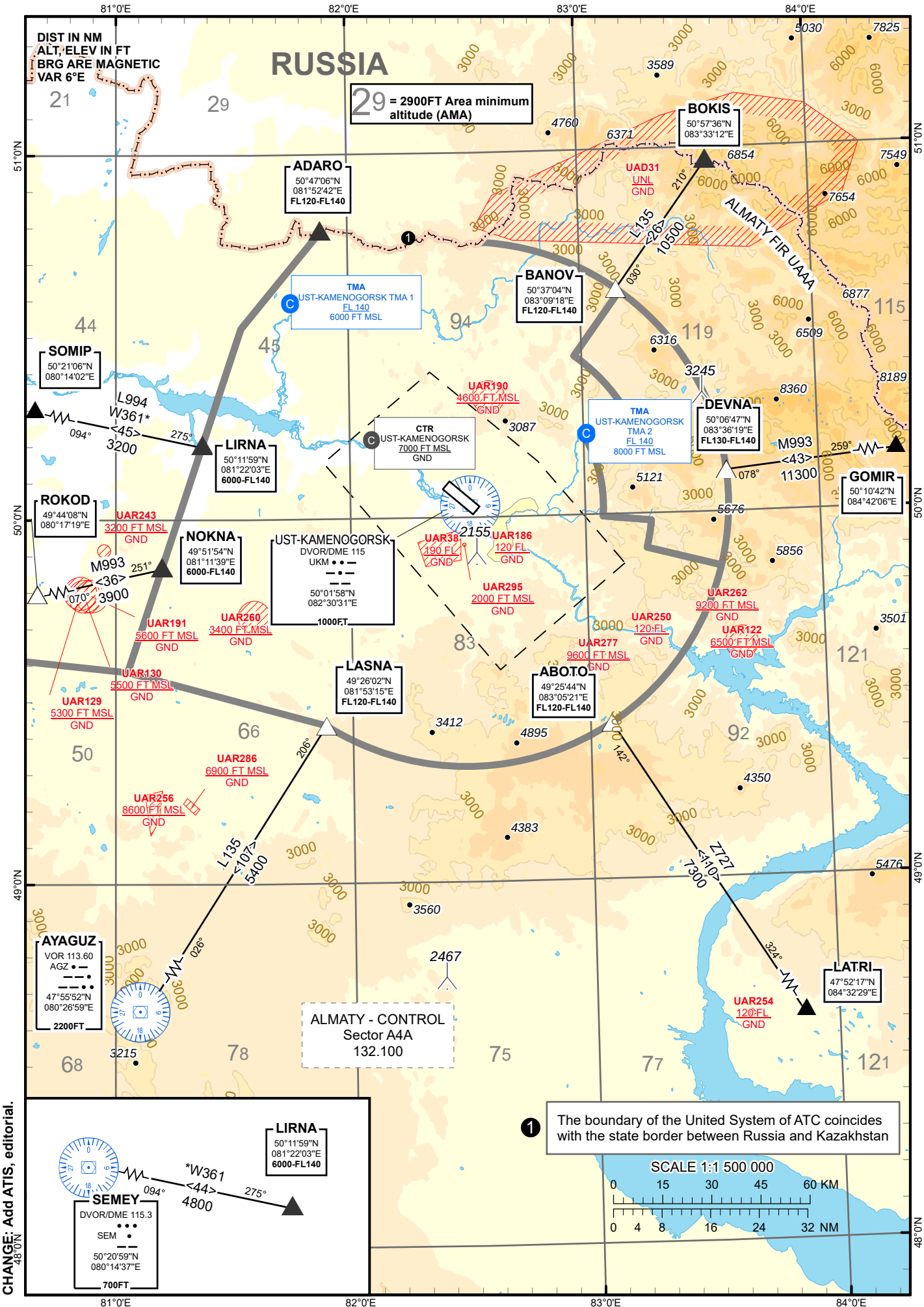
Bird concentration scattering measures include: periodical bird deterrence (shooting), effective measures regarding to scattering, removal of green plantations and ground covering, abandon garbage collection prevention of agricultural activity within the airport area.

UASK AD 2.24 Charts Related To An Aerodrome

AREA CHART - ICAO

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

TMA UST-KAMENOGORSK



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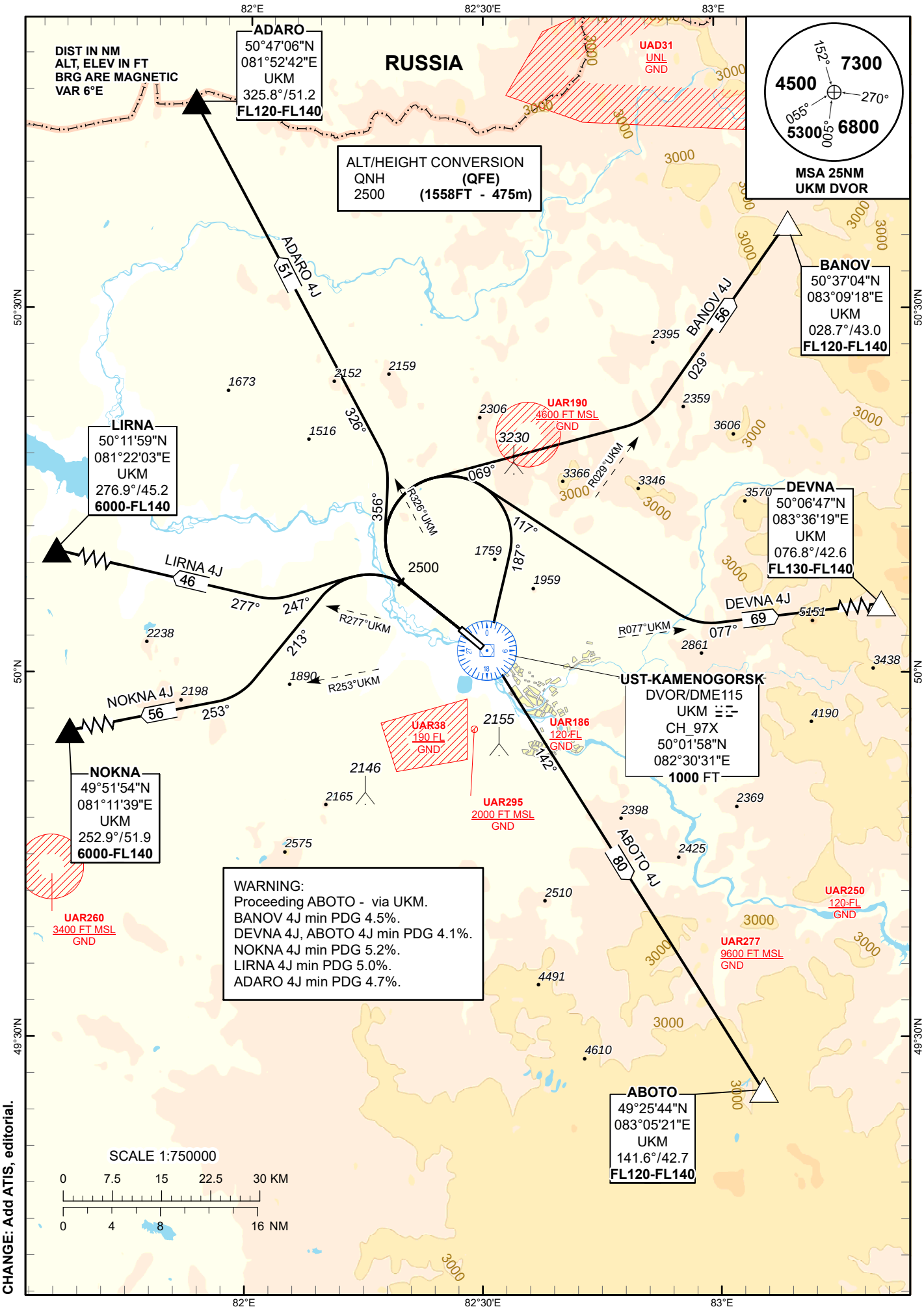
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

ABOTO 4J, ADARO 4J, BANOV 4J, DEVNA 4J, LIRNA 4J, NOKNA 4J

UST-KAMENOGORSK RWY 30



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STANDARD DEPARTURE ROUTES – INSTRUMENT **(SID) UST-KAMENOGORSK RWY 30**
BANOV 4J After take-off climb straight ahead to 2500 FT, turn RIGHT on track 069° until intercept R 029°UKM, then proceed to BANOV R 028.7° D 43.0 UKM. Cross BANOV at FL120-FL140.
DEVNA 4J After take-off climb straight ahead to 2500 FT, turn RIGHT on track 117° until intercept R 077°UKM, then proceed to DEVNA R 076.8° D 42.6 UKM. Cross DEVNA at FL130-FL140.
ABOTO 4J After take-off climb straight ahead to 2500 FT, turn RIGHT to UKM, after crossing UKM turn LEFT on track 142° to ABOTO R 141.6° D 42.7 UKM. Cross ABOTO at FL120-FL140.
NOKNA 4J After take-off climb straight ahead to 2500 FT, turn LEFT on track 213° until intercept R 253° UKM, then proceed to NOKNA R 252.9° D 51.9 UKM. Cross NOKNA at 6000-FL140.
LIRNA 4J After take-off climb straight ahead to 2500 FT, turn LEFT on track 247° until intercept R 277° UKM, then proceed to LIRNA R 276.9° D 45.2 UKM. Cross LIRNA at 6000-FL140.
ADARO 4J After take-off climb straight ahead to 2500 FT, turn RIGHT on track 356° until intercept R 326° UKM, then proceed to ADARO R 325.8° D 51.2 UKM. Cross ADARO at FL120-FL140.

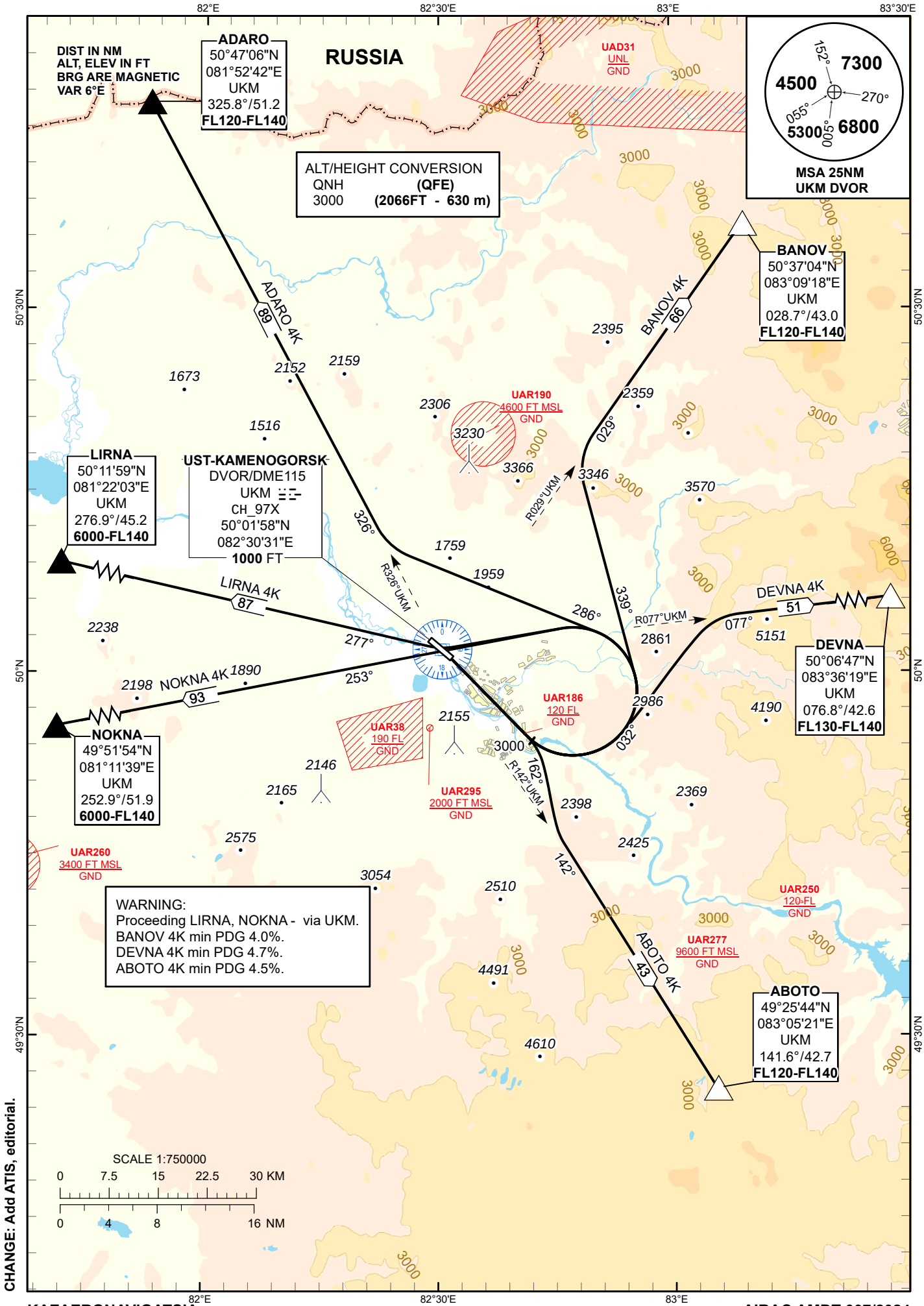
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

ABOTO 4K, ADARO 4K, BANOV 4K, DEVNA 4K, LIRNA 4K, NOKNA 4K.

UST-KAMENOGORSK RWY 12



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STANDARD DEPARTURE ROUTES – INSTRUMENT **(SID) UST-KAMENOGORSK RWY 12**
BANOV 4K After take-off climb straight ahead to 3000 FT, turn LEFT on track 339° until intercept R 029° UKM, then proceed to BANOV R 028.7° D 43.0 UKM. Cross BANOV at FL120-FL140.
DEVNA 4K After take-off climb straight ahead to 3000 FT, turn LEFT on track 032° until intercept R 077° UKM, then proceed to DEVNA R 076.8° D 42.6 UKM. Cross DEVNA at FL130-FL140.
ABOTO 4K After take-off climb straight ahead to 3000 FT, turn RIGHT on track 162° until intercept R 142° UKM, then proceed to ABOTO R 141.6° D 42.7 UKM. Cross ABOTO at FL120-FL140.
NOKNA 4K After take-off climb straight ahead to 3000 FT, turn LEFT to UKM, after crossing UKM proceed on track 253° to NOKNA R 252.9° D 51.9 UKM. Cross NOKNA at 6000-FL140.
LIRNA 4K After take-off climb straight ahead to 3000 FT, turn LEFT to UKM, after crossing UKM turn RIGHT on track 277° to LIRNA R 276.9° D 45.2 UKM. Cross LIRNA at 6000-FL140.
ADARO 4K After take-off climb straight ahead to 3000 FT, turn LEFT on track 286° until intercept R 326°UKM, then proceed to ADARO R 325.8° D 51.2 UKM. Cross ADARO at FL120-FL140.

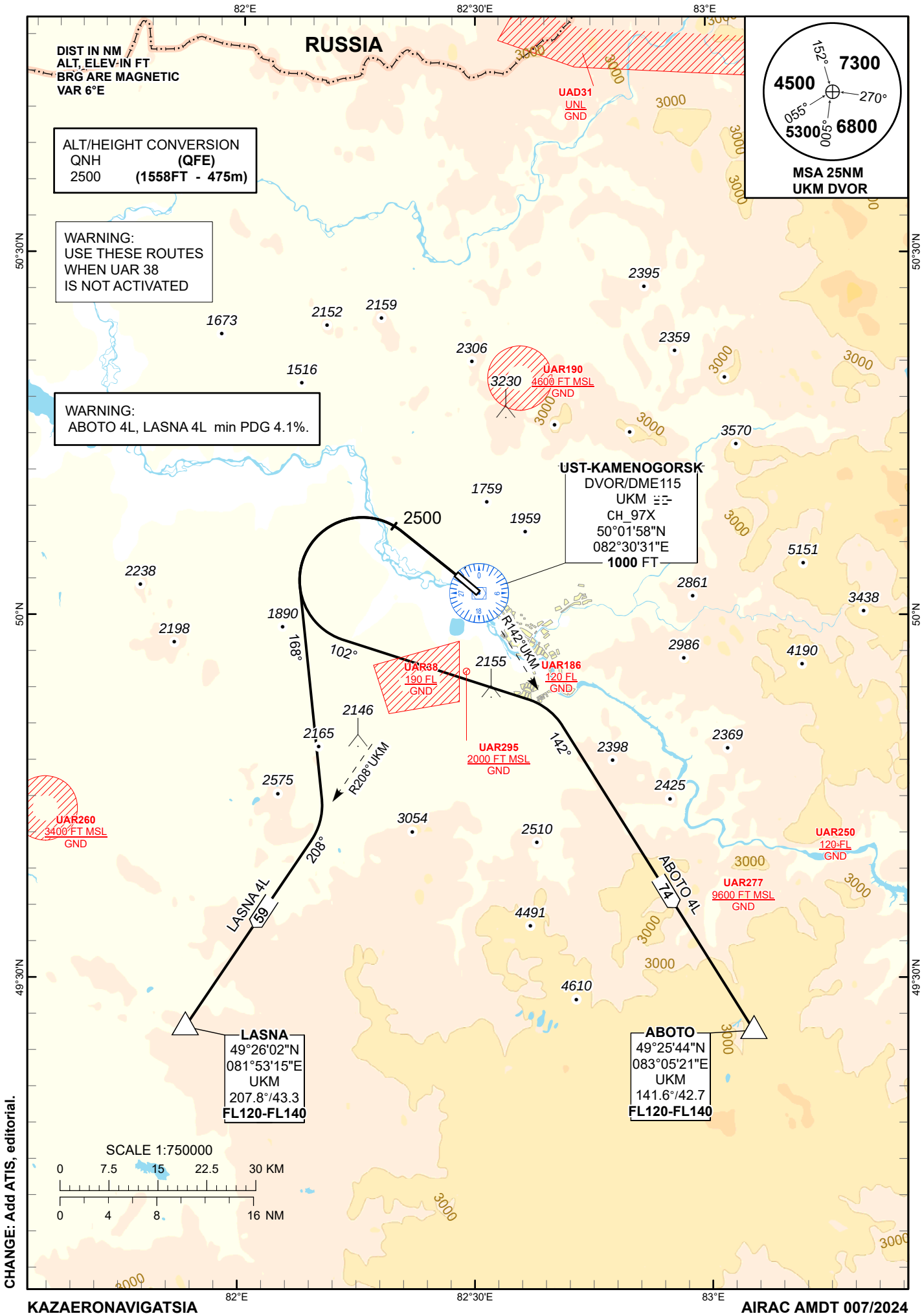
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

ABOTO 4L, LASNA 4L

UST-KAMENOGORSK RWY 30



CHANGE: Add ATIS, editorial.

STANDARD DEPARTURE ROUTES – INSTRUMENT **(SID) UST-KAMENOGORSK RWY 30**
ABOTO 4L After take-off climb straight ahead to 2500 FT, turn LEFT on track 102° until intercept R 142° UKM, then proceed to ABOTO R 141.6° D 42.7 UKM. Cross ABOTO at FL120-FL140.
LASNA 4L After take-off climb straight ahead to 2500 FT, turn LEFT on track 168° until intercept R 208° UKM, then proceed to LASNA R 207.8° D 43.3 UKM. Cross LASNA at FL120-FL140.

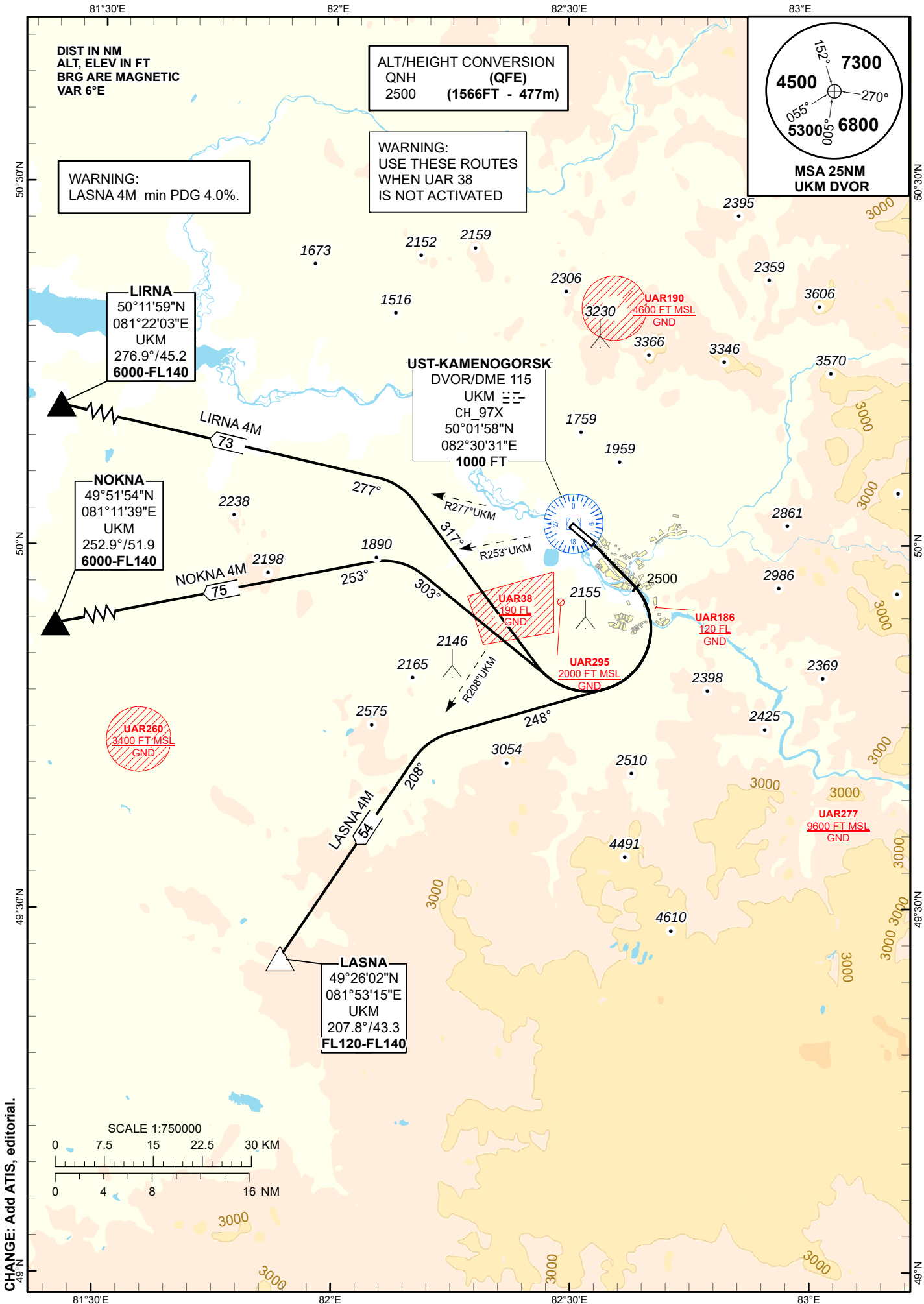
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

LASNA 4M, LIRNA 4M, NOKNA 4M

UST-KAMENOGORSK RWY 12



CHANGE: Add ATIS, editorial.

STANDARD DEPARTURE ROUTES – INSTRUMENT **(SID) UST-KAMENOGORSK RWY 12**
LASNA 4M After take-off climb straight ahead to 2500 FT, turn RIGHT on track 248° until intercept R 208° UKM, then proceed to LASNA R 207.8° D 43.3 UKM. Cross LASNA at FL120-FL140.
NOKNA 4M After take-off climb straight ahead to 2500 FT, turn RIGHT on track 303° until intercept R 253° UKM, then proceed to NOKNA R 252.9° D 51.9 UKM. Cross NOKNA at 6000-FL140.
LIRNA 4M After take-off climb straight ahead to 2500 FT, turn RIGHT on track 317° until intercept R 277° UKM, then proceed to LIRNA R 276.9° D 45.2 UKM. Cross LIRNA at 6000-FL140.

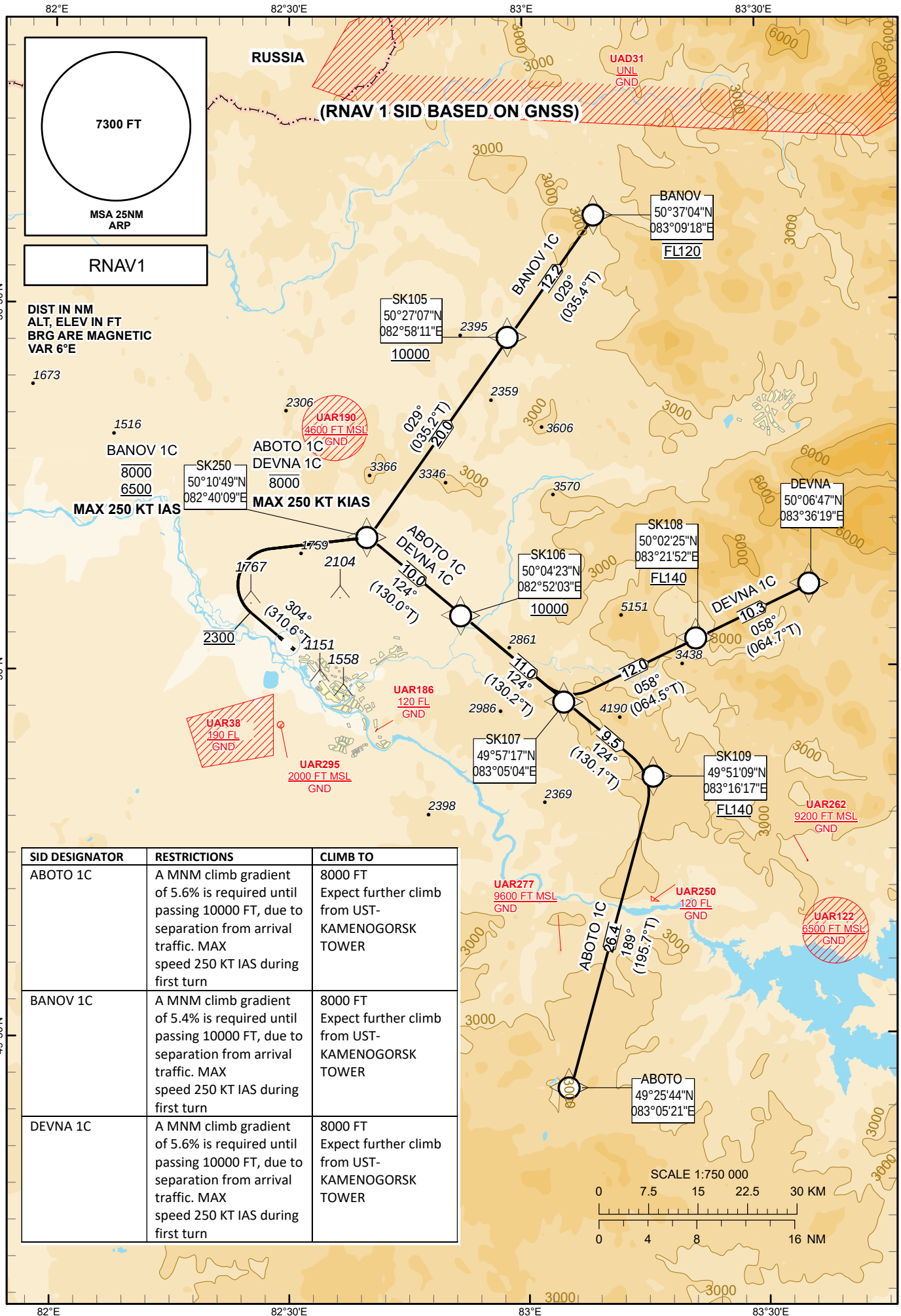
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

ABOTO 1C, BANOV 1C, DEVNA 1C

UST-KAMENOGORSK
RWY 30



SID DESIGNATOR	RESTRICTIONS	CLIMB TO
ABOTO 1C	A MNM climb gradient of 5.6% is required until passing 10000 FT, due to separation from arrival traffic. MAX speed 250 KT IAS during first turn	8000 FT Expect further climb from UST-KAMENOGORSK TOWER
BANOV 1C	A MNM climb gradient of 5.4% is required until passing 10000 FT, due to separation from arrival traffic. MAX speed 250 KT IAS during first turn	8000 FT Expect further climb from UST-KAMENOGORSK TOWER
DEVNA 1C	A MNM climb gradient of 5.6% is required until passing 10000 FT, due to separation from arrival traffic. MAX speed 250 KT IAS during first turn	8000 FT Expect further climb from UST-KAMENOGORSK TOWER

CHANGE: Add ATIS, editorial.

TABULAR DESCRIPTION

ABOTO 1C RWY30

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	-	-	304(310.6)	+6.3	-	-	@2300	-	2.9	RNAV 1
20	DF	SK250	-	-	+6.3	-	R	-8000	-250	2.9	RNAV 1
30	TF	SK106	-	124(130)	+6.3	10.0	R	+10000	-	2.9	RNAV 1
40	TF	SK107	-	124(130.2)	+6.3	11.0	-	-	-	2.9	RNAV 1
50	TF	SK109	-	124(130.1)	+6.3	9.5	-	+FL140	-	1.9	RNAV 1
60	TF	ABOTO	-	189(195.7)	+6.3	26.4	R	-	-	1.9	RNAV 1

WAYPOINT LIST

Waypoint Identifier	Coordinates	
DEP	500238.19N	0822849.32E
SK250	501048.52N	0824009.11E
SK106	500422.64N	0825202.58E
SK107	495716.62N	0830503.99E
SK109	495109.11N	0831617.01E
ABOTO	492544.00N	0830521.00E

TABULAR DESCRIPTION

DEVNA 1C RWY30

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	-	-	304(310.6)	+6.3	-	-	@2300	-	2.9	RNAV 1
20	DF	SK250	-	-	+6.3	-	R	-8000	-250	2.9	RNAV 1
30	TF	SK106	-	124(130)	+6.3	10.0	R	+10000	-	2.9	RNAV 1
40	TF	SK107	-	124(130.2)	+6.3	11.0	-	-	-	2.9	RNAV 1
50	TF	SK108	-	058(64.5)	+6.3	12.0	L	+FL140	-	1.9	RNAV 1
60	TF	DEVNA	-	058(64.7)	+6.3	10.3	-	-	-	1.9	RNAV 1

WAYPOINT LIST

DEVNA 1C

Waypoint Identifier	Coordinates	
DEP	500238.19N	0822849.32E
SK250	501048.52N	0824009.11E
SK106	500422.64N	0825202.58E
SK107	495716.62N	0830503.99E
SK108	500224.88N	0832152.30E
DEVNA	500647.00N	0833619.00E

TABULAR DESCRIPTION

BANOV 1C RWY30

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	-	-	304(310.6)	+6.3	-	-	@2300	-	2	RNAV 1
20	DF	SK250	-	-	+6.3	-	R	+6500/-8000	-250	2	RNAV 1
30	TF	SK105	-	029(35.2)	+6.3	20.0	L	+10000	-	2	RNAV 1
40	TF	BANOV	-	029(35.4)	+6.3	12.2	-	@FL120	-	2	RNAV 1

WAYPOINT LIST

BANOV 1C

Waypoint Identifier	Coordinates	
DEP	500238.19N	0822849.32E
SK250	501048.52N	0824009.11E
SK105	502707.26N	0825810.73E
BANOV	503704.00N	0830918.00E

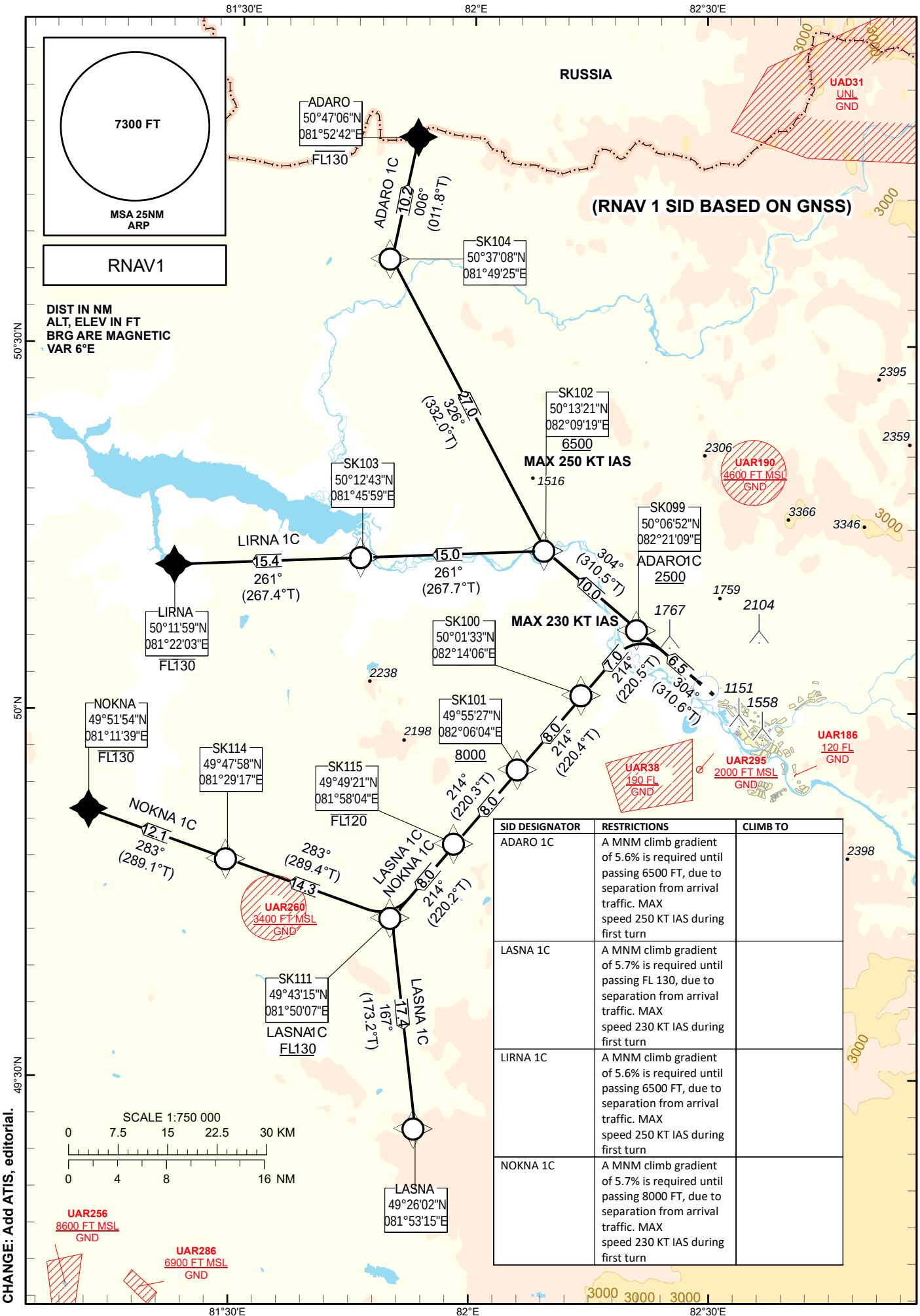
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

ADARO 1C, LASNA 1C, LIRNA 1C, NOKNA 1C

UST-KAMENOGORSK RWY 30



SID DESIGNATOR	RESTRICTIONS	CLIMB TO
ADARO 1C	A MNM climb gradient of 5.6% is required until passing 6500 FT, due to separation from arrival traffic. MAX speed 250 KT IAS during first turn	
LASNA 1C	A MNM climb gradient of 5.7% is required until passing FL 130, due to separation from arrival traffic. MAX speed 230 KT IAS during first turn	
LIRNA 1C	A MNM climb gradient of 5.6% is required until passing 6500 FT, due to separation from arrival traffic. MAX speed 250 KT IAS during first turn	
NOKNA 1C	A MNM climb gradient of 5.7% is required until passing 8000 FT, due to separation from arrival traffic. MAX speed 230 KT IAS during first turn	

CHANGE: Add ATIS, editorial.

TABULAR DESCRIPTION

ADARO 1C RWY30

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	SK099	-	304(310.6)	+6.3	6.5	-	+2500	-	1.9	RNAV 1
20	TF	SK102	-	304(310.5)	+6.3	10.0	-	+6500	-250	1.9	RNAV 1
30	TF	SK104	-	326(332)	+6.3	27.0	R	-	-	1.9	RNAV 1
40	TF	ADARO	-	006(11.8)	+6.3	10.2	R	-FL130	-	1.9	RNAV 1

WAYPOINT LIST

ADARO 1C

Waypoint Identifier	Coordinates	
DEP	500238.19N	0822849.32E
SK099	500651.68N	0822109.32E
SK102	501320.69N	0820918.98E
SK104	503708.38N	0814924.52E
ADARO	504706.00N	0815242.00E

TABULAR DESCRIPTION

LIRNA 1C RWY30

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	SK099	-	304(310.6)	+6.3	6.5	-	-	-	1.9	RNAV 1
20	TF	SK102	-	304(310.5)	+6.3	10.0	-	+6500	-250	1.9	RNAV 1
30	TF	SK103	-	261(267.7)	+6.3	15.0	L	-	-	1.9	RNAV 1
40	TF	LIRNA	-	261(267.4)	+6.3	15.4	-	-FL130	-	1.9	RNAV 1

WAYPOINT LIST

LIRNA 1C

Waypoint Identifier	Coordinates	
DEP	500238.19N	0822849.32E
SK099	500651.68N	0822109.32E
SK102	501320.69N	0820918.98E
SK103	501242.78N	0814559.01E
LIRNA	501159.00N	0812203.00E

TABULAR DESCRIPTION

NOKNA 1C RWY30

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	SK099	-	304(310.6)	+6.3	6.5	-	-	-230	2	RNAV 1
20	TF	SK100	-	214(220.5)	+6.3	7.0	L	-	-	2	RNAV 1
30	TF	SK101	-	214(220.4)	+6.3	8.0	-	+8000	-	2	RNAV 1
40	TF	SK115	-	214(220.3)	+6.3	8.0	-	-FL120	-	2	RNAV 1
50	TF	SK111	-	214(220.2)	+6.3	8.0	-	-	-	2	RNAV 1
60	TF	SK114	-	283(289.4)	+6.3	14.3	R	-	-	2	RNAV 1
70	TF	NOKNA	-	283(289.1)	+6.3	12.1	-	-FL130	-	2	RNAV 1

WAYPOINT LIST

NOKNA 1C

Waypoint Identifier	Coordinates	
DEP	500238.19N	0822849.32E
SK099	500651.68N	0822109.32E
SK100	500132.57N	0821406.15E
SK101	495527.06N	0820604.08E
SK115	494921.26N	0815804.37E
SK111	494315.06N	0815006.88E
SK114	494758.07N	0812916.98E
NOKNA	495154.00N	0811139.00E

TABULAR DESCRIPTION

LASNA 1C RWY30

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	SK099	-	304(310.6)	+6.3	6.5	-	-	-230	2.3	RNAV 1
20	TF	SK100	-	214(220.5)	+6.3	7.0	L	-	-	2.3	RNAV 1
30	TF	SK101	-	214(220.4)	+6.3	8.0	-	+8000	-	2.3	RNAV 1
40	TF	SK115	-	214(220.3)	+6.3	8.0	-	-FL120	-	2.3	RNAV 1
50	TF	SK111	-	214(220.2)	+6.3	8.0	-	+FL130	-	2.3	RNAV 1
60	TF	LASNA	-	167(173.2)	+6.3	17.4	L	-	-	2.3	RNAV 1

WAYPOINT LIST

LASNA 1C

Waypoint Identifier	Coordinates	
DEP	500238.19N	0822849.32E
SK099	500651.68N	0822109.32E
SK100	500132.57N	0821406.15E
SK101	495527.06N	0820604.08E
SK115	494921.26N	0815804.37E
SK111	494315.06N	0815006.88E
LASNA	492602.00N	0815315.00E

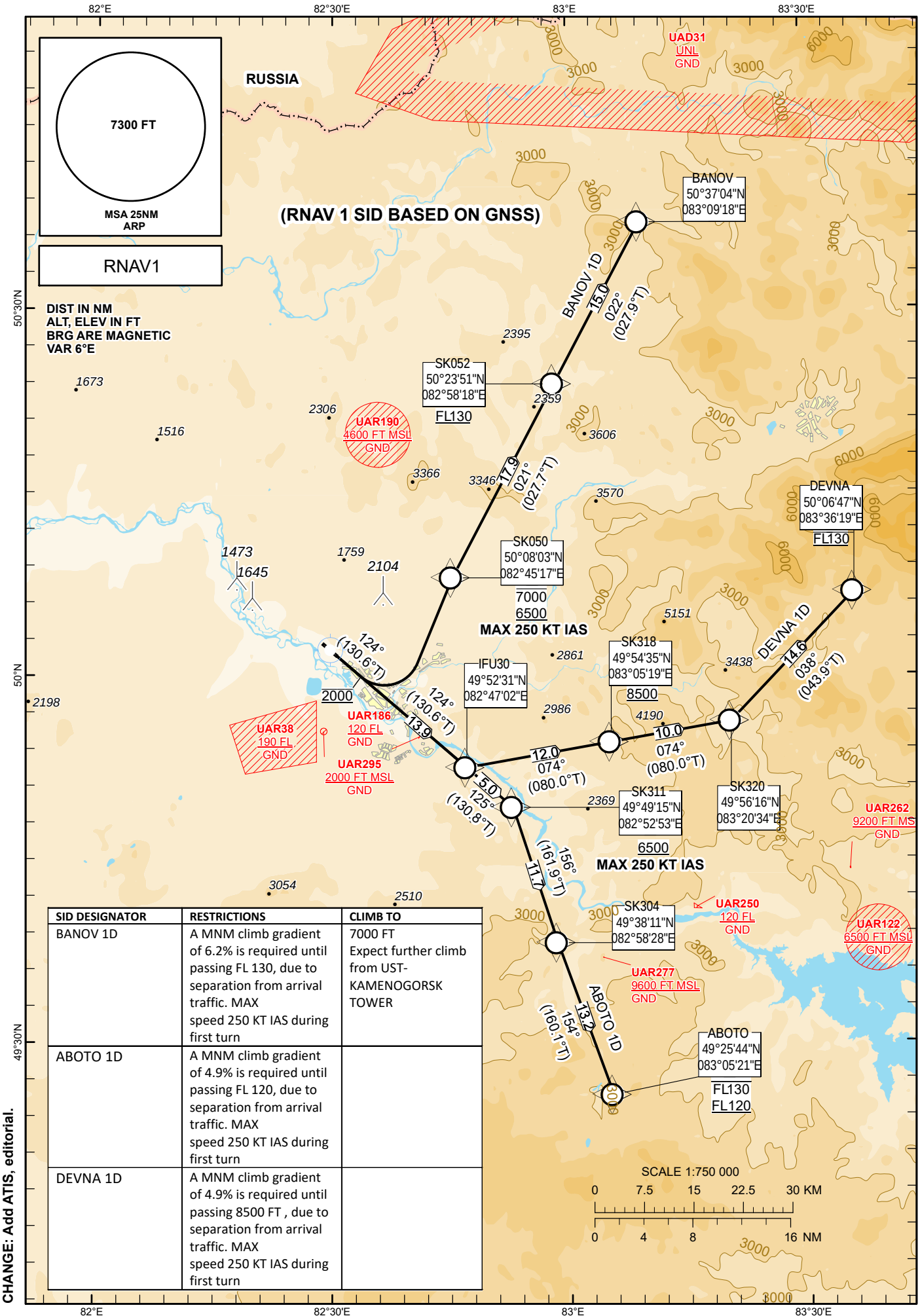
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

ABOTO 1D, BANOV 1D, DEVNA 1D

UST-KAMENOGORSK
RWY 12



SID DESIGNATOR	RESTRICTIONS	CLIMB TO
BANOV 1D	A MNM climb gradient of 6.2% is required until passing FL 130, due to separation from arrival traffic. MAX speed 250 KT IAS during first turn	7000 FT Expect further climb from UST-KAMENOGORSK TOWER
ABOTO 1D	A MNM climb gradient of 4.9% is required until passing FL 120, due to separation from arrival traffic. MAX speed 250 KT IAS during first turn	
DEVNA 1D	A MNM climb gradient of 4.9% is required until passing 8500 FT , due to separation from arrival traffic. MAX speed 250 KT IAS during first turn	

CHANGE: Add ATIS, editorial.

TABULAR DESCRIPTION

ABOTO 1D RWY12											
Serial Number	**Path Descriptor**	**Waypoint Identi-fier**	**Fly - over**	**Course M(T)**	**Magnetic Variation()**	**Distance NM**	**Turn Direction**	**Altitude FT**	**Speed KT**	**VPA ()**	**Navigation Specification**
10	CF	IFU30	-	124(130.6)	+6.3	13.9	-	-	-	2.7	RNAV 1
20	TF	SK311	-	125(130.8)	+6.3	5.0	-	+6500	-250	2.7	RNAV 1
30	TF	SK304	-	156(161.9)	+6.3	11.7	R	-	-	1.9	RNAV 1
40	TF	ABOTO	-	154(160.1)	+6.3	13.2	-	+FL120/-FL130	-	1.9	RNAV 1

WAYPOINT LIST

ABOTO 1D		
Waypoint Identifier	**Coordinates**	
DEP	500133.96N	0823045.63E
IFU30	495231.44N	0824702.13E
SK311	494915.32N	0825252.63E
SK304	493810.82N	0825827.54E
ABOTO	492544.00N	0830521.00E

TABULAR DESCRIPTION

BANOV 1D RWY12											
Serial Number	**Path Descriptor**	**Waypoint Identi-fier**	**Fly - over**	**Course M(T)**	**Magnetic Variation()**	**Distance NM**	**Turn Direction**	**Altitude FT**	**Speed KT**	**VPA ()**	**Navigation Specification**
10	CA	-	-	124(130.6)	+6.3	5.2	-	@2000	-	3.3	RNAV 1
20	DF	SK050	-	-	+6.3	13.1	L	-7000/+6500	-250	3.3	RNAV 1
30	TF	SK052	-	021(27.7)	+6.3	17.9	R	+FL130	-	3.3	RNAV 1
40	TF	BANOV	-	022(27.9)	+6.3	15.0	-	-	-	3.3	RNAV 1

WAYPOINT LIST

BANOV 1D		
Waypoint Identifier	**Coordinates**	
DEP	500133.96N	0823045.63E
SK050	500802.62N	0824516.50E
SK052	502351.29N	0825817.55E
BANOV	503704.00N	0830918.00E

TABULAR DESCRIPTION

DEVNA 1D RWY12											
Serial Number	**Path Descriptor**	**Waypoint Identi-fier**	**Fly - over**	**Course M(T)**	**Magnetic Variation()**	**Distance NM**	**Turn Direction**	**Altitude FT**	**Speed KT**	**VPA ()**	**Navigation Specification**
10	CF	IFU30	-	124(130.6)	+6.3	13.9	-	-	-250	-	RNAV 1
20	TF	SK318	-	074(80.0)	+6.3	12.0	L	+8500	-	2.8	RNAV 1
30	TF	SK320	-	074(80.0)	+6.3	10.0	-	-	-	-	RNAV 1
40	TF	DEVNA	-	038(43.9)	+6.3	14.6	L	@FL130	-	1.7	RNAV 1

WAYPOINT LIST

DEVNA 1D		
Waypoint Identifier	**Coordinates**	
DEP	500133.96N	0823045.63E
IFU30	495231.44N	0824702.13E
SK318	495434.90N	0830519.04E
SK320	495615.51N	0832033.77E
DEVNA	500647.00N	0833619.00E

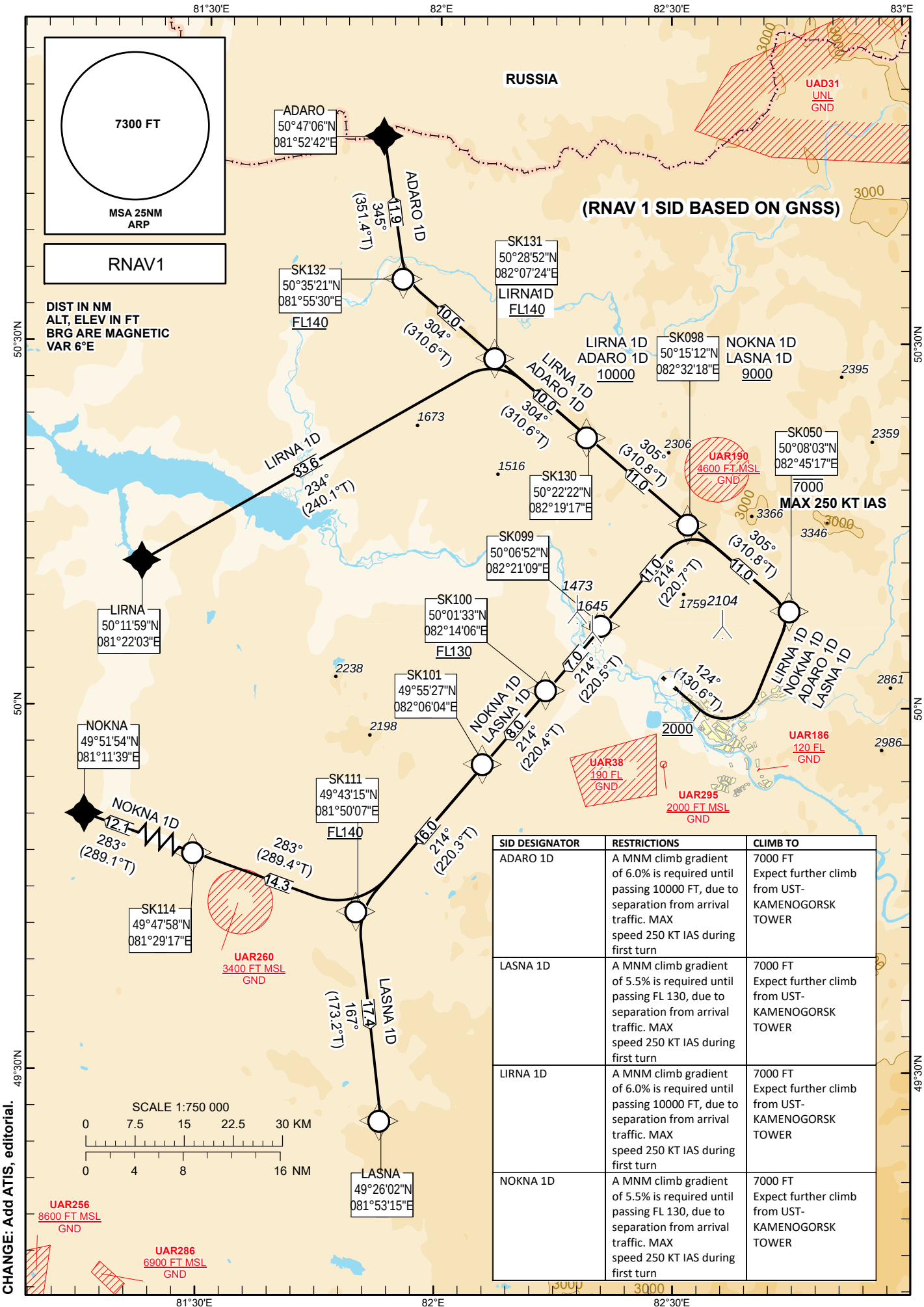
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

ADARO 1D, LASNA 1D, LIRNA 1D, NOKNA 1D

UST-KAMENOGORSK RWY 12



SID DESIGNATOR	RESTRICTIONS	CLIMB TO
ADARO 1D	A MNM climb gradient of 6.0% is required until passing 10000 FT, due to separation from arrival traffic. MAX speed 250 KT IAS during first turn	7000 FT Expect further climb from UST-KAMENOGORSK TOWER
LASNA 1D	A MNM climb gradient of 5.5% is required until passing FL 130, due to separation from arrival traffic. MAX speed 250 KT IAS during first turn	7000 FT Expect further climb from UST-KAMENOGORSK TOWER
LIRNA 1D	A MNM climb gradient of 6.0% is required until passing 10000 FT, due to separation from arrival traffic. MAX speed 250 KT IAS during first turn	7000 FT Expect further climb from UST-KAMENOGORSK TOWER
NOKNA 1D	A MNM climb gradient of 5.5% is required until passing FL 130, due to separation from arrival traffic. MAX speed 250 KT IAS during first turn	7000 FT Expect further climb from UST-KAMENOGORSK TOWER

CHANGE: Add ATIS, editorial.

TABULAR DESCRIPTION

ADARO 1D RWY12											
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	-	-	124(130.6)	+6.3	-	-	@2000	-	3.2	RNAV 1
20	DF	SK050	-	-	+6.3	-	L	-7000	-250	3.2	RNAV 1
30	TF	SK098	-	305(310.8)	+6.3	11.0	-	+10000	-	3.2	RNAV 1
40	TF	SK130	-	305(310.8)	+6.3	11.0	-	-	-	3.2	RNAV 1
50	TF	SK131	-	304(310.6)	+6.3	10.0	-	-	-	1.9	RNAV 1
60	TF	SK132	-	304(310.6)	+6.3	10.0	-	+FL140	-	1.9	RNAV 1
70	TF	ADARO	-	345(351.4)	+6.3	11.9	R	-	-	1.9	RNAV 1

WAYPOINT LIST

ADARO 1D		
Waypoint Identifier	**Coordinates**	
DEP	500133.96N	0823045.63E
SK050	500802.62N	0824516.50E
SK098	501512.31N	0823217.53E
SK130	502222.35N	0821917.24E
SK131	502852.04N	0820724.48E
SK132	503521.46N	0815529.68E
ADARO	504706.00N	0815242.00E

TABULAR DESCRIPTION

LIRNA 1D RWY12											
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	-	-	124(130.6)	+6.3	-	-	@2000	-	3.2	RNAV 1
20	DF	SK050	-	-	+6.3	-	L	-7000	-250	3.2	RNAV 1
30	TF	SK098	-	305(310.8)	+6.3	11.0	-	+10000	-	3.2	RNAV 1
40	TF	SK130	-	305(310.8)	+6.3	11.0	-	-	-	3.2	RNAV 1
50	TF	SK131	-	304(310.6)	+6.3	10.0	-	+FL140	-	1.9	RNAV 1
60	TF	LIRNA	-	234(240.1)	+6.3	33.6	L	-	-	1.9	RNAV 1

WAYPOINT LIST

LIRNA 1D		
Waypoint Identifier	**Coordinates**	
DEP	500133.96N	0823045.63E
SK050	500802.62N	0824516.50E
SK098	501512.31N	0823217.53E
SK130	502222.35N	0821917.24E
SK131	502852.04N	0820724.48E
LIRNA	501159.00N	0812203.00E

TABULAR DESCRIPTION

NOKNA 1D RWY12											
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	-	-	124(130.6)	+6.3	-	-	@2000	-	2.9	RNAV 1
20	DF	SK050	-	-	+6.3	-	L	-7000	-250	2.9	RNAV 1
30	TF	SK098	-	305(310.8)	+6.3	11.0	-	+9000	-	2.9	RNAV 1
40	TF	SK099	-	214(220.7)	+6.3	11.0	L	-	-	2.9	RNAV 1
50	TF	SK100	-	214(220.5)	+6.3	7.0	-	+FL130	-	1.9	RNAV 1
60	TF	SK101	-	214(220.4)	+6.3	8.0	-	-	-	1.9	RNAV 1
70	TF	SK111	-	214(220.3)	+6.3	16.0	-	+FL140	-	1.9	RNAV 1
80	TF	SK114	-	283(289.4)	+6.3	14.3	R	-	-	1.9	RNAV 1
90	TF	NOKNA	-	283(289.1)	+6.3	12.1	-	-	-	1.9	RNAV 1

WAYPOINT LIST

NOKNA 1D		
Waypoint Identifier	**Coordinates**	
DEP	500133.96N	0823045.63E
SK050	500802.62N	0824516.50E
SK098	501512.31N	0823217.53E
SK099	500651.68N	0822109.32E
SK100	500132.57N	0821406.15E
SK101	495527.06N	0820604.08E
SK111	494315.06N	0815006.88E
SK114	494758.07N	0812916.98E
NOKNA	495154.00N	0811139.00E

TABULAR DESCRIPTION

LASNA 1D RWY12											
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	-	-	124(130.6)	+6.3	-	-	@2000	-	2.9	RNAV 1
20	DF	SK050	-	-	+6.3	-	L	-7000	-250	2.9	RNAV 1
30	TF	SK098	-	305(310.8)	+6.3	11.0	-	+9000	-	2.9	RNAV 1
40	TF	SK099	-	214(220.7)	+6.3	11.0	L	-	-	2.9	RNAV 1
50	TF	SK100	-	214(220.5)	+6.3	7.0	-	+FL130	-	1.9	RNAV 1
60	TF	SK101	-	214(220.4)	+6.3	8.0	-	-	-	1.9	RNAV 1
70	TF	SK111	-	214(220.3)	+6.3	16.0	-	+FL140	-	1.9	RNAV 1
80	TF	LASNA	-	167(173.2)	+6.3	17.4	L	-	-	1.9	RNAV 1

WAYPOINT LIST

LASNA 1D		
Waypoint Identifier	**Coordinates**	
DEP	500133.96N	0823045.63E
SK050	500802.62N	0824516.50E
SK098	501512.31N	0823217.53E
SK099	500651.68N	0822109.32E
SK100	500132.57N	0821406.15E
SK101	495527.06N	0820604.08E
SK111	494315.06N	0815006.88E
LASNA	492602.00N	0815315.00E

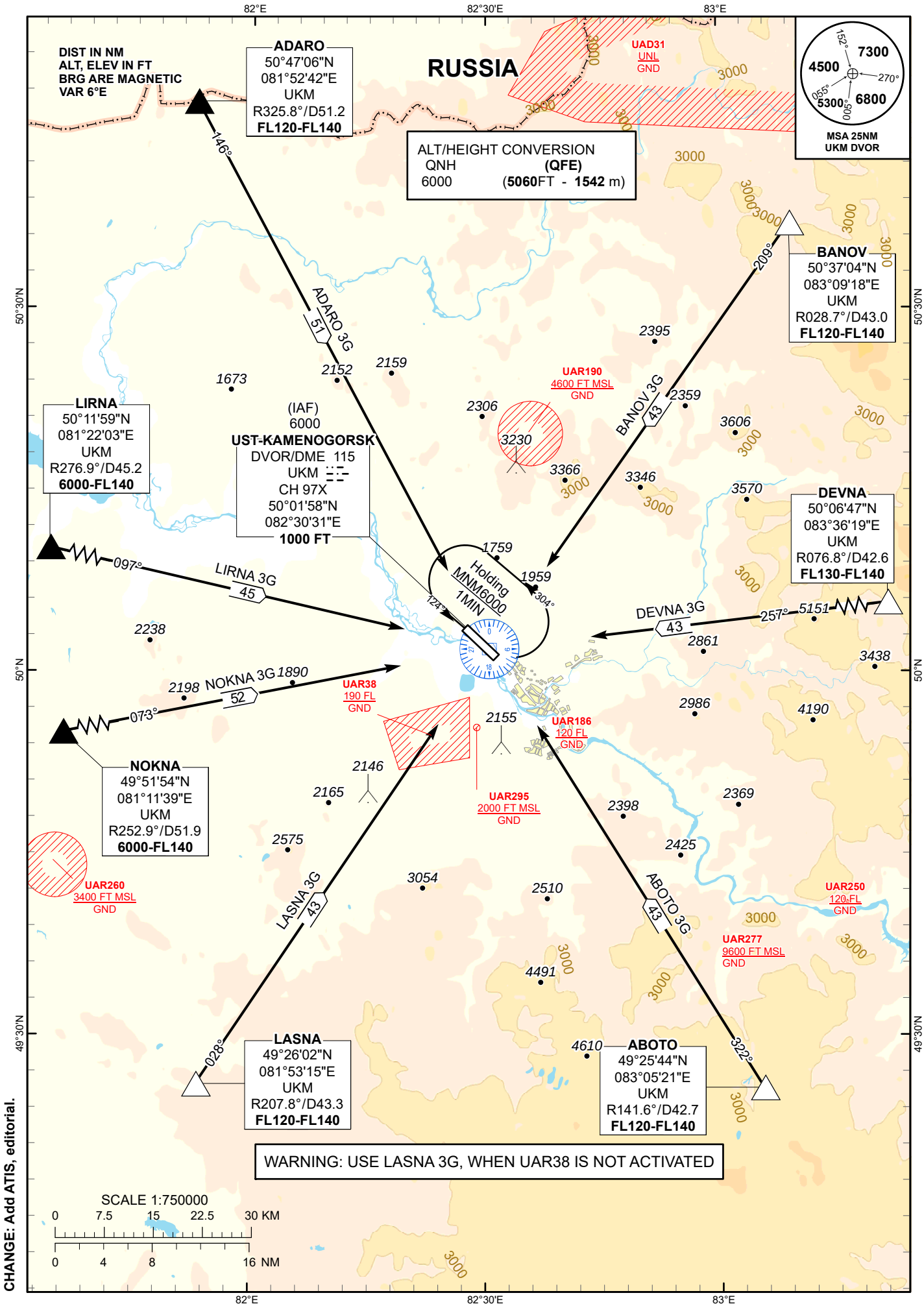
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

ABOTO 3G, ADARO 3G, BANOV 3G, DEVNA 3G, LASNA 3G, LIRNA 3G, NOKNA 3G

UST-KAMENOGORSK RWY 30



CHANGE: Add ATIS, editorial.

STANDARD ARRIVAL ROUTES – INSTRUMENT (STAR) UST-KAMENOGORSK RWY 30
BANOV 3G After crossing BANOV (R 028.7° D 43.0 UKM), proceed on track 209° to UKM. Cross BANOV at FL120-FL140.
DEVNA 3G After crossing DEVNA (R 076.8° D 42.6 UKM), proceed on track 257° to UKM. Cross DEVNA at FL130-FL140.
ABOTO 3G After crossing ABOTO (R 141.6° D 42.7 UKM), proceed on track 322° to UKM. Cross ABOTO at FL120-FL140.
LASNA 3G After crossing LASNA (R 207.8° D 43.3 UKM), proceed on track 028° to UKM. Use LASNA 3G when UAR38 is not activated. Cross LASNA at FL120-FL140.
NOKNA 3G After crossing NOKNA (R 252.9° D 51.9 UKM), proceed on track 073° to UKM. Cross NOKNA at 6000-FL140.
LIRNA 3G After crossing LIRNA (R 276.9° D 45.2 UKM), proceed on track 097° to UKM. Cross LIRNA at 6000-FL140.
ADARO 3G After crossing ADARO (R 325.8° D 51.2 UKM), proceed on track 146° to UKM. Cross ADARO at FL120-FL140.

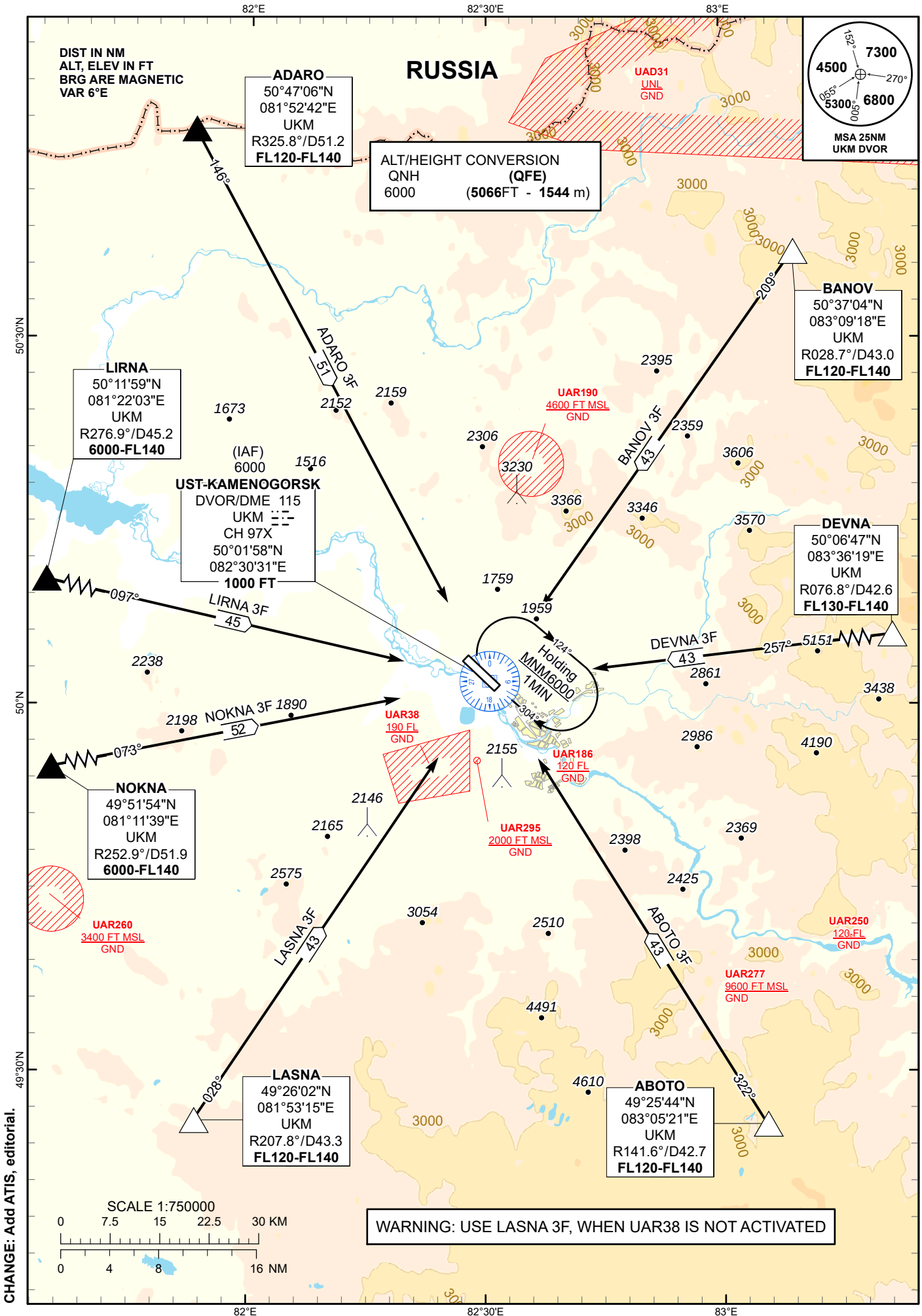
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

ABOTO 3F, ADARO 3F, BANOV 3F, DEVNA 3F, LASNA 3F, LIRNA 3F, NOKNA 3F

UST-KAMENOGORSK RWY 12



CHANGE: Add ATIS, editorial.

STANDARD ARRIVAL ROUTES – INSTRUMENT (STAR) UST-KAMENOGORSK RWY 12
BANOV 3F After crossing BANOV (R 028.7° D 43.0 UKM), proceed on track 209° to UKM. Cross BANOV at FL120-FL140.
DEVNA 3F After crossing DEVNA (R 076.8° D 42.6 UKM), proceed on track 257° to UKM. Cross DEVNA at FL130-FL140.
ABOTO 3F After crossing ABOTO (R 141.6° D 42.7 UKM), proceed on track 322° to UKM. Cross ABOTO at FL120-FL140.
LASNA 3F After crossing LASNA (R 207.8° D 43.3 UKM), proceed on track 028° to UKM. Use LASNA 3F when UAR38 is not activated. Cross LASNA at FL120-FL140.
NOKNA 3F After crossing NOKNA (R 252.9° D 51.9 UKM), proceed on track 073° to UKM. Cross NOKNA at 6000-FL140.
LIRNA 3F After crossing LIRNA (R 276.9° D 45.2 UKM), proceed on track 097° to UKM. Cross LIRNA at 6000-FL140.
ADARO 3F After crossing ADARO (R 325.8° D 51.2 UKM), proceed on track 146° to UKM. Cross ADARO at FL120-FL140.

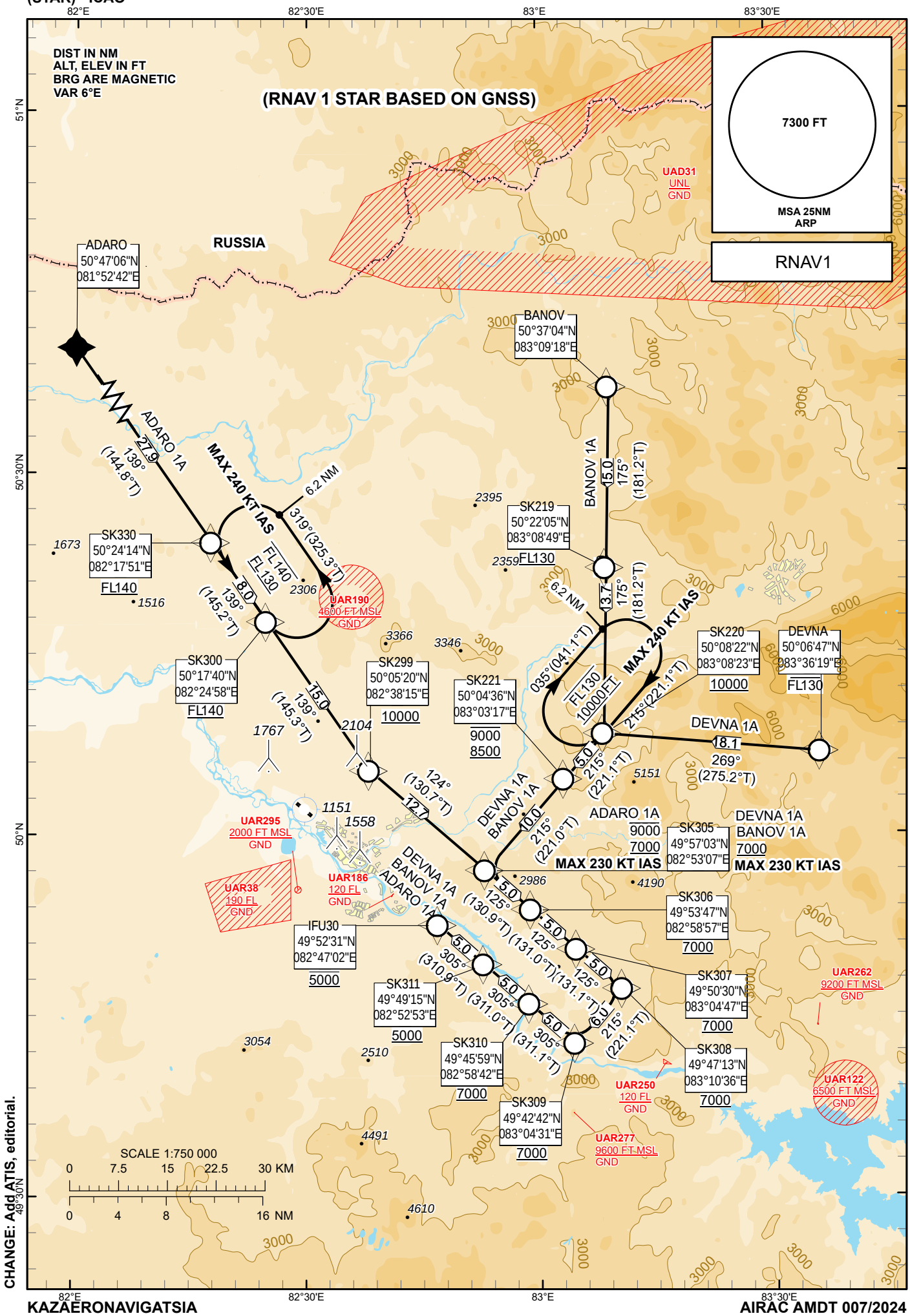
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

ADARO 1A, BANOV 1A, DEVNA 1A

UST-KAMENOGORSK
RWY 30



CHANGE: Add ATIS, editorial.

TABULAR DESCRIPTION

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
ADARO 1A											
10	IF	ADARO	-	-	+6.3	-	-	-	-	-	RNAV 1
20	TF	SK330	-	139(144.8)	+6.3	27.9	R	+FL140	-	0	RNAV 1
30	TF	SK300	-	139(145.2)	+6.3	8.0	-	+FL140	-	0	RNAV 1
40	TF	SK299	-	139(145.3)	+6.3	15.0	-	+10000	-	-2.5	RNAV 1
50	TF	SK305	-	124(130.7)	+6.3	12.7	L	+7000/ -9000	-230	-2.2	RNAV 1
60	TF	SK306	-	125(130.9)	+6.3	5.0	-	+7000	-	0	RNAV 1
70	TF	SK307	-	125(131)	+6.3	5.0	-	+7000	-	0	RNAV 1
80	TF	SK308	-	125(131.1)	+6.3	5.0	-	+7000	-	0	RNAV 1
90	TF	SK309	-	215(221.1)	+6.3	6.0	R	+7000	-	0	RNAV 1
100	TF	SK310	-	305(311.1)	+6.3	5.0	R	+7000	-	0	RNAV 1
110	TF	SK311	-	305(311)	+6.3	5.0	-	+5000	-	-3.8	RNAV 1
120	TF	IFU30	-	305(310.9)	+6.3	5.0	-	@5000	-	0	RNAV 1
BANOV 1A											
10	IF	BANOV	-	-	+6.3	-	-	-	-	-	RNAV 1
20	TF	SK219	-	175(181.2)	+6.3	15.0	R	+FL130	-	-1.9	RNAV 1
30	TF	SK220	-	175(181.2)	+6.3	13.7	-	+10000	-	-2.1	RNAV 1
40	TF	SK221	-	215(221.1)	+6.3	5.0	R	+8500/ -9000	-	-1.9	RNAV 1
50	TF	SK305	-	215(221)	+6.3	10.0	-	+7000	-230	-1.9	RNAV 1
60	TF	SK306	-	125(130.9)	+6.3	5.0	L	+7000	-	0	RNAV 1
70	TF	SK307	-	125(131)	+6.3	5.0	-	+7000	-	0	RNAV 1
80	TF	SK308	-	125(131.1)	+6.3	5.0	-	+7000	-	0	RNAV 1
90	TF	SK309	-	215(221.1)	+6.3	6.0	-	+7000	-	0	RNAV 1
100	TF	SK310	-	305(311.1)	+6.3	5.0	R	+7000	-	0	RNAV 1
110	TF	SK311	-	305(311)	+6.3	5.0	-	+5000	-	0	RNAV 1
120	TF	IFU30	-	305(310.9)	+6.3	5.0	-	@5000	-	-3.8	RNAV 1
DEVNA 1A											
10	IF	DEVNA	-	-	+6.3	-	-	-FL130	-	-	RNAV 1
20	TF	SK220	-	269(275.2)	+6.3	18.1	R	+10000	-	-2.1	RNAV 1
30	TF	SK221	-	215(221.1)	+6.3	5.0	L	+8500/ -9000	-	-1.9	RNAV 1
40	TF	SK305	-	215(221)	+6.3	10.0	-	+7000	-230	-1.9	RNAV 1
50	TF	SK306	-	125(130.9)	+6.3	5.0	L	+7000	-	0	RNAV 1
60	TF	SK307	-	125(131)	+6.3	5.0	-	+7000	-	0	RNAV 1
70	TF	SK308	-	125(131.1)	+6.3	5.0	-	+7000	-	0	RNAV 1
80	TF	SK309	-	215(221.1)	+6.3	6.0	-	+7000	-	0	RNAV 1
90	TF	SK310	-	305(311.1)	+6.3	5.0	R	+7000	-	0	RNAV 1
100	TF	SK311	-	305(311)	+6.3	5.0	-	+5000	-	0	RNAV 1
110	TF	IFU30	-	305(310.9)	+6.3	5.0	-	@5000	-	-3.8	RNAV 1

WAYPOINT LIST

ADARO 1A		
Waypoint Identifier	**Coordinates**	
ADARO	504706.00N	0815242.00E
SK330	502413.88N	0821751.15E
SK300	501739.94N	0822458.40E
SK299	500519.69N	0823814.69E
SK305	495703.40N	0825306.58E
SK306	495346.98N	0825857.22E
SK307	495030.26N	0830447.06E
SK308	494713.25N	0831036.12E
SK309	494242.20N	0830431.27E
SK310	494558.91N	0825842.34E
SK311	494915.32N	0825252.63E
IFU30	495231.44N	0824702.13E
BANOV 1A		
Waypoint Identifier	**Coordinates**	
BANOV	503704.00N	0830918.00E
SK219	502205.41N	0830848.95E
SK220	500821.88N	0830822.73E
SK221	500436.01N	0830316.63E
SK305	495703.40N	0825306.58E
SK306	495346.98N	0825857.22E
SK307	495030.26N	0830447.06E
SK308	494713.25N	0831036.12E
SK309	494242.20N	0830431.27E
SK310	494558.91N	0825842.34E
SK311	494915.32N	0825252.63E
IFU30	495231.44N	0824702.13E
DEVNA 1A		
Waypoint Identifier	**Coordinates**	
DEVNA	500647.00N	0833619.00E
SK220	500821.88N	0830822.73E
SK221	500436.01N	0830316.63E
SK305	495703.40N	0825306.58E
SK306	495346.98N	0825857.22E
SK307	495030.26N	0830447.06E
SK308	494713.25N	0831036.12E
SK309	494242.20N	0830431.27E
SK310	494558.91N	0825842.34E
SK311	494915.32N	0825252.63E
IFU30	495231.44N	0824702.13E

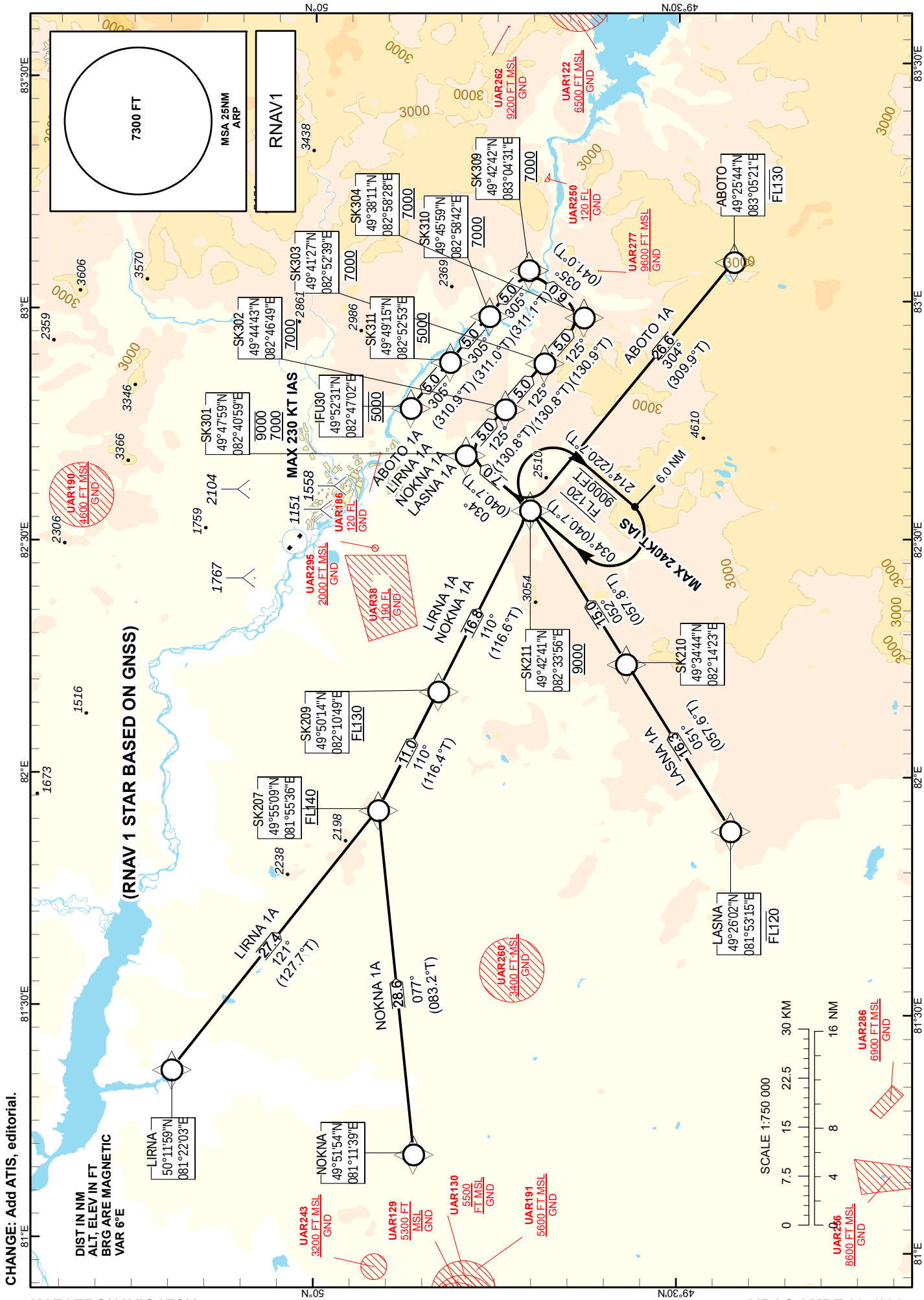
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

ABOTO 1A, LASNA 1A, LIRNA 1A, NOKNA 1A

UST-KAMENOGORSK RWY 30



TABULAR DESCRIPTION

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
ABOTO 1A											
10	IF	ABOTO	-	-	+6.3	-	-	-FL130	-	-	RNAV 1
20	TF	SK211	-	304(309.9)	+6.3	26.6	R	+9000	-	-1.8	RNAV 1
30	TF	SK301	-	034(40.7)	+6.3	7.0	R	+7000/-9000	-230	-2.7	RNAV 1
40	TF	SK302	-	125(130.8)	+6.3	5.0	R	+7000	-	0	RNAV 1
50	TF	SK303	-	125(130.8)	+6.3	5.0	-	+7000	-	0	RNAV 1
60	TF	SK304	-	125(130.9)	+6.3	5.0	-	+7000	-	0	RNAV 1
70	TF	SK309	-	035(041)	+6.3	6.0	L	+7000	-	0	RNAV 1
80	TF	SK310	-	305(311.1)	+6.3	5.0	L	+7000	-	0	RNAV 1
90	TF	SK311	-	305(311)	+6.3	5.0	-	+5000	-	0	RNAV 1
100	TF	IFU30	-	305(310.9)	+6.3	5.0	-	@5000	-	-3.8	RNAV 1
LASNA 1A											
10	IF	LASNA	-	-	+6.3	-	-	-FL120	-	-	RNAV 1
20	TF	SK210	-	051(57.6)	+6.3	16.3	L	-	-	-1.2	RNAV 1
30	TF	SK211	-	052(57.8)	+6.3	15.0	-	+9000	-	-2.5	RNAV 1
40	TF	SK301	-	034(40.7)	+6.3	7.0	L	+7000/-9000	-230	-2.7	RNAV 1
50	TF	SK302	-	125(130.8)	+6.3	5.0	R	+7000	-	0	RNAV 1
60	TF	SK303	-	125(130.8)	+6.3	5.0	-	+7000	-	0	RNAV 1
70	TF	SK304	-	125(130.9)	+6.3	5.0	-	+7000	-	0	RNAV 1
80	TF	SK309	-	035(041)	+6.3	6.0	L	+7000	-	0	RNAV 1
90	TF	SK310	-	305(311.1)	+6.3	5.0	L	+7000	-	0	RNAV 1
100	TF	SK311	-	305(311)	+6.3	5.0	-	+5000	-	0	RNAV 1
110	TF	IFU30	-	305(310.9)	+6.3	5.0	-	@5000	-	-3.8	RNAV 1
LIRNA 1A											
10	IF	LIRNA	-	-	+6.3	-	-	-	-	-	RNAV 1
20	TF	SK207	-	121(127.7)	+6.3	27.4	L	+FL140	-	-2.4	RNAV 1
30	TF	SK209	-	110(116.4)	+6.3	11.0	L	+FL130	-	-2.6	RNAV 1
40	TF	SK211	-	110(116.6)	+6.3	16.8	-	+9000	-	-0.6	RNAV 1
50	TF	SK301	-	034(40.7)	+6.3	7.0	L	+7000/-9000	-230	-2.7	RNAV 1
60	TF	SK302	-	125(130.8)	+6.3	5.0	R	+7000	-	0	RNAV 1
70	TF	SK303	-	125(130.8)	+6.3	5.0	-	+7000	-	0	RNAV 1
80	TF	SK304	-	125(130.9)	+6.3	5.0	-	+7000	-	0	RNAV 1
90	TF	SK309	-	035(041)	+6.3	6.0	L	+7000	-	0	RNAV 1
100	TF	SK310	-	305(311.1)	+6.3	5.0	L	+7000	-	0	RNAV 1
110	TF	SK311	-	305(311)	+6.3	5.0	-	+5000	-	0	RNAV 1
120	TF	IFU30	-	305(310.9)	+6.3	5.0	-	@5000	-	-3.8	RNAV 1
NOKNA 1A											
10	IF	NOKNA	-	-	+6.3	-	-	-	-	-	RNAV 1
20	TF	SK207	-	077(83.2)	+6.3	28.6	L	+FL140	-	-2.3	RNAV 1
30	TF	SK209	-	110(116.4)	+6.3	11.0	R	+FL130	-	-2.6	RNAV 1
40	TF	SK211	-	110(116.6)	+6.3	16.8	-	+9000	-	-0.6	RNAV 1
50	TF	SK301	-	034(40.7)	+6.3	7.0	L	+7000/-9000	-230	-2.7	RNAV 1
60	TF	SK302	-	125(130.8)	+6.3	5.0	R	+7000	-	0	RNAV 1
70	TF	SK303	-	125(130.8)	+6.3	5.0	-	+7000	-	0	RNAV 1
80	TF	SK304	-	125(130.9)	+6.3	5.0	-	+7000	-	0	RNAV 1
90	TF	SK309	-	035(041)	+6.3	6.0	L	+7000	-	0	RNAV 1
100	TF	SK310	-	305(311.1)	+6.3	5.0	L	+7000	-	0	RNAV 1
110	TF	SK311	-	305(311)	+6.3	5.0	-	+5000	-	0	RNAV 1
120	TF	IFU30	-	305(310.9)	+6.3	5.0	-	@5000	-	-3.8	RNAV 1

WAYPOINT LIST

ABOTO 1A	
Waypoint Identifier	**Coordinates**
ABOTO	492544.00N 0830521.00E
SK211	494241.09N 0823356.37E
SK301	494759.16N 0824058.81E
SK302	494443.34N 0824649.17E
SK303	494127.23N 0825238.75E
SK304	493810.82N 0825827.54E
SK309	494242.20N 0830431.27E
SK310	494558.91N 0825842.34E
SK311	494915.32N 0825252.63E
IFU30	495231.44N 0824702.13E

LASNA 1A	
Waypoint Identifier	**Coordinates**
LASNA	492602.00N 0815315.00E
SK210	493443.97N 0821422.65E
SK211	494241.09N 0823356.37E
SK301	494759.16N 0824058.81E
SK302	494443.34N 0824649.17E
SK303	494127.23N 0825238.75E
SK304	493810.82N 0825827.54E
SK309	494242.20N 0830431.27E
SK310	494558.91N 0825842.34E
SK311	494915.32N 0825252.63E
IFU30	495231.44N 0824702.13E

LIRNA 1A	
Waypoint Identifier	**Coordinates**
LIRNA	501159.00N 0812203.00E
SK207	495508.92N 0815535.81E
SK209	495014.45N 0821048.75E
SK211	494241.09N 0823356.37E
SK301	494759.16N 0824058.81E
SK302	494443.34N 0824649.17E
SK303	494127.23N 0825238.75E
SK304	493810.82N 0825827.54E
SK309	494242.20N 0830431.27E
SK310	494558.91N 0825842.34E
SK311	494915.32N 0825252.63E
IFU30	495231.44N 0824702.13E

NOKNA 1A	
Waypoint Identifier	**Coordinates**
NOKNA	495154.00N 0811139.00E
SK207	495508.92N 0815535.81E
SK209	495014.45N 0821048.75E
SK211	494241.09N 0823356.37E
SK301	494759.16N 0824058.81E
SK302	494443.34N 0824649.17E
SK303	494127.23N 0825238.75E
SK304	493810.82N 0825827.54E
SK309	494242.20N 0830431.27E
SK310	494558.91N 0825842.34E
SK311	494915.32N 0825252.63E
IFU30	495231.44N 0824702.13E

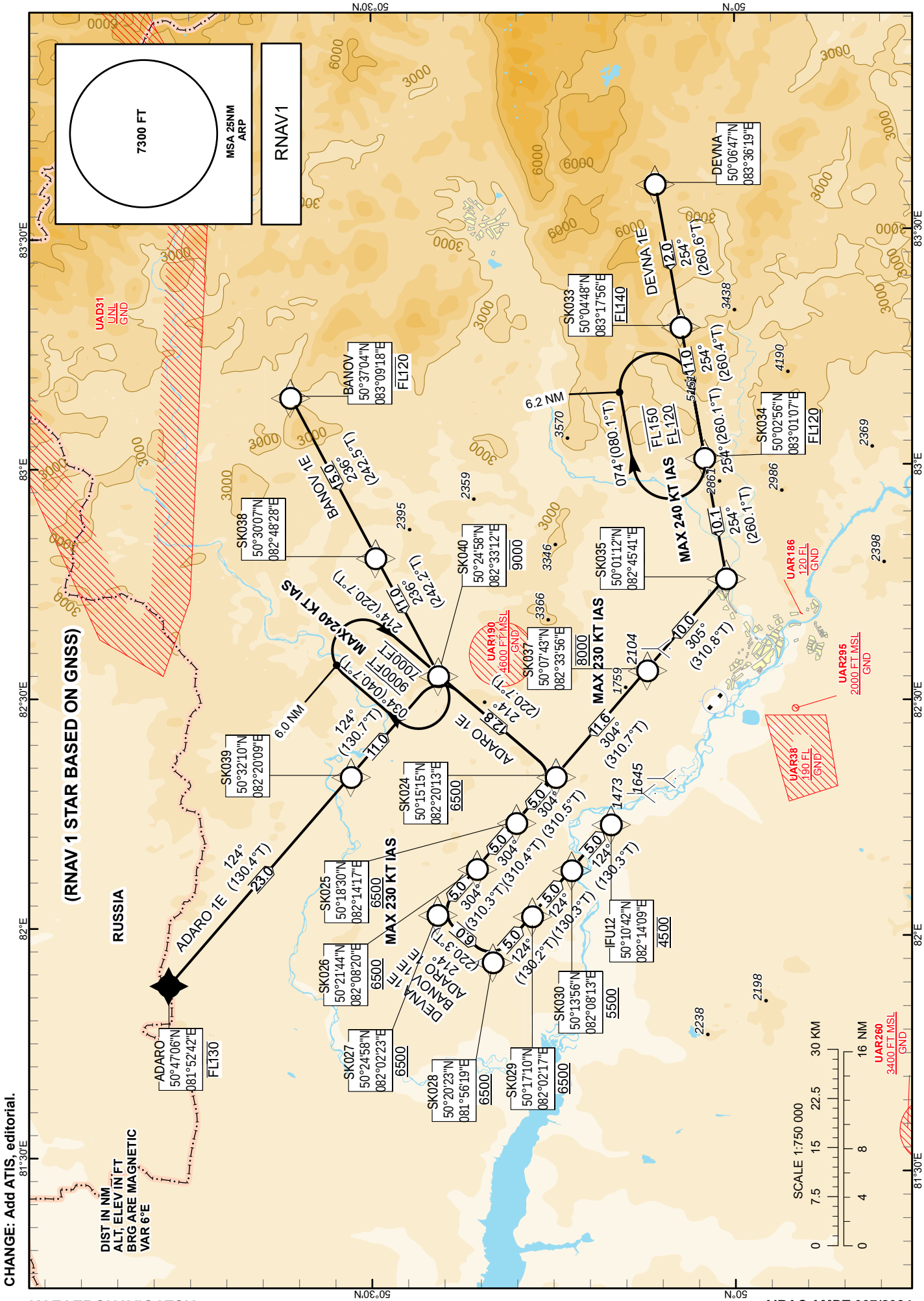
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

ADARO 1E, BANOV 1E, DEVNA 1E

UST-KAMENOGORSK RWY 12



TABULAR DESCRIPTION

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
ADARO 1E											
10	IF	ADARO	-	-	+6.3	-	-	-FL130	-	-	RNAV 1
20	TF	SK039	-	124(130.4)	+6.3	23.0	L	-	-	-2	RNAV 1
30	TF	SK040	-	124(130.7)	+6.3	11.0	-	-9000	-	-1.7	RNAV 1
40	TF	SK024	-	214(220.7)	+6.3	12.8	R	+6500	-230	-1.5	RNAV 1
50	TF	SK025	-	304(310.5)	+6.3	5.0	R	+6500	-230	0	RNAV 1
60	TF	SK026	-	304(310.4)	+6.3	5.0	-	+6500	-	0	RNAV 1
70	TF	SK027	-	304(310.3)	+6.3	5.0	-	+6500	-	0	RNAV 1
80	TF	SK028	-	214(220.3)	+6.3	6.0	L	+6500	-	0	RNAV 1
90	TF	SK029	-	124(130.2)	+6.3	5.0	L	+6500	-	0	RNAV 1
100	TF	SK030	-	124(130.3)	+6.3	5.0	-	+5500	-	0	RNAV 1
110	TF	IFU12	-	124(130.3)	+6.3	5.0	-	@4500	-	-2.8	RNAV 1
BANOV 1E											
10	IF	BANOV	-	-	+6.3	-	-	-FL120	-	-	RNAV 1
20	TF	SK038	-	236(242.5)	+6.3	15.0	R	-	-	-2.5	RNAV 1
30	TF	SK040	-	236(242.2)	+6.3	11.0	-	-9000	-	-1.7	RNAV 1
40	TF	SK024	-	214(220.7)	+6.3	12.8	L	+6500	-230	-1.5	RNAV 1
50	TF	SK025	-	304(310.5)	+6.3	5.0	R	+6500	-230	0	RNAV 1
60	TF	SK026	-	304(310.4)	+6.3	5.0	-	+6500	-	0	RNAV 1
70	TF	SK027	-	304(310.3)	+6.3	5.0	-	+6500	-	0	RNAV 1
80	TF	SK028	-	214(220.3)	+6.3	6.0	L	+6500	-	0	RNAV 1
90	TF	SK029	-	124(130.2)	+6.3	5.0	L	+6500	-	0	RNAV 1
100	TF	SK030	-	124(130.3)	+6.3	5.0	-	+5500	-	0	RNAV 1
110	TF	IFU12	-	124(130.3)	+6.3	5.0	-	@4500	-	-2.8	RNAV 1
DEVNA 1E											
10	IF	DEVNA	-	-	+6.3	-	-	-	-	-	RNAV 1
20	TF	SK033	-	254(260.6)	+6.3	12.0	L	+FL140	-	0	RNAV 1
30	TF	SK034	-	254(260.4)	+6.3	11.0	-	+FL120	-	-1.7	RNAV 1
40	TF	SK035	-	254(260.1)	+6.3	10.1	-	-	-	-1.9	RNAV 1
50	TF	SK037	-	305(310.8)	+6.3	10.0	R	@8000	-	-1.9	RNAV 1
60	TF	SK024	-	304(310.7)	+6.3	11.6	-	+6500	-230	-1.6	RNAV 1
70	TF	SK025	-	304(310.5)	+6.3	5.0	-	+6500	-230	0	RNAV 1
80	TF	SK026	-	304(310.4)	+6.3	5.0	-	+6500	-	0	RNAV 1
90	TF	SK027	-	304(310.3)	+6.3	5.0	-	+6500	-	0	RNAV 1
100	TF	SK028	-	214(220.3)	+6.3	6.0	L	+6500	-	0	RNAV 1
110	TF	SK029	-	124(130.2)	+6.3	5.0	L	+6500	-	0	RNAV 1
120	TF	SK030	-	124(130.3)	+6.3	5.0	-	+5500	-	-2.8	RNAV 1
130	TF	IFU12	-	124(130.3)	+6.3	5.0	-	@4500	-	0	RNAV 1

WAYPOINT LIST

ADARO 1E		
Waypoint Identifier	**Coordinates**	
ADARO	504706.00N	0815242.00E
SK039	503209.70N	0822009.48E
SK040	502458.18N	0823312.37E
SK024	501515.44N	0822012.72E
SK025	501829.89N	0821416.83E
SK026	502144.03N	0820820.13E
SK027	502457.87N	0820222.63E
SK028	502023.28N	0815619.46E
SK029	501709.76N	0820216.80E
SK030	501355.92N	0820813.34E
IFU12	501041.78N	0821409.08E
BANOV 1E		
Waypoint Identifier	**Coordinates**	
BANOV	503704.00N	0830918.00E
SK038	503007.16N	0824827.90E
SK040	502458.18N	0823312.37E
SK024	501515.44N	0822012.72E
SK025	501829.89N	0821416.83E
SK026	502144.03N	0820820.13E
SK027	502457.87N	0820222.63E
SK028	502023.28N	0815619.46E
SK029	501709.76N	0820216.80E
SK030	501355.92N	0820813.34E
IFU12	501041.78N	0821409.08E
DEVNA 1E		
Waypoint Identifier	**Coordinates**	
DEVNA	500647.00N	0833619.00E
SK033	500448.02N	0831756.25E
SK034	500256.48N	0830107.45E
SK035	500111.78N	0824541.27E
SK037	500742.91N	0823355.72E
SK024	501515.44N	0822012.72E
SK025	501829.89N	0821416.83E
SK026	502144.03N	0820820.13E
SK027	502457.87N	0820222.63E
SK028	502023.28N	0815619.46E
SK029	501709.76N	0820216.80E
SK030	501355.92N	0820813.34E
IFU12	501041.78N	0821409.08E

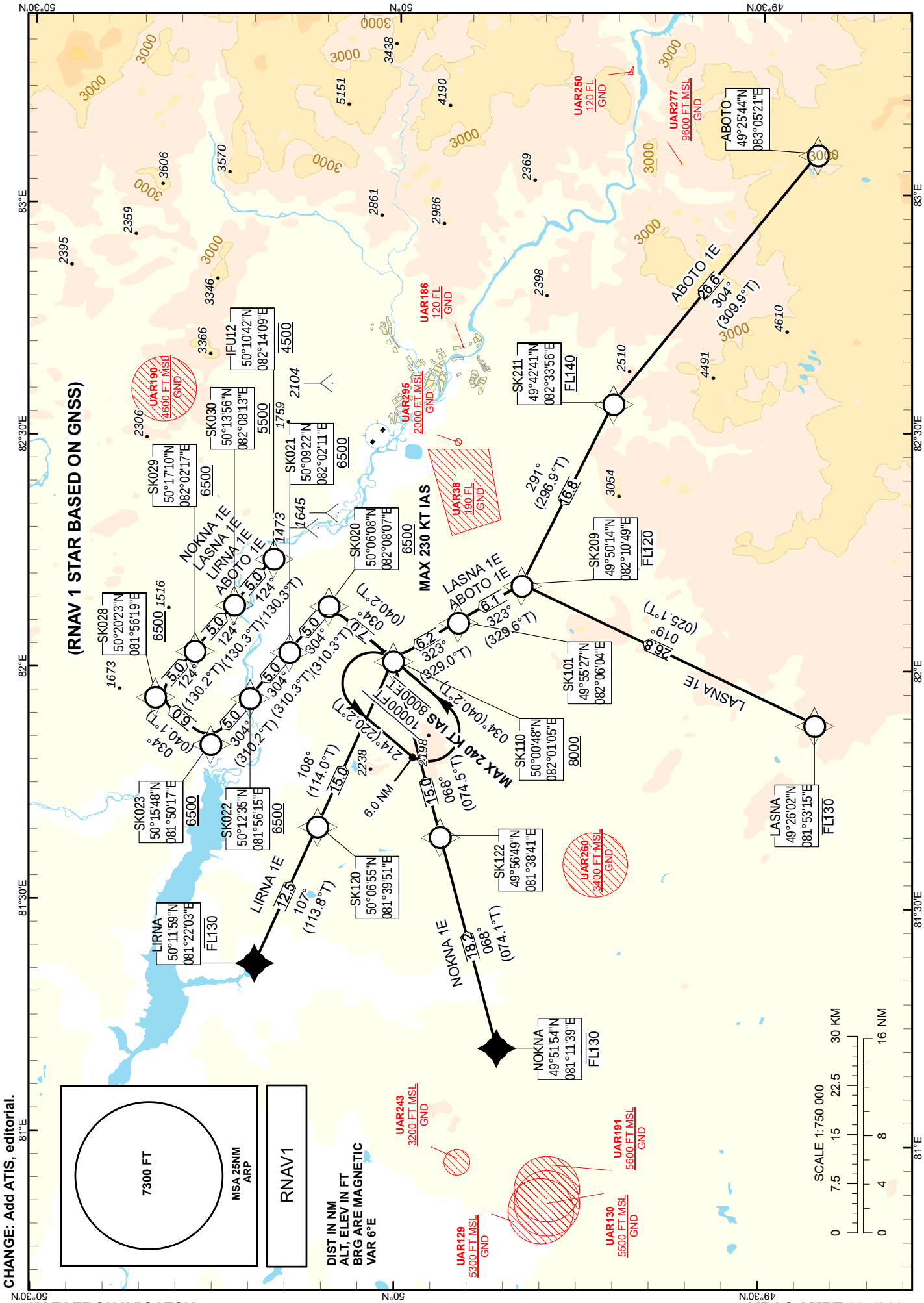
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

ABOTO 1E, LASNA 1E, LIRNA 1E, NOKNA 1E

UST-KAMENOGORSK RWY 12



TABULAR DESCRIPTION

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
ABOTO 1E											
10	IF	ABOTO	-	-	+6.3	-	-	-	-	-	RNAV 1
20	TF	SK211	-	304(309.9)	+6.3	26.6	R	+FL140	-	-2.1	RNAV 1
30	TF	SK209	-	291(296.9)	+6.3	16.8	L	-FL120	-	-1.7	RNAV 1
40	TF	SK101	-	323(329.6)	+6.3	6.1	R	-	-	-1.6	RNAV 1
50	TF	SK110	-	323(329)	+6.3	6.2	-	+8000	-	-1.5	RNAV 1
60	TF	SK020	-	034(40.2)	+6.3	7.0	R	+6500	-230	-2.7	RNAV 1
70	TF	SK021	-	304(310.3)	+6.3	5.0	L	+6500	-	0	RNAV 1
80	TF	SK022	-	304(310.3)	+6.3	5.0	-	+6500	-	0	RNAV 1
90	TF	SK023	-	304(310.2)	+6.3	5.0	-	+6500	-	0	RNAV 1
100	TF	SK028	-	034(40.1)	+6.3	6.0	R	+6500	-	0	RNAV 1
110	TF	SK029	-	124(130.2)	+6.3	5.0	R	+6500	-	0	RNAV 1
120	TF	SK030	-	124(130.3)	+6.3	5.0	-	+5500	-	0	RNAV 1
130	TF	IFU12	-	124(130.3)	+6.3	5.0	-	@4500	-	-2.8	RNAV 1
LASNA 1E											
10	IF	LASNA	-	-	+6.3	-	-	-FL130	-	-	RNAV 1
20	TF	SK209	-	019(25.1)	+6.3	26.8	R	-FL120	-	-2.1	RNAV 1
30	TF	SK101	-	323(329.6)	+6.3	6.1	L	-	-	-1.6	RNAV 1
40	TF	SK110	-	323(329)	+6.3	6.2	-	+8000	-	-1.5	RNAV 1
50	TF	SK020	-	034(40.2)	+6.3	7.0	R	+6500	-230	-2.7	RNAV 1
60	TF	SK021	-	304(310.3)	+6.3	5.0	L	+6500	-	0	RNAV 1
70	TF	SK022	-	304(310.3)	+6.3	5.0	-	+6500	-	0	RNAV 1
80	TF	SK023	-	304(310.2)	+6.3	5.0	-	+6500	-	0	RNAV 1
90	TF	SK028	-	034(40.1)	+6.3	6.0	R	+6500	-	0	RNAV 1
100	TF	SK029	-	124(130.2)	+6.3	5.0	R	+6500	-	0	RNAV 1
110	TF	SK030	-	124(130.3)	+6.3	5.0	-	+5500	-	0	RNAV 1
120	TF	IFU12	-	124(130.3)	+6.3	5.0	-	@4500	-	-2.8	RNAV 1
LIRNA 1E											
10	IF	LIRNA	-	-	+6.3	-	-	-FL130	-	-	RNAV 1
20	TF	SK120	-	107(113.8)	+6.3	12.5	L	-	-	-2.3	RNAV 1
30	TF	SK110	-	108(114)	+6.3	15.0	-	+8000	-	-1.3	RNAV 1
40	TF	SK020	-	034(40.2)	+6.3	7.0	L	+6500	-230	-2.7	RNAV 1
50	TF	SK021	-	304(310.3)	+6.3	5.0	L	+6500	-	0	RNAV 1
60	TF	SK022	-	304(310.3)	+6.3	5.0	-	+6500	-	0	RNAV 1
70	TF	SK023	-	304(310.2)	+6.3	5.0	-	+6500	-	0	RNAV 1
80	TF	SK028	-	034(40.1)	+6.3	6.0	R	+6500	-	0	RNAV 1
90	TF	SK029	-	124(130.2)	+6.3	5.0	R	+6500	-	0	RNAV 1
100	TF	SK030	-	124(130.3)	+6.3	5.0	-	+5500	-	0	RNAV 1
110	TF	IFU12	-	124(130.3)	+6.3	5.0	-	@4500	-	-2.8	RNAV 1
NOKNA 1E											
10	IF	NOKNA	-	-	+6.3	-	-	-FL130	-	-	RNAV 1
20	TF	SK122	-	068(74.1)	+6.3	18.2	L	-	-	-2.1	RNAV 1
30	TF	SK110	-	068(74.5)	+6.3	15.0	-	+8000	-	-1.3	RNAV 1
40	TF	SK020	-	034(40.2)	+6.3	7.0	L	+6500	-230	-2.7	RNAV 1
50	TF	SK021	-	304(310.3)	+6.3	5.0	L	+6500	-	0	RNAV 1
60	TF	SK022	-	304(310.3)	+6.3	5.0	-	+6500	-	0	RNAV 1
70	TF	SK023	-	304(310.2)	+6.3	5.0	-	+6500	-	0	RNAV 1
80	TF	SK028	-	034(40.1)	+6.3	6.0	R	+6500	-	0	RNAV 1
90	TF	SK029	-	124(130.2)	+6.3	5.0	R	+6500	-	0	RNAV 1
100	TF	SK030	-	124(130.3)	+6.3	5.0	-	+5500	-	0	RNAV 1
110	TF	IFU12	-	124(130.3)	+6.3	5.0	-	@4500	-	-2.8	RNAV 1

WAYPOINT LIST

ABOTO 1E	
Waypoint Identifier	**Coordinates**
ABOTO	492544.00N 0830521.00E
SK211	494241.09N 0823356.37E
SK209	495014.45N 0821048.75E
SK101	495527.06N 0820604.08E
SK110	500047.75N 0820105.13E
SK020	500607.80N 0820806.59E
SK021	500921.63N 0820211.01E
SK022	501235.16N 0815614.63E
SK023	501548.38N 0815017.45E
SK028	502023.28N 0815619.46E
SK029	501709.76N 0820216.80E
SK030	501355.92N 0820813.34E
IFU12	501041.78N 0821409.08E

LASNA 1E	
Waypoint Identifier	**Coordinates**
LASNA	492602.00N 0815315.00E
SK209	495014.45N 0821048.75E
SK101	495527.06N 0820604.08E
SK110	500047.75N 0820105.13E
SK020	500607.80N 0820806.59E
SK021	500921.63N 0820211.01E
SK022	501235.16N 0815614.63E
SK023	501548.38N 0815017.45E
SK028	502023.28N 0815619.46E
SK029	501709.76N 0820216.80E
SK030	501355.92N 0820813.34E
IFU12	501041.78N 0821409.08E

LIRNA 1E	
Waypoint Identifier	**Coordinates**
LIRNA	501159.00N 0812203.00E
SK120	500655.33N 0813950.50E
SK110	500047.75N 0820105.13E
SK020	500607.80N 0820806.59E
SK021	500921.63N 0820211.01E
SK022	501235.16N 0815614.63E
SK023	501548.38N 0815017.45E
SK028	502023.28N 0815619.46E
SK029	501709.76N 0820216.80E
SK030	501355.92N 0820813.34E
IFU12	501041.78N 0821409.08E

NOKNA 1E	
Waypoint Identifier	**Coordinates**
NOKNA	495154.00N 0811139.00E
SK122	495648.89N 0813840.97E
SK110	500047.75N 0820105.13E
SK020	500607.80N 0820806.59E
SK021	500921.63N 0820211.01E
SK022	501235.16N 0815614.63E
SK023	501548.38N 0815017.45E
SK028	502023.28N 0815619.46E
SK029	501709.76N 0820216.80E
SK030	501355.92N 0820813.34E
IFU12	501041.78N 0821409.08E

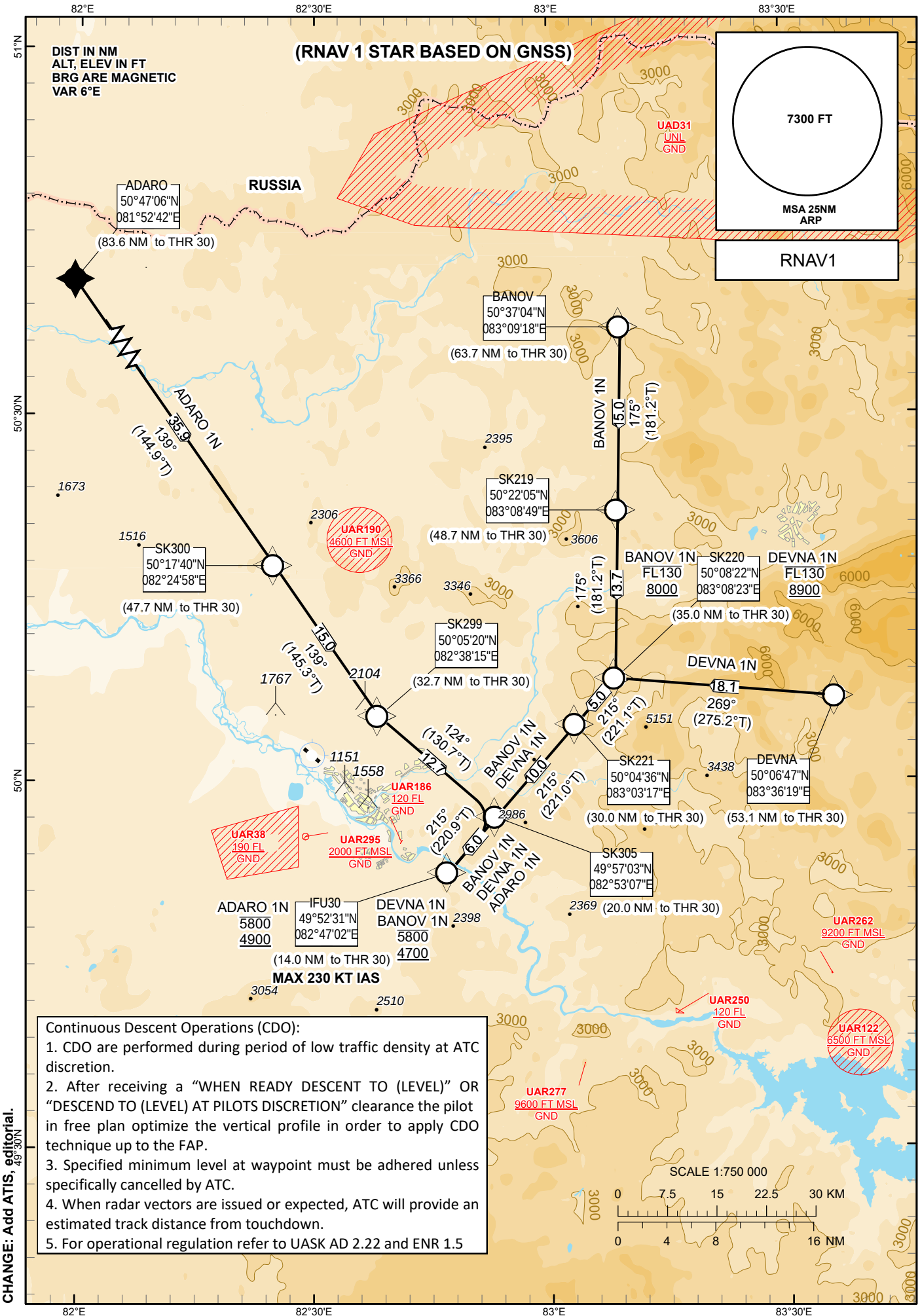
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

ADARO 1N, BANOV 1N, DEVNA 1N

UST-KAMENOGORSK RWY 30



Continuous Descent Operations (CDO):
1. CDO are performed during period of low traffic density at ATC discretion.
2. After receiving a "WHEN READY DESCENT TO (LEVEL)" OR "DESCEND TO (LEVEL) AT PILOTS DISCRETION" clearance the pilot in free plan optimize the vertical profile in order to apply CDO technique up to the FAP.
3. Specified minimum level at waypoint must be adhered unless specifically cancelled by ATC.
4. When radar vectors are issued or expected, ATC will provide an estimated track distance from touchdown.
5. For operational regulation refer to UASK AD 2.22 and ENR 1.5

CHANGE: Add ATIS, editorial.

TABULAR DESCRIPTION

ADARO 1N RWY30

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	IF	ADARO	-	-	+6.3	-	-	+180 FL/-300 FL	-280	-	RNAV 1
20	TF	SK300	-	139(144.9)	+6.3	35.9	L	+10000/-180 FL	-250	-2.1	RNAV 1
30	TF	SK299	-	139(145.3)	+6.3	15.0	-	+7600/-120 FL	-	-1.5	RNAV 1
40	TF	SK305	-	124(130.7)	+6.3	12.7	L	+5600/-7900	-	-1.5	RNAV 1
50	TF	IFU30	-	215(220.9)	+6.3	6.0	R	+4900/-5800	-230	-1.6	RNAV 1

WAYPOINT LIST

ADARO 1N

Waypoint Identifier	Coordinates	
ADARO	504706.00N	0815242.00E
SK300	501739.94N	0822458.40E
SK299	500519.69N	0823814.69E
SK305	495703.40N	0825306.58E
IFU30	495231.44N	0824702.13E

TABULAR DESCRIPTION

BANOV 1N RWY30

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	IF	BANOV	-	-	+6.3	-	-	+140 FL/-230 FL	-280	-	RNAV 1
20	TF	SK219	-	175(181.2)	+6.3	15.0	L	+10000/-180 FL	-250	-2.5	RNAV 1
30	TF	SK220	-	175(181.2)	+6.3	13.7	-	+8000/-130 FL	-	-1.4	RNAV 1
40	TF	SK221	-	215(221.1)	+6.3	5.0	R	+7200/-120 FL	-	-1.5	RNAV 1
50	TF	SK305	-	215(221)	+6.3	10.0	-	+5600/-7900	-	-1.5	RNAV 1
60	TF	IFU30	-	215(220.9)	+6.3	6.0	-	+4700/-5800	-230	-1.6	RNAV 1

WAYPOINT LIST

BANOV 1N

Waypoint Identifier	Coordinates	
BANOV	503704.00N	0830918.00E
SK219	502205.41N	0830848.95E
SK220	500821.88N	0830822.73E
SK221	500436.01N	0830316.63E
SK305	495703.40N	0825306.58E
IFU30	495231.44N	0824702.13E

TABULAR DESCRIPTION

DEVNA 1N RWY30

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	IF	DEVNA	-	-	+6.3	-	-	+120 FL/-190 FL	-280	-	RNAV 1
20	TF	SK220	-	269(275.2)	+6.3	18.1	R	+8900/-130 FL	-250	-2.1	RNAV 1
30	TF	SK221	-	215(221.1)	+6.3	5.0	L	+7200/-120 FL	-	-1.5	RNAV 1
40	TF	SK305	-	215(221)	+6.3	10.0	-	+5600/-7900	-	-1.5	RNAV 1
50	TF	IFU30	-	215(220.9)	+6.3	6.0	-	+4700/-5800	-230	-1.6	RNAV 1

WAYPOINT LIST

DEVNA 1N

Waypoint Identifier	Coordinates	
DEVNA	500647.00N	0833619.00E
SK220	500821.88N	0830822.73E
SK221	500436.01N	0830316.63E
SK305	495703.40N	0825306.58E
IFU30	495231.44N	0824702.13E

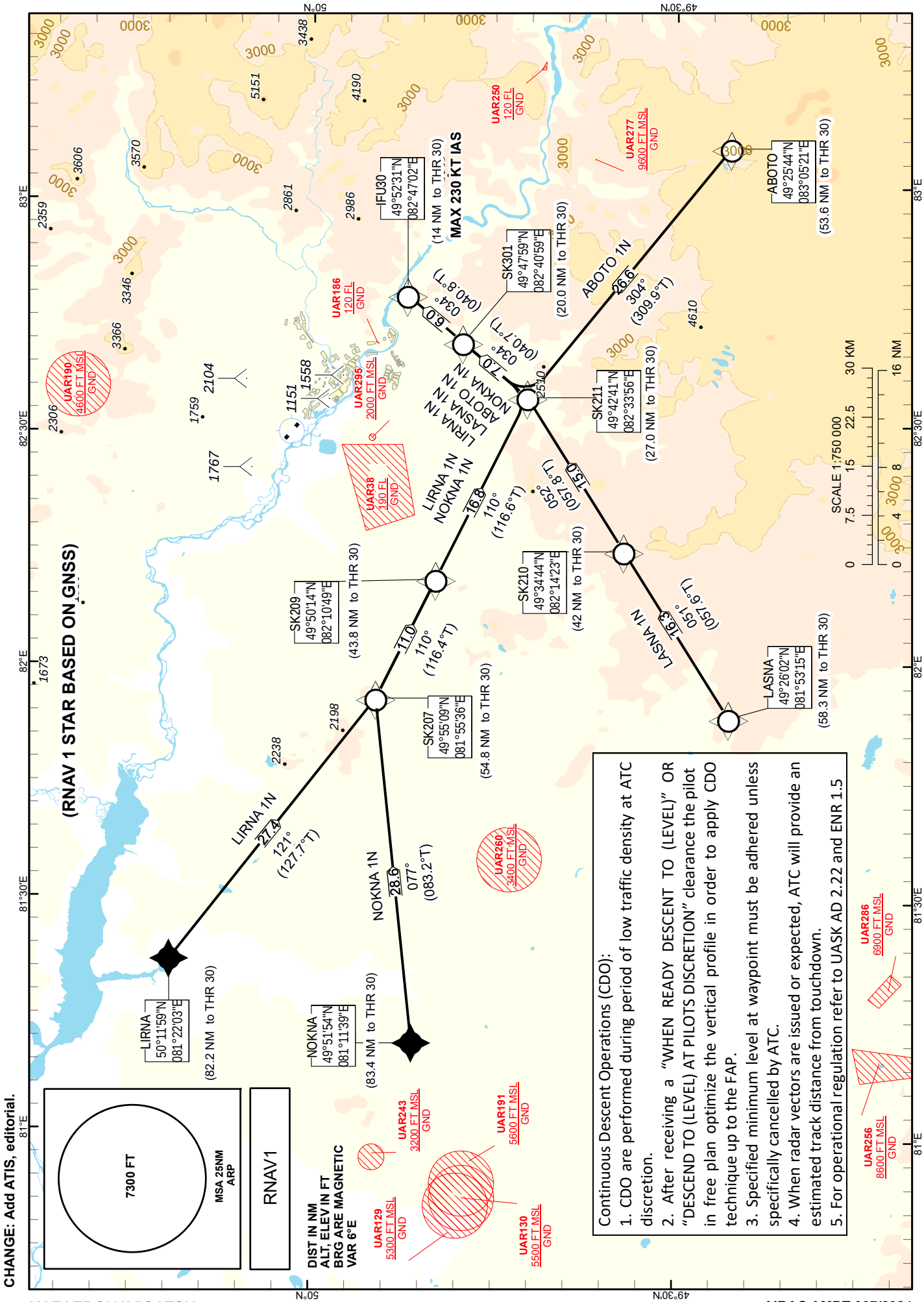
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

ABOTO 1N, LASNA 1N, LIRNA 1N, NOKNA 1N

UST-KAMENOGORSK RWY 30



CHANGE: Add ATIS, editorial.

TABULAR DESCRIPTION

ABOTO 1N RWY30											
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	IF	ABOTO	-	-	+6.3	-	-	+120 FL/-200 FL	-280	-	RNAV 1
20	TF	SK211	-	304(309.9)	+6.3	26.6	L	+6700/-10000	-250	-1.9	RNAV 1
30	TF	SK301	-	034(40.7)	+6.3	7.0	R	+5600/-7900	-	-1.5	RNAV 1
40	TF	IFU30	-	034(40.8)	+6.3	6.0	-	+4600/-5800	-230	-1.6	RNAV 1

WAYPOINT LIST

ABOTO 1N		
Waypoint Identifier	**Coordinates**	
ABOTO	492544.00N	0830521.00E
SK211	494241.09N	0823356.37E
SK301	494759.16N	0824058.81E
IFU30	495231.44N	0824702.13E

TABULAR DESCRIPTION

LASNA 1N RWY30											
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	IF	LASNA	-	-	+6.3	-	-	+130 FL/-210 FL	-280	-	RNAV 1
20	TF	SK210	-	051(57.6)	+6.3	16.3	L	+9500/-160 FL	-250	-2	RNAV 1
30	TF	SK211	-	052(57.8)	+6.3	15.0	-	+6700/-10000	-	-1.8	RNAV 1
40	TF	SK301	-	034(40.7)	+6.3	7.0	L	+5600/-7900	-	-1.5	RNAV 1
50	TF	IFU30	-	034(40.8)	+6.3	6.0	-	+4600/-5800	-230	-1.6	RNAV 1

WAYPOINT LIST

LASNA 1N		
Waypoint Identifier	**Coordinates**	
LASNA	492602.00N	0815315.00E
SK210	493443.97N	0821422.65E
SK211	494241.09N	0823356.37E
SK301	494759.16N	0824058.81E
IFU30	495231.44N	0824702.13E

TABULAR DESCRIPTION

LIRNA 1N RWY30											
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	IF	LIRNA	-	-	+6.3	-	-	+180 FL/-300 FL	-280	-	RNAV 1
20	TF	SK207	-	121(127.7)	+6.3	27.4	R	+120 FL/-200 FL	-250	-2.1	RNAV 1
30	TF	SK209	-	110(116.4)	+6.3	11.0	L	+9900/-160 FL	-	-1.8	RNAV 1
40	TF	SK211	-	110(116.6)	+6.3	16.8	-	+6700/-10000	-	-1.8	RNAV 1
50	TF	SK301	-	034(40.7)	+6.3	7.0	L	+5600/-7900	-	-1.5	RNAV 1
60	TF	IFU30	-	034(40.8)	+6.3	6.0	-	+4600/-5800	-230	-1.6	RNAV 1

WAYPOINT LIST

LIRNA 1N		
Waypoint Identifier	**Coordinates**	
LIRNA	501159.00N	0812203.00E
SK207	495508.92N	0815535.81E
SK209	495014.45N	0821048.75E
SK211	494241.09N	0823356.37E
SK301	494759.16N	0824058.81E
IFU30	495231.44N	0824702.13E

TABULAR DESCRIPTION

NOKNA 1N RWY30											
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	IF	NOKNA	-	-	+6.3	-	-	+180 FL/-300 FL	-280	-	RNAV 1
20	TF	SK207	-	077(83.2)	+6.3	28.6	L	+120 FL/-200 FL	-250	-2	RNAV 1
30	TF	SK209	-	110(116.4)	+6.3	11.0	R	+9900/-160 FL	-	-1.8	RNAV 1
40	TF	SK211	-	110(116.6)	+6.3	16.8	-	+6700/-10000	-	-1.8	RNAV 1
50	TF	SK301	-	034(40.7)	+6.3	7.0	L	+5600/-7900	-	-1.5	RNAV 1
60	TF	IFU30	-	034(40.8)	+6.3	6.0	-	+4600/-5800	-230	-1.6	RNAV 1

WAYPOINT LIST

NOKNA 1N		
Waypoint Identifier	**Coordinates**	
NOKNA	495154.00N	0811139.00E
SK207	495508.92N	0815535.81E
SK209	495014.45N	0821048.75E
SK211	494241.09N	0823356.37E
SK301	494759.16N	0824058.81E
IFU30	495231.44N	0824702.13E

CHANGE: Add ATIS, editorial.

STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE 10000 FT

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

ADARO 1H, BANOV 1H, DEVNA 1H

UST-KAMENOGORSK RWY 12

KAZAERONAVIGATSIA

DIST IN NM
ALT, ELEV IN FT
BRG ARE MAGNETIC
VAR 6°E

RUSSIA

(RNAV 1 STAR BASED ON GNSS)

7300 FT

MSA 25NM
ARP

RNAV1

ADARO
50°47'06"N
081°52'42"E
(65.2 NM to THR 12)

ADARO 1H
23.0
124°
(130.4°T)

SK039
50°32'10"N
082°20'09"E
(42.2 NM to THR 12)

11.0
124°
(130.7°T)

SK040
50°24'58"N
082°33'12"E
(31.2 NM to THR 12)

11.0
236°
(242.2°T)

SK038
50°30'07"N
082°48'28"E
(42.2 NM to THR 12)

BANOV 1H
15.0
236°
(242.5°T)

BANOV
50°37'04"N
083°09'18"E
(57.2 NM to THR 12)

SK024
50°15'15"N
082°20'13"E
(18.4 NM to THR 12)

ADARO 1H
BANOV 1H
12.8
214°
(220.7°T)

IFU12
50°10'42"N
082°14'09"E
(12.4 NM to THR 12)

MAX 230 KT IAS

ADARO 1H
BANOV 1H
DEVNA 1H
6.0
214°
(220.5°T)

SK037
50°07'43"N
082°33'56"E
(30.0 NM to THR 12)

11.6
304°
(310.7°T)

SK034
50°02'56"N
083°01'07"E
(50.1 NM to THR 12)

10.0
305°
(310.8°T)

SK035
50°01'12"N
082°45'41"E
(40.0 NM to THR 12)

10.1
254°
(260.1°T)

DEVNA 1H
23.0
254°
(260.6°T)

DEVNA
50°06'47"N
083°36'19"E
(73.1 NM to THR 12)

UAD31
UNL
GND

UAR190
4600 FT MSL
GND

UAR295
2000 FT MSL
GND

UAR38
190 FL
GND

UAR186
120 FL
GND

UAR260
3400 FT MSL
GND

UAR250
120 FL
GND

UAR262
9200 FT MSL
GND

UAR122
6500 FT MSL
GND

SCALE 1:750 000
0 7.5 15 22.5 30 KM
0 4 8 16 NM

Continuous Descent Operations (CDO):
1. CDO are performed during period of low traffic density at ATC discretion.
2. After receiving a "WHEN READY DESCENT TO (LEVEL)" OR "DESCEND TO (LEVEL) AT PILOTS DISCRETION" clearance the pilot in free plan optimize the vertical profile in order to apply CDO technique up to the FAP.
3. Specified minimum level at waypoint must be adhered unless specifically cancelled by ATC.
4. When radar vectors are issued or expected, ATC will provide an estimated track distance from touchdown.
5. For operational regulation refer to UASK AD 2.22 and ENR 1.5

TABULAR DESCRIPTION

ADARO 1H											
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	IF	ADARO	-	-	+6.3	-	-	+140 FL/-240 FL	-280	-	RNAV 1
20	TF	SK039	-	124(130.4)	+6.3	23.0	L	+9400/-160 FL	-250	-1.9	RNAV 1
30	TF	SK040	-	124(130.7)	+6.3	11.0	-	+7300/-120 FL	-	-1.8	RNAV 1
40	TF	SK024	-	214(220.7)	+6.3	12.8	R	+5200/-7400	-	-1.5	RNAV 1
50	TF	IFU12	-	214(220.5)	+6.3	6.0	-	+4300/-5300	-230	-1.4	RNAV 1
BANOV 1H											
10	IF	BANOV	-	-	+6.3	-	-	+120 FL/-210 FL	-280	-	RNAV 1
20	TF	SK038	-	236(242.5)	+6.3	15.0	R	+9400/-160 FL	-250	-1.6	RNAV 1
30	TF	SK040	-	236(242.2)	+6.3	11.0	-	+7300/-120 FL	-	-1.8	RNAV 1
40	TF	SK024	-	214(220.7)	+6.3	12.8	L	+5200/-7400	-	-1.5	RNAV 1
50	TF	IFU12	-	214(220.5)	+6.3	6.0	-	+4300/-5300	-230	-1.4	RNAV 1
DEVNA 1H											
10	IF	DEVNA	-	-	+6.3	-	-	+160 FL/-260 FL	-280	-	RNAV 1
20	TF	SK034	-	254(260.6)	+6.3	23.0	L	+120 FL/-180 FL	-250	-1.6	RNAV 1
30	TF	SK035	-	254(260.1)	+6.3	10.1	-	+9000/-150 FL	-	-2.8	RNAV 1
40	TF	SK037	-	305(310.8)	+6.3	10.0	R	+7000/-120 FL	-	-1.9	RNAV 1
50	TF	SK024	-	304(310.7)	+6.3	11.6	-	+5200/-7400	-	-1.5	RNAV 1
60	TF	IFU12	-	214(220.5)	+6.3	6.0	L	+4300/-5300	-230	-1.4	RNAV 1

WAYPOINT LIST

ADARO 1H		
Waypoint Identifier	**Coordinates**	
ADARO	504706.00N	0815242.00E
SK039	503209.70N	0822009.48E
SK040	502458.18N	0823312.37E
SK024	501515.44N	0822012.72E
IFU12	501041.78N	0821409.08E
BANOV 1H		
Waypoint Identifier	**Coordinates**	
BANOV	503704.00N	0830918.00E
SK038	503007.16N	0824827.90E
SK040	502458.18N	0823312.37E
SK024	501515.44N	0822012.72E
IFU12	501041.78N	0821409.08E
DEVNA 1H		
Waypoint Identifier	**Coordinates**	
DEVNA	500647.00N	0833619.00E
SK034	500256.48N	0830107.45E
SK035	500111.78N	0824541.27E
SK037	500742.91N	0823355.72E
SK024	501515.44N	0822012.72E
IFU12	501041.78N	0821409.08E

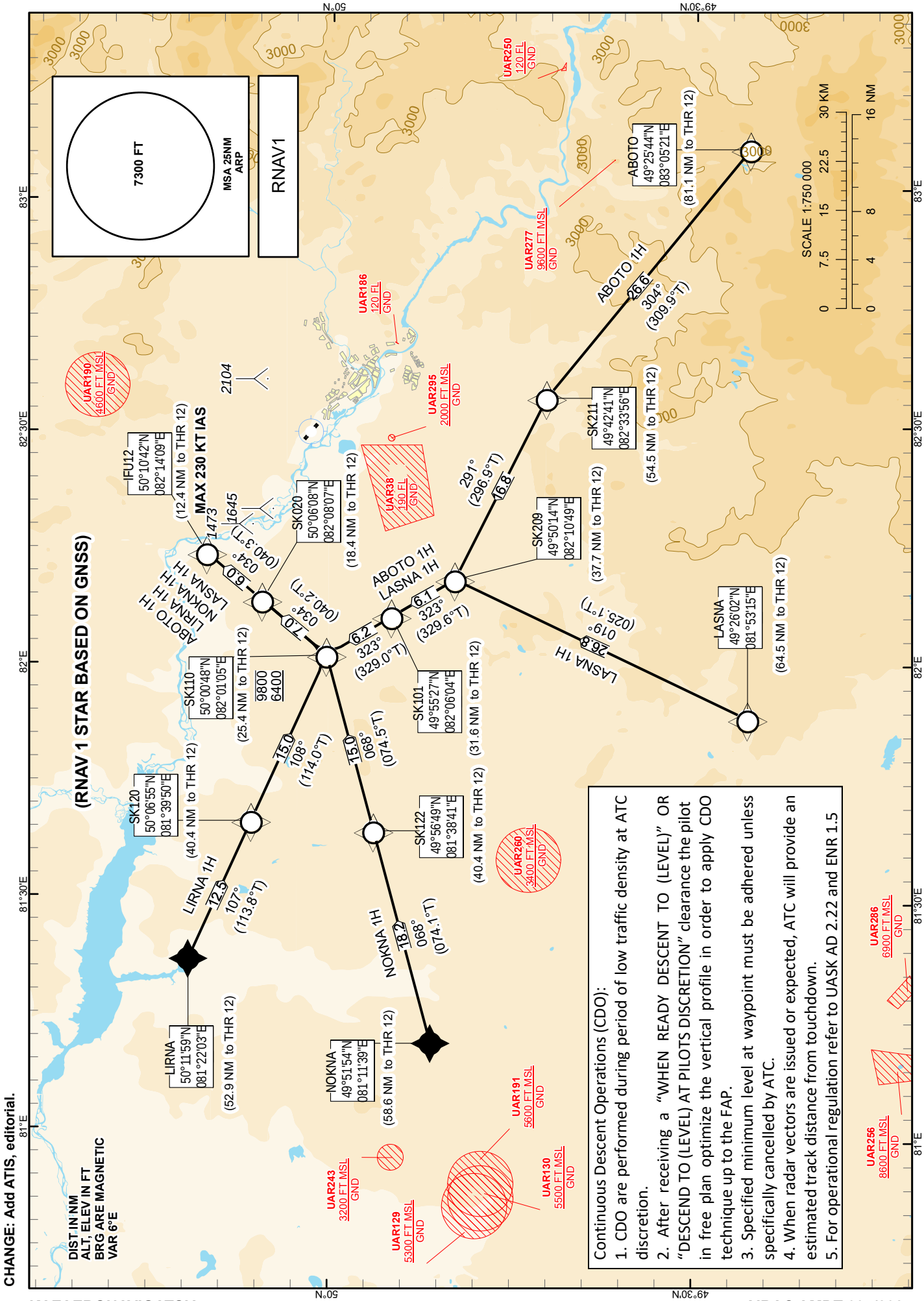
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

ABOTO 1H, LASNA 1H, LIRNA 1H, NOKNA 1H

UST-KAMENOGORSK RWY 12



TABULAR DESCRIPTION

ABOTO 1H RWY 12

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	IF	ABOTO	-	-	+6.3	-	-	+180 FL/-290 FL	-280	-	RNAV 1
20	TF	SK211	-	304(309.9)	+6.3	26.6	L	+120 FL/-200 FL	-250	-2.1	RNAV 1
30	TF	SK209	-	291(296.9)	+6.3	16.8	L	+8400/-140 FL	-	-2	RNAV 1
40	TF	SK101	-	323(329.6)	+6.3	6.1	R	+7400/-120 FL	-	-1.6	RNAV 1
50	TF	SK110	-	323(329)	+6.3	6.2	-	+6400/-9800	-	-1.5	RNAV 1
60	TF	SK020	-	034(40.2)	+6.3	7.0	R	+5200/-7400	-	-1.6	RNAV 1
70	TF	IFU12	-	034(40.3)	+6.3	6.0	-	+4300/-5300	-230	-1.4	RNAV 1

WAYPOINT LIST

ABOTO 1H

Waypoint Identifier	Coordinates
ABOTO	492544.00N 0830521.00E
SK211	494241.09N 0823356.37E
SK209	495014.45N 0821048.75E
SK101	495527.06N 0820604.08E
SK110	500047.75N 0820105.13E
SK020	500607.80N 0820806.59E
IFU12	501041.78N 0821409.08E

TABULAR DESCRIPTION

LASNA 1H RWY 12

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	IF	LASNA	-	-	+6.3	-	-	+140 FL/-230 FL	-280	-	RNAV 1
20	TF	SK209	-	019(25.1)	+6.3	26.8	R	+8400/-140 FL	-250	-2	RNAV 1
30	TF	SK101	-	323(329.6)	+6.3	6.1	L	+7400/-120 FL	-	-1.6	RNAV 1
40	TF	SK110	-	323(329)	+6.3	6.2	-	+6400/-9800	-	-1.5	RNAV 1
50	TF	SK020	-	034(40.2)	+6.3	7.0	R	+5200/-7400	-	-1.6	RNAV 1
60	TF	IFU12	-	034(40.3)	+6.3	6.0	-	+4300/-5300	-230	-1.4	RNAV 1

WAYPOINT LIST

LASNA 1H

Waypoint Identifier	Coordinates
LASNA	492602.00N 0815315.00E
SK209	495014.45N 0821048.75E
SK101	495527.06N 0820604.08E
SK110	500047.75N 0820105.13E
SK020	500607.80N 0820'06.59E
IFU12	501041.78N 0821409.08E

TABULAR DESCRIPTION

LIRNA 1H RWY 12

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	IF	LIRNA	-	-	+6.3	-	-	+120 FL/-190 FL	-280	-	RNAV 1
20	TF	SK120	-	107(113.8)	+6.3	12.5	L	+9000/-150 FL	-250	-2.3	RNAV 1
30	TF	SK110	-	108(114)	+6.3	15.0	-	+6400/-9800	-	-1.6	RNAV 1
40	TF	SK020	-	034(40.2)	+6.3	7.0	L	+5200/-7400	-	-1.6	RNAV 1
50	TF	IFU12	-	034(40.3)	+6.3	6.0	-	+4300/-5300	-230	-1.4	RNAV 1

WAYPOINT LIST

LIRNA 1H

Waypoint Identifier	Coordinates
LIRNA	501159.00N 0812203.00E
SK120	500655.33N 0813950.50E
SK110	500047.75N 0820105.13E
SK020	500607.80N 0820806.59E
IFU12	501041.78N 0821409.08E

TABULAR DESCRIPTION

NOKNA 1H RWY 12

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	IF	NOKNA	-	-	+6.3	-	-	+130 FL/-210 FL	-280	-	RNAV 1
20	TF	SK122	-	068(74.1)	+6.3	18.2	R	+9000/-150 FL	-250	-2.1	RNAV 1
30	TF	SK110	-	068(74.5)	+6.3	15.0	-	+6400/-9800	-	-1.6	RNAV 1
40	TF	SK020	-	034(40.2)	+6.3	7.0	L	+5200/-7400	-	-1.6	RNAV 1
50	TF	IFU12	-	034(40.3)	+6.3	6.0	-	+4300/-5300	-230	-1.4	RNAV 1

WAYPOINT LIST

NOKNA 1H

Waypoint Identifier	Coordinates
NOKNA	495154.00N 0811139.00E
SK122	495648.89N 0813840.97E
SK110	500047.75N 0820105.13E
SK020	500607.80N 0820806.59E
IFU12	501041.78N 0821409.08E

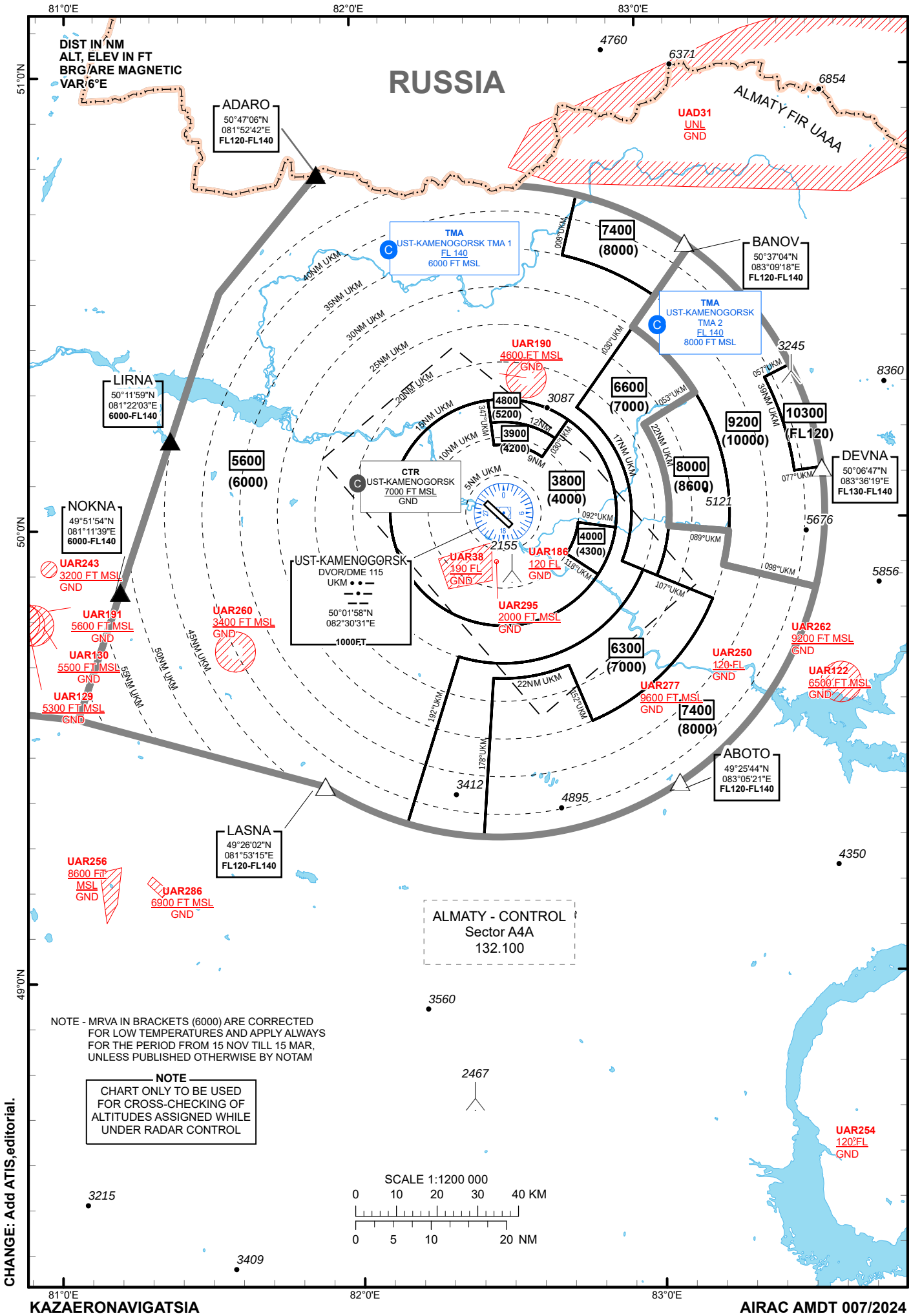
ATC Surveillance Minimum Altitude Chart ICAO

TRANSITION ALTITUDE
10000 FT

AERODROME ELEV
942 FT

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

UST-KAMENOGORSK



NOTE - MRVA IN BRACKETS (6000) ARE CORRECTED FOR LOW TEMPERATURES AND APPLY ALWAYS FOR THE PERIOD FROM 15 NOV TILL 15 MAR, UNLESS PUBLISHED OTHERWISE BY NOTAM

NOTE
CHART ONLY TO BE USED FOR CROSS-CHECKING OF ALTITUDES ASSIGNED WHILE UNDER RADAR CONTROL

CHANGE: Add ATIS,editorial.

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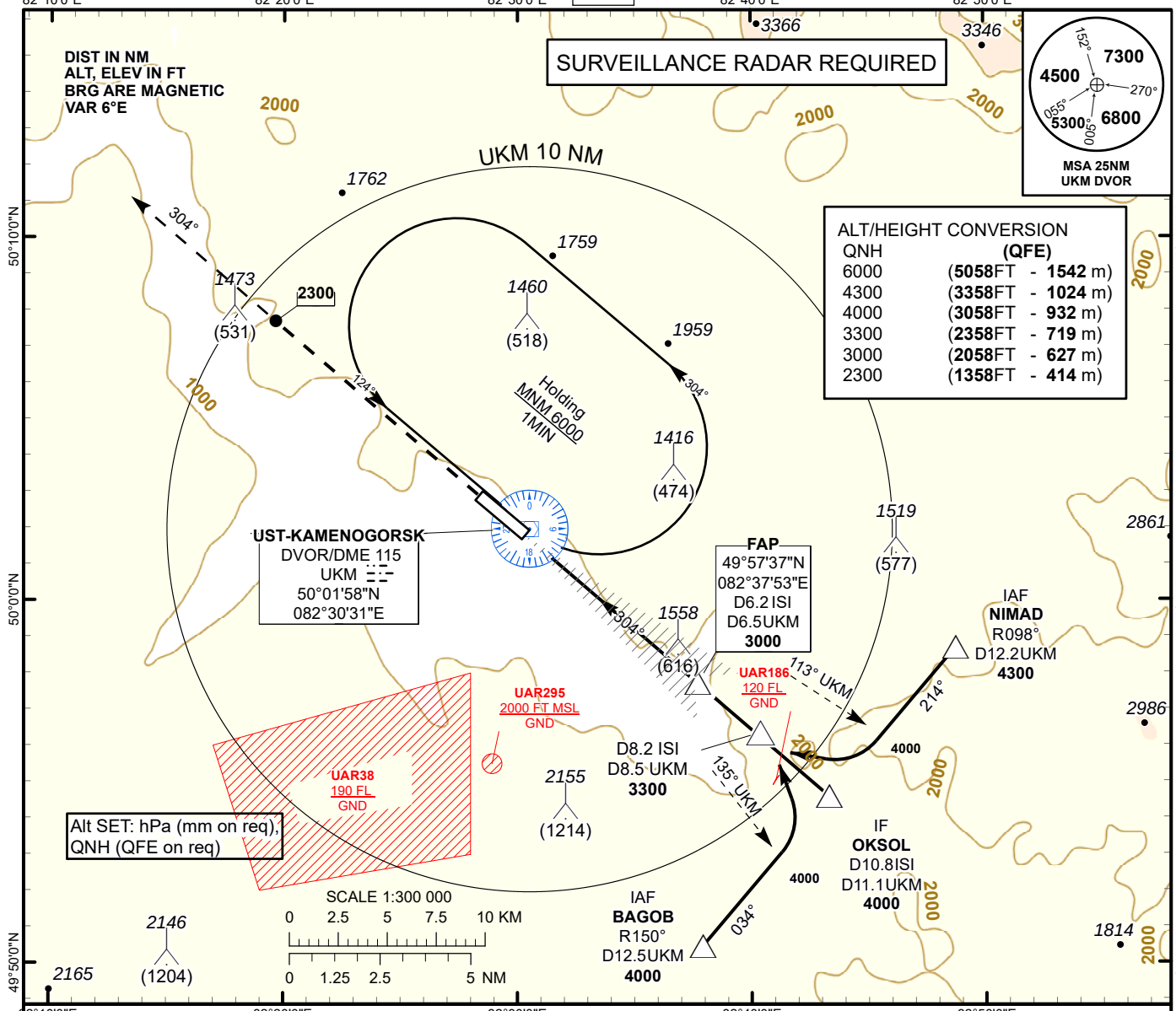
INSTRUMENT APPROACH CHART
ICAO

AERODROME ELEV ***942FT***
HEIGHTS RELATED TO
THR RWY 30 - ELEV ***942FT***

ILS
LLZ 109.7
ISI
GP 333.2
CH 34X

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

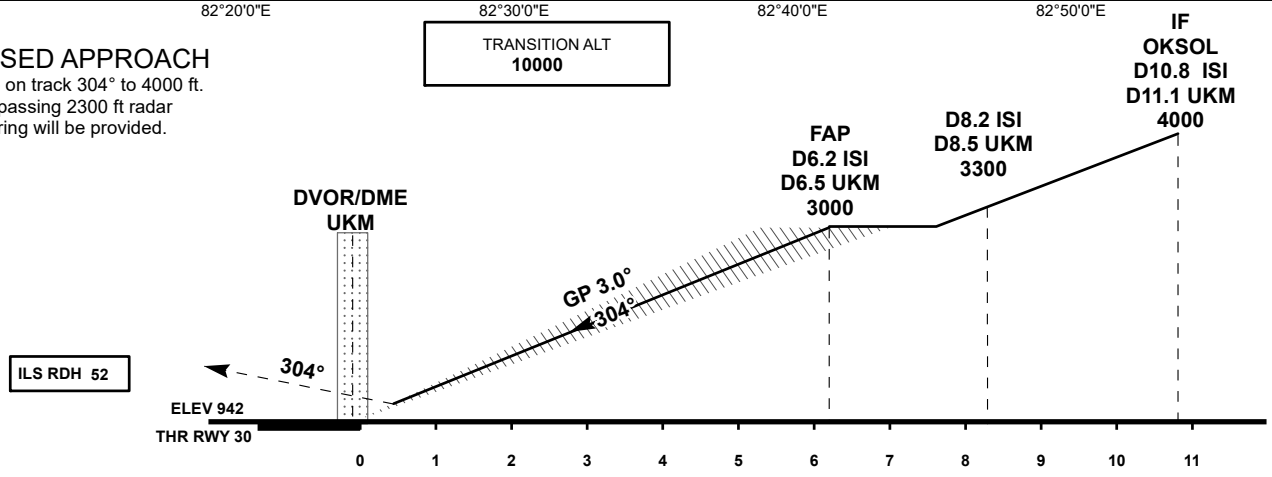
UST-KAMENOGORSK
ILS/DME
RWY 30



TRANSITION ALT
10000

MISSED APPROACH

Climb on track 304° to 4000 ft.
After passing 2300 ft radar vectoring will be provided.



Aircraft Category		A	B	C	D	DIST to THR	NM	6.2	5	4	3	2	1
Straight-in Approach OCA/H						DME UKM	NM	6.5	5.1	4.1	3.1	2.1	1.1
	ILS CAT I	1142(200)	1146(204)	1156(214)	1165(224)	ALTITUDE	FT	3000	2608	2281	1957	1634	1313
						HEIGHT	FT	(2058)	(1666)	(1339)	(1015)	(692)	(371)

DME ISI ZERO RANGED TO THR RWY 30

Aerodrome Operating Minima DH ft x RVR (CMV)	ILS CAT I				

WARNING
1.Priority landing is performed according to pattern.
2.Heavy turbulence and wind shear may arise on final.

GS	Kt	80	100	120	140	160	180
Desc.Rate(5.2%)	ft/min	420	530	640	740	850	960

CHANGE: Add ATIS, editorial.

UST-KAMENOGORSK
ILS/DME **AERONAUTICAL DATA TABULATION**

ILS approach to RWY30 from NIMAD, OKSOL, BAGOB	
Fix/point	**Coordinates**
UKM DVOR/DME	50° 01’ 58.0”N 082° 30’ 31.1”E
(FAP) D6.2 ISI, D6.5 UKM	49° 57’ 37.1”N 082° 37’ 52.8”E
OKSOL (IF) D10.8 ISI, D11.1 UKM	49° 54’ 35.5”N 082° 43’ 18.7”E
NIMAD (IAF) R098°, D12.2 UKM	49° 58’ 42.2”N 082° 48’ 43.5”E
BAGOB (IAF) R150°, D12.5 UKM	49° 50’ 28.5”N 082° 37’ 54.9”E
THR RWY 30	50° 01’ 39.20”N 082° 30’ 36.13”E
ISI LOC	50° 02’ 49.8”N 082° 28’ 28.4”E

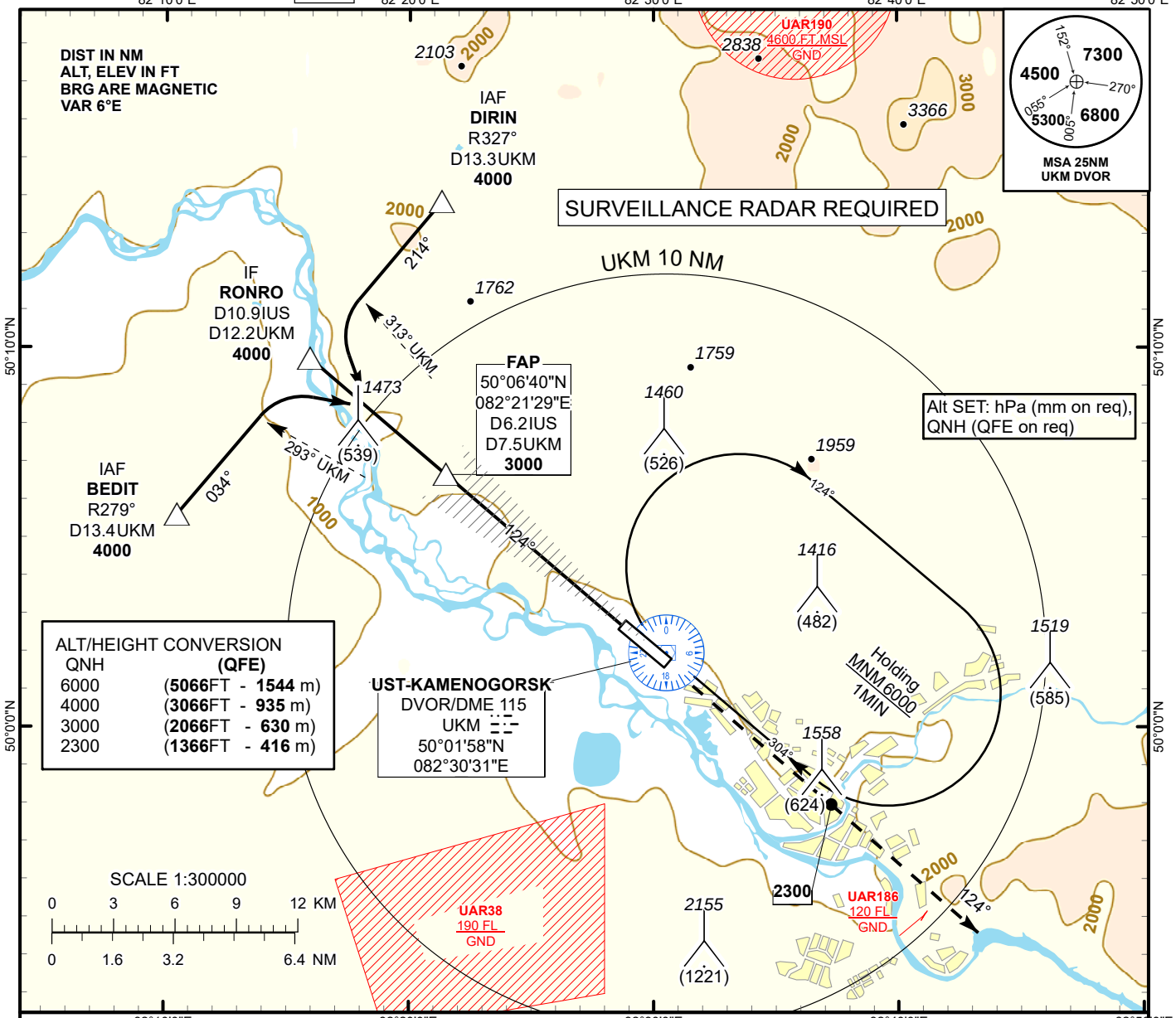
INSTRUMENT APPROACH CHART
ICAO

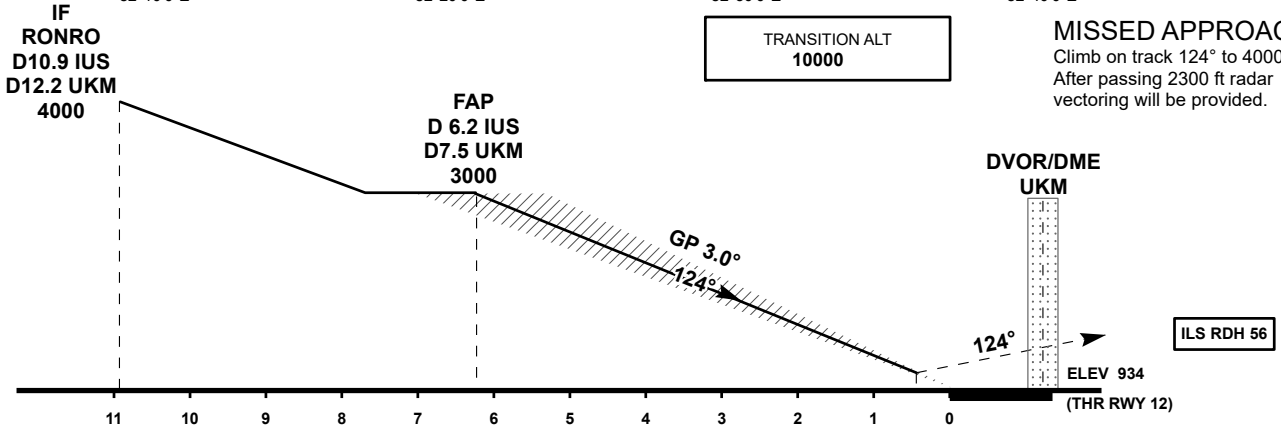
ILS
LLZ 111.7
IUS
GP 333.5
CH 54X

AERODROME ELEV ***942ft***
HEIGHTS RELATED TO
THR RWY12 - ELEV ***934ft***

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

UST-KAMENOGORSK ILS/DME RWY 12





TRANSITION ALT
10000

MISSED APPROACH

Climb on track 124° to 4000 ft.
After passing 2300 ft radar vectoring will be provided.

Aircraft Category		A	B	C	D
Straight-in Approach OCA/H	ILS CAT I	1148(214)	1158(224)	1168(234)	1178(244)

DIST to THR	NM	6.2	5	4	3	2	1
DME IUS							
DME UKM	NM	7.5	6.3	5.3	4.3	3.3	2.3
ALTITUDE	FT	3000	2602	2275	1951	1628	1307
HEIGHT	FT	(2066)	(1668)	(1341)	(1017)	(694)	(373)

DME IUS ZERO RANGED TO THR RWY 12

Aerodrome Operating Minima DH ft x RVR (CMV)	ILS CAT I				

WARNING
1.Priority landing is performed according to pattern.
2.Heavy turbulence and wind shear may arise on final.

GS	Kt	80	100	120	140	160	180
Desc.Rate(5.2%)	ft/min	420	530	640	740	850	960

CHANGE: New chart.

UST-KAMENOGORSK
ILS/DME **AERONAUTICAL DATA TABULATION**

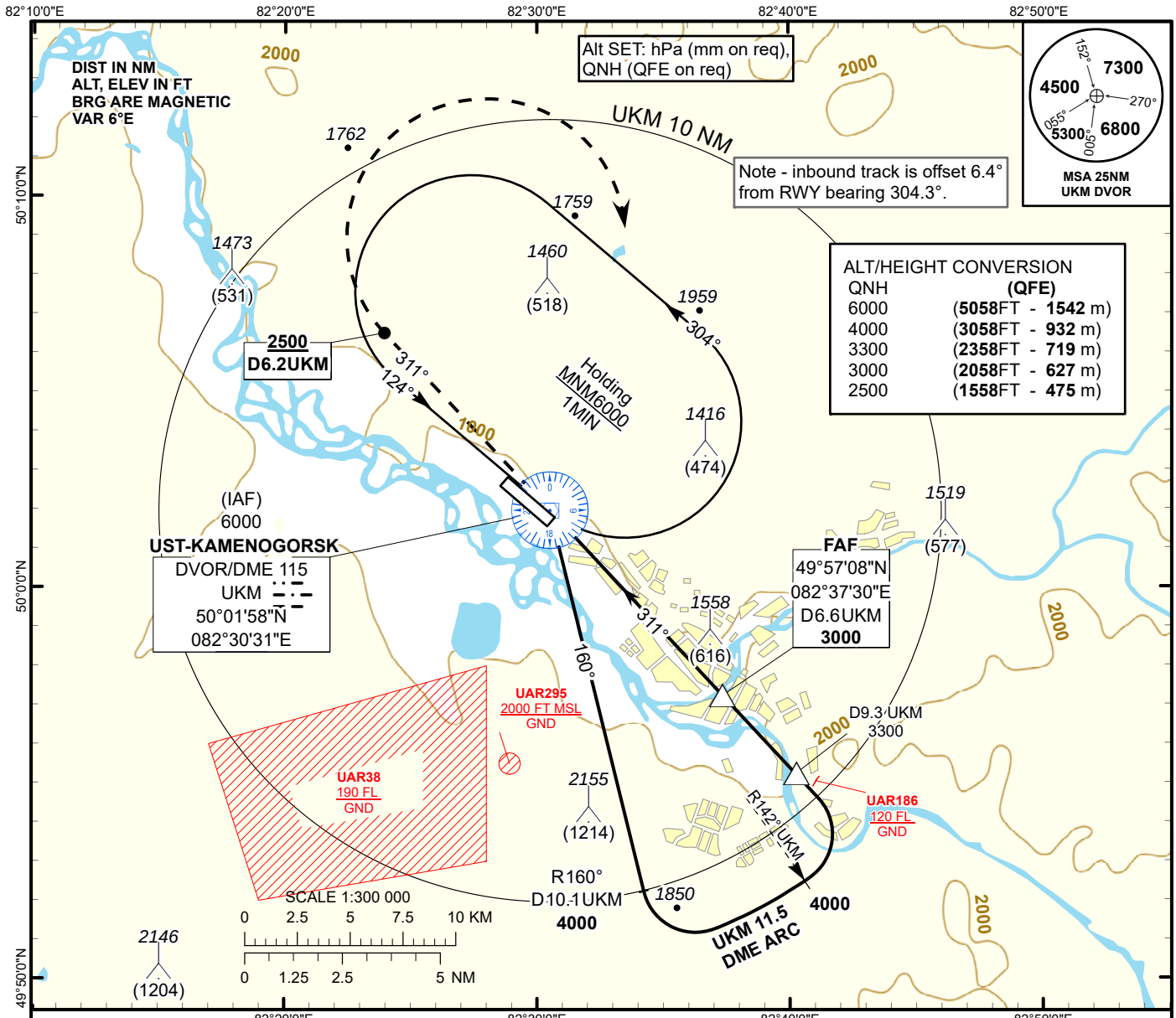
ILS approach to RWY12 from BEDIT, RONRO, DIRIN	
Fix/point	**Coordinates**
UKM DVOR/DME	**50° 01’ 58.0”N 082° 30’ 31.1”E**
(FAP) D6.2 IUS, D7.5 UKM	**50° 06’ 40.1”N 082° 21’ 29.4”E**
RONRO (IF) D10.9 IUS, D12.2 UKM	**50° 09’ 43.7”N 082° 15’ 54.5”E**
BEDIT (IAF) R279°, D13.4 UKM	**50° 05’ 36.7”N 082° 10’ 28.9”E**
DIRIN (IAF) R327°, D13.3 UKM	**50° 13’ 51.6”N 082° 21’ 18.9”E**
THR RWY 12	**50° 02’ 38.22”N 082° 28’ 49.30”E**
IUS LOC	**50° 01’ 22.8”N 082° 31’ 05.8”E**

INSTRUMENT APPROACH CHART
ICAO

AERODROME ELEV ***942FT***
THR RWY 30 - ELEV ***942FT***
HEIGHTS RELATED TO AD ELEV

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

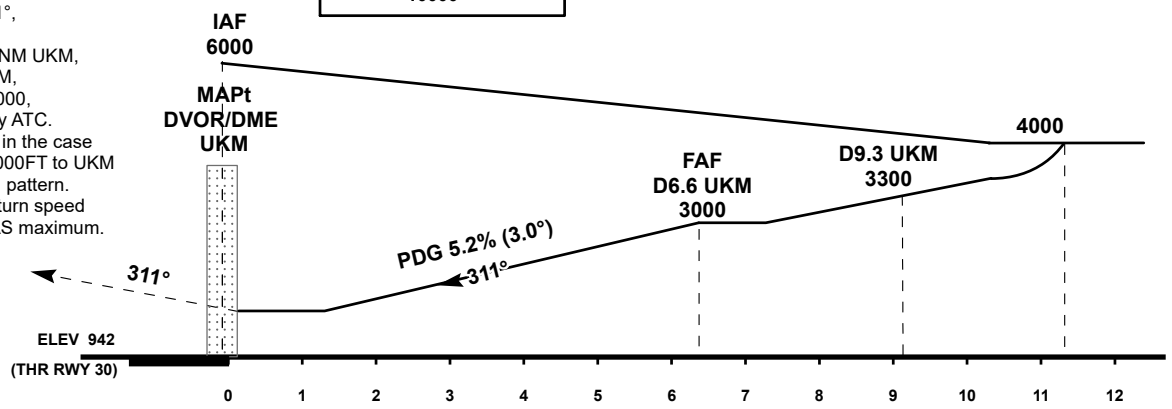
UST-KAMENOGORSK VOR/DME RWY 30



TRANSITION ALT
10000

MISSED APPROACH

Climb on track 311°,
at 2500 or above,
outbound to D6.2 NM UKM,
turn RIGHT to UKM,
Climb initially to 4000,
then as directed by ATC.
RADIO FAILURE: in the case
of RCF climb to 6000FT to UKM
and join to holding pattern.
Missed approach turn speed
limited to 240Kt IAS maximum.



Aircraft Category		A	B	C	D	DIST to THR	NM	6.4	5	4	3	2	1
Straight-in Approach OCA/H						DME UKM	NM	6.6	5.1	4.1	3.1	2.1	1.1
	VOR/DME	1780(840)	1780(840)	1780(840)	1780(840)	ALTITUDE	FT	3000	2583	2265	1947	1628	1310
						HEIGHT	FT	(2058)	(1641)	(1323)	(1005)	(686)	(368)

Aerodrome Operating Minima MDH ft x RVR (CMV)						GS	Kt	80	100	120	140	160	180
	VOR/DME					FAF-MAPt(6.6NM)	min:sec	4:53	3:54	3:15	2:47	2:26	2:10
						Desc.Rate(5.2%)	ft/min	420	530	630	740	840	950

WARNING
1.Priority landing is performed according to pattern.
2.Heavy turbulence and wind shear may arise on final.

CHANGE: Add ATIS, editorial.

UST-KAMENOGORSK
VOR/DME **AERONAUTICAL DATA TABULATION**

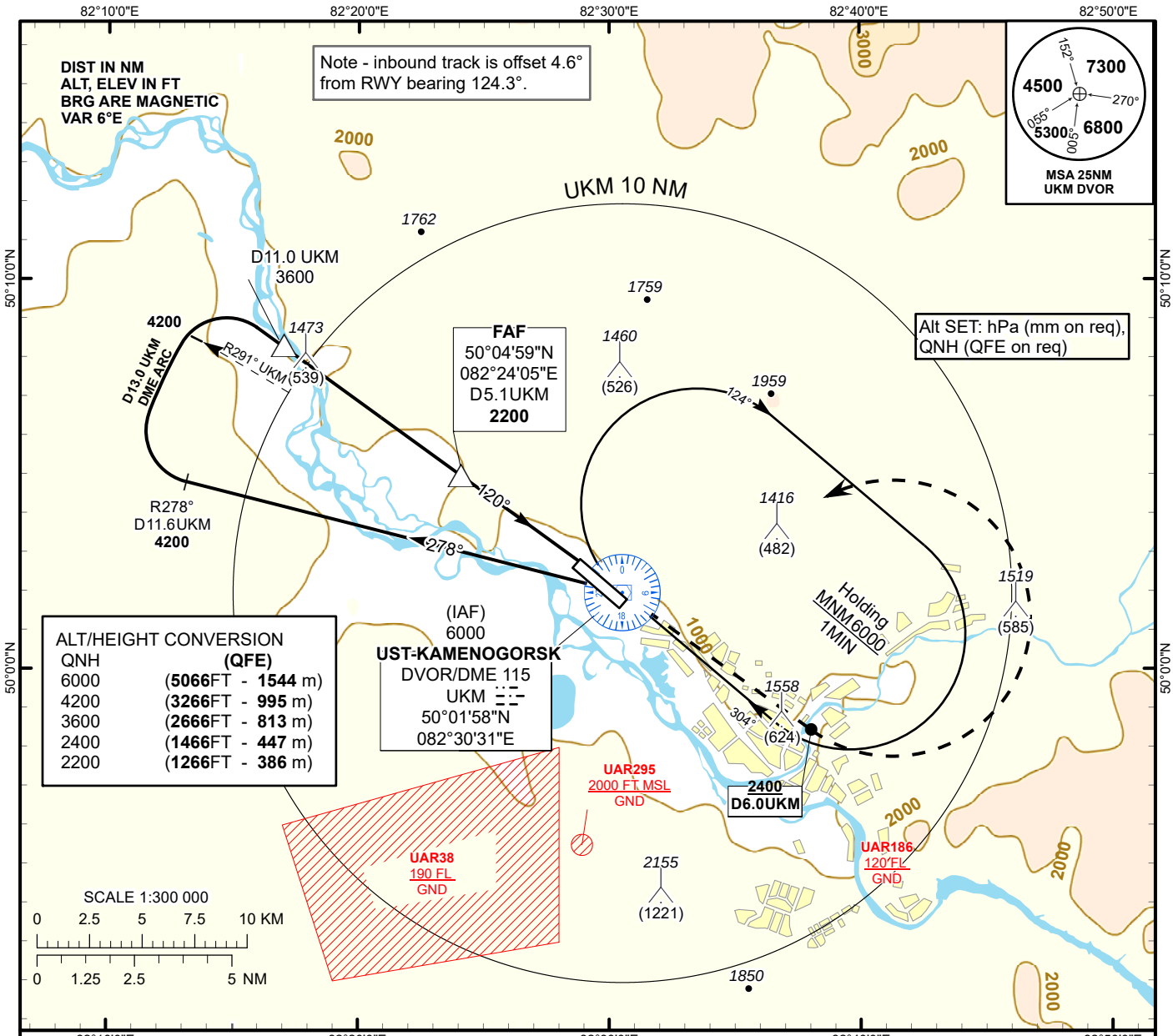
VOR approach to RWY30 from UKM DVOR.	
Fix/point	**Coordinates**
(IAF) UKM DVOR/DME	**50° 01’ 58.0”N 082° 30’ 31.1”E**
(FAF) D6.6 UKM	**49° 57’ 07.7”N 082° 37’ 30.2”E**
THR RWY 30	**50° 01’ 39.20”N 082° 30’ 36.13”E**
Final approach descent angle is 3°	

INSTRUMENT APPROACH CHART ICAO

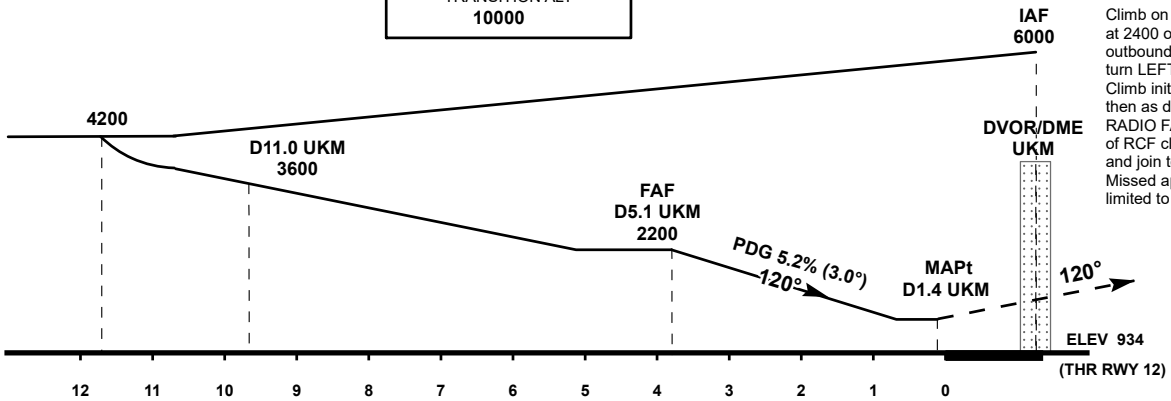
AERODROME ELEV ***942FT***
HEIGHTS RELATED TO
THR RWY12 - ELEV ***934FT***

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

UST-KAMENOGORSK VOR/DME RWY 12



TRANSITION ALT
10000



MISSED APPROACH
Climb on track 120°,
at 2400 or above,
outbound to D6.0NM UKM,
turn LEFT to UKM.
Climb initially to 4200,
then as directed.
RADIO FAILURE: In the case of RCF climb to 6000 FT to UKM and join to holding pattern.
Missed approach turn speed limited to 240Kt IAS maximum.

Aircraft Category		A	B	C	D
Straight-in Approach OCA/H					
	VOR/DME	1550(610)	1550(610)	1550(610)	1550(610)

DIST to THR	NM	3.9	3	2	1
DME UKM	NM	5.1	4.3	3.3	2.3
ALTITUDE	FT	2200	1938	1620	1301
HEIGHT	FT	(1266)	(1004)	(686)	(367)

Aerodrome Operating Minima MDH ft x RVR (CMV)					
	VOR/DME				

WARNING
1.Priority landing is performed according to pattern.
2.Heavy turbulence and wind shear may arise on final.

GS	Kt	80	100	120	140	160	180
FAF-MAPt(3.7NM)	min:sec	2:47	2:13	1:51	1:35	1:23	1:14
Desc.Rate(5.2%)	ft/min	420	530	630	740	840	950

CHANGE: Add ATIS, editorial.

UST-KAMENOGORSK
VOR/DME **AERONAUTICAL DATA TABULATION**

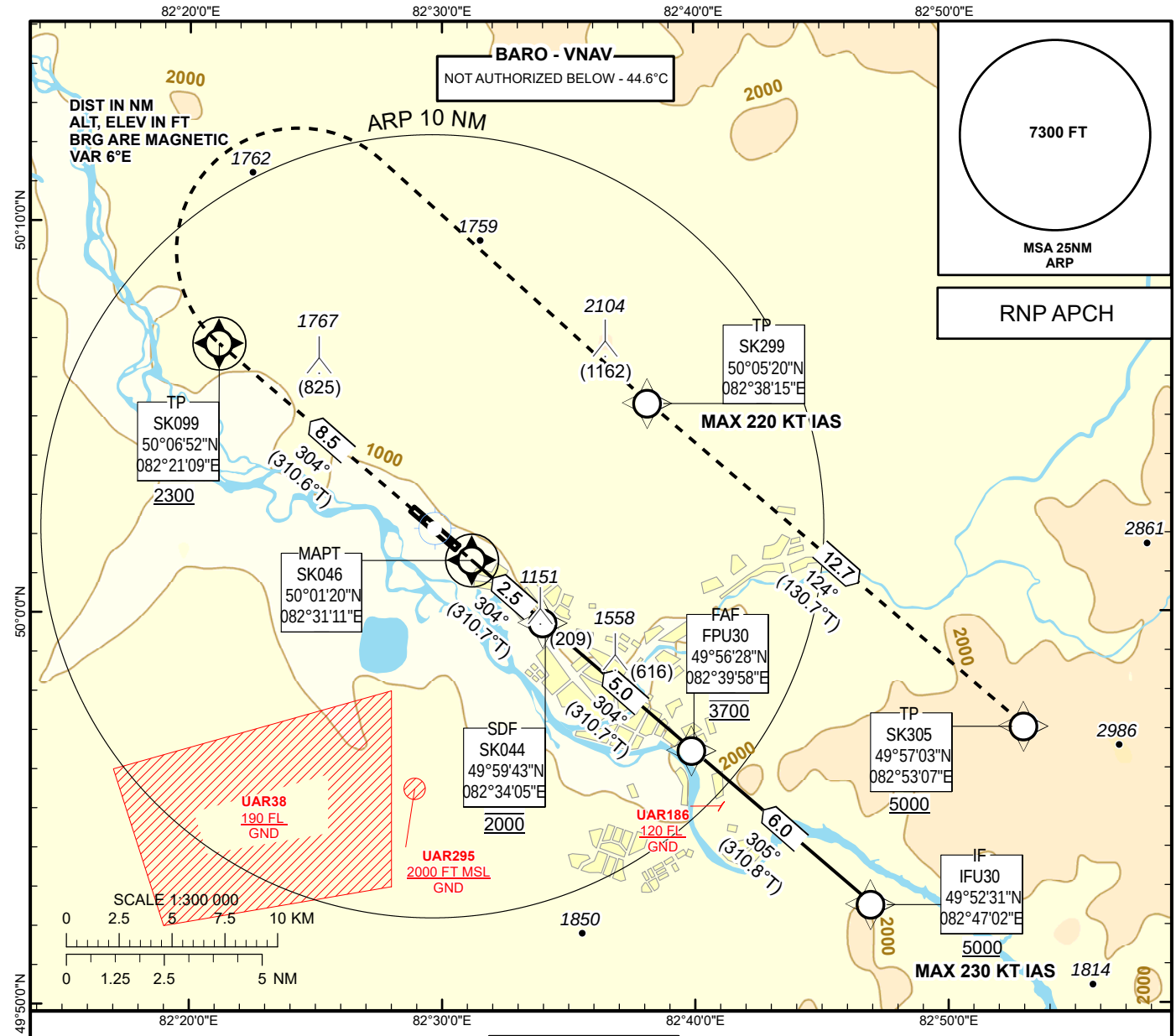
VOR approach to RWY12 from UKM DVOR.	
Fix/point	**Coordinates**
(IAF) UKM DVOR/DME	**50° 01’ 58.0”N 082° 30’ 31.1”E**
(FAF) D5.1 UKM	**50° 04’ 58.8”N 082° 24’ 04.9”E**
THR RWY 12	**50° 02’ 38.21”N 082° 28’ 49.28”E**
Final approach descent angle is 3°	

INSTRUMENT APPROACH CHART
ICAO

AERODROME ELEV ***942FT***
HEIGHTS RELATED TO
AD ELEV

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

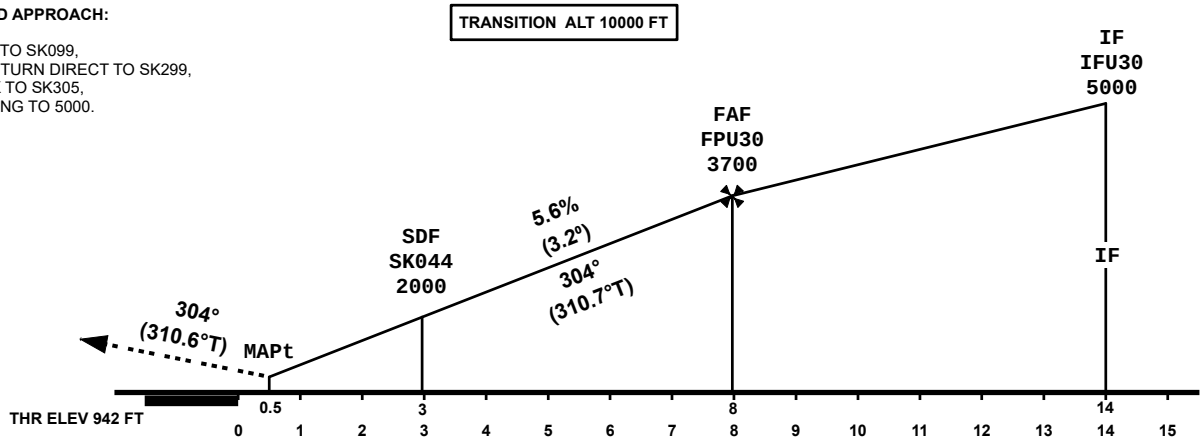
UST-KAMENOGORSK
RNP RWY 30



MISSED APPROACH:

CLIMB TO SK099,
RIGHT TURN DIRECT TO SK299,
TRACK TO SK305,
CLIMBING TO 5000.

TRANSITION ALT 10000 FT



OCA(OCH)		A	B	C	D
Straight	LNAV	1350(408)			
	LNAV/VNAV	1240(298)	1250(308)	1270(328)	1300(358)

GS	Kt	70	90	120	150	180
Rate of descent	ft/min	395	510	680	850	1020
FAF-MAPt 7.5 NM	min:sec	06:26	05:00	03:45	03:00	02:30

CHANGE: Add ATIS, editorial.

TABULAR DESCRIPTION

UASK RNP RWY30

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	IF	IFU30	-	-	+6.3	-	-	+5000	-230	-	RNP APCH
20	TF	FPU30	-	305(310.8)	+6.3	6.0	-	@3700	-	-	RNP APCH
30	TF	SK044	-	304(310.7)	+6.3	5.0	-	@2000	-	-3.2	RNP APCH
40	TF	SK046	Y	304(310.7)	+6.3	2.5	-	@1162	-	-3.2	RNP APCH
50	CF	SK099	Y	304(310.6)	+6.3	8.5	-	+2300	-	1.4	RNP APCH
60	DF	SK299	-	-	+6.3	19.2	R	-	-220	1.4	RNP APCH
70	TF	SK305	-	124(130.7)	+6.3	12.7	-	+5000	-	1.4	RNAV 1

WAYPOINT LIST

UASK RNP RWY30

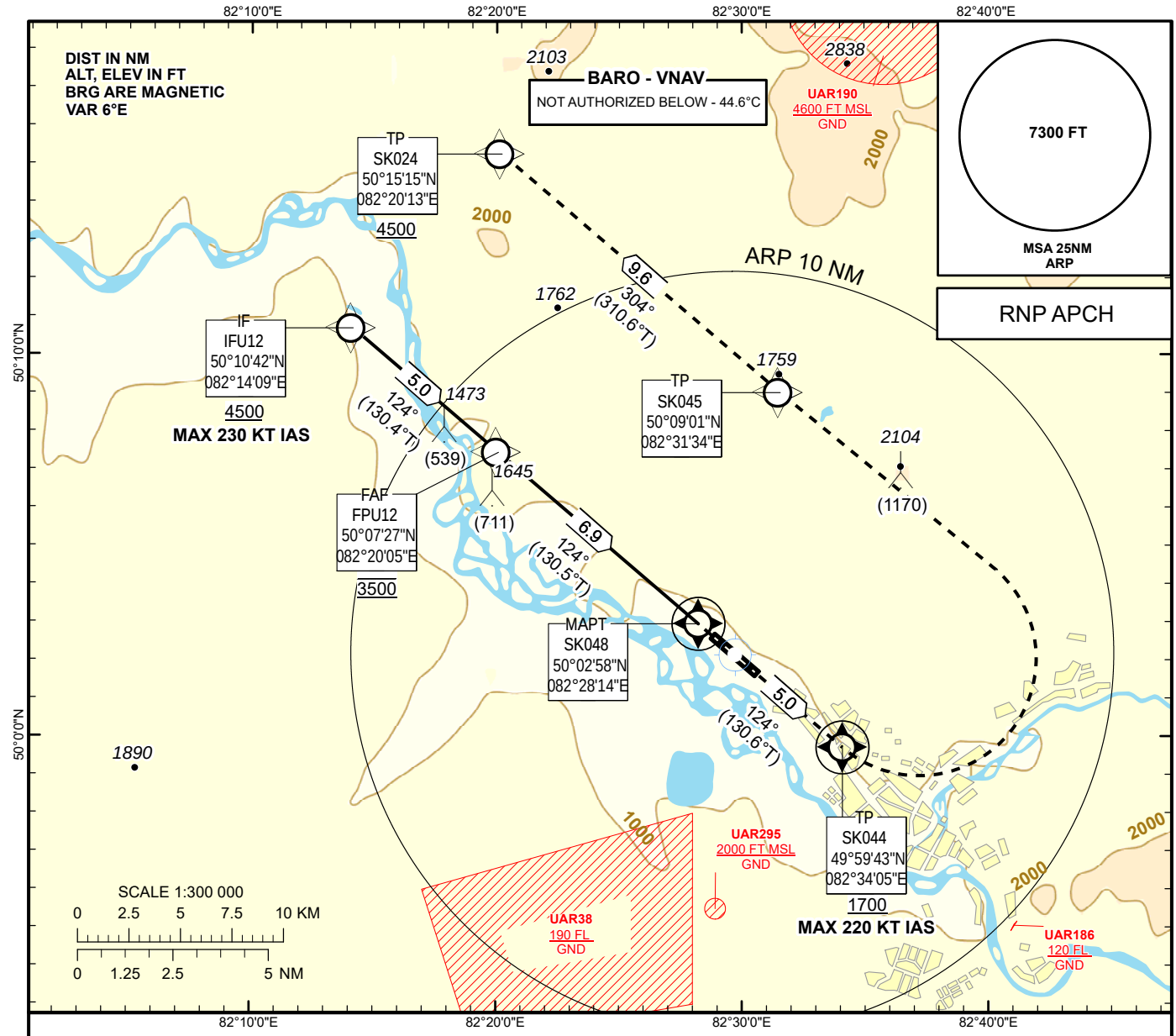
Waypoint Identifier	Coordinates	
IFU30	495231.44N	0824702.13E
FPU30	495627.72N	0823958.10E
SK044	495943.44N	0823405.38E
SK046	500119.69N	0823111.43E
SK099	500651.68N	0822109.32E
SK299	500519.69N	0823814.69E
SK305	495703.40N	0825306.58E

INSTRUMENT APPROACH CHART
ICAO

AERODROME ELEV ***942FT***
HEIGHTS RELATED TO
THR RWY 12 - ELEV ***934FT***

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

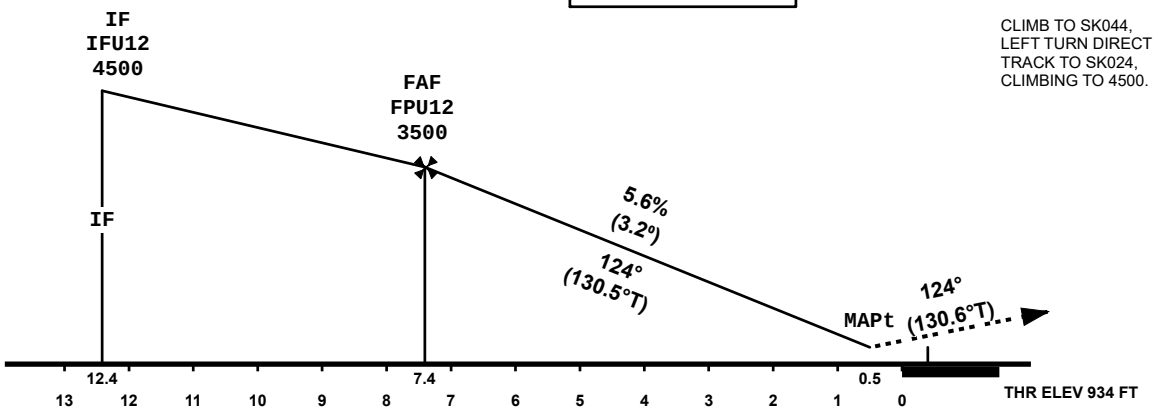
UST-KAMENOGORSK
RNP RWY 12



TRANSITION ALT 10000 FT

MISSED APPROACH:

CLIMB TO SK044,
LEFT TURN DIRECT TO SK045,
TRACK TO SK024,
CLIMBING TO 4500.



OCA (OCH)		A	B	C	D
Straight	LNAV	1330 (396)			
	LNAV/VNAV	1220 (286)	1230 (296)	1240 (306)	1260 (326)

GS	Kt	70	90	120	150	180
Rate of descent	ft/min	395	510	680	850	1020
FAF-MAPt 6.9 NM	min:sec	05:55	04:36	03:27	02:46	02:18

CHANGE: Add ATIS, editorial.

TABULAR DESCRIPTION

UASK RNP RWY12											
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	IF	IFU12	-	-	+6.3	-	-	+4500	-230	-	RNP APCH
20	TF	FPU12	-	124(130.4)	+6.3	5.0	-	@3500	-	-	RNP APCH
30	TF	SK048	Y	124(130.5)	+6.3	6.9	-	@1150	-	-3.2	RNP APCH
40	CF	SK044	Y	124(130.6)	+6.3	5.0	-	+1700	-220	1.4	RNP APCH
50	DF	SK045	-	-	+6.3	17.0	L	-	-	1.4	RNP APCH
60	TF	SK024	-	304(310.6)	+6.3	9.6	-	+4500	-	1.4	RNP APCH

WAYPOINT LIST

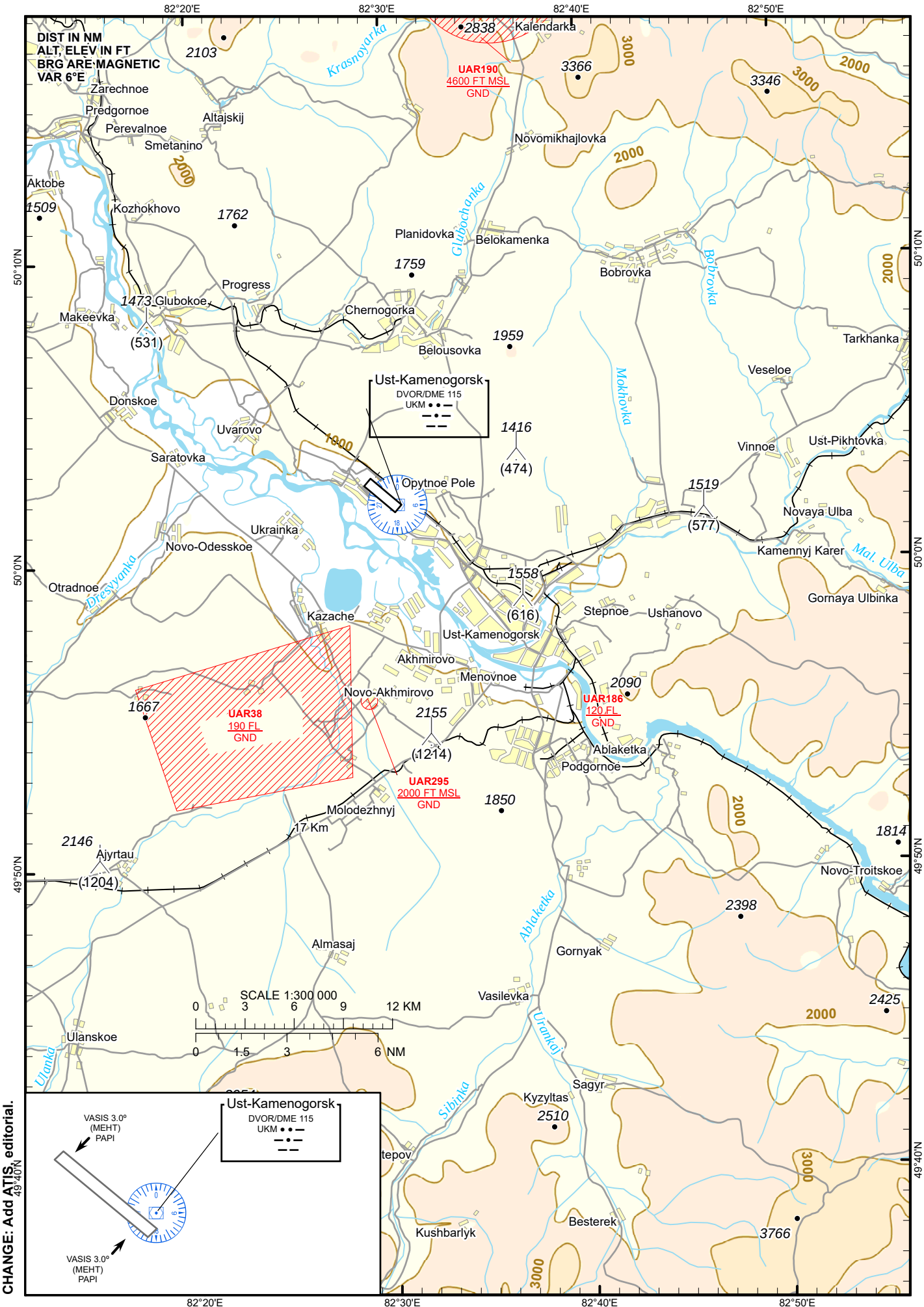
UASK RNP RWY12		
Waypoint Identifier	**Coordinates**	
IFU12	501041.78N	0821409.08E
FPU12	500726.79N	0822005.00E
SK048	500257.71N	0822813.95E
SK044	495943.44N	0823405.38E
SK045	500901.01N	0823134.21E
SK024	501515.44N	0822012.72E

VISUAL APPROACH CHART - ICAO

AERODROME ELEV ***942FT***
HEIGHTS RELATED TO
AD ELEV

UST-KAMENOGORSK TOWER 130.1
UST-KAMENOGORSK ATIS (EN) 124.2
UST-KAMENOGORSK ATIS (RU) 127.7

UST-KAMENOGORSK



CHANGE: Add ATIS, editorial.

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instructions to the aircraft crew to follow to one of the holding points.

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

UAKD AD 2.23 Additional Information

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

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

2. Ornithological situation

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

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

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

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

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

UAKD AD 2.24 Charts Related To An Aerodrome

Name	Page
Aerodrome Chart ICAO	UAKD AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UAKD AD 2.24.3-1
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

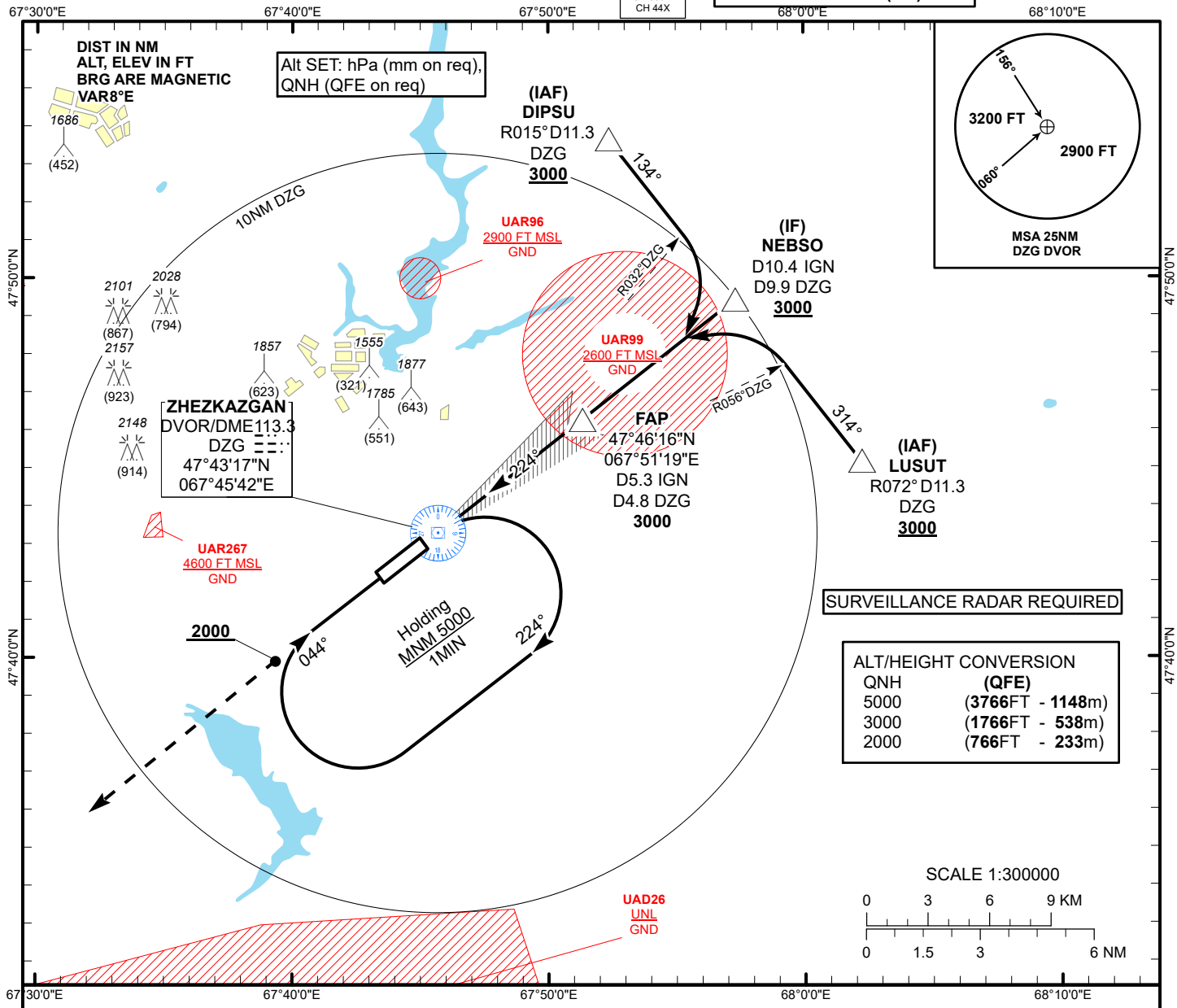
INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV *1251 FT*
HEIGHTS RELATED TO
THR 22 ELEV 1234 FT

ILS
LLZ 110.7
IGN
GP 330.2
CH 44X

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

ZHEZKAZGAN ILS/DME RWY 22



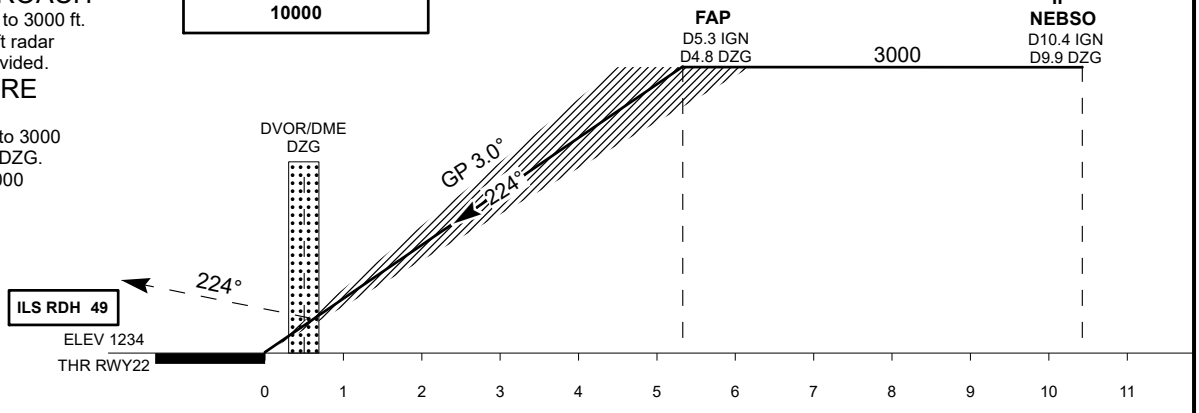
MISSED APPROACH

Climb on track 224° to 3000 ft.
After passing 2000 ft radar vectoring will be provided.

RADIO FAILURE

In the case of RCF
climb on track 224° to 3000
outbound to 8.0NM DZG.
Turn left, climb to 5000
to DZG and join
to holding pattern.

TRANSITION ALT
10000



Aircraft Category		A	B	C	D
Straight-in Approach OCA/H	CAT I	1434(200)	1434(200)	1443(209)	1453(219)

DME IGN - THR	NM	5.3	5	4	3	2	1
DME DZG	NM	4.8	4.5	3.5	2.5	1.5	0.5
ALTITUDE	FT	3000	2897	2570	2246	1923	1602
HEIGHT	FT	1766	1663	1336	1012	689	368

DME IGN ZERO RANGED TO THR RWY 22

Aerodrome Operating Minima DH ft x RVR(CMV)	CAT I				

GS	Kt	80	100	120	140	160	180
Rate of descent (5.2%)	ft/min	420	530	640	740	850	960

CHANGE: New chart.

ZHEZKAZGAN
ILS/DME **AERONAUTICAL DATA TABULATION**

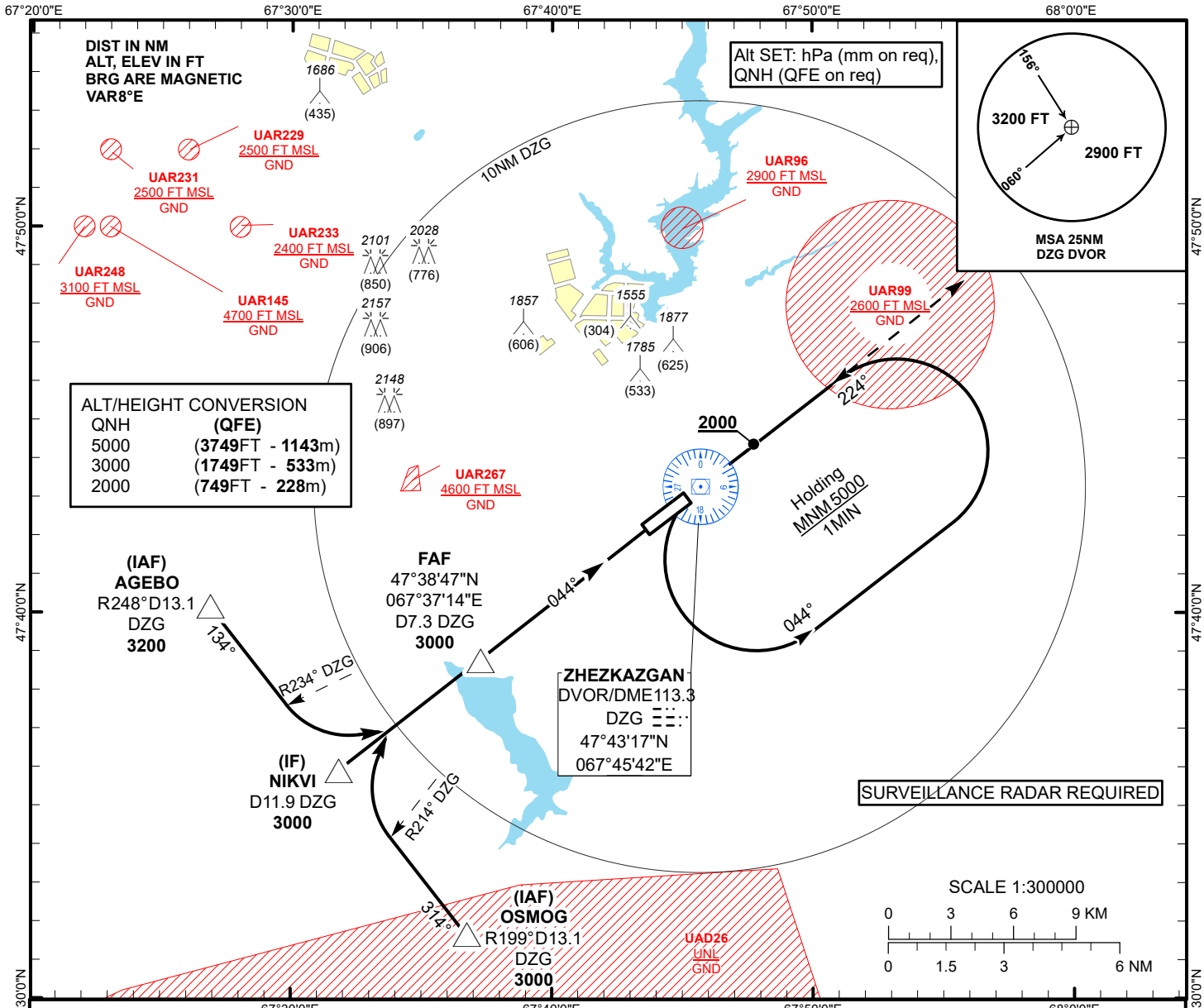
ILS approach to RWY22 from DIPSU, NEBSO, LUSUT	
Fix/point	**Coordinates**
DVOR/DME DZG	47° 43’ 17.1”N 067° 45’ 41.7”E
(FAP) D5.3 IGN D4.8 DZG	47° 46’ 15.7”N 067° 51’ 18.6”E
NEBSO (IF) D9.9 DZG D10.4 IGN	47° 49’ 25.3”N 067° 57’ 17.2”E
DIPSU (IAF) R015°,D11.3 DZG	47° 53’ 40.1”N 067° 52’ 20.2”E
LUSUT (IAF) R072°,D11.3 DZG	47° 45’ 10.2”N 068° 02’ 13.4”E
THR RWY 22	47° 42’ 58.68”N 067° 45’ 07.14”E
LOC IGN	47° 41’ 50.6”N 067° 42’ 59.2”E

INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV *1251 FT*
HEIGHTS RELATED TO AD ELEV

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

ZHEZKAZGAN VOR/DME Y RWY 04



TRANSITION ALT
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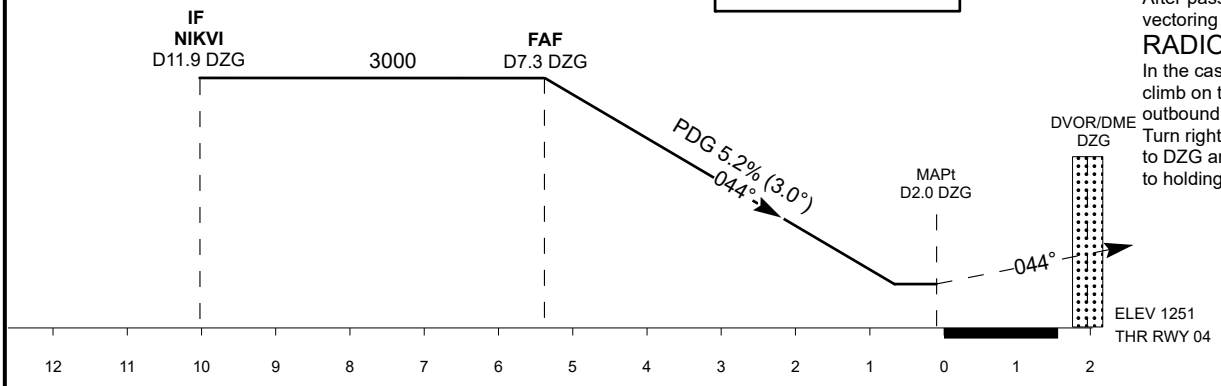


MISSED APPROACH

Climb on track 044° to 3000 ft. After passing 2000 ft radar vectoring will be provided.

RADIO FAILURE

In the case of RCF climb on track 044° to 3000 outbound to 6.0 NM DZG. Turn right, climb to 5000 to DZG and join to holding pattern.

Aircraft Category		A	B	C	D
Straight-in Approach OCA/H	VOR/DME	1530(280)	1530(280)	1530(280)	1530(280)

DIST THR	5.4	5	4	3	2	1
DME DZG	7.3	6.9	5.9	4.9	3.9	2.9
ALTITUDE	3000	2892	2574	2255	1937	1618
HEIGHT	1749	1641	1323	1004	686	367

Aerodrome Operating Minima MDH ft x RVR(CMV)	VOR/DME				

GS	Kt	80	100	120	140	160	180
FAF-MAPt 5.3NM	min:sec	3:59	3:11	2:39	2:16	1:59	1:46
Rate of descent (5.2%)	ft/min	420	530	640	740	850	960

CHANGE: Radio failure.

ZHEZKAZGAN
VOR/DME Y **AERONAUTICAL DATA TABULATION**

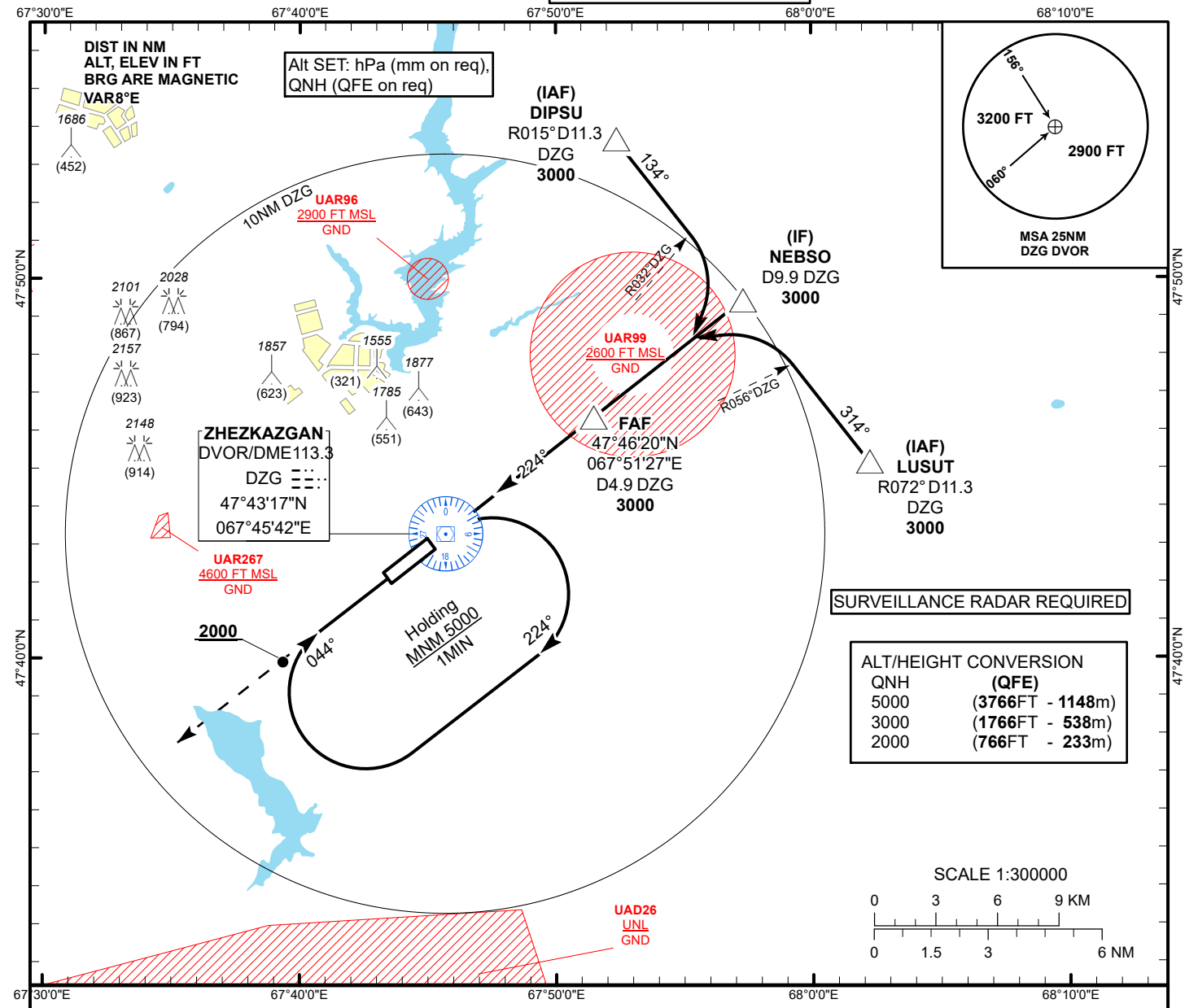
VOR approach to RWY04 from AGEBO, NIKVI, OSMOG	
Fix/point	**Coordinates**
DVOR/DME DZG	47° 43’ 17.1”N 067° 45’ 41.7”E
(FAF) D7.3 DZG	47° 38’ 46.7”N 067° 37’ 14.0”E
NIKVI (IF) D11.9 DZG	47° 35’ 55.2”N 067° 31’ 47.9”E
AGEBO (IAF) R248°, D13.1 DZG	47° 40’ 09.8”N 067° 26’ 51.9”E
OSMOG (IAF) R199°, D13.1 DZG	47° 31’ 40.3”N 067° 36’ 43.2”E
THR RWY04	47° 42’ 06.51”N 067° 43’ 29.14”E
Final approach descent angle is 3°	

INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV *1251 FT*
HEIGHTS RELATED TO
THR RWY 22 ELEV 1234 FT

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

ZHEZKAZGAN VOR/DME Y RWY 22



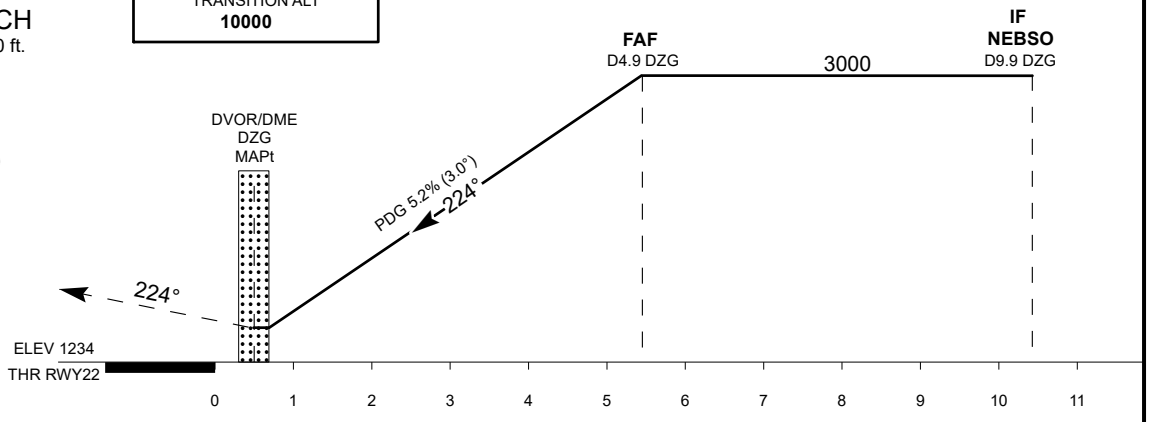
MISSED APPROACH

Climb on track 224° to 3000 ft.
After passing 2000 ft radar vectoring will be provided.

RADIO FAILURE

In the case of RCF climb on track 224° to 3000 outbound to 8.0 NM DZG. Turn left, climb to 5000 to DZG and join to holding pattern.

TRANSITION ALT
10000



Aircraft Category		A	B	C	D	DIST THR	5.4	5	4	3	2	1
Straight-in Approach OCA/H						DME DZG	4.9	4.5	3.5	2.5	1.5	0.5
	VOR/DME	1500(270)	1500(270)	1500(270)	1500(270)	ALTITUDE	3000	2875	2577	2238	1920	1601
						HEIGHT	1766	1641	1323	1004	686	367

Aerodrome Operating Minima MDH ft x RVR(CMV)	VOR/DME											
						GS	Kt	80	100	120	140	160	180
						FAF-MAPt 4.9NM	min:sec	3:40	2:56	2:27	2:06	1:50	1:38
						Rate of descent (5.2%)	ft/min	420	530	640	740	850	960

CHANGE: Radio failure.

ZHEZKAZGAN
VOR/DME Y **AERONAUTICAL DATA TABULATION**

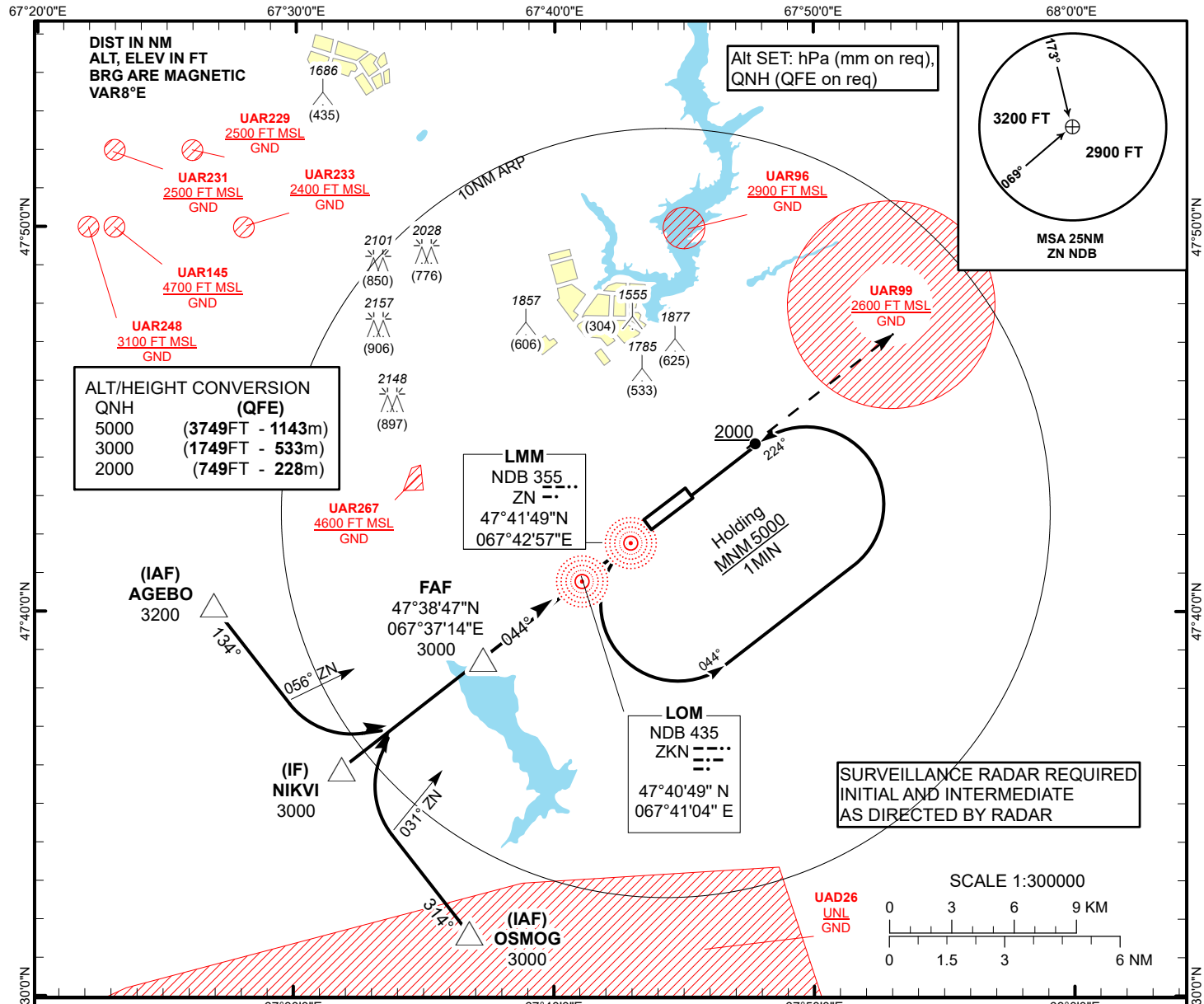
VOR approach to RWY22 from DIPSU, NEBSO, LUSUT	
Fix/point	**Coordinates**
DVOR/DME DZG	47° 43’ 17.1”N 067° 45’ 41.7”E
(FAF) D4.9 DZG	47° 46’ 20.1”N 067° 51’ 27.1”E
NEBSO (IF) D9.9 DZG	47° 49’ 25.3”N 067° 57’ 17.2”E
DIPSU (IAF) R015°,D11.3 DZG	47° 53’ 40.1”N 067° 52’ 20.2”E
LUSUT (IAF) R072°,D11.3 DZG	47° 45’ 10.2”N 068° 02’ 13.4”E
THR RWY 22	47° 42’ 58.68”N 067° 45’ 07.14”E
Final approach descent angle is 3°	

INSTRUMENT APPROACH CHART

AERODROME ELEV *1251 FT*
HEIGHTS RELATED TO AD ELEV

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

ZHEZKAZGAN 2NDB RWY 04



TRANSITION ALT
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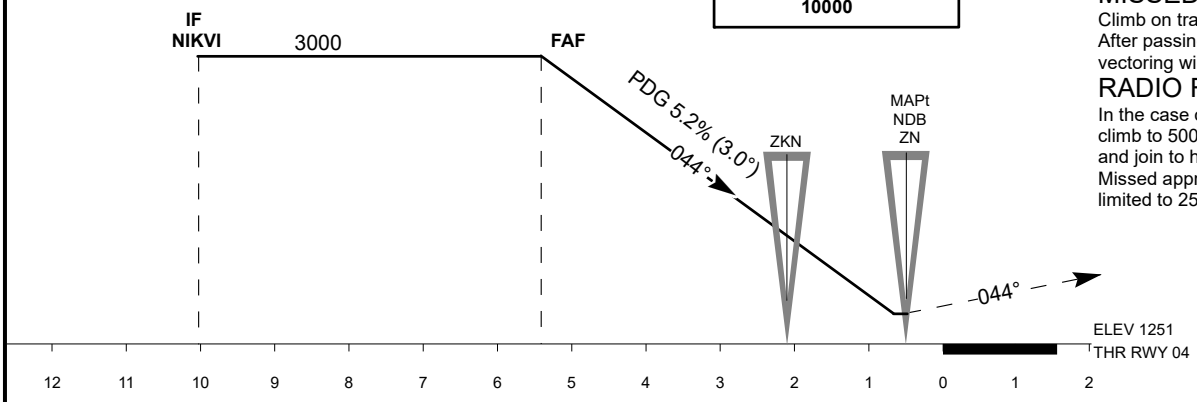

MISSED APPROACH

Climb on track 044° to 3000 ft.
After passing 2000 ft radar vectoring will be provided.

RADIO FAILURE

In the case of RCF
climb to 5000 to ZN
and join to holding pattern.
Missed approach turn speed limited to 250kt IAS maximum.

Aircraft Category		A	B	C	D
Straight-in Approach OCA/H	2 NDB	1530(280)	1530(280)	1530(280)	1530(280)

Aerodrome Operating Minima MDH ft x RVR(CMV)	2 NDB				

GS	Kt	80	100	120	140	160	180
Rate of descent	ft/min	420	530	640	740	850	960

CHANGE: Radio failure.

ZHEZKAZGAN
2NDB **AERONAUTICAL DATA TABULATION**

NDB approach to RWY04 from AGEBO, NIKVI, OSMOG	
Fix/point	**Coordinates**
LMM NDB ZN	**47° 41’ 48.7”N 067° 42’ 56.9”E**
LOM NDB ZKN	**47° 40’ 48.7”N 067° 41’ 04.5”E**
(FAF)	**47° 38’ 46.7”N 067° 37’ 14.0”E**
NIKVI (IF)	**47° 35’ 55.2”N 067° 31’ 47.9”E**
AGEBO (IAF)	**47° 40’ 09.8”N 067° 26’ 51.9”E**
OSMOG (IAF)	**47° 31’ 40.3”N 067° 36’ 43.2”E**
THR RWY04	**47° 42’ 06.51”N 067° 43’ 29.14”E**